PHARMACEUTICAL RESEARCH AND MANUFACTURERS OF AMERICA (P*h*RMA)

SPECIAL 301 SUBMISSION 2022

PAGE INTENTIONALLY LEFT BLANK

Contents

PhRMA 2022 SPECIAL 301 OVERVIEW

PhRMA 2022 SPECIAL 301 OVERVIEW

The Pharmaceutical Research and Manufacturers of America (PhRMA) appreciates the opportunity to provide this submission for the *2022 Special 301 Report*. America leads the world in the research and development of valuable new medicines and vaccines. Established by the Trade Act of 1974, the Special 301 review gives the Administration a critical opportunity to confirm its strong commitment to defend these and other American inventions in overseas markets and a critical tool to address damaging market access and intellectual property barriers abroad that harm America's innovative and creative industries and the more than 45 million jobs they support across the country.[1]

The COVID-19 pandemic has rattled health systems and economies globally, but the biopharmaceutical industry is working around the clock to find ways to diagnose, treat and prevent infections from the virus and other conditions. Indeed, in 2020 alone, PhRMA member companies invested more than $91 billion in research and development to facilitate new ways to tackle some of the most complex and difficult to treat diseases of our time.[2] In addition, the biopharmaceutical industry is providing financial support and in-kind donations to organizations and collaborating with U.S. and global health authorities to combat the pandemic. Recognizing the unprecedented scale of this pandemic and the significant impact that it is having on global health and economies, it is essential that governments and industry continue working together to provide access to safe and effective COVID-19 treatments and vaccines. It is also critical that the existing resilience and diversity of the biopharmaceutical industry's global supply chains be maintained. Despite unprecedented logistical challenges and increases in demand, the United States has not experienced significant supply shortages for innovative biopharmaceuticals during the pandemic – a testament to the efficiency and delivery of industry's complex and carefully developed supply chains. In order to further strengthen supply chain resilience and better prepare for future challenges, efforts should be taken to enhance regulatory cooperation, leverage R&D and manufacturing infrastructure to expand production capacity, facilitate the free movement of pharmaceuticals and inputs, and strengthen cybersecurity infrastructure.

Durable intellectual property and market access policies have made possible the tremendous R&D effort required to deliver COVID-19 diagnostics, treatments and vaccines to the world. Most PhRMA members have R&D for potential treatments and vaccines under way or are providing donations of medicines and critical medical supplies as well as providing financial donations to support patients and first responders in addressing this evolving crisis. As a result of the unprecedented collaboration and partnerships between the private sector, researchers, academia, governments and other organizations – including more than 300 voluntary manufacturing and other partnerships

[1] U.S. Department of Commerce, *Intellectual Property and the U.S. Economy: 2016 Update*, September 2016, available at https://www.uspto.gov/sites/default/files/documents/IPandtheUSEconomySept2016.pdf (last visited Jan. 30, 2021).
[2] PhRMA 2021 Annual Membership Survey, available at https://phrma.org/research-and-development/2021-phrma-annual-membership-survey (last visited Jan. 30, 2022).

to date – biopharmaceutical manufacturers have and are working to deliver numerous COVID-19 treatments and vaccines in record time.[3] PhRMA members are fully committed to providing global access to COVID-19 vaccines, and this commitment continues to result in increased U.S. production targets and vaccine exports.

Despite this major accomplishment and unprecedented progress by American scientists, researchers and manufacturers, the Administration announced support for waiving obligations to protect intellectual property rights under the World Trade Organization (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) for COVID-19 vaccines. This policy position constitutes a reversal of longstanding U.S. policy under both Democratic and Republican Administrations concerning the protection of American intellectual property rights.

Moreover, the Administration's announced policy position was offered absent any evidence that waiving international obligations will promote the development or manufacturing of additional COVID-19 vaccines. In fact, intellectual property rights have not been a barrier to access but rather have enabled the very collaborations among manufacturers and suppliers that are necessary to produce vaccines on a global scale. Indeed, experience shows that weak health systems, inadequate infrastructure, and distributional challenges unrelated to intellectual property protection are impeding the global response to the pandemic.[4] Reports indicate that countries are destroying vaccines because they are unable to distribute them within their shelf life or have asked manufacturers to suspend delivery of vaccines because they have enough stock.[5] Waiving global obligations to protect intellectual property rights would further undermine our global response to the pandemic, compromise safety, weaken supply chains and foster the proliferation of counterfeit vaccines. In addition, handing over American innovations to countries looking to undermine U.S. leadership in biomedical discovery would run counter to the Administration's stated objectives concerning the growth of American infrastructure, innovation and employment.

At a time when research and development has never been more important, the biopharmaceutical industry shares the goal to vaccinate as many people as quickly as possible and hopes that all governments and stakeholders will refocus on that shared objective.

The United States leads the world in the research and development of valuable new medicines and vaccines. However, foreign trading partners that deny adequate and

[3] Five Steps to Urgently Advance COVID-19 Vaccine Equity, available at https://phrma.org/Coronavirus/Five-Steps-to-Urgently-Advance-COVID-19-Vaccine-Equity (last visited Jan. 30, 2022).
[4] Adler, D., Stop Treating Vaccine Hesitancy Like an Afterthought, Foreign Policy, Dec. 2021, available at https://foreignpolicy.com/2021/12/09/covid-vaccine-hesitancy-issue-global-south-north-supplies-health/ (last visited Jan. 30, 2022).
[5] Kew, J. and Cele, S., South Africa Asks J&J, Pfizer to Stop Sending Vaccines, Bloomberg, Nov. 2021, available at https://www.bloomberg.com/news/articles/2021-11-24/s-africa-wants-j-j-pfizer-vaccine-delivery-delay-news24-says (last visited Jan. 30, 2022).

effective protection of intellectual property rights, or deny fair and equitable market access, significantly threaten the ability of our member companies to develop and export life-saving treatments and cures. Such policies put at risk nearly $60 billion of American biopharmaceutical exports and more than four million jobs across all 50 states. The Special 301 Report provides the Administration with an important opportunity to confirm its strong commitment to defend American inventions in overseas markets and a critical tool to address damaging market access and intellectual property barriers abroad that harm America's innovative and creative industries. In order for the U.S. biopharmaceutical industry to continue innovating and delivering innovative medicines to patients globally, the Office of the U.S. Trade Representative (USTR) must address the many significant trade barriers that foreign governments impose against biopharmaceuticals innovated and manufactured in the United States.

Urgent action is required to address serious market access and intellectual property barriers in the overseas markets named in this submission. As explained further below, biopharmaceutical innovators in the United States face a wide array of damaging government pricing policies abroad that undervalue American innovation, threaten billions of dollars in lost sales and put American competitiveness, jobs and exports at risk. Medicines discovered and manufactured by PhRMA member companies are the constant target of compulsory licensing and other harmful practices that deny the most basic intellectual property protections necessary to drive discovery and bring new treatments and cures to patients around the world.

USTR and other federal agencies should prioritize action to address compulsory licensing threats, including in **Brazil, Chile, Colombia, Indonesia, Malaysia** and **Russia**, and to end egregious and discriminatory pricing policies in several markets, including **Canada**, **Japan** and **Korea**. Government price controls imposed in many markets are non-tariff barriers to trade that substantially eliminate incentives to invest in the development of new medicines for patients. They deny American inventors and workers the ability to compete on fair and equitable terms in foreign markets, undermine the expected benefit of intellectual property protections and exacerbate the U.S. trade imbalance by inappropriately raising barriers in their own markets, while their own inventors enjoy access to the U.S. market. Ending damaging pricing policies in these markets and others could add billions of dollars to research and development for new medicines and lower overall health care costs in the U.S. and around the world, while supporting U.S. competitiveness and jobs.[6]

[6] See Council of Economic Advisers, "Reforming Biopharmaceutical Pricing at Home and Abroad," February 2018, available at https://trumpwhitehouse.archives.gov/wp-content/uploads/2017/11/CEA-Rx-White-Paper-Final2.pdf (last visited Jan. 30, 2022); and U.S. Department of Commerce, International Trade Administration, *Pharmaceutical Price Controls in OECD Countries: Implications for U.S. Consumers, Pricing, Research and Development, and Innovation*, December 2004, available at https://web.archive.org/web/20190414170009/https://2016.trade.gov/td/health/DrugPricingStudy.pdf (last visited Jan. 30, 2022).

I. The Innovative Biopharmaceutical Sector

The U.S. biopharmaceutical industry is the world leader in medical research.[7] Innovators in this critical sector depend on strong intellectual property protection and enforcement, and on fair and equitable access to overseas markets. With the right policies and incentives in place at home and abroad, they can continue to bring valuable new medicines to patients, contribute powerfully to the American economy and jobs and open markets to U.S. exports.

A. Biopharmaceutical innovation delivers value for patients and economies

PhRMA member companies and the more than 800,000 women and men they directly employ across the United States are devoted to inventing, manufacturing and distributing valuable medicines that enable people to live longer, healthier and more productive lives.[8] They work in partnership with universities, clinical researchers, patient organizations, health care providers and others to bring new treatments and cures to patients who need them at home and abroad – introducing nearly 650 new therapies since 2000[9] and investing in many of the over 8,000 new drugs currently in development worldwide,[10] with about three quarters having the potential to be first-in-class treatments.[11]

Pioneering work by biopharmaceutical innovators in the United States contributes significantly to economic growth and supports good-paying jobs in all 50 states. In 2017, biopharmaceutical research and development activity added more than $1.3 trillion to the U.S. economy and supported more than four million American jobs, including indirect and induced jobs.[12] For all occupations involved in the biopharmaceutical industry, the average total compensation per direct employee is twice the average compensation in any other U.S. private sector industry.[13] In 2020, U.S. biopharmaceutical goods exports exceeded $59 billion.[14] The biopharmaceutical sector was the largest exporter of goods

[7] Ezell S., Ensuring U.S. Biopharmaceutical Competitiveness, July 2020, available at https://www2.itif.org/2020-biopharma-competitiveness.pdf (last visited Jan. 30, 2022).
[8] TEConomy Partners, *The Economic Impact of the U.S. Biopharmaceutical Industry*, Dec. 2019, available at https://www.phrma.org/-/media/Project/PhRMA/PhRMA-Org/PhRMA-Org/PDF/D-F/Economic-Impact-US-Biopharmaceutical-Industry-December-2019.pdf (last visited Jan. 30, 2022).
[9] U.S. Food and Drug Administration, "New Drugs at FDA: CDER's new molecular entities and new therapeutic biological products," available at https://www.fda.gov/drugs/development-approval-process-drugs/new-drugs-fda-cders-new-molecular-entities-and-new-therapeutic-biological-products (last visited Jan. 30, 2022); and U.S. Food and Drug Administration, "Biological approvals by year," available at https://www.fda.gov/vaccines-blood-biologics/development-approval-process-cber/biological-approvals-year (last visited Jan. 30, 2022).
[10] *Adis R&D Insight database*, last accessed Jan. 4, 2019.
[11] Long G., The Biopharmaceutical Pipeline: Innovative Therapies in Clinical Development. Analysis Group; 2017.
[12] TEConomy Partners; for PhRMA. The Economic Impact of the US Biopharmaceutical Industry 2017: National and State Estimates.
[13] *Id.*
[14] TradeStats Express™: National Trade Data for NAICS Code 3254 Pharmaceuticals and Medicines, available at http://tse.export.gov/TSE/TSEHome.aspx.

among the most R&D-intensive industries in 2020 – which in addition to biopharmaceuticals included navigational equipment, semiconductors and other electronic components, medical equipment and supplies, and communications equipment.[15]

Even more important than the biopharmaceutical sector's role in the U.S. economy is its contribution to global patient health. Biopharmaceutical innovation extends lives, improves worker productivity and cuts health care costs. Between 1950 and 2016, life expectancy for women and men in the United States increased by more than a decade[16] – adding trillions of dollars to the U.S. economy.[17] New medicines are responsible for much of this increase. According to a National Bureau of Economic Research working paper, new treatments accounted for three-quarters of life expectancy gains in the United States and other high-income countries between 2000 and 2009.[18]

For example, the AIDS death rate has dropped nearly 87 percent since the approval of antiretroviral treatments in 1995.[19] Today, a 20-year old diagnosed with HIV can expect to live another 50 years.[20] New medicines have cut heart disease deaths by 38 percent, according to the Centers for Disease Control and Prevention.[21] More than 80 percent of the increase in life expectancy of cancer patients since 1980 is attributable to new treatments.[22] New hepatitis C therapies approved since 2013 cure over 90 percent

[15] Analysis of National Science Foundation and Business Research and Development Survey (BRDIS) data by ndp | analytics.
[16] U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics, *Health, United States, 2017*, Table 15, May 2018, available at https://www.cdc.gov/nchs/data/hus/2017/015.pdf (last visited Jan. 30, 2022).
[17] Between 1970 and 2000, increased longevity added about $3.2 trillion per year to national wealth in the United States. *See* Murphy, K.M. and R.H. Topel, "The Value of Health and Longevity," National Bureau of Economic Research, June 2005, available at http://www.nber.org/papers/w11405 (last visited Jan. 30, 2022).
[18] Lichtenberg, F.R., "Pharmaceutical Innovation and Longevity Growth in 30 Developing and High-income Countries, 2000-2009," *National Bureau of Economic Research*, July 2012, available at http://www.nber.org/papers/w18235 (last visited Jan. 30, 2022).
[19] U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics, *Health, United States, 2014*, Table 29, May 2015, available at http://www.cdc.gov/nchs/data/hus/hus14.pdf (last visited Jan. 30, 2022).
[20] *Id.*
[21] U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, "New CDC Vital Signs: CDC finds 200,000 heart disease deaths could be prevented," Dec. 2013, available at https://www.cdc.gov/media/releases/2013/p0903-vs-heart-disease.html (last visited Jan. 30, 2022); and U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, "Vital Signs: Avoidable Deaths from Heart Disease, Stroke, and Hypertensive Disease—United States, 2001-2010," Sep. 2013, available at https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6235a4.htm (last visited Jan. 30, 2022).
[22] Sun, E., D. Lakdawalla et al., "The determinants of recent gains in cancer survival: an analysis of the surveillance, epidemiology and end results [SEER] database," *Journal of Clinical Oncology*, 2008, available at http://ascopubs.org/doi/abs/10.1200/jco.2008.26.15_suppl.6616 (last visited Jan. 30, 2022); A more recent article by the American Cancer Society (dated Jan. 8, 2019) reported that cancer death rates have been reduced 27% since 1991. *See* https://www.cancer.org/latest-news/facts-and-figures-2019.html (last visited Jan. 30, 2022).

of patients – a more than two-fold increase from previously available treatment options.[23] As of January 2022, more than 10 billion doses of COVID-19 vaccines have been administered across 184 countries,[24] and COVID-19 vaccination in the United States alone is estimated to have saved 279,000 lives and averted up to 1.25 million hospitalizations as of July 2021.[25]

PhRMA member companies are building on these achievements and pioneering new treatments and cures for some of the world's most devastating diseases. Researchers are developing more than 400 new medicines for infectious diseases, including viral, bacterial, fungal and parasitic infections such as the most common and difficult-to-treat form of hepatitis C, a form of drug-resistant malaria, a form of drug-resistant MRSA, and a novel treatment for smallpox.[26] Advances in biotechnology and genomics are propelling the discovery of new medicines to treat a range of chronic and infectious diseases. Made using living organisms, biologic medicines are revolutionizing the treatment of cancer and autoimmune disorders. Biologics are critical to the future of the industry and promise progress in the fight against conditions like Alzheimer's, a debilitating disease affecting millions.[27] The mRNA technology platforms, which are the backbone of some of the most effective COVID-19 vaccines, could potentially revolutionize vaccinology and help fight cancer, immune-mediated diseases and rare diseases.[28]

New medicines can lower the overall cost of treating these and other devastating diseases by reducing medical complications, hospitalizations and emergency room visits. For example, the use of cholesterol-lowering statin drugs has cut hospitalizations and saved the U.S. health care system at least $5 billion.[29] Every $24 spent on new medicines for cardiovascular diseases in OECD countries saves $89 in hospitalization costs.[30] Treating high blood pressure according to clinical guidelines would result in annual health

---

[23] *See, e.g.*, "FDA approves Viekira Pak to treat hepatitis C," Dec. 19, 2014, available at https://www.formularywatch.com/fda/fda-approves-viekira-pak-treat-hepatitis-c (last visited Jan. 30, 2022).
[24] *See* Bloomberg COVID-19 vaccine tracker, available at https://www.bloomberg.com/graphics/covid-vaccine-tracker-global-distribution/ (last visited Jan. 27, 2022).
[25] Vilches, T., Moghadas, S., Sah, P. et al, Estimating COVID-19 Infections, Hospitalizations, and Deaths Following the US Vaccination Campaigns During the Pandemic, *JAMA Network Open*, Jan. 2022, available at https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2787935 (last visited Jan. 30, 2022).
[26] PhRMA, 2020 Medicines in Development – Infectious Diseases Report, Jul. 2020, available at https://phrma.org/-/media/Project/PhRMA/PhRMA-Org/PhRMA-Org/PDF/M-O/MID_2020_InfectiousDiseases_DrugList.pdf (last visited Jan. 30, 2022).
[27] *Id.*
[28] Sanofi, mRNA Technology: Vaccines and Beyond, Nov. 2021, available at https://www.sanofi.com/en/science-and-innovation/research-and-development/technology-platforms/mrna-technology-platform (last visited Jan. 30, 2022).
[29] Grabowski, D., D. Lakdawalla et al., "The Large Social Value Resulting From Use Of Statins Warrants Steps To Improve Adherence And Broaden Treatment," *Health Affairs*, Oct. 2012, available at https://www.healthaffairs.org/doi/pdf/10.1377/hlthaff.2011.1120 (last visited Jan. 30, 2022).
[30] Lichtenberg, F., "Have newer cardiovascular drugs reduced hospitalization? Evidence from longitudinal country-level data on 20 OECD countries, 1995-2003," *National Bureau of Economic Research*, May 2008, available at http://www.nber.org/papers/w14008 (last visited Jan. 30, 2022).

system savings of about $15.6 billion.[31] In addition to lowering overall health care costs, appropriate use of medicines can increase worker productivity by reducing rates of absenteeism and short-term disability.[32] A 2012 study demonstrated that appropriate use of diabetes medicines saved 15 percent and 20 percent per month in medical spending after one year of initiating treatment[33] and an estimated reduction of more than one million emergency department visits and hospitalizations annually, for an annual savings of up to $8.3 billion.[34]

PhRMA members are working to overcome significant systemic challenges that can prevent the poorest patients from accessing medicines. Together with governments, academia and others, they are leading more than 300 initiatives with more than 1,000 partners to help shape sustainable solutions that improve the health of all people.[35] In 2017, more than 20 biopharmaceutical companies joined the World Bank and the Union for International Cancer Control to launch Access Accelerated – a first-of-its-kind global initiative to address cancer and other non-communicable diseases that cause more than 28 million deaths per year in low and lower-middle income countries.[36]

Between 2000 and 2011, biopharmaceutical innovators contributed an estimated $98.4 billion dollars toward achieving health-related Millennium Development Goals.[37] Despite a three percent drop in public funding for neglected disease (excluding Ebola) research and development in 2014, biopharmaceutical industry funding increased by 28 percent during the same period.[38]

---

[31] Cutler, D.M., G. Long et al., "The Value of Antihypertensive Drugs: A Perspective on Medical Innovation," *Health Affairs*, Jan. 2007, available at https://www.healthaffairs.org/doi/pdf/10.1377/hlthaff.26.1.97 (last visited Jan. 30, 2022).

[32] Carls G.S., M.C. Roebuck et al., "Impact of medication adherence on absenteeism and short-term disability for five chronic diseases," *Journal of Occupational and Environmental Medicine*, July 2012, available at http://journals.lww.com/joem/Abstract/2012/07000/Impact_of_Medication_Adherence_on_Absenteeism_and.7.aspx (last visited Jan. 30, 2022).

[33] Jha A.K., Aubert R.E., Yao J., Teagarden J.R., Epstein R.S., "Greater adherence to diabetes drugs is linked to less hospital use and could save nearly $5 billion annually," *Health Affairs*, Aug. 2012, available at https://www.healthaffairs.org/doi/10.1377/hlthaff.2011.1198 (last visited Jan. 30, 2022).

[34] Slejko J.F., Ho M., Anderson H.D., Nair K.V., Sullivan P.W., Campbell J.D., "Adherence to statins in primary prevention: yearly adherence changes and outcomes," *J Manag. Care Pharm*., Jan. 2014, available at https://www.jmcp.org/doi/10.18553/jmcp.2014.20.1.51 (last visited Jan. 30, 2022).

[35] *See* Global Health Progress, available at http://www.globalhealthprogress.org (last visited Jan. 30, 2022).

[36] Access Accelerated, "22 Biopharma Companies Partner and Launch Access Accelerated," Jan. 2017, available at https://accessaccelerated.org/news-and-events/test-post-f/ (last visited Jan. 30, 2022).

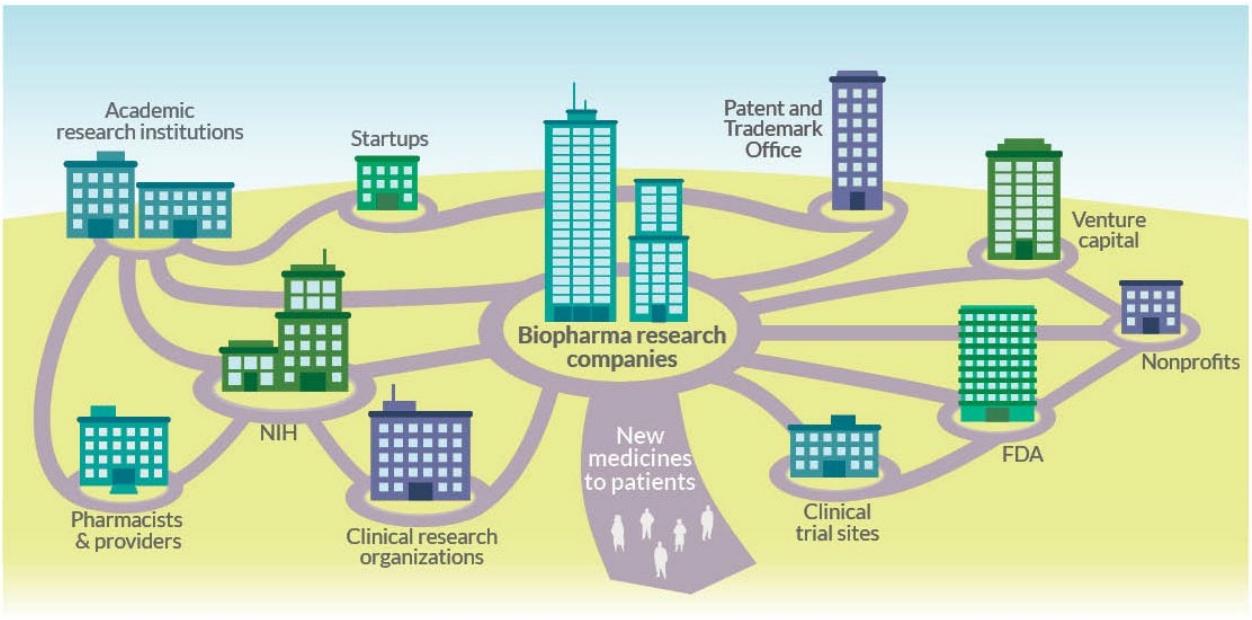
[37] Morris, Jeremiah et al., *The Pharmaceutical Industry's Contributions to the United Nations Millennium Development Goals*, Hudson Institute, May 2013, available at http://www.hudson.org/content/researchattachments/attachment/1260/the_pharmaceutical_industry_s_contibutions_to_the_un_millennium_development_goals.pdf (last visited Jan. 30, 2022).

[38] Global Funding of Innovation for Neglected Diseases: G-Finder, available at https://gfinder.policycuresresearch.org/ (last visited Jan. 30, 2022).

B. Policies that power prevention, treatments and cures

Fair and transparent access to overseas markets and strong protection and enforcement of patents, regulatory test data and other intellectual property provide powerful incentives that drive and sustain substantial investments in valuable treatments and cures. Where markets are open, innovation is valued and intellectual property is protected and enforced, biopharmaceutical innovators have the predictability and certainty that they need to collaborate with partners, compete successfully and accelerate the launch of new medicines.

Figure 1: Collaboration and the biopharmaceutical R&D process



As highlighted in Figure 1 above, research, development and distribution of innovative medicines increasingly involves collaboration and the exchange of commercially sensitive information between multiple partners across borders and around the world. Strong intellectual property protection and enforcement enable innovators to license their patented inventions to others with the certainty that valuable information disclosed is secure. Thanks to the technology transfer framework established by the Bayh-Dole Act, licensing of intellectual property is also enabling collaboration among industry, university and public sector researchers in the development of new medicines and other products – adding close to $591 billion to the U.S. economy and supporting more than four million American jobs between 1996 and 2015.[39] Such collaboration is

[39] *See* Association of University Technology Managers, Statistics Access for Technology Transfer (STATT) database, available at https://autm.net/surveys-and-tools/databases/statt (last visited Jan. 30, 2022); and Pressman, L., D. Roessner et al., "The Economic Contribution of University/Nonprofit Inventions in the United States: 1996-2013," Mar. 2015, available at

delivering similar benefits in other countries. Research in the United Kingdom found that public expenditure on biomedical and health research leveraged even greater private sector investment, delivering a total rate of return to public biomedical and health research of up to 28 percent.[40]

Patents and market-based pricing policies promote competition and greater treatment options. In exchange for the limited period of protection that patents provide, innovators must fully disclose their inventions to the world. That disclosure accelerates innovation and empowers potential competitors to build on those inventions. Competition means more medicines in the same therapeutic class, more options for patients and even lower prices.[41] For example, less than a year after market entry of the first in a new class of hepatitis C treatments, there were multiple suppliers that competed both on price and clinical benefits. Indeed, competition was so fierce that the largest U.S. pharmacy benefit manager claimed hepatitis C treatment is less expensive in America than in other western countries.[42] European countries have seen similar gains from competition.[43]

Today, biopharmaceutical innovators face competition faster – both from other innovators and from generic drug companies. In the 1970s, a new medicine might remain the only innovative treatment available in its therapeutic class for ten years or more. By the 2000s, that period had declined to about two years.[44] Generic competitors now challenge patents earlier and more frequently – even as early as four years after the launch of an innovative medicine.[45] Today, over 94 percent of innovative medicines experience at least one patent challenge prior to generic entry – compared to 25 percent

https://www.bio.org/sites/default/files/files/BIO_2015_Update_of_I-O_Eco_Imp.pdf (last visited Jan. 30, 2022).

[40] Sussex, J., Y. Feng et al., "Quantifying the economic impact of government and charity funding of medical research on private research and development funding in the United Kingdom," *BMC Medicine*, Feb. 2016, available at http://bmcmedicine.biomedcentral.com/articles/10.1186/s12916-016-0564-z (last visited Jan. 30, 2022).

[41] International Federation of Pharmaceutical Manufacturers and Associations, *The New Frontiers of Biopharmaceutical Innovation, 2012*, available at http://www.ifpma.org/wp-content/uploads/2016/01/IFPMA_New_Frontiers_Biopharma_Innovation_2012_Web.pdf (last visited Jan. 30, 2022).

[42] LaMattina, J., "For Hepatitis C Drugs, U.S. Prices are Cheaper Than in Europe," *Forbes*, Dec. 2015, available at http://www.forbes.com/sites/johnlamattina/2015/12/04/for-hepatitis-c-drugs-u-s-prices-are-cheaper-than-in-europe/#1483772d64bb (last visited Jan. 30, 2022).

[43] Berdud, M. et al., "R&D, Competition and Diffusion of Innovation in the EU: The Case of Hepatitis C," Office of Health Economics, July 2018, available at https://www.ohe.org/publications/rd-competition-and-diffusion-innovation-eu-case-hepatitis-c (last visited Jan. 30, 2022).

[44] Tufts Center for the Study of Drug Development, "First-in-class drugs in competitive development races with later entrants," Impact Report, Dec. 2015, available at https://csdd.tufts.edu/impact-reports/ (last visited Jan. 30, 2022).

[45] Grabowski, H., G. Long et al., "Updated trends in US brand-name and generic drug competition," *Journal of Medical Economics*, Sep. 2016, available at https://www.ncbi.nlm.nih.gov/pubmed/27064194 (last visited Jan. 30, 2022).

in 1995.[46] Increasing competition from biosimilars is driving down the cost of cutting-edge treatments.[47]

Patents promote faster access to new medicines. A major 2014 study found firms launch innovative medicines sooner in countries where there is effective patent protection and enforcement. The study looked at data from the launch of more than 600 drugs in almost 80 countries between 1983 and 2002. It showed that strong patent protection accelerates new product launches in higher and lower income countries alike.[48] Launching a medicine in a particular market also has important effects on the whole health care system. For instance, when a new medicine is introduced, biopharmaceutical companies invest in educating health care providers on the science and appropriate use of that medicine.[49] This investment later enables accelerated acceptance of generic versions once relevant patents expire.

Strong intellectual property protection and enforcement has long been a critical goal of America's trade policy agenda. Strong intellectual property protection and enforcement at home and abroad, and the efficient market conditions necessary to enjoy those rights, provide essential incentives for investment in the biopharmaceutical sector and in all of the innovative industries that today account for nearly 40 percent of U.S. gross domestic product.[50] For each of these industries, developing and bringing new products and processes to market is a risky endeavor; it requires time and substantial resources. In most cases, new products will fail to deliver returns that meet or exceed investment. Some three-quarters of all venture capital-backed internet startups fail.[51] And even those that succeed often fail to make a profit. Biopharmaceutical firms face similar challenges. Just two of every ten marketed medicines achieve returns that match or exceed average research and development costs.[52] Of the approximately 1,200 biopharmaceutical companies in the United States, more than 90 percent do not earn a profit.[53]

---

[46] *Id.*

[47] *See*, *e.g.*, Sagonowsky, E., "As competition heats up, U.S. prices for Remicade and biosims slip: analyst," FiercePharma, Dec. 2018, available at https://www.fiercepharma.com/pharma/amid-biosim-competition-remicade-prices-gradually-slipping-analyst (last visited Jan. 30, 2022).

[48] Cockburn, I.M. et al., "Patents and the Global Diffusion of New Drugs," *National Bureau of Economic Research*, Sep. 2014, available at http://nber.org/papers/w20492 (last visited Jan. 30, 2022).

[49] Wilsdon, Tim and Glyn Chambers, "The wider value delivered to patients, healthcare systems and competitors when innovators launch new products," *Charles River Associates*, Apr. 2013.

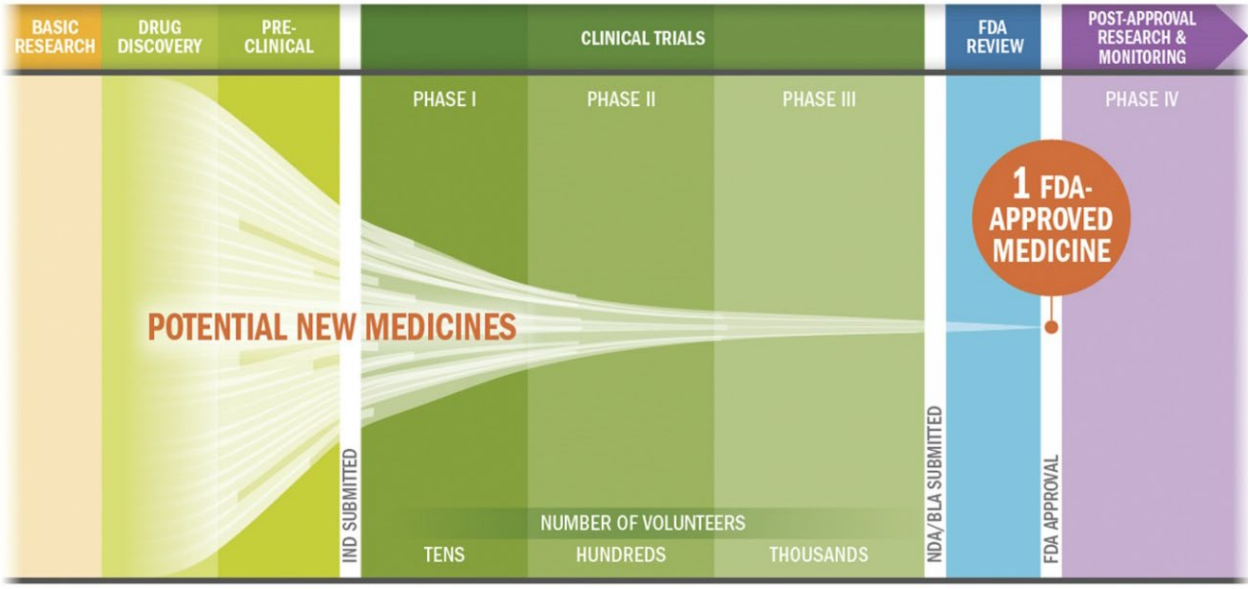
[50] U.S. Department of Commerce, *Intellectual Property and the U.S. Economy: 2016 Update*, Sep. 2016, available at https://www.uspto.gov/sites/default/files/documents/IPandtheUSEconomySept2016.pdf (last visited Jan. 30, 2022).

[51] Gage, D., "The Venture Capital Secret: 3 Out of 4 Start-Ups Fail," *The Wall Street Journal*, Sep. 2012, available at http://www.wsj.com/articles/SB10000872396390443720204578004980476429190 (last visited Jan. 30, 2022).

[52] Vernon, J.A., J.H. Golec and J.A. DiMasi, "Drug development costs when financial risk is measured using the fama-french three-factor model," *Health Economics*, Aug. 2010, available at http://onlinelibrary.wiley.com/doi/10.1002/hec.1538/abstract (last visited Jan. 30, 2022).

[53] Biotechnology Industry Organization, *Unleashing the Next Generation of Biotechnology Innovation*, available at https://www.bio.org/sites/default/files/files/Whitepaper-Final_0.pdf (last visited Jan. 30, 2022).

Figure 2: The biopharmaceutical research and development process



Key: IND: Investigational New Drug Application, NDA: New Drug Application, BLA: Biologics License Application

The lengthy approval process for new products makes the research-based biopharmaceutical sector particularly reliant on the temporary protection intellectual property rights provide.[54] Unlike products made by other innovative industries, new medicines are not market-ready at the time they are developed. As highlighted in Figure 2 above, biopharmaceutical firms rigorously test and evaluate potential therapies through a series of clinical trials to demonstrate they are safe and effective for treatment of a particular disease or condition.[55] In 2017, biopharmaceutical companies sponsored more than 4,500 clinical trials in the United States alone, with trials in all 50 states, the District of Columbia and Puerto Rico. These trials involved close to one million participants and accounted for nearly $43 billion in economic activity.[56] Test data generated through those trials is then submitted to national regulatory agencies for marketing approval.

For these reasons and others, research and development is more capital intensive in the innovative biopharmaceutical sector than in other industries. Firms in this sector invest twelve times more in research and development per employee than the average of

[54] Without patent protection, an estimated 65% of pharmaceutical products would not have been brought to market, compared with an average of eight percent across all other industries. *See* Mansfield, E., "Patents and Innovation: An Empirical Study," *Management Science*, Feb. 1986, available at https://www.jstor.org/stable/2631551?seq=1#page_scan_tab_contents (last visited Jan. 30, 2022).
[55] PhRMA adaptation based on Dimasi J.A., "Cost of Developing a New Drug," Tufts Center for the Study of Drug Development, *R&D Cost Study Briefing*, available at https://f.hubspotusercontent10.net/hubfs/9468915/TuftsCSDD_June2021/pdf/Microsoft+PowerPoint+-+Tufts+CSDD+briefing+on+R%26D+cost+study+-+Nov+18,+2014.pdf (last visited Jan. 30, 2022); U.S. Food and Drug Administration, *Development & Approval Process | Drugs*, available at https://www.fda.gov/Drugs/DevelopmentApprovalProcess/ (last visited Jan. 30, 2022).
[56] TEConomy Partners; for PhRMA. Biopharmaceutical Industry-Sponsored Clinical Trials. April 2019.

all other manufacturing industries.[57] In 2018 alone, American biopharmaceutical companies invested approximately $102 billion in research and development.[58] Clinical trials can account for more than 60 percent of the total cost of bringing a new medicine to market, and there is no guarantee promising molecules and proteins that enter clinical trials will result in a new treatment or cure.[59] The process of evaluating potential new therapies is so exacting that less than 12 percent of all potential new drugs entering clinical trials result in an approved medicine.[60]

Advances in the treatment of diseases typically are not driven by large, dramatic developments, but more commonly build on a series of continuous improvements over time. The best clinical role and full value of a particular therapy typically emerges years after initial approval as further research is conducted and physicians and other health care providers gain real-world experience. These improvements and the further development of therapeutic classes of medicines often lead researchers to explore new treatments in related areas – restarting the research and development cycle. Indeed, nearly a quarter of existing therapeutic indications are treated by medicines initially developed to address a different concern.[61] And more than 60 percent of therapies on the World Health Organization's (WHO's) Essential Medicines List relate to improvements on older treatments.[62] This step-by-step transformation in knowledge has led to increased survival, improved patient outcomes and enhanced quality of life for many patients.[63]

II. Practices that Undermine Innovation and Access to New Treatments

To research, develop and deliver new treatments and cures for patients who need them around the world, biopharmaceutical innovators must be able to secure and effectively enforce patents and protect regulatory test data. They must be able to obtain timely marketing approval for new medicines and make those therapies available to patients according to reimbursement rules and procedures that are fair, transparent,

---

[57] Pham, N., *IP-Intensive Manufacturing Industries: Driving U.S. Economic Growth, NDP Analytics*, Mar. 2015, available at https://ssrn.com/abstract=3045229 (last visited Jan. 30, 2022).
[58] Research!America, U.S. Investments in Medical and Health Research and Development, 2013-2018, 2019, available at https://www.researchamerica.org/sites/default/files/Publications/InvestmentReport2019_Fnl.pdf (last visited Jan. 30, 2022).
[59] *Id.*
[60] PhRMA adaptation based on Dimasi JA. Cost of developing a new drug. Tufts Center for the Study of Drug Development (CSDD). R&D Cost Study Briefing (Nov. 18, 2014), available at https://f.hubspotusercontent10.net/hubfs/9468915/TuftsCSDD_June2021/pdf/Microsoft+PowerPoint+-+Tufts+CSDD+briefing+on+R%26D+cost+study+-+Nov+18,+2014.pdf (last visited Jan. 30, 2022).
[61] Jin, G. and S. Wong, "Toward better drug repositioning: prioritizing and integrating existing methods into efficient pipelines," *Drug Discovery Today*, Jan. 2014, available at http://www.sciencedirect.com/science/article/pii/S1359644613003991 (last visited Jan. 30, 2022).
[62] *See* Cohen, J. and K. Kaitin, "Follow-On Drugs and Indications: The Importance of Incremental Innovation to Medical Practice," *American Journal of Therapeutics*, Jan.-Feb. 2008, available at http://journals.lww.com/americantherapeutics/Citation/2008/01000/Follow_On_Drugs_and_Indications__The_Importance_of.15.aspx (last visited Jan. 30, 2022).
[63] Goss, T.F., E.H. Picard, and A. Tarab, *Recognizing the Value in Oncology Innovation*, Boston Healthcare Associates, June 2012.

reasonable and non-discriminatory, and that appropriately value and reward patented pharmaceuticals. Also, these conditions are necessary to facilitate U.S. exports and ensure that the competitive biopharmaceutical industry can continue to provide jobs and advance the economic interests of the United States.

For well over a century, governments have recognized the need for global minimum standards that enable inventors to effectively and efficiently protect and share their inventions in a territorial system of intellectual property rights. Signed in 1883, the Paris Convention for the Protection of Industrial Property allowed inventors, regardless of nationality, to claim priority for their inventions and to take advantage of the intellectual property laws in each member country. To facilitate the process of filing patent applications around the world, many members of the Paris Convention established the Patent Cooperation Treaty (PCT) in 1970. Today, more than 90 percent of all countries are members of the Paris Convention and the PCT.

The WTO TRIPS Agreement, which entered into force in 1994, was a major achievement in strengthening the worldwide protection and enforcement of intellectual property rights by creating an international minimum standard of protection for intellectual property rights. TRIPS was premised on the view that its obligations, if faithfully implemented by the diverse WTO Membership,[64] would create the policy and legal framework necessary for innovation-based economic development of WTO Members by rewarding innovation with reliable rights-based systems and permitting the flow of its attendant commercial benefits. Because it concerns both the definition and enforcement of rights, TRIPS is one of the single most important steps toward effective protection of intellectual property globally. WTO Members, including the United States, have an important role to play in fully and effectively implementing, reiterating and enforcing TRIPS minimum standards.

Critically, the United States and other countries have promoted, implemented and built on the global minimum standards of protection provided by these international rules through eligibility criteria for trade preference programs, WTO accessions and regional and bilateral trade agreements that establish strong intellectual property protections and require fair and equitable market access. However, certain U.S. trading partners maintain or are considering acts, policies or practices that are harming or would harm the ability of biopharmaceutical innovators to research, develop and deliver new treatments and cures for patients around the world. These acts, policies or practices deny or would deny adequate and effective intellectual property protection and/or fair and equitable market access for innovative medicines. In many cases, they appear to be inconsistent with global, regional and bilateral rules.

India and South Africa are key sponsors of a proposal at the WTO TRIPS Council calling to eliminate for an indefinite term certain WTO obligations to grant IP on a wide range of technologies related to COVID-19. The proposal marks a significant escalation in anti-IP global activism and will further polarize legitimate conversations on countries'

[64] 164 members as of July 29, 2016.

engagement to combat the pandemic. The proposal will do nothing to address the production and distribution challenges for making COVID-19 vaccines globally available. Rather, the proposal threatens to undermine the ability to respond to both the current pandemic and future health crises, and inevitably will affect IP discussions in countries around the world.

Some countries are using the COVID-19 pandemic opportunistically to advance longstanding industrial policies to further erode intellectual property policies. These governments ignore the value of intellectual property, including enabling increased participation in the global economy and the availability of new technologies – not least the creation, production, and delivery of innovative COVID-19 vaccines and therapeutics in record time. Since TRIPS took effect in 1994, economic growth has accelerated, billions have been lifted from poverty and global health has improved.[65] Indeed, the innovations supported, incentivized and licensed as a consequence of intellectual property protections, including those championed by TRIPS, have saved millions of lives around the globe.[66] Moreover, evidence suggests that strong intellectual property protections, including those obligations established via TRIPS, are linked to increased technology transfer to developing countries and promote indigenous innovation by local companies.[67]

Multilateral organizations that once served as custodians of the international rules-based system increasingly are seeking to undermine and even eliminate intellectual property protections that drive and sustain biopharmaceutical innovation in the United States and around the world. By reinterpreting international agreements and through meetings, reports, guidelines and training programs, the WHO, the United Nations Development Program (UNDP), the United Nations Conference on Trade and Development (UNCTAD), Unitaid and other organizations are promoting acts, policies and practices globally and in specific countries that prevent biopharmaceutical innovators from securing and maintaining patents, protecting regulatory test data and from enjoying fair and equitable market access.[68]

The following sections highlight the most serious challenges facing PhRMA members around the world. The acts, policies and practices of specific countries are described further below. PhRMA members urge USTR and other federal agencies to highlight these challenges, acts, policies and practices in the 2022 Special 301 Report and to use all available tools to address and resolve them.

---

[65] Geneva Network, The WTO Trips Agreement and Global Health Progress, Nov. 2021, available at https://geneva-network.com/research/the-wto-trips-agreement-and-global-health-progress/ (last visited Jan. 30, 2022).
[66] Solovy, E., The Doha Declaration at Twenty: Interpretation, Implementation, and Lessons Learned on the Relationship Between the TRIPS Agreement and Global Health, Northwestern Journal of International Law & Business, Nov. 2021, available at https://ssrn.com/abstract=3965053 (last visited Jan. 30, 2022).
[67] Geneva Network, The WTO Trips Agreement and Global Health Progress, Nov. 2021, available at https://geneva-network.com/research/the-wto-trips-agreement-and-global-health-progress/ (last visited Jan. 30, 2022).
[68] Hudson Institute, "The Patent Truth about Health, Innovation and Access," June 2016, available at https://s3.amazonaws.com/media.hudson.org/files/publications/20160706ThePatentTruthAboutHealthInnovationandAccess.pdf (last visited Jan. 30, 2022).

A. Practices that deny fair and equitable market access

PhRMA members increasingly encounter acts, policies and practices abroad that deny fair and equitable market access. Through arbitrary and often discriminatory government price controls, unnecessary regulatory delays and high tariffs and taxes, countries across Europe, Asia and beyond are limiting market competition, increasing costs and undermining the ability of biopharmaceutical innovators in the United States to bring new medicines to patients who need them.

In recent years, America's biopharmaceutical sector has witnessed a surge in the number and severity of arbitrary and discriminatory government price controls abroad that threaten U.S. exports and jobs. Such measures cause serious damage in the countries that maintain them by rationing patient access to health care. They also can have significant ripple effects across other markets. For example, government price controls implemented in one market can spill over to many other markets through international reference pricing. These policies can restrict competition and artificially depress prices below market value, ultimately delaying and denying patient access to new medicines.[69]

A 2004 Commerce Department study[70] found that international reference pricing and other such measures that "rely heavily on government fiat to set prices rather than competition in the marketplace" put short-term government objectives ahead of long-term strategies that would ensure continued R&D into medicines that patients need most. The report showed that moving to market-based systems would add billions to research and development for new medicines and lower overall health care costs around the world by promoting greater efficiencies in off-patent markets. A 2020 report from the Council of Economic Advisers[71] found that foreign government price controls have worsened over the past 15 years, causing innovative products to be sold "below fair market value," leading to a "slower pace of innovation" and "fewer potential new life-saving therapies for patients in all countries." Urgent action is needed to address and resolve the following government price control regulations, policies and practices that are limiting market access for medicines researched and developed in the United States:

- *Government price controls*. In many countries, governments are the primary payer of medicines and in effect dictate prices. This dominant position often results in U.S. trading partners failing to appropriately recognize the value of innovation in their pricing and reimbursement policies, instead engaging in actions that distort

[69] Danzon, P., Y. Wang et al., "The Impact of Price Regulation on the Launch Delay of New Drugs – Evidence from Twenty-Five Major Markets in the 1990s," Health Economics, March 2005, available at https://onlinelibrary.wiley.com/doi/abs/10.1002/hec.931 (lasted visited Jan. 28, 2022).
[70] U.S. Department of Commerce, International Trade Administration, Pharmaceutical Price Controls in OECD Countries: Implications for U.S. Consumers, Pricing, Research and Development, and Innovation (Dec. 2004) available at https://web.archive.org/web/20190414170009/https://2016.trade.gov/td/health/DrugPricingStudy.pdf (last visited Jan. 30, 2022).
[71] The Council of Economic Advisers, *Funding the Global Benefits of Biopharmaceutical Innovation*, February 2020, available at https://trumpwhitehouse.archives.gov/wp-content/uploads/2020/02/Funding-the-Global-Benefits-to-Biopharmaceutical-Innovation.pdf (last visited Jan. 30, 2022).

markets and artificially depress prices below what a competitive market would provide. Foreign governments are increasingly employing a range of regulatory measures, including international reference pricing, therapeutic reference pricing, mandatory price cuts, clawback taxes and flawed health technology assessments. These measures are often layered to exert maximum pressure. Over the past several years, **Japan** has implemented over 50 changes to pricing policies that significantly undermine efforts to carry a fair share of the costs of global research and development. In particular, the eligibility criteria for the Price Maintenance Premium (PMP) program as well as other price-cutting measures such as annual price cuts to patented medicines and health technology assessments designed to erode premiums for innovation will mean that some of America's most innovative medicines will be significantly undervalued. **Korea** employs several price control measures – including health technology assessments that require unreasonable thresholds for "cost-effectiveness," international reference pricing of inappropriate off-patent and generic comparators, and *ad hoc* measures – to systematically cut prices. In **Canada**, the Patented Medicine Prices Review Board regulates the maximum allowable price that a manufacturer can charge for a patented medicine to public or private payers. The Board continues to push for draconian changes intended to set prices at levels paid by less wealthy countries. Examples of other highly-developed markets that undervalue innovative medicines include **Australia**, countries in the **European Union** and the **United Kingdom**.

- *Discriminatory pricing policies*. In some countries, governments have policies that further benefit domestic drug companies and wholesalers at the expense of innovators in the United States. For example, in 2018, **Japan** revised its PMP program based on company criteria that appear to be inherently biased towards domestic companies (e.g., number of local clinical trials and whether the product was launched first in Japan), and in 2019 implemented new health technology assessments that will subject imported products to greater scrutiny and price cuts than domestic products. These new company and country-of-origin criteria call into question Japan's commitment to fair and non-discriminatory policies, including that of national treatment.

Other acts, policies and practices delay or limit market access for America's biopharmaceutical innovators and the benefits patients overseas could realize from faster access to medicines and greater competition between treatments in the same therapeutic class. These barriers include:

- *Import barriers.* High tariffs and taxes can limit U.S. biopharmaceutical exports and prevent access to new treatments in overseas markets.[72] Under the WTO Pharmaceutical Agreement, the United States and the 33 other countries do not

[72] Bate, R. et al., "Still Taxed to Death: An Analysis of Taxes and Tariffs on Medicines, Vaccines and Medical Devices," AEI-Brookings Joint Center for Regulatory Studies, Feb. 2006, available at https://www.researchgate.net/publication/46454258_Still_Taxed_to_Death_An_Analysis_of_Taxes_and_Tariffs_on_Medicines_Vaccines_and_Medical_Devices (last visited Jan. 30, 2022).

impose any import duties on a wide range of medicines and other health products.[73] However, biopharmaceutical innovators in the United States do not benefit from the same access to China, India and other emerging economies that, despite being major producers and exporters of drugs and active pharmaceutical ingredients, are not parties to the WTO Pharmaceutical Agreement. Between 2006 and 2013, the value of worldwide biopharmaceutical trade in countries that are not parties to that Agreement increased at a compound annual growth rate of more than 20 percent. This means that a larger proportion of medicines distributed around the world are potentially subject to tariffs.[74] For example, **India**'s basic import duties on biopharmaceutical products and active ingredients average about ten percent.[75] Additional duties and assessments can raise India's effective import duty to as high as 20 percent or more.[76] Combined federal and state taxes account for 31 percent of the cost of medicines in Brazil, one of the highest tax burdens on medicines in the world compared to the global average of 6 percent.[77] Examples of other countries that maintain high tariffs and taxes on imported medicines include **Argentina**, **Russia** and **Thailand**.

- *Regulatory approval delays.* **China** is making significant strides in reforming and strengthening its regulatory framework but remains an outlier in the drug approval process compared to other regulatory authorities, with new medicines typically taking three to five years longer to reach China than other major markets. In other words, a "drug lag" remains in China. Examples of other markets with complex and lengthy regulatory approval processes include **Mexico**, **Russia** and **Turkey**. Accelerating regulatory approval in these countries and others will improve the efficiency of global drug development, facilitate U.S. exports and reduce the time it takes for new medicines to reach patients.

- *Government pricing and reimbursement delays.* Restrictive government pricing and reimbursement policies delay market access for biopharmaceutical innovators in the United States and prevent timely patient access to new treatments and cures that have received regulatory approval. These processes vary by country with the result that government reimbursement decisions can be almost immediate in some countries to several years in others. For example, prior to 2017, **China** had only undertaken two substantive updates (2004 and 2009) to its National

[73] General Agreement on Tariffs and Trade, "Trade in Pharmaceutical Products" (L/7430), Mar. 1994, available at https://ustr.gov/sites/default/files/WTO%20Pharmaceutical%20Agreement%20March%201994.pdf (last visited Jan. 30, 2022).
[74] Banik, N. and P. Stevens, "Pharmaceutical tariffs, trade flows and emerging economies," Geneva Network, Sep. 2015, available at http://geneva-network.com/wp-content/uploads/2015/09/GN-Tariffs-on-medicines.pdf (last visited Jan. 30, 2022).
[75] *Id.*
[76] Olcay, M. and R. Laing, "Pharmaceutical Tariffs: What is their effect on prices, protection of local industry and revenue generation," World Health Organization, May 2005, available at http://www.who.int/intellectualproperty/studies/TariffsOnEssentialMedicines.pdf (last visited Jan. 30, 2022).
[77] Brazilian Institute of Tax Planning, 2018.

Reimbursement Drug List, which delayed reimbursement by up to seven years. In **Mexico**, delays can stretch as long as 1,500 days or more, on average.[78] PhRMA is encouraged by efforts that China has made to accelerate updates to its reimbursement list. However, patients would be better served by a model that allows all new drugs to be reviewed for reimbursement on a more regular, or rolling, basis.

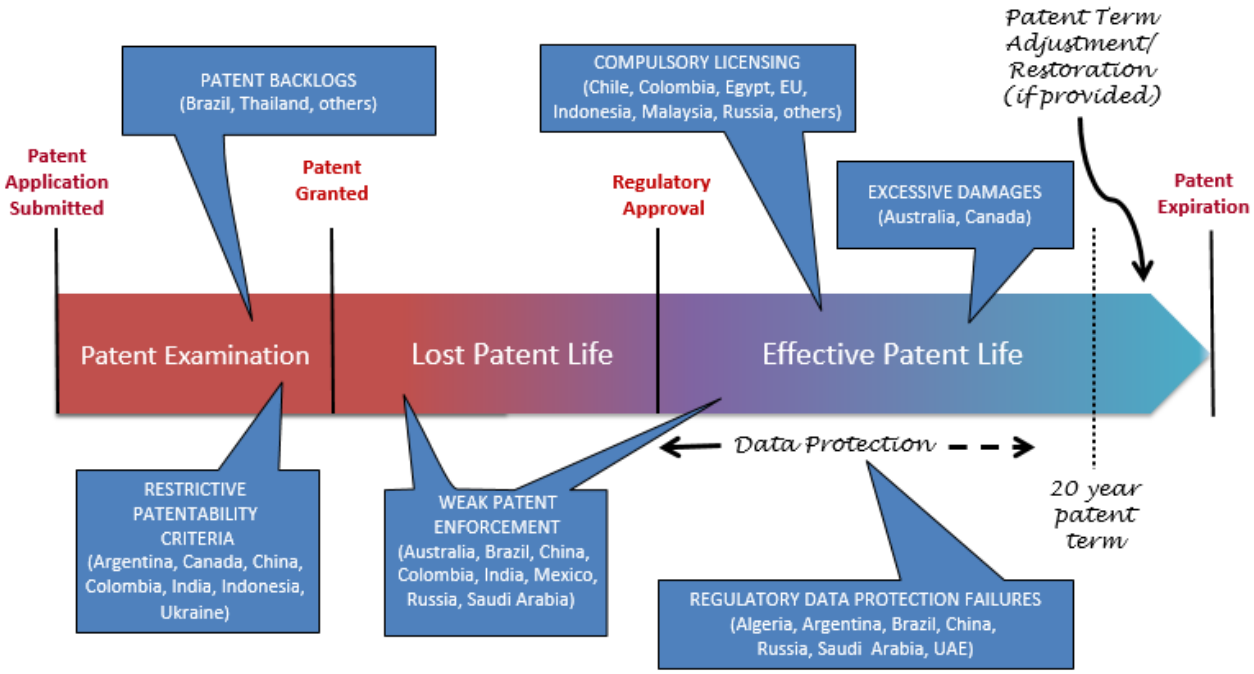
- *Lack of transparency and due process.* Lack of transparency, due process and delayed reimbursement decisions are widespread across the world. In **Canada**, **Japan** and **Korea**, the governments continue to make significant pricing policy reforms without adequate consultation with the industry. In **Mexico**, excessive regulatory approval delays are compounded by new government procurement processes that lack transparency and are applied inconsistently. In **Turkey**, reimbursement decision criteria are not clearly defined, the process is non-transparent and unpredictable delays in decision-making significantly postpone patient access to innovative medicines. The United States has previously recognized the serious nature of these types of concerns and attempted to redress several of them through a variety of trade policy initiatives. For example, the United States-Mexico-Canada Agreement (USMCA) requires Canada and Mexico to adhere to detailed transparency and procedural fairness obligations, and the United States-Korea Free Trade Agreement (KORUS) requires Korea to comply with similar specific commitments. PhRMA and its member companies welcome continued U.S. Government attention to these issues and encourage the Administration to strengthen its enforcement of our trading partners' commitments in these areas.

More broadly, PhRMA members recognize the efforts undertaken by the U.S. Government to address these barriers, including eliminating tariffs and promoting fair, reasonable and non-discriminatory pricing and reimbursement policies in trade agreements and addressing regulatory approval delays and other market access challenges in bilateral forums. As more countries enact price controls, the burden for financing medical advances will be borne increasingly by U.S. patients and biopharmaceutical innovators, while patients abroad will suffer decreased access to improved therapies over the long term. It remains critical that the U.S. Government engage on these issues with its trading partners, effectively enforce U.S. trade agreements and require immediate and meaningful steps by foreign governments to resolve existing barriers and to ensure that patients have faster access to new treatments and cures.

[78] Mexico data provided by the Asociación Mexicana de Industrias de Investigación Farmacéutica. *See also* Salieri, G. and F. Fuentes, "Biopharmaceutical Innovation in Mexico: At the Crossroads," Fundacion IDEA, 2016, available at http://geneva-network.com/article/biopharmaceutical-innovation-mexico-crossroads/ (last visited Jan. 30, 2022).

B. Practices that undermine biopharmaceutical innovation

The six intellectual property challenges described below and highlighted in Figure 3 have serious and immediate impacts on the ability of PhRMA members to invest in discovering and transforming promising molecules and proteins into useful new medicines for patients around the world. These challenges hinder or prevent biopharmaceutical innovators from securing patents (restrictive patentability criteria and patent backlogs), maintaining and effectively enforcing patents (market-size damages, weak patent enforcement and compulsory licensing), and protecting regulatory test data (regulatory data protection failures).



Restrictive Patentability Criteria

To bring valuable new medicines to patients, biopharmaceutical innovators must be able to secure patents on all inventions that are new, involve an inventive step and are capable of industrial application.[79] National laws, regulations or judicial decisions that prohibit patents on certain types of biopharmaceutical inventions or impose additional or heightened patentability criteria restrict patient access to valuable new medicines and undermine investment in future treatments and cures. These restrictions prevent innovators from building on prior knowledge to develop valuable new and improved

[79] *See generally*, TRIPS Article 27.1.

treatments that can improve health outcomes[80] and reduce costs[81] by making it easier for patients to take medicines and by improving patient adherence to prescribed therapies. Some of the most serious examples of restrictive patentability criteria challenges facing PhRMA members in countries around the world include:

- *Patentability restrictions and additional patentability criteria.* A number of countries maintain laws and regulations that, *per se*, prevent the patenting of a wide range of specific improvements to existing medicines[82] – improvements that are valuable to patients and payers and that require significant investment and research to develop. For example, **Argentina** issued regulations in 2012 that prevent biopharmaceutical innovators from securing patents on certain types of inventions, including new dosage forms and combinations. In the Philippines, national law limits patentability of new forms and new uses of existing medicines. **Indonesia** adopted a new patent law in 2016 that similarly prohibits patents for new forms and new uses of existing medicines. **India**'s Patent Law harms its own domestic

[80] New improvements to existing treatments, such as new dosage forms and combinations, are of tremendous value to patients. They can make it easier for patients to take medicines and increase patient adherence. Specifically, they make it more likely patients will take their medicines consistently and as prescribed. Such improvements might allow patients to take an oral medication instead of an injection or reduce the number of doses required. Adherence is inversely proportional to the number of times a patient must take their medicine each day. The average adherence rate for treatments taken once daily is nearly 80%, compared to about 50% for medicines that must be taken four times a day. Patient adherence to prescribed courses of treatment leads to better health outcomes and is particularly important for the management of chronic, non-communicable diseases like diabetes, heart disease and cancer. According to the WHO, "[a]dherence to therapies is a primary determinant of treatment success." *See* Shrank, William H. et al., "A Blueprint for Pharmacy Benefit Managers to Increase Value," *American Journal of Managed Care*, Feb. 2009, available at http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2737824/ (last visited Jan. 30, 2022).

[81] Encouraging patients to take their medicines consistently and as prescribed can lower overall health care costs. The cost of non-adherence has been estimated at $100 billion to $300 billion annually, including the costs of avoidable hospitalizations, nursing home admissions and premature deaths. Making patents available for improvements and new indications can also drive price competition for medicines by encouraging the development of alternative treatments – leading to multiple drugs in a single therapeutic class and increasing the range of options for patients and health care providers. *See* Osterberg, Lars and Terrence Blaschke, "Adherence to Medication," *New England Journal of Medicine*, Aug. 2005, available at http://www.nejm.org/doi/full/10.1056/NEJMra050100 (last visited Jan. 30, 2022); and DiMatteo, M. Robin, "Variations in Patients' Adherence to Medical Recommendations: A Quantitative Review of 50 Years of Research," *Medical Care*, Mar. 2004, available at http://journals.lww.com/lww-medicalcare/Abstract/2004/03000/Variations_in_Patients__Adherence_to_Medical.2.aspx (last visited Jan. 30, 2022); and DiMasi, Joseph A., *Price Trends for Prescription Pharmaceuticals 1995-1999*, background report prepared for the Department of Health and Human Services Conference on Pharmaceutical Pricing Practices, Utilization and Costs, Aug. 2000, available at https://aspe.hhs.gov/reports/price-trends-prescription-pharmaceuticals-1995-1999 (last visited Jan. 30, 2022).

[82] Examples of improvements include enantiomers and combination treatments. *See* Stevens, P. and J. Ellis, "Enantiomer Patents," Geneva Network, June 2017, available at https://geneva-network.com/wp-content/uploads/2017/07/enantiomer-patents.pdf (last visited Jan. 30, 2022); and Stevens, P. and J. Ellis, "The Power of Combination Drugs," Geneva Network, June 2017, available at https://geneva-network.com/wp-content/uploads/2017/07/Combination-drugs-patentability.pdf (last visited Jan. 30, 2022).

drug companies[83] by prohibiting patents on new forms and new uses of known substances, unless applicants can demonstrate they meet an additional "enhanced therapeutic efficacy" test. Ukraine adopted legislation that appears to impermissibly introduce restrictive patentability criteria for biopharmaceutical inventions by restricting the patentability of new forms and uses unless they differ significantly in efficacy.

In addition, multilateral organizations such as UNDP and Unitaid advocate actively for patentability restrictions and additional patentability requirements that are inconsistent with international practice. For example, although UNDP does not appear to have specialized expertise on intellectual property matters, it issued patent examination guidelines in 2016 that, if followed, would prevent innovators from securing patents on many kinds of biopharmaceutical inventions.[84] Similarly, Unitaid partnered with various non-governmental organizations in 2018 to launch a campaign to erode intellectual property policies and laws globally.

- *Restrictions on post-filing submissions.* Unlike patent offices in the United States, Europe, Japan, Korea and other major markets, **China**'s National Intellectual Property Administration (CNIPA) does not consistently accept data generated after a patent is filed during patent prosecution to describe inventions or satisfy inventive step requirements. Consistent with its commitments in Article 1.10 of the Economic and Trade Agreement between the United States and China (U.S.-China Economic and Trade Agreement), China has issued a judicial interpretation providing that the Court will review post-filing experimental data and CNIPA has amended its Patent Examination Guidelines. PhRMA and it members welcome these positive steps and will be closely monitoring implementation of the revised Guidelines to ensure that they permit pharmaceutical patent applicants to rely on supplemental data to satisfy relevant requirements for patentability.

Restrictive patentability criteria in many of these countries and others appear to be contrary to WTO rules and U.S. trade agreements, which require parties to make patents available for inventions that are new, involve an inventive step and are capable of industrial application.[85] These laws also appear to apply solely to pharmaceutical products, either expressly by law or in a *de facto* manner as applied. This is not consistent with the obligations of WTO Members and U.S. trade agreement partners to make patents available without discrimination as to the field of technology.

[83] Geneva Network, "Copy or Compete: How India's patent law harms its own drug industry's ability to innovate," December 2018, available at https://geneva-network.com/research/copy-or-compete-how-indias-patent-law-harms-its-own-drug-industrys-ability-to-innovate/ (last visited Jan. 30, 2022).
[84] United Nations Development Program, "Guidelines for the Examination of Patent Applications relating to Pharmaceuticals," 2016, available at http://www.undp.org/content/undp/en/home/librarypage/hiv-aids/guidelines-for-the-examination-of-patent-applications-relating-t.html (last visited Jan. 30, 2022).
[85] Hollman, C.M. et al., "Patentability Standards for Follow-On Pharmaceutical Innovation," *Biotechnology Law Report*, June 2018, available at https://www.liebertpub.com/doi/pdf/10.1089/blr.2018.29073.cmh (last visited Jan. 30, 2022).

PhRMA members appreciate steps that USTR and other federal agencies have taken to address restrictive patentability criteria and look forward to continuing to work closely with these agencies to secure concrete progress and real results. Effective enforcement of U.S. trade agreements is needed to resolve these challenges in particular countries and to prevent others from adopting similar practices.

Patent Backlogs

Long patent examination and approval backlogs harm domestic and overseas inventors in every economic sector. Backlogs undermine incentives to innovate, prevent timely patient access to valuable new treatments and cures, and impose huge societal costs.[86] Because the term of a patent begins on the date an application is filed, unreasonable delays can directly reduce the value of granted patents and undermine investment in future research. For biopharmaceutical companies, patent backlogs can postpone the introduction of new medicines.[87] They create legal uncertainty for research-based and generic companies alike and can increase the time and cost associated with bringing a new treatment to market.

- Patent backlogs are a challenge around the world, but a few countries stand out for persistently long delays. In **Brazil** and **Thailand**, for example, it can take ten years or more to secure a patent on a new medicine.[88] Brazil has prioritized reducing the patent backlog, including through the National Institute of Industrial Property's (INPI) implementation of the "Plan to Tackle Patent Backlog," which is yielding positive results. Moreover, the recent elimination of the dual examination process associated with the Brazilian National Health Surveillance Agency's (ANVISA) examination of pharmaceutical patent applications should help reduce the patent backlog. However, comprehensive reform is needed to address Brazil's significant patent examination backlog. Thailand approved a patent application filed by one PhRMA member six weeks before the patent expired. The situation is only somewhat better in markets like **India**, where it takes an average of six years to secure a patent,[89] and yet in 2015, India granted one patent based on an application filed 19 years earlier.[90]

[86] Schultz, M. and K. Madigan, "The Long Wait for Innovation: The Global Patent Pendency Problem," George Mason University, Center for the Protection of Intellectual Property, 2016, available at https://sls.gmu.edu/cpip/wp-content/uploads/sites/31/2016/10/Schultz-Madigan-The-Long-Wait-for-Innovation-The-Global-Patent-Pendency-Problem.pdf (last visited Jan. 30, 2022).
[87] Business Standard, "Delay in Patents Can Slow Down Improvements in Medicines: Experts," October 2016, available at http://www.business-standard.com/article/news-ians/delay-in-patents-can-slow-down-improvement-in-medicine-experts-116101600452_1.html (last visited Jan. 30, 2022).
[88] Schultz, M. and K. Madigan, "The Long Wait for Innovation: The Global Patent Pendency Problem," George Mason University, Center for the Protection of Intellectual Property, 2016, available at https://sls.gmu.edu/cpip/wp-content/uploads/sites/31/2016/10/Schultz-Madigan-The-Long-Wait-for-Innovation-The-Global-Patent-Pendency-Problem.pdf (last visited Jan. 30, 2022).
[89] *Id.*
[90] IndiaSpend, *Patent Delays Threaten 'Make In India'*, Jan. 2016, available at http://www.indiaspend.com/cover-story/patent-delays-threaten-make-in-india-67033 (last visited Jan. 30, 2022).

Long patent examination delays cause significant damage. A London Economics study estimated the value of lost innovation due to increased patent pendency at £7.6 billion per year.[91] Patent backlogs are a particular challenge for small start-up firms that are playing an increasingly important role in biopharmaceutical innovation. According to a U.S. Patent and Trademark Office (PTO) Economic Working Paper, for every year an ultimately-approved patent application is delayed, a start-up firm's employment growth decreases by 21 percent and its sales growth decreases by 28 percent on average over the following five years.[92] Each year a patent application is delayed, the average number of subsequent patents granted decreases by 14 percent and the probability that a startup will go public is cut in half.[93]

PhRMA members support patent term adjustment provisions in trade agreements and national laws to address unreasonable patent examination delays. They support initiatives to increase the efficiency of patent prosecution and reduce patent backlogs, including the PCT and work sharing arrangements through the IP5 and Patent Prosecution Highway (PPH) programs. Through these and other initiatives, national and regional patent offices in the European Union, Japan, Korea, Mexico and elsewhere are succeeding in reducing patent examination delays. In this regard, industry was disappointed to hear the sudden announcement on January 6, 2021, that the Gulf Cooperation Council (GCC) Patent Office is no longer accepting patent applications, thereby requiring innovators to file their patent applications in each of the GCC Member States rather than through the one office. This deprives innovators of the benefit of obtaining patent protection in all GCC Member States by filing one single regional application, which significantly reduced the financial and administrative burden on right holders. Moreover, recent amendments to the GCC Patent Regulations create further uncertainty regarding the future of the GCC Patent Office and how existing patent applications will be examined. Also, in **Brazil**, the recent Supreme Court decision finding that the sole paragraph of Article 40 of the Patent Law, which ensured a minimum patent term of 10 years from the date of patent grant in Brazil, is unconstitutional leaves patent applicants no recourse for unreasonable delays during examination of patent applications. Further, damaging legislation in the **European Union** and Ukraine has weakened patent term restoration (PTR) mechanisms by reducing the patent protections restored through Supplementary Protection Certificates. **Israel** is currently considering incorporating similar exemptions to its PTR system. Also, Singapore should adjust its PTR mechanism to compensate the patent holder for the time invested in conducting clinical trials either in Singapore or in any other market when such data is a condition of obtaining marketing approval in Singapore. Further work is needed to consolidate gains in patent protections and to extend effective models to other countries.

---

[91] London Economics, *Patent Backlogs and Mutual Recognition report to the UK Intellectual Property Office,* Jan. 2010, available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/328678/p-backlog-report.pdf (last visited Jan. 30, 2022).

[92] Farre-Mensa, J., D. Hegde, and A. Ljungqvist, "What Is a Patent Worth? Evidence from the U.S. Patent 'Lottery'," USPTO Economic Working paper No. 2015-5, Dec. 17, 2015, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2704028 (last visited Jan. 30, 2022).

[93] *Id.*

Compulsory Licensing

Biopharmaceutical innovators support strong national health systems and timely access to safe, effective and high-quality medicines for patients who need them. Patents drive and enable research and development that delivers new treatments and cures. These limited and temporary intellectual property rights are not a barrier to access to medicines[94] – particularly when governments and the private sector partner to improve health outcomes.

Compulsory licenses (CLs) have been issued in several countries, including **India**, **Indonesia, Russia** and **Malaysia**, that allow local companies to make, use, sell or import particular patented medicines without the consent of the patent holder. Other governments, including **Argentina**, **Australia**, **Brazil, Chile**, **Colombia**, El Salvador, **European Union**, Peru, the Philippines, **Saudi Arabia**, **Turkey**, the **United Arab Emirates (UAE)** and Vietnam, have adopted or considered resolutions, laws or regulations that promote or provide broad discretion to issue CLs, provide inadequate opportunity for patent holders to respond to CL petitions and appeal CL grants, and discriminate against pharmaceutical patents. Some countries like Hungary, **Colombia** and **Indonesia**, have adopted emergency regulations or presidential decrees that facilitate use of CLs for COVID-19 products without due process or basic engagement with the patent holder. In **Brazil**, the National Congress is pursuing efforts to expand inappropriately compulsory licensing provisions in Brazil's Industrial Property Law. PhRMA believes that governments should grant CLs in accordance with international rules and only in exceptional circumstances and as a last resort. Decisions should be made through fair and transparent processes that involve participation by all stakeholders and consider all relevant facts and options.

Experience and recent research demonstrate that compulsory licensing is not an effective way to improve access or achieve other public health objectives. It does not necessarily lower prices[95] or speed access[96] in the short-term or provide sustainable or comprehensive solutions to longer-term challenges. It does not address systemic barriers

[94] *See, e.g.*, Attaran, A. and L. Gillespie-White, "Do Patents for Antiretroviral Drugs Constrain Access to AIDS Treatments in Africa?" *Journal of the American Medical Association*, Oct. 2001, available at https://jamanetwork.com/journals/jama/fullarticle/194301 (last visited Jan. 30, 2022); Attaran, A. "How Do Patents and Economic Policies Affect Access to Essential Medicines in Developing Countries," *Health Affairs*, May 2004, available at https://www.healthaffairs.org/doi/full/10.1377/hlthaff.23.3.155 (last visited Jan. 30, 2022).

[95] Beall, R.F. et al., "Compulsory Licensing Often Did Not Produce Lower Prices for Antiretrovirals Compared to International Procurement," *Health Affairs*, Mar. 2015, available at https://www.healthaffairs.org/doi/pdf/10.1377/hlthaff.2014.0658 (last visited Jan. 30, 2022).

[96] When Brazil issued a CL for an antiretroviral treatment in 2007, it took the local manufacturer two years to launch production of a generic version. *See* Bond, E. and K. Saggi, "Compulsory licensing, price controls, and access to patented foreign products," Vanderbilt University, Apr. 2012, available at http://www.wipo.int/edocs/mdocs/mdocs/en/wipo_ip_econ_ge_4_12/wipo_ip_econ_ge_4_12_ref_saggi.pdf (last visited Jan. 30, 2022).

to access[97] – from weak health care delivery systems to low national health care funding and high taxes and tariffs on medicines. Compulsory licensing is particularly ineffective relative to the many alternatives available. Biopharmaceutical innovators support different tools and programs that make medicines available to patients who could not otherwise afford them, including drug donation and differential pricing programs, voluntary licensing and non-assert declarations.[98] In sub-Saharan Africa, for example, the majority of antiretrovirals are manufactured under voluntary licenses to local generic drug companies.[99] Indeed, the successful use of various mechanisms, such as voluntary licenses, explains why the compulsory licensing provisions in TRIPS have rarely been utilized. As several WTO Members have argued, the limited use is not surprising given that the vast majority of essential medicines are not patented, and that developing countries acquire medicines through voluntary licenses for those medicines that are subject to intellectual property protections.[100]

Unfortunately, despite the evidence indicating that CLs are a deeply flawed means of facilitating access to medicines, some countries appear to be using CLs to promote the local production of medicines at the expense of manufacturers and jobs in the United States and elsewhere.[101] For example, **Indonesia** recently issued a CL on a COVID-19 therapeutic despite entering into a voluntary licensing agreement with the right holder. Similarly, **Russia**, which has made no secret of its intent to compel local manufacturing, recently renewed its CL on a COVID-19 therapeutic. **Malaysia** issued a CL in 2017 in a move that appears designed to facilitate the local development and marketing of a competing combination product. Since then, the Malaysian government appears to be inappropriately leveraging the CL to encourage medical tourism and travel to Malaysia.[102] In 2013, **India**'s Intellectual Property Appellate Board affirmed a CL for a patented

[97] Vesper, I., "Cheap drugs not enough to fight hepatitis C in Asia," SciDevNet, July 2018, available at https://www.scidev.net/global/news/drugs-fight-hepatitis-asia/ (last visited Jan. 30, 2022).
[98] IFPMA Policy Position, *Voluntary Licenses and Non-Assert Declarations*, available at http://www.ifpma.org/wp-content/uploads/2016/03/IFPMA-Position-on-VL-and-Non-Assert-Declarations-18FEB2015.pdf (last visited Jan. 30, 2022).
[99] Chien, C., "HIV/AIDS Drugs for Sub-Saharan Africa: How Do Brand and Generic Supply Compare?" *PLoS One*, Mar. 2007, available at http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1805689/ (last visited Jan. 30, 2022).
[100] Solovy, E., The Doha Declaration at Twenty: Interpretation, Implementation, and Lessons Learned on the Relationship Between the TRIPS Agreement and Global Health, Northwestern Journal of International Law & Business, Nov. 2021, available at https://ssrn.com/abstract=3965053 (last visited Jan. 30, 2022); see also Geneva Network, The WTO Trips Agreement and Global Health Progress, Nov. 2021, available at https://geneva-network.com/research/the-wto-trips-agreement-and-global-health-progress/ (last visited Jan. 30, 2022).
[101] See, for example, Drugs for Neglected Diseases Initiative, "DNDi welcomes Malaysia's move to secure access to more affordable treatments for hepatitis C," Sep. 2017, available at https://www.dndi.org/2017/media-centre/press-releases/dndi-welcomes-malaysia-move-access-affordable-treatments-hepc/ (last visited Jan. 30, 2022).
[102] *See*, *e.g.*, "Malaysia hopes to become Asia's treatment hub for hepatitis C; offering treatment at fraction of cost: Health minister," CNA (Nov. 16, 2021), available at https://www.channelnewsasia.com/asia/malaysia-hepatitis-c-medical-tourism-2316876 (last visited Jan. 30, 2022).

oncology medicine, based in part on a finding that the patented medicine was not being manufactured in India.[103]

In its 2020 Special 301 Report, USTR rightly highlighted concerning actions by "trading partners to unfairly issue, threaten to issue, or encourage others to issue compulsory licenses" and committed to "engage, as appropriate, with trading partners".[104] PhRMA members welcomed these statements and urge USTR and other federal agencies to engage to address serious and growing compulsory licensing threats across Latin America, Southeast Asia and elsewhere.

Weak Patent Enforcement

To continue to invest in the research and development of new medicines, biopharmaceutical innovators must be able to effectively enforce patents. Mechanisms such as patent linkage that provide for the early resolution of patent disputes before potentially infringing follow-on products enter a market are essential for effective enforcement. The premature launch of a product that is later found to infringe a patent may disrupt patient treatment and require governments to adjust and re-adjust national formularies and reimbursement policies. For biopharmaceutical innovators, it may cause commercial damage that is impossible to repair later.

At a minimum, effective early resolution mechanisms (1) require governments to notify the holder of a patent on a biopharmaceutical product if another party applies for marketing approval for a generic or biosimilar versions of that product; (2) enable the holder of a patent on a biopharmaceutical product to seek provisional enforcement measures, such as a stay, preliminary injunction or interlocutory injunction, to prevent the marketing of a potentially infringing generic or biosimilar version of that product; and (3) provide for the timely resolution of patent disputes before marketing approval is granted for a generic or biosimilar.

PhRMA members welcomed the inclusion of effective patent enforcement commitments in the U.S.-China Economic and Trade Agreement. Although **China** implemented a number of measures in 2021 to establish an early patent dispute resolution framework, we have concerns about the effectiveness of the resulting system. PhRMA and its member companies stand ready to work with the U.S. and Chinese governments on the implementation of an effective patent enforcement system in China, consistent with its commitments in Article 1.11 of the U.S.-China Economic and Trade Agreement and with a view to establishing an effective and commercially meaningful enforcement system for biopharmaceutical patents in China.

---

[103] Chatterjee, P., "India's First Compulsory License Upheld, But Legal Fights Likely to Continue," Intellectual Property Watch, Apr. 2013, available at http://www.ip-watch.org/2013/03/04/indias-first-compulsory-licence-upheld-but-legal-fights-likely-to-continue/ (last visited Jan. 30, 2022).
[104] *2020 Special 301 Report,* at p. 14 (Apr. 2020), available at https://ustr.gov/sites/default/files/2020_Special_301_Report.pdf (last visited Jan. 30, 2022).

Biopharmaceutical innovators strongly supported passage of patent linkage legislation in **Taiwan** in late 2017. We welcomed regulations issued on January 30, 2019, to implement patent linkage for both biologic and chemically synthesized medicines. In July 2019, Taiwan published the final patent linkage regulation and shortly thereafter the Executive Yuan approved implementation of the patent linkage system effective August 20, 2019. Disappointingly, however, the Taiwan Food and Drug Administration has unilaterally determined that Taiwan's patent linkage system should not include patents that protect new doses, new dosage forms or new unit strengths. If allowed to continue, this action will seriously undermine the value of Taiwan's patent linkage system. We stand ready to work with the Taiwan Government to support appropriate implementation of the regulation and to ensure that patents on all innovative medicines are effectively enforced.

U.S. trade agreements generally require parties to notify patent holders, to act expeditiously on requests for provisional enforcement measures and to prevent the marketing of generic or biosimilar products during the patent term without the consent of the patent holder. However, some U.S. trade agreement partners do not comply with these obligations. For example, biopharmaceutical innovators in the United States are unable to quickly secure effective preliminary injunctions in **Mexico**. Until recently, **Australia** did not require any notice of a third party's intention to obtain marketing approval**,** so as to enable final resolution of patent claims before marketing approval, but further measures are required to more reliably notify patent holders.

Saudi Arabia has knowingly facilitated the infringement of the patent on a medicine formulated and exported from the United States by giving a local company approval to produce a competing product during the patent term. Similarly, in 2017 the **UAE** approved the sale of patent infringing generics despite the government's pharmaceutical patent commitments in Ministerial Decree No. 404 and reciprocal patent recognition obligations under the Gulf Cooperation Council. Promisingly, Decree No. 321 (2020) suggests that the UAE may be poised to remedy this deficiency. In Bangladesh, local companies are taking advantage of the country's least developed country (LDC) status to undermine intellectual property protections in other countries. Under the terms of a grace period adopted in 2001 (and extended in 2015), LDCs are not obligated to comply with WTO intellectual property rules.[105] Local companies in Bangladesh are reverse engineering and making copies of biopharmaceutical products that are under patent in other parts of the world. These unlicensed biopharmaceutical products are entering markets abroad, e.g., India, where patent protection exists. The quality and safety of these products have not been reviewed and could pose significant risks. Furthermore, local companies are adopting product names for biopharmaceutical products that are nearly identical to well-known product names of U.S. biopharmaceutical companies creating confusion in the market as to their source and/or association. These actions are not consistent with the spirit, if not the letter, of the LDC grace period.[106]

[105] WTO Council decision, available at https://www.wto.org/english/news_e/news15_e/trip_06nov15_e.htm (last visited Jan. 30, 2022).
[106] *Id*.

Effective early resolution mechanisms are also needed in **India**, **Russia** and other countries, where innovators are not notified of marketing approval applications filed for potentially infringing products and generally are unable to secure provisional enforcement measures. In the Philippines, early resolution mechanisms were available before a 2005 Department of Health Administrative Order (A.O. No. 2005-0001) took effect that required pharmaceutical patent holders to monitor follow-on products seeking FDA registration and to pursue costly and time-consuming legal remedies to avoid potential patent infringement.

PhRMA urges USTR and other federal agencies to enforce intellectual property commitments in existing U.S. trade agreements and to continue to promote effective patent enforcement abroad, including through bilateral dialogues such as the U.S.-India Trade Policy Forum.

Excessive and Punitive Damages

Biopharmaceutical innovators must be able to rely on and enforce patents issued by competent government authorities. Laws or policies that allow governments or other non-parties to a patent dispute to collect excessive and punitive damage awards after the fact from innovators that pursue unsuccessful patent claims unfairly penalize and discourage the use of provisional enforcement measures as part of well-functioning early resolution mechanisms. These policies undermine legal certainty, predictability and the incentive provided by patents to invest in new treatments and cures.

The ability to enforce patents in **Canada** continues to weaken. Canada's current policies discourage and penalize innovators from seeking patent enforcement actions by enabling generic litigants to recover excessive and punitive damage awards simply because innovators unsuccessfully sought to protect patents granted by the Canadian Government. Pending court decisions could make that situation far worse – increasing the potential that innovators forfeit patents prematurely in Canada rather than defend them. Section 8 of the Patented Medicines (Notice of Compliance) Regulations (PM (NOC) Regulations) is intended to compensate generic drug companies that bring successful patent disputes against innovators for actual losses suffered during the stay period. But Canada's courts are granting generic litigants damages in excess of 100 percent of the total generic market.

Canada's implementing regulations of the Comprehensive Economic and Trade Agreement (CETA) further expose innovators to excessive liability under Section 8. These regulations enable competitors to claim indefinite future loses and to seek compensation for production "ramp-up" costs that they may have incurred before the stay was granted and after it was lifted. In addition, Canada's courts are now contemplating even more excessive damage awards for generic litigants using obscure legal theories under the "Statute of Monopolies" to seek treble damages from innovators that unsuccessfully enforced their patent(s) against a generic litigant. An Ontario trial court decision awarding a generic litigant damage under this statute is currently under appeal.

Australia's Therapeutic Goods Act, passed as part of legislation implementing the U.S.-Australia Free Trade Agreement,[107] provided for "market-size damages" in certain instances. Since 2012, the Australian Government has stated its intent to seek – and has sought – market-size damages from biopharmaceutical innovators that have pursued unsuccessful patent claims. Those damages are designed to compensate Australia's pharmaceutical reimbursement scheme (PBS) for any higher price paid for a patented medicine during the period of a provisional enforcement measure. The PBS imposes automatic price cuts on medicines as soon as competing versions enter the market, but the policy entails no corresponding mechanism to compensate innovators for losses if an infringing product is launched prematurely.

By pursuing market-size damages, Australia is unfairly tipping the scales in commercial patent disputes – encouraging competitors to launch at risk and discouraging innovators from enforcing their patents. This action creates an inappropriate conflict of interest by permitting the same government that examined and granted a patent to seek damages if that patent is later ruled invalid or not infringed. It exposes innovators to significant additional compensation claims that are difficult to quantify and were not agreed to at the time provisional enforcement measures were granted. The size of these additional claims equates legitimate patent enforcement with patent abuse. Allowing governments or other non-parties to a patent dispute to collect market-size damages undermine legal certainty, predictability and the incentives patents provide for investment in new treatments and cures. Australia's practice appears to be inconsistent with the U.S.-Australia Free Trade Agreement and with WTO intellectual property rules, including with respect to provisional measures.

In a 2004 letter[108] to Australia's trade minister, USTR raised concerns about the significant and negative impact that the Therapeutic Goods Act amendments permitting market-size damages could have on patent rights and the consistency of those amendments with Australia's international obligations. The letter stated that the "United States reserves its right to challenge the consistency of these amendments with such obligations." PhRMA members urge USTR and other federal agencies to prioritize actions to address Australia's pursuit of market-size damages.

Regulatory Data Protection Failures

Regulatory data protection (RDP) complements patents on innovative medicines. By providing temporary protection for the comprehensive package of information biopharmaceutical innovators must submit to regulatory authorities to demonstrate the safety and efficacy of a medicine for marketing approval, RDP provides critical incentives for investment in new treatments and cures.

---

[107] *See* Schedule 7 of the U.S. Free Trade Agreement Implementation Act 2004, available at http://www.wipo.int/wipolex/en/text.jsp?file_id=206375 (last visited Jan. 30, 2022).

[108] Letter from U.S. Trade Representative Robert B. Zoellick to Australian Minister of Trade Mark Vaile, Nov. 17, 2004, available at https://ustr.gov/archive/assets/Trade_Agreements/Bilateral/Australia_FTA/Implementation/asset_upload_file393_6951.pdf (last visited Jan. 30, 2022).

RDP is a carefully balanced mechanism that improves access to medicines of all kinds. Prior to 1984, generic drug companies in the United States were required to generate their own test data for marketing approval. The Hatch-Waxman Act introduced abbreviated pathways that enabled generic drug companies to rely on test data developed by innovators.[109] In exchange, innovators received a period of protection for test data gained through substantial investments in clinical trials over many years. As a result of this and other provisions of Hatch-Waxman, the percentage of prescription drugs filled by generics soared from 19 percent in 1984 to approximately 90 percent of all prescriptions filled in the United States today.[110]

RDP is particularly critical for biologic medicines, which may not be adequately protected by patents alone. Made using living organisms, biologics are so complex that it is possible for others to produce a version – or "biosimilar" – of a medicine that may not be covered within the scope of the innovator's patent. For this reason and others, U.S. law provides twelve years of RDP for biologics. This was not an arbitrary number, but rather the result of careful consideration and considerable research on the incentives necessary to ensure biopharmaceutical innovators and the associated global scientific ecosystem are able to sustainably pursue groundbreaking biomedical research.[111]

Unfortunately, many U.S. trading partners do not provide RDP. Examples, some of which are described further in the market profiles below, include **Algeria**, **Argentina**, **Brazil**, **China**, **Egypt** and **India**. Others, like **Saudi Arabia**, provide RDP but have allowed local companies to rely on data submitted by American innovators during the period of protection. This is contrary to WTO rules, which require parties to protect regulatory test data submitted as a condition of obtaining marketing approval against both disclosure and unfair commercial use. U.S. trade agreements generally require parties to provide RDP for a specified period of time, but some partner countries have not fully honored their commitments. For example, **Mexico** and Peru provide RDP for small-molecule treatments, but not for biologics. Singapore does not provide RDP for new formulations, combinations, indications and dosage regimes. In **Russia**, RDP was tied to the registration system, which ceased to exist on January 1, 2021, when the new Eurasian Economic Union rules for registration of new medicines across the Union went into effect. Other countries have adopted mechanisms inconsistent with international rules that enable governments to circumvent RDP. In 2020, the **UAE** took the positive step of issuing an RDP Decree, but created an unprecedented exception to that protection. We urge the UAE Government to ensure that the Decree (and in particular the proposed exception in Article 5) is consistent with the UAE's international commitments and that it is implemented in a manner that provides effective and meaningful RDP for all innovative pharmaceuticals (including biologics). **Israel** enacted legislation affording limited RDP to small molecule drugs, but it fails to explicitly provide such protection for biologics. Israel

[109] Pub. L. No. 98-417, 98 Stat. 1585 (1984) (codified as amended at 21 U.S.C. § 355 and 35 U.S.C. §§ 156, 271 and 282).
[110] PhRMA analysis based on IQVIA National Sales Perspective and Quintiles, IMS Institute MIDAS™ audited data, 2017.
[111] *See*, *e.g.*, Grabowski, H. et al., "Data exclusivity for biologics," *Nature Reviews – Drug Discovery*, Jan. 2011, available at https://fds.duke.edu/db/attachment/1592 (last visited Jan. 30, 2022).

established an inter-governmental committee in 2018 to examine this deficiency, although the process has not yet yielded a policy recommendation for providing adequate protection. We urge Israel to complete the regulatory impact assessment process and provide a guaranteed period of RDP for biologic drugs that reflects the highest international standards. Meanwhile, **Canada** passed legislation in 2014 that gives the Health Minister broad discretion to share undisclosed test data without safeguards to protect against unfair commercial use. Other countries provide RDP in a manner that discriminates against foreign innovators.

PhRMA urges USTR and other federal agencies to enforce intellectual property commitments in existing U.S. trade agreements, to address RDP failures in bilateral forums and to seek and secure RDP commitments in trade agreement negotiations that reflect the high standards found in U.S. law.

C. Localization barriers – A cross-cutting challenge

Like businesses in many other sectors of the U.S. economy, PhRMA members are witnessing a proliferation of acts, policies and practices abroad that are designed to benefit local producers at the expense of manufacturers and their employees in the United States and elsewhere around the world. In countries like **Argentina**, **China**, **India**, **Indonesia**, **Russia** and **Turkey**, these localization barriers have become so pervasive that they are now a routine part of many transactions between businesses and governments – from securing patents, regulatory approval and market entry to the most minor administrative formalities.

These discriminatory measures put American jobs at risk and appear to violate the most basic principles of the global trading system found in the General Agreement on Tariffs and Trade, TRIPS and the WTO Agreements on Technical Barriers to Trade and Trade-Related Investment Measures. They deny adequate and effective intellectual property protection for biopharmaceutical innovators in the United States and fair and equitable market access for new medicines, vaccines and other health technologies. Some examples of the most serious localization barriers that are undermining the ability of PhRMA members to develop and deliver new treatments and cures include:

- *Market entry or other benefits conditioned on local manufacturing.* While many economies provide positive incentives for businesses to conduct research and development and to manufacture in their markets,[112] an alarming number are seeking to grow their economies by discriminating against innovators in the United States and other countries. For example, **Turkey** has removed products from the reimbursement list that are not produced in Turkey. **Algeria** prohibits imports of virtually all biopharmaceutical products that compete with similar products

[112] Pugatch Consilium, "Separating Fact From Fiction – How Localization Barriers Fail Where Positive Non-Discriminatory Incentives Succeed: A Global Assessment of Localization Policies and Incentivizing Life Science Investment and Innovation," 2016, available at http://www.pugatch-consilium.com/reports/Localization%20Paper_US_FINAL.pdf (last visited Jan. 30, 2022).

manufactured domestically. **Russia**'s Law on the Federal Contract System allows government medicines procurement agencies to ban foreign goods in public procurement tenders. Moreover, Russia is implementing legislation that limits national medicine procurement to manufacturers in the Eurasian Economic Union if there are two or more manufacturers for a particular class of medicine.

- *Mandatory technology transfer.* In **Indonesia** and other countries, local manufacturing requirements are coupled with other policies that directly expropriate sensitive intellectual property and know-how. For example, a foreign biopharmaceutical company may import medicines into Indonesia only if it partners with an Indonesian firm and transfers relevant technology so that those medicines can be domestically produced within five years. Requiring technology transfer to import medicines into Indonesia creates a windfall for domestic firms and artificially distorts the market.

- *De facto bans on imports.* Manufacturing licensing requirements generally are intended to ensure that companies meet globally recognized standards – such as good manufacturing practices (GMP). Some countries exploit these licensing requirements by adopting policies that virtually prevent market entry. For example, **Turkey** does not recognize internationally accepted GMP certifications from other countries unless they have mutual recognition agreements (MRAs) on inspections with Turkey. Given, however, the many steps that would need to be satisfied before an MRA could be pursued between the United States and Turkey, this policy serves as a *de facto* restriction on imports from biopharmaceutical innovators in the United States. Turkey has stated publicly that the purpose of this policy is to promote Turkish drug companies.

Recent research[113] demonstrates the significant and widespread damage localization barriers can inflict on the global economy and on markets that put such barriers in place. They cost businesses and their employees in the United States and other leading nations by cutting tens of billions of dollars in global trade and by reducing global income and innovation. They do not increase biopharmaceutical investment or knowledge-intensive employment in countries that adopt localization barriers. In fact, they

[113] *See*, *e.g.*, Stone, S., J. Messent and D. Flaig, "Emerging Policy Issues: Localisation Barriers to Trade," OECD Trade Policy Papers, No. 180, 2015, available at http://www.oecd-ilibrary.org/trade/emerging-policy-issues_5js1m6v5qd5j-en;jsessionid=ai5pr32hanqoq.x-oecd-live-03 (last visited Jan. 30, 2022); Ezell, S.J., R.D. Atkinson and M.A. Wein, "Localization Barriers to Trade: Threat to the Global Innovation Economy," Information Technology and Innovation Foundation, Sep. 2013, available at http://www2.itif.org/2013-localization-barriers-to-trade.pdf?_ga=1.136058805.581989633.1484510758 (last visited Jan. 30, 2022); Hufbauer, G.C., J.J. Schott et al., *Local Content Requirements: A Global Problem*, Peterson Institute for International Economics, Sep. 2013, available at https://www.piie.com/bookstore/local-content-requirements-global-problem (last visited Jan. 30, 2022).

can even reduce employment – particularly for the less skilled – by raising input costs and severing connections to global value chains.[114]

PhRMA members appreciate the attention that USTR and other federal agencies have given to localization barriers in recent reports and publications. However, action is urgently needed to remove these barriers and to discourage other countries from adopting similar acts, policies and practices. Biopharmaceutical innovators in the United States look forward to concrete progress and real results in 2022.

III. Addressing Challenges and Securing the Benefits of Biopharmaceutical Innovation

To address these pressing challenges and ensure that biopharmaceutical innovators in the United States can continue to research, develop and deliver new treatments and cures for patients who need them around the world, PhRMA members urge USTR and other federal agencies to take the following five actions. These actions can help ensure access to quality, safe and effective medicines at home and abroad by promoting high standards of protection for patents and regulatory test data, effective enforcement of these and other intellectual property rights and transparent and predictable legal and regulatory regimes.

A. Enforce and defend global, regional and bilateral rules

USTR and other federal agencies should use all available tools and leverage to ensure America's trading partners live up to their obligations in global, regional and bilateral trade and investment agreements. Negotiating new trade agreements, modernizing existing trade agreements and strengthening enforcement activity in the months and years ahead will be critical to end discriminatory pricing policies and to address longstanding intellectual property challenges around the world – particularly in countries that are U.S. trade and investment agreement partners, that have made important unfulfilled WTO accession commitments and that benefit from U.S. trade preference programs.

U.S. regional and bilateral trade agreements affirm globally accepted standards for the patentability of biopharmaceutical and other inventions and require countries to protect regulatory test data, provide mechanisms that enable innovators to resolve patent disputes prior to the marketing of potentially infringing products and establish a stronger intellectual property framework. Some also include government pricing and reimbursement and transparency commitments. However, **Australia**, **Canada**, **Chile**, **Colombia**, **Korea** and other U.S. trading partners fail to adequately comply with some or all of these obligations. USTR and other federal agencies should consider a process to

[114] Pugatch Consilium, "Separating Fact From Fiction – How Localization Barriers Fail Where Positive Non-Discriminatory Incentives Succeed: A Global Assessment of Localization Policies and Incentivizing Life Science Investment and Innovation," 2016, available at http://www.pugatch-consilium.com/reports/Localization%20Paper_US_FINAL.pdf (last visited Jan. 30, 2022).

systematically review compliance with trade and investment agreements and to take steps necessary to ensure that countries abide by rules to which they have agreed.

On joining the WTO in 2001, **China** committed to provide six years of protection for clinical test and other data submitted for regulatory approval of biopharmaceutical products containing a new chemical ingredient.[115] China has never implemented this obligation, despite agreement to do so during the 2012 U.S.-China Joint Commission on Commerce and Trade meeting.[116] In light of these deficiencies, we strongly welcomed the CFDA draft Circular 55 (Relevant Policies on Protecting Innovators' Rights to Encourage New Drug and Medical Device Innovation) and draft "Implementing Provisions on Protection of Drug Trial Data" (April 2018), which propose up to twelve years of RDP for therapeutic biologics, orphan and pediatric medicines and six years of RDP for new small molecule drugs. These proposals represent a strong first step toward reform in this area, but it is now imperative that these proposed policy revisions are transparently and expeditiously implemented in a manner that provides for effective protection for U.S. biopharmaceutical companies and is consistent with international best practices and China's renewed commitment to provide RDP as affirmed in the chapeau to Section C of Chapter One of the U.S.-China Economic and Trade Agreement.

The Generalized System of Preferences (GSP) program provides unilateral duty-free access to the U.S. market for approximately 3,500 products.[117] Before granting GSP benefits to an eligible country, the President must take into account a number of factors, including the extent to which the country is willing to "provide equitable and reasonable access to its markets" and is "providing adequate and effective protection of intellectual property rights."[118] However, GSP beneficiaries like **Argentina**, **Brazil** and **Indonesia** do not provide adequate and effective protection of intellectual property rights or fair and equitable market access.

The Special 301 Report is an important tool. Action plans required by the Trade Facilitation and Trade Enforcement Act of 2015 should be developed for countries listed on the Priority Watch List with input from relevant stakeholders.[119] Out-of-cycle reviews announced in the Special 301 Report should be conducted and involve the participation of relevant stakeholders.

The National Trade Estimate Report likewise is an important tool to identify and prioritize acts, policies and practices in these and other overseas markets that are

[115] World Trade Organization, "Report of the Working Party on the Accession of China" (WT/ACC/CHN/49), Oct. 2001, available at https://www.wto.org/english/thewto_e/acc_e/completeacc_e.htm (last visited Jan. 30, 2022).
[116] Office of the U.S. Trade Representative, "Fact Sheet: 23rd U.S.-China Joint Commission on Commerce and Trade," Dec. 2012, available at https://ustr.gov/about-us/policy-offices/press-office/fact-sheets/2012/december/23rd-JCCT (last visited Jan. 30, 2022).
[117] Office of the United States Trade Representative, *U.S. Generalized System of Preferences Guidebook*, Nov. 2020, available at https://ustr.gov/sites/default/files/gsp/GSPGuidebook_0.pdf (last visited Jan. 30, 2022).
[118] *See* Title V of the Trade Act of 1974 (19 U.S.C. § 2461 et seq.), as amended.
[119] *See* Section 182 of the Trade Act of 1974 (19 U.S.C. § 2242), as amended.

harming America's creative and innovative industries by denying adequate and effective intellectual property protection and fair and equitable market access. PhRMA members urge USTR and other federal agencies to ensure that this tool is used effectively.

USTR should pursue a variety of enforcement initiatives, including – but not limited to – the filing of dispute settlement cases to secure compliance with trade and investment agreement commitments. In addition, USTR should create and fill key positions. To that end, PhRMA and its member companies welcomed the President's recent nomination of a Chief Innovation and Intellectual Property Negotiator, as required by the Trade Facilitation and Trade Enforcement Act of 2015 (TFTEA).[120] According to TFTEA, the "principal functions of the Chief Innovation and Intellectual Property Negotiator shall be to conduct trade negotiations and to enforce trade agreements relating to United States intellectual property and to take appropriate actions to address acts, policies and practices of foreign governments that have a significant adverse impact on the value of United States Innovation."[121] TFTEA states further that the "Chief Innovation and Intellectual Property Negotiator shall be a vigorous advocate on behalf of United States innovation and intellectual property interests."[122] PhRMA and its member companies look forward to working with the Chief Innovation and Intellectual Property Negotiator to pursue and accomplish these statutory objectives.

B. Secure strong commitments in global, regional and bilateral negotiations

Global, plurilateral and bilateral trade and investment negotiations provide critical opportunities to build on the existing foundation of international rules and to secure commitments necessary to drive and sustain 21st century biopharmaceutical innovation. Ending discriminatory pricing policies, eliminating restrictive patentability criteria, addressing unreasonable patent examination and approval delays, providing for the early and effective resolution of patent disputes, ensuring robust protection of regulatory test data and reducing unnecessary regulatory barriers can promote biopharmaceutical innovation and improve market access.

PhRMA supports trade agreements that include strong protections for intellectual property, ensure fair and equitable market access and enable biopharmaceutical innovators in the United States to export lifesaving medicines to patients around the world. Free and fair trade agreements open new markets. They help grow our economy and create better, higher-paying jobs. PhRMA members look forward to continuing to work with USTR and other federal agencies to modernize existing trade agreements and to consider opportunities to further improve public health and grow American

[120] Public Law 114–125 (Feb. 24, 2016), available at https://www.congress.gov/114/plaws/publ125/PLAW-114publ125.pdf (last visited Jan. 30, 2022).
[121] *Id*.
[122] *Id.*

manufacturing exports and jobs through additional trade agreements, including with leading U.S. biopharmaceutical export markets.[123]

C. End discrimination in pricing and reimbursement

PhRMA members are, and seek to be, partners in solutions to health care challenges facing patients and their communities around the world. However, some governments have proposed or implemented pricing and reimbursement policies that discriminate against medicines made in America, do not appropriately value innovation and lack predictable, transparent and consultative processes. As stated above, such measures can undermine the ability of biopharmaceutical innovators to bring new medicines to patients who need them and to invest in future treatments and cures.

The biopharmaceutical industry is unique in that most foreign governments, as sole or primary health care providers, impose burdensome and often discriminatory price controls and regulations on the sector. Others have resorted to improperly using national compulsory licensing provisions to threaten or coerce manufacturers to accept pricing agreements on unreasonable commercial terms and conditions. As a result, market access for pharmaceuticals is dependent not only on innovators meeting strict regulatory approval standards and obtaining necessary intellectual property protections, but also on obtaining positive government pricing and reimbursement determinations. It is imperative, therefore, that regulatory procedures and decisions regarding the approval and reimbursement of medicines are governed by fair, transparent and verifiable rules guided by science-based decision making. There should be meaningful opportunities for input from manufacturers and other stakeholders to health authorities and other regulatory agencies and a right to appeal government pricing and reimbursement decisions to an independent, objective court or administrative body.

The U.S. Government can play a critical role in ensuring transparency and due process of pricing and reimbursement policies, as well as in highlighting the global benefits to patients that result from a reduction in trade barriers. The Medicare Prescription Drug, Improvement and Modernization Act of 2003 called for the Administration to develop a strategy to address foreign price controls on pharmaceuticals and related practices through bilateral and multilateral trade negotiations. PhRMA believes that the cornerstone of any such strategy must be a proactive U.S. trade policy focused on: (i) addressing discriminatory government price controls and related practices and (ii) highlighting the global benefits for patients from the potential groundbreaking research that could result from a reduction in key trade barriers. Unfortunately, governmental policies around the globe over the last year have continued to harm patient access to innovative medicines.

[123] U.S. Department of Commerce, International Trade Administration, “2016 Top Markets Report: Pharmaceuticals,” May 2016, available at https://legacy.trade.gov/topmarkets/pdf/Pharmaceuticals_Executive_Summary.pdf (last visited Jan. 30, 2022).

PhRMA members appreciate steps USTR and other federal agencies have taken to ensure fair and equitable market access for innovative medicines in overseas markets, including seeking and securing commitments in trade agreements that ensure pricing and reimbursement policies abroad are fair, reasonable and non-discriminatory, and appropriately value patented pharmaceuticals. PhRMA urges USTR and other federal agencies to continue to promote the full implementation of these commitments and to build on them in future trade negotiations by ensuring future trade agreements meet the Trade Promotion Authority objective to "ensure that government regulatory reimbursement regimes are transparent, provide procedural fairness, are non-discriminatory and provide full market access for United States products."[124]

In particular, proposed laws, regulations and procedures concerning how medicines are approved, priced and reimbursed should be:

- Promptly published or otherwise made available to enable interested parties to become acquainted with them.
- Published prior to adoption in a single official journal of national circulation, with an explanation of the underlying purpose of the regulation. In addition, interested parties (including trading partners) should be provided a reasonable opportunity to comment on the proposed measures. Those comments and any revisions to the proposed regulation should be addressed in writing at the time that the agency adopts its final regulations. Finally, there should be reasonable time between publication of the final measures and their effective date so that the affected parties can adjust their systems to reflect the new regulatory environment.

In turn, specific regulatory determinations or pricing and reimbursement decisions should be:

- Based on fair, reasonable, consistent and non-discriminatory procedures, rules and criteria that are fully disclosed to applicants.
- Completed within a reasonable, specified timeframe. In some countries, there are no deadlines for making decisions on whether to approve new medicines. In others, deadlines exist, but are regularly not met. These delays impede market access, deplete the patent term and are detrimental to patients waiting for life-saving medicines.
- Conducted so that they afford applicants timely and meaningful opportunities to provide comments at relevant points in the decision-making process.
- Supported by written reports which explain the rationale for the decision and include citations to any expert opinions or academic studies relied upon in making the determination.
- Subject to an independent review process.

[124] Section 102(b)(7)(G) of the Bipartisan Congressional Trade Priorities and Accountability Act of 2016 (P.L. 114-26).

D. Combat the worldwide proliferation of counterfeit medicines

PhRMA members view counterfeit medicines as a critical public health and safety concern threatening patients around the world. Counterfeit medicines may deprive patients of the medicines they need and contribute to drug-resistant forms of tuberculosis and other serious diseases and contain impurities or toxins that can cause harm or even death.[125] This challenge is exacerbated by the ease with which counterfeiters can offer fake medicines over the Internet[126] and ship them by mail[127] to patients and consumers worldwide.[128]

Counterfeit medicines are a potential danger to patients everywhere, including in the United States. During 2020, the Pharmaceutical Security Institute documented more than 4,300 incidents of pharmaceutical crime in the United States.[129] Across all sectors, the Organization for Economic Cooperation and Development (OECD) found that global counterfeiting and piracy accounts for 2.5 percent of world trade and disproportionately harms innovators in the United States.[130] PhRMA and its members welcomed the proactive launch and implementation of "Operation Stolen Promise 2.0" by the U.S. Department of Homeland Security in April 2020 to address COVID-19-related fraud and criminal activity, including the illicit sale and distribution of counterfeit or unauthorized vaccines and treatments.

---

[125] Testing reported in *The Lancet* found one-third of anti-malarial medicines in sub-Saharan Africa and South East Asia lacked active ingredients. Guarvika, M.L.N. et al., "Poor-quality antimalarial drugs in southeast Asia and sub-Saharan Africa," *The Lancet*, June 2012, available at http://www.thelancet.com/journals/laninf/article/PIIS1473-3099%2812%2970064-6/fulltext (last visited Jan. 30, 2022). *See also* Testimony of Howard Sklamberg, U.S. Food and Drug Administration Deputy Commissioner for Global Regulatory Operations and Policy, before the House Energy and Commerce Subcommittee on Oversight and Investigations, "Counterfeit Drugs: Fighting Illegal Supply Chains," Feb. 2014, available at https://www.gpo.gov/fdsys/pkg/CHRG-113hhrg88828/pdf/CHRG-113hhrg88828.pdf (last visited Jan. 30, 2022).

[126] Of more than 11,000 web sites selling prescription medicines to patients in the United States, the National Association of Boards of Pharmacy® has found approximately 96% of them are operating illegally. *See* National Association of Boards of Pharmacy, "Internet Drug Outlet Identification Program: Progress Report for State and Federal Regulators," Aug. 2017, available at https://nabp.pharmacy/wp-content/uploads/2016/08/Internet-Drug-Outlet-Report-August-2017.pdf (last visited Jan. 30, 2022).

[127] An OECD study found that more than 60% of counterfeit goods seized around the world between 2011 and 2013 were shipped by mail or express carrier. OECD, "Trade in Counterfeit and Pirated Goods: Mapping the Economic Impact," 2016, available at https://read.oecd-ilibrary.org/governance/trade-in-counterfeit-and-pirated-goods_9789264252653-en#page1 (last visited Jan. 30, 2022).

[128] Institute of Medicine (IOM), *Countering the Problem of Falsified and Substandard Drugs*, Feb. 2013, available at https://www.ncbi.nlm.nih.gov/books/NBK202530/ (last visited Jan. 30, 2022). The IOM notes that "because the internet facilitates easy international sales, online drug stores have spread the problem of falsified and substandard drugs...." *Id.*

[129] Pharmaceutical Security Institute, "Incident Trends," available at https://www.psi-inc.org/incident-trends (last visited Jan. 30, 2022).

[130] OECD, "Trade in Counterfeit and Pirated Goods: Mapping the Economic Impact," 2016, available at https://read.oecd-ilibrary.org/governance/trade-in-counterfeit-and-pirated-goods_9789264252653-en#page1 (last visited Jan. 30, 2022).

China and **India** are leading sources of fake medicines seized at ports of entry in the United States[131] and elsewhere,[132] though many other jurisdictions are involved – particularly in online sales.[133] According to the WHO, regions where protection and enforcement systems are weakest also see the highest incidence of counterfeit medicines. In these jurisdictions and others, customs and other law enforcement officials often are not able to seize counterfeit medicines, particularly goods in transit, goods in free trade zones and goods offered for sale on the Internet. Violations of limited laws on the books often are not effectively enforced or do not come with sufficient penalties to deter counterfeiting.[134]

PhRMA members companies work to maintain the safety of their manufacturing facilities and the security of their global supply chains. They currently employ and routinely enhance a variety of anti-counterfeiting technologies, including covert and overt features on the packaging of high-risk prescription medicines. They have adopted a range of business processes to better secure prescription drug supply chains and facilitate the early detection of criminal counterfeiting activity. They partner with law enforcement officials around the world.

To combat the global proliferation of counterfeit medicines and active pharmaceutical ingredients, PhRMA supports strengthening training and collaboration with U.S. trading partners to adopt and implement a comprehensive regulatory and enforcement framework that: (i) subjects drug counterfeiting activity to effective administrative and criminal remedies and deterrent penalties; (ii) adequately regulates and controls each link in the legitimate supply chain; (iii) trains, empowers and directs drug regulators, law enforcement authorities and customs to take effective and coordinated action, including against exports and online activity; and (iv) educates all stakeholders about the inherent dangers of counterfeit medicines.

E. Build and strengthen global cooperation

Finally, PhRMA members urge USTR and other federal agencies to further build and strengthen partnerships with countries around the world that also have a critical stake in a strong and effective intellectual property system that values and protects innovation. Federal agencies should promote full implementation and ensure effective enforcement of global, regional and bilateral commitments and support training of regulators, law

[131] Homeland Security, "Intellectual Property Rights Seizure Statistics: Fiscal Year 2020," available at https://www.cbp.gov/document/report/fy-2020-ipr-seizure-statistics (last visited Jan. 30, 2022).
[132] *See*, *e.g.*, "Report on EU customs enforcement of intellectual property rights: Results at the EU border," 2019, available at https://ec.europa.eu/taxation_customs/system/files/2020-12/ipr_report_2020.5464_en_04.pdf (last visited Jan. 30, 2022).
[133] United States Government Accountability Office, "Internet Pharmacies: Federal Agencies and States Face Challenges Combatting Rogue Sites, Particularly Those Abroad," (GAO-13-560), July 2013, available at http://www.gao.gov/assets/660/655751.pdf (last visited Jan. 30, 2022).
[134] Office of the U.S. Intellectual Property Enforcement Coordinator, "Supporting Innovation, Creativity & Enterprise: Charting a Path Ahead," U.S. Joint Strategic Plan on Intellectual Property Enforcement, FY2017-2019, available at https://obamawhitehouse.archives.gov/blog/2016/12/12/supporting-innovation-creativity-and-enterprise-charting-path-ahead (last visited Jan. 30, 2022).

enforcement officials, judges and other court personnel overseas to enforce those commitments.

PhRMA members appreciate the steps that USTR and other federal agencies already are taking to strengthen cooperation with other governments. Bilateral forums like the Transatlantic IPR Working Group have helped to build understanding and to identify and advance common priorities. They can be a model for similar engagement with other countries, particularly those which are parties to Trade and Investment Framework Agreements. The network of PTO intellectual property attachés around the world is a vital resource for American inventors and should be expanded. Cooperation between PTO and other leading patent offices through the PCT, the IP5 and PPH programs is cutting costs, improving the efficiency of patent examination in overseas markets and helping to reduce stubbornly high patent examination backlogs.

All this provides a valuable foundation on which to build in the coming year and beyond. PhRMA members believe that strengthening such coalitions will be particularly critical in multilateral organizations that advise countries and provide assistance on policies related to global trade, intellectual property and pharmaceutical markets. Organizations such as the WHO, the World Intellectual Property Organization (WIPO), the WTO, UNDP and UNCTAD often focus their work inappropriately on limitations and exceptions to intellectual property rights, as well as promote a range of harmful policies that would undermine vital incentives for innovation. For example, WHO's Roadmap on Access to Medicines envisions providing "technical support" to countries that intend to engage in compulsory licensing,[135] with one regional WHO office openly asserting that compulsory licensing is "important and to be encouraged."[136] The WHO Director-General even publicly supported an extreme and unnecessary proposal at the WTO TRIPS Council to waive entirely certain international obligations with respect to COVID-19 technologies, even as Member States were still debating this proposal in a separate multilateral forum. Unitaid has directed millions of dollars to programs that seek to weaken intellectual property laws and lobby governments to reject provisions in international trade agreements that would strengthen innovation incentives.[137] U.S. leadership is essential to preventing such organizations from weakening or even eliminating the intellectual property protections that drive America's innovation economy.

As the leading funder of many multilateral organizations, the United States must remain vigilant in these forums and work with other like-minded countries to advocate for robust intellectual property protection and fair and equitable market access. Federal agencies should ensure that intellectual property matters are addressed in organizations

[135] WHO, "Road Map for Access to Medicines, Vaccines, and Other Health Products, 2019–2023," p. 18, available at https://apps.who.int/gb/ebwha/pdf_files/WHA72/A72_17-en.pdf (last visited Jan. 30, 2022).
[136] WHO South-East Asia Regional Office (SEARO), "Access to medical products in the South-East Asia Region 2019," available at https://apps.who.int/iris/bitstream/handle/10665/326829/9789290227281-eng.pdf (last visited Jan. 30, 2022).
[137] Unitaid, "Unitaid expands its work on access to medicines," Sep. 8, 2018, available at: https://unitaid.org/news-blog/unitaid-expands-its-work-on-access-to-medicines/#en (last visited Jan. 30, 2022).

with the appropriate mandate and expertise, and with full visibility of the organization's Member States. The U.S. Government should strengthen interagency coordination and ensure that officials with intellectual property expertise are part of U.S. delegations to relevant global meetings. U.S. leadership can help to ensure that all stakeholders, including those in the private sector, are able to contribute to discussions in multilateral organizations on relevant topics.

IV. Market Designation Index

A. Priority Foreign Country

PhRMA urges USTR to designate **Japan** as a Priority Foreign Country. Market access and/or intellectual property acts, policies and practices in Japan are among the most onerous and egregious. They are having or could have the greatest adverse impact on medicines developed and manufactured in the United States. USTR and other federal agencies should use all available tools to remedy serious concerns in these markets.

B. Priority Watch List

PhRMA recommends that **16** markets be included on the Priority Watch List. We further recommend that **China** continue under Section 306 Monitoring. The detailed information presented in the market-specific sections below demonstrates that the acts, policies and practices of these markets are denying adequate and effective intellectual property protection or fair and equitable market access. They are harming biopharmaceutical innovators and their employees in the United States and limiting their ability to bring new treatments to patients around the world. In many cases, they appear to be inconsistent with relevant global, regional and bilateral trade and investment agreement rules. To evaluate progress and secure action and real results, PhRMA recommends that USTR conduct meaningful **Out-of-Cycle Reviews** for **Canada**, **Indonesia** and **Russia**.

C. Watch List

PhRMA recommends that **six** markets be included on the Watch List. We urge USTR and other federal agencies to include all these markets in the *2022 Special 301 Report* – particularly Australia and other markets that are current or potential U.S. bilateral trade agreement partners. USTR and other federal agencies should monitor developments in these markets and address specific intellectual property and market access concerns through bilateral and multilateral engagement.

D. Out-of-Cycle Reviews

PhRMA's Out-of-Cycle Review recommendations for **Canada**, **Indonesia and Russia** reflect clear opportunities to heighten engagement and cooperation with trading partners, or leverage trade policy tools, to address the deteriorating environment for IP protection and enforcement, particularly related to compulsory licensing and other

practices which seriously undermine U.S. biopharmaceutical innovation. PhRMA believes that the Out-of-Cycle Review tool presents an opportunity to send a firm response regarding the troubling IP issues in the markets and highlights the urgent need and immediate opportunity for heightened USG engagement outside of the routine Special 301 cycle to reverse the negative trends and/or encourage continued progress in these markets. In addition, PhRMA requests that USTR conduct an Out-of-Cycle Review of the **UAE** so that the two governments can work together on the implementation of Decree 321 in 2022.

PRIORITY FOREIGN COUNTRY

JAPAN

A decade ago, Japan made important reforms in the areas of drug pricing, evaluation and approval, and vaccine policy that made its system more transparent, more supportive of innovation and more conducive to biopharmaceutical research and development. These changes reduced regulatory delays in the introduction of new medicines and reduced Japan's well-known drug lag. However, the policy and commercial environment has significantly deteriorated since 2016. The Japanese Government has pursued, and the Central Social Insurance Medical Council (Chuikyo) has approved, more than 50 price-cutting mechanisms and other actions related to intellectual property (IP) that significantly undermine Japan's pro-innovation environment and its efforts to carry its fair share of the costs of global R&D efforts. Moreover, these decisions are made with limited meaningful opportunities for stakeholders to provide timely input and increasingly in ways that are contrary to their stated intent.

The COVID-19 pandemic has highlighted the need for Japan to improve its innovative biopharmaceutical ecosystem through policies that ensure continued investment in R&D, timely access to new medicines and a more sustainable health care system. In a positive development, recent Japanese Government policy documents including the *Honebuto*, Ministry of Health, Labor and Welfare (MHLW) Pharmaceutical Industry Vision, and Annual Growth Strategy Plan, identified the life sciences as a key sector and highlighted the need to ensure greater transparency and predictability in the drug pricing system. PhRMA and its member companies are committed to work as a constructive partner with Japan to achieve these important goals.

Key Issues of Concern:

- **Non-scientific and discriminatory revisions to the Price Maintenance Premium (PMP) system**: Japan announced several new drug pricing policies in December 2017 that ran counter to the government's pledge to appropriately value innovation and foster innovation in Japan. Among these, PhRMA member companies are particularly concerned by the dramatic reduction in the number of patented medicines that are recognized as "innovative" for the purpose of qualifying for the PMP. In addition, fewer PhRMA member companies qualify for the full benefit of the PMP under the new company requirements. More specifically, Japan's new product criteria are non-science based and unique in the world, and the new company criteria contain elements that discriminate against foreign companies and smaller companies. Unfortunately, despite industry proposals to improve the criteria, the Japanese Government made only minor changes when it undertook a review of the outcome of the new rules in 2019. The PMP system continues to severely undervalue U.S. IP and the eligibility criteria that are biased in favor of domestic companies were not adequately revised, seriously calling into question Japan's commitment to fair and non-discriminatory policies.

- **Annual price cuts to patented medicines**: Another issue of serious concern is the move from the current system of biennial price cuts to an annual system. Effective April 1, 2021, annual cuts apply to all medicines with more than a 5 percent difference (*yakkasa*) between the government reimbursement price and the surveyed wholesaler price to purchasers (e.g., hospitals, clinics and retail pharmacies). In 2020, this included 69 percent of all medicines (more than 90 percent on a monetary basis) and 59 percent of patented medicines. The scope of the annual price cut policy goes far beyond any options put forward by the Ministry of Health, Labour and Welfare (MHLW) for discussion at the Chuikyo and was never shared with the industry prior to its formal announcement. In 2021, the reduction in biopharmaceutical expenditure generated by the price cuts to these products is estimated to be 430 billion yen. The combined impact of the recent PMP revisions and annual price cuts on patented medicines severely undervalues U.S. IP and makes Japan an outlier among leading economies.

- **Use of health technology assessment (HTA) to devalue innovation**: In 2018, the Japanese Government cut the prices of several leading innovative medicines that were subject to an ongoing cost-effectiveness assessment pilot program. For these products, the price premium granted at launch for innovativeness and clinical benefit was later reduced based on a poorly justified cost-effectiveness threshold of JPY 5 million per quality-adjusted life year. Given the challenges experienced during the pilot program, the Japanese Government decided to review the outcomes. However, in April 2019, without sufficiently addressing prior concerns and without resources and processes to ensure scientifically valid assessments, the new HTA system was formally implemented. The HTA system is severely inconsistent with international norms, solely focusing on cost-effectiveness thresholds and ignoring many aspects of a product's value. Further, the system continues to be developed with limited, meaningful opportunities for the innovative biopharmaceutical industry and other stakeholders to provide input. There remains a strong need to enhance the transparency of the process, foster science-based discussions on product value and develop sound guidelines that can serve as a basis for analysis. PhRMA remains concerned about the future direction of the HTA system – including proposals to expand its use to reimbursement listing contrary to U.S.-Japan trade understandings – and its potential to significantly undervalue U.S. innovation.

- **Lack of transparency and predictability in government decision-making**: As the Japanese Government developed detailed plans to carry out the drug pricing reform initiative over the last four years, there were few formal attempts by the decision-making bodies to seek input from stakeholders, including the innovative pharmaceutical industry. For example, despite the key policy issues being debated by the government since 2017, the Japanese Government has not once released the proposed new rules for public comment. In addition, the industry has been invited to testify before the Chuikyo on limited occasions and the time allotted for testimony has typically been rigidly limited. Frequently, no government proposal is put forward in advance of the Chuikyo meeting on which the industry could

comment. Except for the formal hearings at which industry is invited to testify, industry representatives are only able to attend Chuikyo meetings as observers. Even after rules are announced, PhRMA member companies are often uncertain about how they will be applied or experience their capricious application. Moving forward, PhRMA and its member companies request more regular and meaningful opportunities to provide input regarding the development of further reforms to Japan's pricing and reimbursement rules.

- **Regulatory policies**: The Japanese Government continues to seek to accelerate and expand drug development in Japan, ensure that patients have prompt access to the newest drugs and support the pharmaceutical industry as a key driver of economic growth in Japan. To achieve these goals, more flexible approaches are needed in the approval and regulatory process to promote simultaneous global development. This includes (1) acceptance of a pooled region approach for clinical data as well as Japanese sample size allotments for multi-regional clinical trials as described in the ICH E17 (MRCT) guideline, (2) increase in the number of drugs designated and approved early under the *Sakigake* designation and conditional early approval systems and (3) the development of a new innovative expedited approval system that focuses on the clinical benefit-risk assessment of a new drug itself. In addition, COVID-19 has underscored the need for a new expedited approval system for emergency use that is not contingent on early approval in other countries first.

- **Vaccines**: In order to ensure that Japanese citizens have access to the world's newest and most innovative vaccines, Japan needs to execute the National Vaccine Plan and to develop a system that provides for permanent and full funding of all recommended vaccines, transparency in the evaluation and adoption of new vaccines into the recommended (i.e., funded) vaccination schedule and a science-based process to determine the benefits of vaccines and to manage adverse events.

- **Patent term restoration (PTR)**: PhRMA members appreciate Japan's PTR laws, as they provide term extensions for subsequent marketing approvals for additional indications or medical uses, or modifications of previously approved products. The Japanese law acknowledges the value that additional approvals can provide to patients. However, the laws as currently interpreted by the Japanese Patent Office (JPO) often result in extensions for subsequent marketing approvals which are shorter in term than the extensions for the original approval and can thus act as a disincentive to conduct research on additional medical uses and indications, including new formulations for an approved product.

- **Effective patent enforcement**: Actions by the MHLW in 2020 to approve generic versions of an innovative product even though JPO had upheld two of the four claims on the patent identified by the innovator as relevant to its product, raise concerns for industry as to Japan's commitment to effectively enforce patents.

Further, while injunctive relief is typically available in Japan, such relief can take months to secure, thereby frustrating the ability of the innovator to seek an injunction before potentially infringing products are allowed to enter the market.

For these reasons, PhRMA requests that Japan be designated a **Priority Foreign Country** in the 2022 Special 301 Report, and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved.

Market Access

Non-scientific and Discriminatory Revisions to the Price Maintenance Premium System

The introduction of the PMP in 2010 as a two-year pilot project (followed by its renewal in 2012, 2014 and 2016), has been a critical factor in promoting innovation in Japan, eliminating the drug lag, ensuring that Japanese patients have timely access to innovative medicines and ensuring that U.S. and other innovative products were appropriately valued. This system has demonstrably led to increased R&D and applications and approvals for new drugs and indications, even though the net benefit of the price maintenance premium has been somewhat reduced by the 80 percent ceiling on the premium under certain circumstances and the continued use of the market expansion and other re-pricing rules. Investment in biopharmaceutical innovation is a long-term endeavor, such that any unpredictability in the PMP could lead to slower development or launch of new medicines.

However, under the government pricing reforms implemented in April 2018, products eligible to receive the PMP were restricted to those that either: (1) received a price premium at launch or post-launch; (2) meet certain criteria for new mechanisms of action; (3) are second- or third-in-class and launched within three years of a comparator product in the above groups; (4) received an orphan designation or; (5) were developed in response to an open request from MHLW. Particularly for the third set of products, the new PMP system equates innovativeness with the speed and the order in which products launch. PhRMA is opposed to such a non-science-based evaluation of innovation and notes that several globally leading U.S. products have been deemed non-innovative under the new criteria and stripped of their PMP eligibility. This clearly demonstrates that the new system fails to appropriately value U.S. innovation. According to the MHLW, approximately 30 percent of patented medicines no longer qualify for the PMP.

In addition to the product eligibility changes, companies with eligible products were ranked and sorted into three tiers based on: (1) the number of phase 2+ clinical trials conducted in Japan; (2) the number of new products launched in Japan within the past five years; (3) the number of new products developed in response to open requests from MHLW; and (4) the number of products with a *Sakigake* designation. The number of companies eligible for Tier 1 status was limited to 25 percent but not exceeding 30 percent, even if companies have the same rank. All eligible products marketed by Tier 1 companies were awarded the full amount of the PMP. Eligible products marketed by Tier 2 or Tier 3 companies were awarded 90 percent or 80 percent of the PMP, respectively.

While the Japanese Government undertook a review of the new PMP rules and outcomes in 2019, only minor changes were made despite industry proposals to address concerns. PhRMA believes that the product criteria remain non-science-based and that limiting the number of companies eligible for the full PMP cannot be a true test of innovativeness. Further, the company criteria continue to inappropriately favor larger companies and specific elements are inherently biased towards domestic companies, seriously calling into question Japan's commitment to fair and non-discriminatory policies pursuant to its WTO obligations. In December 2021, a positive change was announced that will allow ineligible products to qualify for the PMP after approval of an indication that would have met the criteria for a price-premium at launch. However, significant further revisions to the PMP system are urgently needed to ensure that it is science-based, fairly evaluates innovation and promotes biopharmaceutical R&D.

Annual Price Cuts to Patented Medicines

In December 2020, the Japanese Government announced a rule that moved from the current system of biennial price cuts to an annual system, applying annual price cuts effective April 1, 2021, to all medicines with more than a 5 percent difference (*yakkasa*) between the government reimbursement price and the surveyed wholesaler price to purchasers (e.g., hospitals, clinics and retail pharmacies). In 2020, this included 69 percent of all medicines (more than 90 percent by value) and 59 percent of patented medicines. In 2021, the reduction in biopharmaceutical expenditure generated from the price cuts to these products is estimated to be 430 billion yen. The combined impact of the recent PMP revisions and annual price cuts on patented medicines severely undervalues U.S. IP and makes Japan an outlier among leading economies.

The scope of products that will be subject to annual price cuts also goes far beyond any policy options put forward by MHLW for discussion at the Chuikyo and was never shared with the industry or other stakeholders prior to its formal announcement. Further, the scope of the revision marked a major departure from previous Japanese Government policy decisions that have been publicly announced and codified in various documents, including the 2016 four-ministers agreement which stated that only products with a large *yakkasa* would be subject to the off-year price revision. Finally, the decision seemed to ignore prior discussions at the Chuikyo, during which several health care stakeholder groups (e.g., physicians and pharmacists) opposed implementing the price revision on a broad range of products. PhRMA requests that the scope of products subject to annual price cuts be reconsidered during discussions on the next off-year price revision and exclude patent-protected products.

Use of Health Technology Assessment to Devalue Innovation

PhRMA agrees that appropriate HTA systems have the potential to assist governments in making informed decisions about allocating health care resources. However, deficient HTA processes can run counter to their key objectives and risk denying or delaying patients' appropriate access to medical technologies, inefficiently

allocating resources, constraining clinical freedom and harming innovation through pure cost-containment methods.

In 2018, the Japanese Government cut the prices of several leading innovative products that were subject to an ongoing cost-effectiveness assessment pilot program. For these products, the price premium granted at launch for innovativeness and clinical benefit was reduced based on a poorly justified cost-effectiveness threshold of JPY 5 million per quality-adjusted life year, ignoring many other elements of a product's value including broader clinical, societal and economic benefits not captured by an incremental cost-effectiveness ratio (e.g., disease severity, caregiver burden and absenteeism). Given the challenges experienced during the pilot program, the Japanese Government decided to review the outcome of the pilot program for several products.

In April 2019, without sufficiently addressing prior concerns and without resources and processes to ensure scientifically valid assessments, the Japanese Government implemented the new HTA system. The new HTA system is severely inconsistent with international norms in both methods and process. With respect to methods, the system is solely focused on cutting prices based on an incremental cost-effectiveness threshold that ignores the benefits that innovative medicines bring to Japanese patients, the health care system and society. Moreover, the process does not include input from multiple stakeholders, including patients and experts in relevant clinical areas to appropriately assess the clinical benefits of the medicines. By primarily serving to reduce the price premiums granted at launch for innovativeness and clinical benefit, the adopted approach perversely acts to remove the incentives for medicines that deliver better patient outcomes. There remains a strong need to enhance the transparency of the process, foster science-based discussions on product value and develop sound guidelines that can serve as a basis for analysis.

Furthermore, the system was developed without meaningful opportunities for interested and affected stakeholders, including the innovative industry, to provide input. Unfortunately, the MHLW presentations to the Chuikyo did not fully include proposals put forward by the industry and other materials on our learnings from other markets. PhRMA remains concerned about the Japanese Government's plan to potentially expand the scope of the HTA system to reimbursement listing. Such a new policy would not only be contrary to previous U.S.-Japan trade understandings but would create further market access barriers to U.S. pharmaceutical products and almost certainly delay patient access to innovative medicines.

Lack of Transparency and Predictability in Government Decision-Making

As the Japanese Government developed detailed plans to carry out the drug pricing reform initiative over the last four years, there were few formal attempts by the decision-making bodies to seek input from stakeholders, including the innovative biopharmaceutical industry. For example, despite the key policy issues being debated by the government since 2017, the Japanese Government has not once released the proposed new rules for public comment. In addition, the industry has been invited to testify

before the Chuikyo on limited occasions and the time allotted for testimony has typically been rigidly limited and there has frequently been no government proposal put forward in advance on which the industry could comment. Except for the formal hearings at which industry is invited to testify, industry representatives are only able to attend Chuikyo meetings as observers.

In addition to the failure to provide adequate meaningful opportunities for interested stakeholders, including PhRMA member companies, to provide input into the development of these policies, the Japanese Government has also failed to publish clear guidelines on how some of the new policies will be interpreted and implemented. Even after rules are announced, PhRMA member companies experience sudden and non-transparent application of rules to their products and increasingly in a way that is contrary to their stated intent. This lack of transparency and frequent changes to the rules for setting prices at reimbursement listing, re-pricing of existing products and other key policies have made the Japanese market highly unpredictable and lacking in procedural fairness.

Moving forward, PhRMA and its member companies request that Japan implement more transparent decision-making processes that include regular and meaningful opportunities to provide input regarding the development of further reforms to Japan's pricing and reimbursement rules. We urge the U.S. Government to engage with their counterparts in the Japanese Government in an early timeframe to ensure that Japan provides the appropriate transparency and due process – including the opportunity for meaningful consultations with industry and other interested stakeholders – before Japan finalizes proposed laws, regulations and procedures concerning how medicines are priced and reimbursed.

Other Government Policies of Concern

The introduction of optimal use guidelines and repeated changes to various re-pricing rules have been imposed suddenly and without meaningful stakeholder involvement. These actions by the Japanese Government reduce the predictability and transparency of the drug pricing system in Japan and threaten to undervalue innovative U.S. products. Reform of the pricing system should be done via a fully fair and transparent system and should avoid reactive short-term, *ad hoc* re-pricing mechanisms that fail to appropriately value innovation. The re-pricing rules should be revisited in their entirety and the effect of optimal use guidelines on the health insurance system should be strictly limited so that patients' early access to innovative medicines is ensured.

The industry also recommends that other unfair or unreasonable rules in Japan's drug pricing and reimbursement system be corrected as follows:

1. *Revisit Re-pricing Rules*: Over the past few years, new or strengthened re-pricing rules have been applied in Japan. For example, in 2016 the huge seller re-pricing rule was introduced, starting in 2018 some of the re-pricing rules have been applied on a quarterly basis instead of a biennial basis and in 2020 a special rule

for indication change re-pricing was introduced. Such frequent changes and tightening of the re-pricing rules significantly impair the predictability of drug prices and reduce the incentive to invest in R&D for additional indications. PhRMA believes that the complex re-pricing rules need to be revisited and restructured by reexamining the requirements of each rule. For example, the exclusion criteria for the spillover re-pricing rule should be revised so that a product competing with the product subject to re-pricing can be excluded in reasonable cases, including where (1) the products have little overlap in indications; (2) the price of the competing product is already lower than the price of the product subject to re-pricing; or (3) re-pricing will be implemented repeatedly over a short period of time.

2. *Reward for Innovative Additional Indications*: The MHLW should consider not only the strengthening of the re-pricing rules, but also the mechanism by which the reward for innovative additional indications can be reflected in the drug price. According to the current rules, when pediatric or orphan indications are added, a corrective premium can be granted at the time of re-pricing. In the same manner, when adding highly innovative indications, corrective premiums should be added at the time of re-pricing.

3. *Apply Innovation and Usefulness Premiums*: Under the existing pricing method for new drugs, certain premiums may be granted where the drug shows greater innovation or usefulness than its comparator or existing treatments. However, most new drugs eligible for the price premium still receive no, or relatively low, premiums. One reason for this is that even if evidence of usefulness is available, a premium is often not applied when the supporting evidence is not evaluated in the Pharmaceuticals and Medical Devices Agency (PMDA) review report. PhRMA believes that even if such evidence is not included in the PMDA review report, it should be accepted for determining whether a premium is applied as long as the evidence can withstand scientific and objective evaluation.

4. *Relax the 14-day Limit Rule for New Drug Prescriptions*: Prescriptions for newly approved drugs can only be written for a 14-day supply during the first year after reimbursement price listing. This restriction imposes a physical and financial burden on patients who are forced to visit their doctors twice a month for the first year simply to receive a prescription. It also imposes a burden on overworked doctors who must see a patient as many as 26 times during this first year simply to renew a prescription.

<u>Pharmaceutical Regulatory Reform and Related Issues</u>

1. Simultaneous Global Development of Drugs

PhRMA welcomes the government's continued support of simultaneous global development and efforts to promote multiregional clinical trials (MRCT) in order to expedite the availability of life-saving and life-enhancing drugs to patients. Therefore:

- PhRMA encourages the government to increase its global and regional regulatory harmonization efforts, especially to include the reduction of market-specific requirements that can delay simultaneous global development. In particular, PhRMA encourages the MHLW and PMDA to be more flexible in regulatory requirements and processes for promoting simultaneous global development, including the acceptance of a pooled region approach for clinical data and Japanese sample size allotments as described in the ICH E17 (MRCT) guideline.

- PhRMA encourages harmonization of the following CMC data requirements: (1) globally aligned science- and risk-based specification setting for commercial products; (2) flexibility of requirements for CMC data for expedited approval pathways; (3) harmonization of pharmacopoeias; and (4) CMC data requirements for biological products.

- PhRMA encourages PMDA to continue to ensure consistency across its review offices as they consider development strategies based upon the scientific considerations of each biopharmaceutical.

- The threat of drug-resistant pathogens to antibacterial drugs is a worldwide issue. PhRMA encourages the Japanese Government to consider measures to promote drug development for Antimicrobial Resistance (AMR), such as the creation of internationally harmonized clinical development guidelines for AMR.

- PhRMA also welcomes the MHLW's announcement in December 2021 about its intention to establish new rules to ease regulatory approval requirements for therapeutic drugs and vaccines and allow for conditional use in certain emergency situations.

2. Improved Efficiencies at PMDA

PhRMA appreciates and applauds the significant efforts made by PMDA to meet its review performance goals for standard and priority files, as well as its efforts to meet the demands for consultations in an expeditious manner. PhRMA values its participation in PMDA's Working Groups on consultations and review practices. PhRMA looks forward to continuing its active participation in these groups and hopes that its participation will lead to the development and implementation of concrete process improvements that will aid PMDA in continuing to meet its performance goals.

3. Revision of Post-Approval Change Process and Reduction in Review Times

PhRMA appreciates the opportunity to discuss Japan's post-approval changes to manufacturing and control processes and will continue to provide constructive recommendations based on global best practices to align the Japanese system with those used by other major regulatory agencies. PhRMA further appreciates the efforts to reduce

the review times of partial change applications and encourages PMDA to include biologic products, especially those arising from recombinant technology, in those review targets.

4. Risk Management System

Reform of the pharmacovigilance system including risk management assessments is an important undertaking by the government and PhRMA has supported the government's preparation and implementation of its Risk Management System (i.e., Risk Management Plan (RMP)). The RMP went into effect on April 1, 2013 in Japan. While global standardization of a pharmacovigilance system is challenging, risk minimization in an effective and efficient manner is critical. PhRMA looks forward to continuing to engage collaboratively with academia and regulatory authorities on the implementation of this concept and process.

5. AMED – the Japan Agency for Medical Research and Development

PhRMA welcomes the creation of AMED in April 2015 as a new agency designed to enhance translational research, to support drug development from the laboratory through the clinical development process and into the marketplace, and to coordinate the national government's health care research and development budgets now assigned to different ministries without strategic coordination. PhRMA emphasizes the need to ensure that AMED's programs will be open to all pharmaceutical companies, whether Japanese or foreign based.

6. Expedited Approval Systems

PhRMA welcomes the enforcement of the *Sakigake* program and the conditional early approval system under the revised Pharmaceuticals and Medical Devices Law, which will encourage the early evaluation and approval of important new drugs. To avoid a drug lag for innovative products in Japan, PhRMA encourages the government to adopt a flexible approach to the acceptance requirements for applications in order to increase the number of drugs designated and approved early under the *Sakigake* designation and conditional early approval systems. Currently, the number of drugs qualifying for the *Sakigake* designation remains very low. Therefore, a new innovative expedited approval system should be developed that focuses solely on the safety and efficacy of a new drug rather than other factors such as the order of development and application in the world. This will ensure Japan's expedited approval pathways are equivalent to similar systems in the United States and the European Union. In addition, COVID-19 has underscored the need for a new expedited approval system for emergency use that is not contingent on early approval in other countries first as is the case with the existing special approval system.

<u>Preventive Health Care and Vaccines</u>

Prevention plays a critical role in protecting a population's health and well-being. However, more effective and efficient awareness initiatives aimed at the public should be

undertaken. Vaccines are particularly important in reducing disease burden and medical expenses, as well as improving the quality of life. The past several years have seen some important changes, including a revision in 2013 of the Preventive Vaccination Law, implementation of a National Vaccine Plan and adoption of six vaccines into the national immunization program (NIP). Although the Japanese Government intended to revise the Law in 2021, the COVID-19 pandemic has delayed this timeline, which remains unclear.

The following issues require attention:

1. Increasing priority given to support investments in “Made in Japan” products

COVID-19 has revealed weaknesses in the Japanese system and the government’s *Strategy for the Strengthening of Vaccine Development and Manufacturing* adopted in June 2021 as well as recent government discussions point to a growing trend by the Japanese government to support investments in “Made in Japan” products. The rapid development and deployment of COVID-19 vaccines was made possible because of global partnerships and consistent investments in research and development, manufacturing, and marketing. In order for Japan to promptly develop vaccines that can be used widely, it must participate in international networks for vaccine development through an open global ecosystem instead of relying solely on the research and development of domestic companies and academia.

2. Lack of transparency and timeliness in the NIP decision-making process at MHLW

The current recommendation process is significantly nontransparent as it relates to the evaluation and adoption of new vaccines. As a result, vaccine manufacturers lack crucial information as to what data are necessary to receive a national recommendation and when the data should be presented. Furthermore, the vaccination decision-making process is unclear. While a Vaccination Policy Committee under MHLW exists, the timeline of a new vaccine’s evaluation, the criteria by which it is evaluated and the committee’s ability to change vaccination policy, are not transparent and lack predictability, which are important criteria for company investment decisions. For example, in October 2019, MHLW’s Vaccination Policy Committee made the decision to include rotavirus vaccines into the NIP from October 2020. This decision came eight years after regulatory approval in Japan. It is essential that decisions related to vaccines are timely and based on science. This is especially important for inclusion in the NIP and in any evaluation of adverse events.

3. Lack of international regulatory harmonization

Quality standards for vaccine manufacturing and pre- and post-approval vaccine supply processes, including the current national testing requirement, should be streamlined and harmonized with global standards in order to supply innovative vaccines in a timely manner. Japan faces sporadic outbreaks due in part to shortage of available vaccines. For example, there was a measles outbreak that began in the spring of 2018 and continued into 2019. In addition, a rubella outbreak in the summer of 2018 prompted

the issuing of a warning for pregnant women traveling to Japan by foreign governments, including the U.S. Centers for Disease Control and Prevention. Introduction of vaccines from outside Japan is one effective option in such circumstances, and in order to facilitate and accelerate this, there should be a more harmonized regulatory system, including modernization of various requirements such as Minimum Requirements for Biological Products.

4. Lack of broad recognition from Japanese citizens of the value of vaccines

Although the revision of the Preventive Vaccination Law provided for full national funding for most recommended vaccines, including several foreign-origin vaccines, the changes did not apply to several other vaccines that are already approved. The value of vaccines should be recognized by a funding system and NIP process that incentivize manufacturers to develop and bring new vaccines to Japan as quickly as possible, together with a nationwide program to educate citizens, and especially parents, about the importance of vaccinations. While the COVID-19 pandemic has raised public interest in vaccines and disease prevention, definitive action by the Japanese government is needed to educate citizens about the importance of life-course immunization.

Intellectual Property

Patent Term Restoration

Japan's PTR system permits term extensions for subsequent approvals for a product, such as for a new use of a previously approved product. PhRMA members appreciate Japan's PTR laws, as they acknowledge the value that additional approvals can provide to patients. However, PhRMA urges the JPO to review its practices in granting PTR for subsequent approvals, to take into account the full regulatory review period in determining the length of any extensions. In particular, the current JPO practice, which provides an extension period based only on what is considered "necessary testing" for the subsequent approval, often results in extension periods for subsequent approvals that are shorter than the extension period of the first approval. As a result, the current practice can act as a disincentive to conduct research on additional medical uses and indications, including new formulations for an approved product.

Effective Patent Enforcement

PhRMA's members value the highly predictable and reliable IP protections provided in Japan. Predictable and reliable IP protections are particularly important to our sector given the significant resources required to develop innovative medicines, as well as the inherently risky nature of developing new medicines which must not only be developed but also must be shown to be safe and effective for treatment of a particular disease or condition. Less than 12 percent of all potential new drugs entering clinical trials

result in an approved medicine and, in most cases, new products in our sector fail to deliver returns that meet or exceed investment.[138]

However, actions by the MHLW in 2020 throw the predictability of Japanese IP protections into question. Specifically, while MHLW appropriately takes the position that it should not arbitrate patent disputes, it essentially did so in 2020 when it unilaterally determined that it was appropriate to approve multiple generic versions of an innovative product even though the JPO had upheld two of the four claims on the underlying method of use patent. In other words, MHLW took it upon itself to interpret whether the upheld patent claims covered the innovative product.

The innovative manufacturer in this instance has initiated patent infringement suits against each of the approved generics. That, however, has served to highlight another deficiency in Japan's patent enforcement system. Specifically, now that the MHLW has approved these generics versions, those products were added to the National Health Insurance price list in December 2020, thereby enabling potentially infringing products to enter the market. While injunctive relief is typically available in Japan, such relief can take months to secure, thereby frustrating the ability of the innovator to seek an injunction before potentially infringing products were allowed to enter the market in December 2020. As a result, the manufacturers of each of the approved generics have been put in the position of having to decide whether to launch at risk despite the ongoing litigation. In short, this situation creates significant uncertainty for innovators and generic manufacturers alike, and could ultimately result in products being prescribed to Japanese patients that ultimately have to be withdrawn from the market based on the outcome of the pending litigation. It is exactly this uncertainty that well-functioning and effective patent enforcement systems are designed to avoid.

[138] Research!America, U.S. Investments in Medical and Health Research and Development, 2013-2018, 2019, available at https://www.researchamerica.org/sites/default/files/Publications/InvestmentReport2019_Fnl.pdf (last visited Jan. 30, 2022).

SECTION 306 MONITORING

THE PEOPLE'S REPUBLIC OF CHINA

China's leadership has committed to strengthening biopharmaceutical innovation and ensuring Chinese patients have greater access to innovative medicines. These objectives are an integral part of China's 14th Five-year Plan, Healthy China 2030, and a wide range of health care-related legislative and regulatory reforms. PhRMA and its member companies operating in China are committed to supporting the government's efforts to build a patient-centered and pro-innovation health care system.

Since the signing of the U.S.-China Economic and Trade Agreement (Trade Agreement) between the United States and China in January 2020, China has taken steps to enhance its IP protection system for pharmaceuticals, including establishing a patent dispute early resolution system, as well as standards for patent term extension (PTE) and adjustment (PTA). PhRMA is further encouraged by China's ongoing work to strengthen its drug regulatory framework, including its continued commitment to implement guidelines under the International Council on Harmonisation (ICH) and participation in the ICH management committee. On the government pricing front, PhRMA welcomes China's efforts to annually adjust the National Reimbursement Drug List (NRDL) and support development of a sustainable commercial health insurance industry.

However, significant challenges remain. PhRMA and its member companies remain concerned about the effectiveness of these new IP protections for innovative products, as well as the lack of regulatory data protection (RDP). In addition, the government pricing and reimbursement system remains non-transparent and highly unpredictable. Procedures for approval of clinical trials and marketing authorizations can be very lengthy and require substantial commercially sensitive information, diverging from international registration standards. Lastly, rampant counterfeiting of medicines and under-regulated active pharmaceutical ingredients (APIs) are persisting problems.

Key Issues of Concern:

- **Weak patent enforcement**: Transparent mechanisms and legal standing to bring suit are needed in China to ensure parties are afforded a meaningful opportunity to resolve patent disputes before potentially infringing pharmaceutical products are launched in the market. Since January 2019, NMPA has granted at least 60 marketing approvals to local drug companies to make infringing copies of innovative medicines while the reference products in each case were still subject to patent protection. While we are encouraged by the issuance of the revised Patent Law and final measures[139] to establish an early patent dispute resolution

[139] Specifically, the NMPA-China National Intellectual Property Administration (CNIPA) Implementation Measures on Early Resolution Mechanisms for Drug Patent Disputes (July 2021) and the Supreme People's Court (SPC) Judicial Interpretation (JI) Regarding Patent Disputes Related to Pharmaceutical Registration Application and Registration (July 2021). In August 2018, the State Intellectual Property Office (SIPO) changed its name to the China National Intellectual Property Administration (CNIPA). Although some of the policies and draft proposals referenced in this submission were issued under the name of SIPO, we have used CNIPA consistently throughout this document.

framework, we have concerns about the effectiveness of the resulting system. Moreover, requests for preliminary injunctions for patent infringement lawsuits are rarely, if ever, granted. PhRMA and its member companies stand ready to work with the U.S. and Chinese Governments on the implementation of an effective patent enforcement system in China, consistent with its commitments in Article 1.11 of the Trade Agreement and with a view to establishing an effective and commercially meaningful enforcement system for medicines patents in China.

- **Patent term adjustment (PTA) and extension/restoration (PTE)**: We are encouraged that the revised Patent Law, CNIPA draft Patent Law Implementing Rules (PLIR) (November 2020) and CNIPA Draft Revised Patent Examination Guidelines (August 2021) include language to provide PTA and PTE. We recommend that CNIPA revise the Draft PLIR and 2021 Draft Revised Patent Examination Guidelines to clarify significant ambiguities and to provide further guidance about how the PTA and PTE periods will be calculated. Furthermore, the Draft Patent Examination Guidelines uses the terms "innovative drugs" and "improved new drugs" when addressing eligibility for and the calculation of PTE. CNIPA should clarify that the terms "innovative drugs" and "improved new drugs" refer to drugs or improvements that are new to China (see comments below on New Drug Definition). Any interpretation that these terms apply a new-to-the world standard would deny PTE to innovative medicines first approved outside of China, which account for the vast majority of innovative medicines approved in China. These revisions are essential for effectuating the patent term compensation provisions in Article 42 of the revised Patent Law and satisfying China's commitments under the Trade Agreement.

- **New drug definition that excludes products previously approved overseas**: PhRMA and its members are concerned about China's interpretation of the term "new drug" and its broader policy implications. China has, in practice, maintained the definition of a new drug as one that has not yet been marketed anywhere in the world, (i.e., the drug is not simply new to China), even though this definition is not codified in law or regulation.[140] This position is inconsistent with international standards, under which new drugs are those that are new to a specific country. It also paves the way for China to treat drugs manufactured and approved abroad differently. For example, only "new drugs" qualify for the expedited approval pathway for breakthrough drugs,[141] the recently established PTE mechanism, and former proposals to provide RDP. This globally unique approach is contrary to China's innovation goals, making it more difficult for both foreign and domestic innovative manufacturers to benefit from proposed policy reforms and engage in the type of meaningful drug research and development and collaboration with

[140] Chemical Drug Registration Categorization and Application Requirements (NMPA No. 44 2020), available at https://www.nmpa.gov.cn/xxgk/ggtg/qtggtg/20200630180301525.html (last visited Jan. 30, 2022); Biological Product Registration Categorization and Application Requirements (NMPA No. 43 2020), available at https://www.nmpa.gov.cn/xxgk/ggtg/qtggtg/20200630175301552.html (last visited Jan. 30, 2022).
[141] Drug Registration Regulation, Article 59 (NMPA 2020).

partners in China and around the world that promotes innovation. Given the problems that this definition creates, we urge China to clarify "new" to mean newly approved for marketing in China, as opposed to new to the world. A new-to-the-world approach is also inconsistent with the Article 1.12 of the Trade Agreement, under which China agreed to provide PTE to new approved pharmaceutical products in China and China's commitment under Article 2.4 of the Agreement to treat all parties, both foreign and domestic, equally.

- **Lack of regulatory data protection (RDP)**: China committed as part of its accession to the World Trade Organization (WTO) over twenty years ago to provide a six-year period of RDP against unfair commercial use for clinical test and other data submitted to secure approval of products containing a new chemical ingredient. In practice, however, China does not have a mechanism to grant RDP. We urge implementation of an RDP system that is consistent with international best practice and China's commitment to provide RDP as affirmed in the chapeau to Section C of Chapter One of the Trade Agreement.

- **Lengthy and nontransparent human genetic resource (HGR) requirements**: China's HGR regulations prohibit human sample collection by foreign parties and restrict the use, analysis and transfer of such samples and related data except in the context of an approved collaboration with Chinese parties, such as medical institutions or enterprises with no foreign investment.[142] This process has added significantly to the timeline for completion of clinical trials (at times over a year) and carries heavy penalties for non-compliance. By definition, the HGR regulations disproportionately burden U.S. and other foreign companies who may need to export samples and data to complete their clinical trials. The regulations also contain provisions regarding mandatory IP sharing that are inconsistent with Chapter 2 of the Trade Agreement, which provides that any transfer of technology as part of securing marketing approval for innovative medicines occurs on voluntary, market-based terms.

- **Restrictive patentability criteria**: In April 2017, the CNIPA amended its Patent Examination Guidelines that would require examiners to consider post-filing experimental data submitted by an applicant. Consistent with its commitments in Article 1.10 of the Trade Agreement, the SPC issued the JI of Some Issues in Hearing Administrative Cases of Granting and Determination of Patent Rights (September 2020), in which Article 10 prescribed that the Court would review post-filing experimental data.[143] CNIPA subsequently approved further amendments to the chemical, pharmaceutical and biotech sections of the Patent Examination Guidelines that went into effect on January 15, 2021. PhRMA and its members

[142] Human Genetic Resource Regulations, Articles 21-22 (State Council No. 717, 2019) ("HGR Regulations").
[143] Provisions of Some Issues in Hearing Administrative Cases of Granting and Determination of Patent Rights (I) (Supreme People's Ct. September 11, 2020), available at http://www.court.gov.cn/zixun-xiangqing-254761.html (last visited Jan. 30, 2022).

welcome these positive steps and will be closely monitoring implementation of the revised Guidelines to ensure that they permit pharmaceutical patent applicants to rely on supplemental data to satisfy relevant requirements for patentability.

- **Government pricing and reimbursement**: PhRMA welcomes recent annual updates to the NRDL. While any additions to the NRDL are a positive development, the negotiation process for these new medicines continues to lack transparency and diverges from global best practices. Major implementation challenges remain, such as low reimbursement percentages, hospital listing restrictions and other cost control regulations, which will continue to restrict patient access to innovative and life-saving medicines. We encourage the Chinese Government to shift towards a more timely, transparent, predictable and evidence-based reimbursement system, in which manufacturers may apply for reimbursement at any time, evidence-based methodologies are adopted for product value assessment and completed within a pre-defined period following the application (e.g., within 90 days) and negotiations between manufacturers and the responsible government agency consider the product's holistic value and need to incentivize innovation instead of focusing solely on price cuts.

- **Regulatory approval process**: NMPA has undertaken significant reform efforts to accelerate the drug review and approval process and align its regulatory framework with international standards. PhRMA is encouraged by the development of expedited review pathways (breakthrough, conditional approval, priority review and special review) that will facilitate accelerated development and approval of new drugs. However, the qualifying criteria, process and timelines for these pathways need to be more clearly defined. It is also critical for NMPA to issue and implement regulatory guidance and other policies that leverage the best science and innovation to improve the efficiency and predictability of the regulatory approval process.

- **Data requirements for NMPA clinical trial applications (CTAs)**: Increasingly, NMPA has required an unusually detailed review of the manufacturing and control process at the CTA stage, which can include asking questions that require companies to reveal proprietary information about manufacturing steps and requesting additional data beyond what is required on the face of the application materials. This is not in line with international practice and is particularly concerning for innovative products including cell and gene therapies. The detailed analysis delays the clinical trials and raises concerns about potential disclosure of manufacturing confidential commercial information (CCI) to third parties.

- **Counterfeit medicines**: We commend the two governments on the commitments in Section G of Chapter One of the Trade Agreement to combat counterfeiting. Over the last several years, China has implemented national plans to improve drug safety and crack down on the production and sale of counterfeit medicines, resulting in several positive and tangible actions on the enforcement front.

However, the production, distribution and sale of counterfeit medicines and unregulated APIs continue to pose a problem in China and continue to pose a threat to China's trading partners. The 2019 Drug Administration Law (DAL) expressly subjects APIs to applicable good manufacturing practice regulations, but also removes APIs from the scope of the definition of drug, which leaves the application of other drug regulations to APIs unclear. Also, the DAL removes the prohibited act of manufacturing or importing unapproved drugs from the definition of counterfeit drug. The DAL now further states that individuals who import small quantities of unapproved drugs that are approved abroad may receive lesser or no penalties. That provision is not limited to drugs that are not for resale. Subsequent amendments to the Criminal Law in 2021 penalize importation of unapproved drugs that causes or could cause serious human harm. This combination of legislation still gives local officials substantial discretion to allow companies that import unapproved drugs to escape liability altogether or offer lighter penalties if there is no evident harm and the unapproved drugs are in small quantities.

For these reasons, PhRMA requests that China remain on the **Priority Watch List** and be subject to **Section 306 Monitoring** for the 2022 Special 301 Report, and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved.

Intellectual Property Protection

PhRMA and its members companies strongly support the IP commitments in the Trade Agreement and look forward to securing implementation of these commitments in a manner fully grounded in international best practices. We acknowledge China's progress in 2021 to implement the IP commitments and advance important IP reforms. However, further work is required to ensure that the final mechanisms are implemented in a manner that advances innovation and patient access, consistent with China's international commitments, provide meaningful market access and allow U.S. biopharmaceutical companies to compete on a level playing field.

Weak Patent Enforcement

PhRMA is encouraged by the issuance of China's amended Patent Law, the NMPA-CNIPA Implementation Measures and the SPC JI to establish an early patent dispute resolution framework, but has concerns about the regime that has been put into place. In addition, although China's laws and regulations provide for injunctive relief, in practice preliminary injunctions are rarely, if ever, granted in the context of preventing premature follow-on product market entry. This is largely due to high procedural barriers as well as instructions from the SPC to be "cautious" in granting preliminary injunctions in technically complicated cases and to be "substantially convinced" of infringement before granting preliminary injunctions.

Consistent with Article 1.11 of the Trade Agreement, transparent mechanisms and a legal standing to sue are needed in China to ensure that parties are afforded the

opportunity to resolve patent disputes before potentially infringing pharmaceutical products are launched on the market. If a follow-on company begins to market a drug that infringes the innovator's patents, the damage to the innovator may be irreparable even if the innovator later wins its patent litigation. This could undermine the goal of encouraging innovation in China.

Since January 2019 there has been a significant uptick in NMPA granting market approvals to local drug makers for a variety of generic medicines used to treat common conditions – even though the original drugs are all still under patent protection (including their basic compound patent). To date, we are aware of at least 60 such generic approvals. In some cases, the Chinese companies have challenged the patents while applying for marketing approval, but no patent has been invalidated. The lack of efficiency of the Chinese IP court system and the near impossibility of securing preliminary injunctions to keep infringing products off the market already make it very difficult for innovative drug makers to stop patent violations. These NMPA actions seriously exacerbate the problem in China.

In addition, parallel patent dispute resolution proceedings through China's judiciary and CNIPA's Patent Reexamination and Invalidation Department (PRID) further frustrate biopharmaceutical innovator's ability to effectively and efficiently resolve patent disputes. Patent owners are often faced with unnecessary and burdensome procedural hurdles to seek the timely resolution of patent disputes because invalidity decisions issued by CNIPA's PRID during an ongoing infringement proceeding are grounds for automatic dismissal of such an infringement proceeding, even if the invalidity decision is under appeal. In that situation, patent owners are required to appeal the PRID decision through the judiciary and, if successful, seek a court to compel PRID to confirm the judgment. Due to PRID's extremely strict inventive step and supplemental data requirements and fast docket times, patent infringement defendants can use the PRID proceedings as a tactic to circumvent the judicial process.

These shortcomings underscore the need for an effective mechanism for early resolution of patent disputes in China. Over the course of 2020-21, responsible agencies released a number of final measures to implement such a system, including amendments to the Patent Law, the NMPA-CNIPA Implementation Measures and the SPC JI. While aspects of an effective early dispute resolution system are reflected in these measures, the resulting system does not appear to be fit for purpose. Key deficiencies include (i) the scope of patents for which notice would be provided is severely limited for biologics; (ii) a woefully inadequate stay period of nine months (with no stay provided for biologics); (iii) unclear guidance on the availability of injunctive relief to allow for the resolution of patent disputes outside of or beyond the proposed patent linkage mechanism; and (iv) a lack of clarity about which declarations by generic or biosimilar companies trigger the ability to initiate an Article 76 dispute and the remedy if a generic or biosimilar manufacturer submits an erroneous declaration. In addition, Chinese courts require foreign plaintiffs to submit notarized and legalized formal papers to initiate a case, which are difficult and burdensome to complete within the 45-day period to initiate an Article 76 dispute (further compounded by the COVID-19 pandemic). Further, while the revised Patent Law creates

a cause of action (Article 76), the SPC JI limits the scope of that action to listed patents. This, combined with the fact Article 76 creates a different type of action than a traditional infringement or validity proceeding, means that it is highly unlikely that an Article 76 case alone will resolve the patent dispute (particularly given that the NMPA-CNIPA Implementation Measures offer a 12-month "marketing exclusivity" period to the first generic applicant to successfully challenge the validity of the innovator's patent). It is also not clear whether abbreviated new drugs applications submitted before the new patent law took effect will still be approved by NMPA without reference to the patent status of the reference product, even though the patents on those innovative drugs have now been registered.

We look forward to continuing to work with the Chinese and U.S. Governments to ensure that China implements an effective patent enforcement system consistent with its commitments in Article 1.11 of the Trade Agreement.

Patent Term Adjustment (PTA) and Restoration/Extension (PTE)

PhRMA and its member companies applaud the U.S. and Chinese Governments for their commitment in Article 1.12 of the Trade Agreement to provide effective patent term extension mechanisms to compensate for unreasonable delays that occur in granting patents (PTA) and unreasonable curtailment of the effective patent term as a result of the lengthy marketing approval process (PTE) for innovative medicines. PhRMA members are encouraged that the revised Patent Law, the CNIPA draft PLIR and 2021 CNIPA draft Revised Patent Examination Guidelines include language to provide both PTA and PTE. However, there remains significant ambiguity related to the scope of patents eligible for adjustment and restoration, as well as the scope of protection provided. We recommend that CNIPA revise the draft PLIR and Revised Guidelines to clarify. In addition, the PLIR and Revised Guidelines should provide clear direction as to how the PTA and PTE periods will be calculated.

While PTE became effective on June 1, 2021, the final rules have yet to be issued even though patent owners must file PTE applications within three months of new drug approval to qualify for this protection. Without the final rules, it is very difficult, if not impossible, for patent owners to determine which patents are eligible for PTE. Furthermore, the Draft Patent Examination Guidelines uses the terms "innovative drugs" and "improved new drugs" when addressing eligibility for and the calculation of PTE. CNIPA should clarify that the terms "innovative drugs" and "improved new drugs" refer to drugs or improvements that are new to China. Any interpretation that these terms apply a new-to-the world standard would deny PTE to innovative medicines first approved outside of China, which account for the vast majority of innovative medicines approved in China. Also, the scope of the extended term needs to be clarified, e.g., the extended term of a compound patent should not be limited to the specific indication in the marketing approval based on which PTE is requested. These revisions and clarifications are essential for effectuating the patent term compensation provisions in Article 42 of the revised Patent Law and satisfying China's commitments under the Trade Agreement.

Lack of Regulatory Data Protection

We urge China to adopt measures that are consistent with international best practices and China's WTO commitments to provide RDP,[144] as affirmed in the chapeau to Section C of Chapter One of the Trade Agreement, in order to prevent the unfair commercial use of safety and efficacy data generated by innovative pharmaceutical companies. As it stands, China provides no period of protection during which a non-originator (or follow-on) applicant is prevented from relying on the data submitted to NMPA or a foreign regulatory agency to secure approval of the originator product. This practice gives an unfair commercial advantage to the follow-on manufacturer by permitting it to rely on the full clinical data submitted by an innovator – which the follow-on manufacturer did not incur the costs to produce – while having to submit only a small amount of China-specific supplemental data to NMPA.

Furthermore, RDP should be granted to any product that is "new" to China, i.e., has not been approved by NMPA. Proposals to date, however, suggest that China would only grant RDP to pharmaceutical products that are "new" to the world – in other words, products that make their international debut in China.[145] That is at odds with the approach of other regulatory systems and even at odds with the approach taken in China with respect to RDP for agricultural chemicals. PhRMA is concerned that this definition of "new drug" or similar concepts may continue to create risk that a drug approved or marketed first outside of China may receive weaker or no protection in China. This approach would also be discriminatory in that it would favor domestic industry, contrary to China's international obligations.

Mandatory IP Sharing Related to HGR Requirements

Any research conducted by foreign companies using Chinese human biological samples must be undertaken in collaboration with Chinese partners (i.e., Chinese state hospitals) under the HGR regime. In both the original HGR Regulation and the 2019 amended version, provisions require that (1) the foreign and Chinese party jointly submit

[144] As part of its accession to the WTO in 2001, China committed to provide a six-year period of RDP for undisclosed test or other data submitted to obtain marketing approval for pharmaceuticals in accordance with Article 39.3 of the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). See Report of the Working Party on the Accession of China to the World Trade Organization, WT/MIN(01)/3 (Nov. 10, 2001), at para. 284. Article 39.3 provides that a country must protect data submitted in the context of a drug registration application from unfair commercial use.

[145] NMPA continues to draw distinctions between drug applications in China relative to approvals in other countries. The February 2016 NMPA "Chemical Drug Registration Category Work Plan," defined a "new drug" as a chemical entity that is "new to the world." Although this definition is contrary to international practice and the definition in the earlier DAL Implementing Regulation itself, NMPA continues to utilize this concept to grant priority to certain applications. NMPA is also proposing that only products "new to the world" would qualify for full RDP terms (in an April 2018 draft of NMPA measures on the Implementation of Drug Clinical Trial Data Protection). Applicants that submit marketing applications in China before or at the same time as other countries receive benefits; those who submit later in China receive less. The 2020 DRR contains a separate application category for drugs approved abroad but not in China, which could be used to perpetuate this disparate treatment of drugs approved abroad.

any patent applications arising from the results of the collaboration (e.g., results of exploratory research and post-marketing studies) and (2) the two parties agree on an arrangement for sharing or, in the event that there is no arrangement, jointly share the rights and benefits to other IP, including obtaining the consent of the other party to transfer those rights. While not necessarily impacting rights over the investigational product, applicants are required to submit their clinical trial agreements (including the IP-related provisions) and submit declarations[146] as to how they will share these IP rights with Chinese parties, sometimes requiring a negotiation with the Human Genetic Resources Administrative Office (HGRAO) that creates uncertainty as to the rights over exploratory research and post-marketing studies.

In 2017, the Ministry of Science and Technology (MOST) released the Guidelines on Optimizing the Approval Process of Human Genetic Resources to streamline the approval process and allow for parallel reviews of CTAs and genetic testing (HGRAC). Under the new process, foreign sponsors and vendors are required to sign an "undertaking letter," which certifies that they will comply with Chinese regulations that govern clinical studies and the Chinese Administrative Permit Law. The IP sharing requirement and the undertaking letter together form a significant hurdle and create uncertainty for foreign companies conducting clinical research in China.

The mandatory IP sharing requirement should be eliminated to ensure, consistent with Chapter 2 of the Trade Agreement, that any transfer of technology as part of securing marketing approval for innovative medicines occurs on voluntary, market-based terms.

Restrictive Patentability Criteria

Reforms need to continue in China to provide clear and coherent standards, consistent with other major drug markets, for obtaining biopharmaceutical patents. Such standards must reflect the realities of the drug development lifecycle.

In late 2016, CNIPA issued an amendment to its Patent Examination Guidelines that requires examiners to consider post-filing experimental data submitted by the applicant. This amendment sought to implement China's commitment, made during the 2013 JCCT, to permit patent applicants to file additional data after the application filing date. Consistent with its commitments in Article of the Trade Agreement, in September 2020, the SPC issued the JI of Some Issues in Hearing Administrative Cases of Granting and Determination of Patent Rights, in which Article 10 prescribed that the Court would review post-filing experimental data.[147] On December 11, 2020, CNIPA approved further amendments to the chemical, pharmaceutical and biotech sections of the Patent Examination Guidelines that went into effect on January 15, 2021. PhRMA and its

[146] The forms that are part of the notification process introduced by the 2019 amendment to the HGR Regulations do not require IP-related declarations, although applicants must still submit the clinical trial agreements.

[147] Provisions of Some Issues in Hearing Administrative Cases of Granting and Determination of Patent Rights (I) (Supreme People's Ct. September 11, 2020), available at http://www.court.gov.cn/zixun-xiangqing-254761.html (last visited Jan. 30, 2022).

members welcome these positive steps and will be closely monitoring implementation of the revised Guidelines to ensure that they permit pharmaceutical patent applicants to rely on supplemental data to satisfy relevant requirements for patentability. For now, the courts and PRID are still divided on applying specific tests on post-filing data and various important technical nuances on the type of post-filing data that will be accepted remain unclear.

For example, unlike patent offices in the United States, Europe, Japan, Korea and other major markets, CNIPA does not consistently accept data submitted after a patent is filed to satisfy sufficiency and inventive step requirements, pursuant to Articles 26.3 and 22.3 of China's Patent Law, respectively. This practice has caused uncertainty about the ability to obtain and maintain biopharmaceutical patents in China, and has caused denials of patents on new medicines in China that received patents in other jurisdictions. It further contributes to the high invalidation rate of pharmaceutical patents, which exceeds 30 percent even for compound patents, adding to the lack of predictability of the Chinese market.

In addition, "specific therapeutic methods" cannot be protected by patents in China. New specific therapeutic methods are new methods of treatment of a known indication with a known product (such as new dosage regimens, treatment of new subgroups of patients or new routes of administration). They are distinguished from new product forms (such as dosage forms and formulations), manufacturing processes and treatment of new indications, which can be protected by patents in China either directly or through use of the Swiss-type claim format. Most countries with strong IP laws provide patent protection for specific therapeutic methods either directly (by permitting methods of treatment to be patented) or indirectly (by permitting alternative claim formats, e.g., Swiss-type claims). Incentives to develop such new specific therapeutic methods should be provided by the patent system because such new uses of existing medicines can bring important patient benefits, including methods of treatment specific to the Chinese population that may not be developed in the absence of a local incentive to do so. Furthermore, such new "specific therapeutic methods" require significant investments and clinical trial efforts that should be encouraged through the availability of patents. However, Article 25(3) of China's Patent Law does not allow for direct patenting of methods of treatment. The courts, including the Supreme Court (see, e.g., in the decision on *Genentech v. PRB* against the validity of patent No. ZL 00814590.3) and CNIPA (as stipulated in the Guidelines for Patent Examination), do not permit alternative claim formats that could protect specific therapeutic methods, including either Swiss-type claims where the point of novelty is a specific therapeutic method or other alternative formats that are accepted by patent offices in other countries, including the European Patent Office. We urge CNIPA to revisit this gap in China's patent system and conform China's practice to that of many other countries.

Lack of Transparency in Patent Prosecution

According to Article 48 of the Implementing Regulations of the Patent Law, any person may, from the date of publication of a patent application till the date of allowance,

submit observations as to why the application does not satisfy the patentability criteria. In turn, section 4.9 of Part II Chapter 8 of the Patent Examination Guidelines provides:

> *The observations submitted by anyone* to the Patent Office on an invention application not in conformity with the provisions of the Patent Law shall be included in the application file. The examiner shall take them into consideration during substantive examination …. The handling of the observation submitted by the public does not need to be notified to the public concerned. (Emphasis added.)

Contrary to international best practice, patent applicants in China are not typically notified of the submission of third-party observations nor offered the opportunity to rebut any allegations that they contain even though these observations may influence the substantive examination of their patent applications. We strongly encourage China to amend the Examination Guidelines and/or Implementing Regulations of the Patent Law to provide this basic transparency and due process as part of its patent prosecution process.

Market Access

Government Pricing and Reimbursement

To appropriately address patient access and affordability challenges, PhRMA urges China to establish a more timely, transparent, predictable and evidence-based reimbursement system, in which manufacturers may apply for reimbursement at any time, evidence-based methodologies are adopted for product value assessment and completed within a pre-defined period following the application (e.g., within 90 days), negotiations between manufacturers and the responsible government agency occur more periodically (e.g., semi-annually) and consider the product's holistic value and need to incentivize innovation instead of focusing solely on price cuts. Such a comprehensive and sustainable policy framework should also include an enhanced role for supplemental commercial health insurance (CHI), including by ensuring that the relationship between Basic Medical Insurance (BMI) and CHI is clearly defined and that systems can interact seamlessly, encouraging CHI products to include coverage of pre-existing conditions and consumer protection mechanisms, and addressing data availability and management limitations that hamper actuarial modeling and the ability to create viable insurance products. PhRMA and its members are committed to working with the appropriate government authorities in China to assist in the timely and transparent development of this policy framework.

National Reimbursement Drug List

PhRMA welcomes recent annual updates to the NRDL, which have improved access and affordability of innovative medicines for patients in China. While any additions to the NRDL are a positive development, the negotiation process for these new medicines continues to lack sufficient transparency and diverge from global best practices. For

example, previous rounds of negotiations have significantly varied in process, timelines and requirements, ultimately resulting in a lack of predictability and timely reimbursement for new medicines. The product selection and assessment criteria appear to be based on narrowly defined dimensions of value and budget impact, without clarity on how these criteria are determined and applied. Furthermore, even when prices are established, there remain major implementation challenges, such as low reimbursement percentages, hospital listing restrictions and additional cost control regulations that continue to restrict patient access to innovative and life-saving medicines. Moreover, contract renewal and price renegotiation are required two years after listing, which result in irreversible price reductions without any mechanism for price maintenance or positive adjustment based on the demonstrated benefits of the product. PhRMA also welcomed the deletion of language in the 2020 NHSA Interim Administrative Measures for the National Reimbursement Drug List that would have prioritized products with "independent intellectual property" (i.e., developed and owned by a Chinese legal entity) for inclusion in the NRDL. Nonetheless, only 23 percent of new medicines launched globally since 2011 are available in China and, among these, roughly a third are excluded from the NRDL.[148]

PhRMA recommends that the Chinese Government continue to take steps to improve the clinical assessment, economic assessment, negotiation process and BMI fund allocation for including innovative medicines in the NRDL. The clinical assessment should be a transparent, evidence-based and comprehensive analysis of scientifically proven clinical benefits that is independent of economic considerations. Following the clinical assessment, a transparent and evidence-based framework that holistically reflects the clinical, economic and societal benefits and costs – as opposed to the current focus on lowest international reference prices and cost-effectiveness thresholds – should be established before conducting individual product negotiations. Greater clarity and engagement with industry and other stakeholders is needed regarding these issues, including assessment and budget impact analysis criteria, standards for appropriate comparator selection, flexibility to address challenges for particular therapy areas and rare diseases, and new pathways for companies to pursue innovative payment arrangements. Selection standards for individual expert groups that support these assessments should also be more scientific and transparent. Negotiations between the national reimbursement authority and the manufacturer should be based on clear conditions and standardized documentation, with sufficient time for companies to prepare submissions and open communication channels before, during and after negotiations to resolve any issues. PhRMA and its member companies seek to work with the Chinese Government to improve NRDL policies. Needed reforms would increase the transparency and predictability of the Chinese market, more appropriately recognize the value of innovative medicines and provide PhRMA member companies increased market access that leads to improved patient access.

[148] PhRMA analysis of IQVIA Analytics Link, country regulatory and NRDL data on new active substances first launched globally between January 2011 and December 2020. June 2021.

Volume-Based Procurement (VBP)

In late 2018, NHSA initiated a VBP pilot program to centrally procure off-patent and generic products that passed a generic quality consistency evaluation (GQCE) for all public hospitals in 11 cities which collectively represented around a third of the Chinese biopharmaceutical market. Twenty-five of the 31 molecules proposed for procurement were selected based on the lowest bidders, with an average price cut of 52 percent. In September 2019, the Chinese Government expanded the program to most of China but modified the procurement methodology to allow three suppliers with the lowest bids. Subsequent procurements organized by the National Drug Joint Procurement Office (the procurement agency authorized by the NHSA) have increased the number of allowed suppliers for individual medicines. For example, the second national VBP allowed six suppliers with the lowest bids and the third national VBP allowed eight suppliers with the lowest bids. While allowing multiple winning bidders is a positive development, PhRMA urges the Chinese Government to ensure that the national VBP program does not reduce the number of *quality* suppliers in the market, increase the risk of drug shortages or hinder patient and physician choice in selecting the clinically most appropriate medicines. PhRMA encourages the Chinese Government to provide additional sales channels to ensure that patients have the full range of treatment options available.

By the end of 2022, the NHSA plans to expand the national VBP program to include as many as 500 medicines that have GQCE-certified generics. The NHSA is also expanding the national VBP program to biologic products, beginning with insulins in November 2021 and then other types of biologic products, including biosimilars. To ensure patient safety, PhRMA recommends that biosimilars demonstrate strong and specific scientific, clinical and quality standards. To this end, the Chinese Government should improve the regulatory framework for biologic products before expanding the national VBP program to biologic products, including through clear, science-based policies on naming, pharmacovigilance, interchangeability, extrapolation of approved indications of reference biologics and production capability. With the appropriate regulatory framework in place, PhRMA encourages the Chinese Government to develop a tailored biologic VBP model that recognizes value, ensures patient safety and therapeutic continuity, allows for shared decision-making between physicians and patients and incentivizes innovation.

New concerns with the national VBP program have emerged with respect to the protection of IP rights. For example, the list of products announced for the fourth national VBP in 2020 included a compound for which the patent was still valid and for which an administrative lawsuit was in progress. In 2021, the announced procurement methodology for the sixth national VBP grouped patented and off-patent products in the same class for competitive lowest price bidding. PhRMA urges the Chinese Government to abandon the practice of including patented medicines (including, but not limited to, patents on compounds) in the national VBP, which abrogates innovator's IP rights and, in the case of therapeutic class tendering, treats as interchangeable products with very different clinical characteristics and performance.

In conclusion, PhRMA is committed to working collaboratively and expeditiously with the appropriate government authorities to resolve these concerns and to implement transparent government pricing and procurement policies that recognize quality, innovation and the value that our member companies' products bring to patients and China.

Regulatory Approval Process

China has made significant strides in reforming and strengthening its regulatory framework, including shorter review times for CTAs (notwithstanding the unique manufacturing requirements) and the expedited programs described above. Although there were a number of examples where NMPA granted expedited regulatory approval consistent with timelines in the United States and European Union (or even faster), further improvements are needed to consistently match the review times for other regulatory authorities. We encourage China to address these issues rapidly, given the promise that a significant number of therapies currently in development have shown and the importance of predictable and timely review processes to encourage innovators to bring these new therapies to China for regulatory approval.

Chinese patients remain at a disadvantage compared to other countries with respect to the number of innovative medicines available, though moderate improvements continue to reduce the gap. Still, only 23 percent of new medicines launched globally in the past decade are available in China.[149] Because of China's unique and overly strict regulatory requirements and lengthy review and testing procedures, a "drug lag" remains in China.

PhRMA is encouraged that the 2019 DAL and certain aspects of the 2020 Drug Registration Regulation (DRR) have implemented reforms to speed up the approval process for some drugs. This supports greater flexibility in the drug development process, including a shortened timeline for the approval of clinical trials, streamlined amendment and reporting processes for clinical trial applications, and strengthened channels for stakeholder-NMPA communications. Furthermore, we support NMPA's implementation of various conditional approval programs, including for three lists of drugs approved in the U.S., Europe and Japan that China considers to be urgently needed for clinical use. We also support the issuance of guidance in July 2018 on the acceptance of overseas clinical trial data followed by the new clinical technical requirements for drugs approved overseas but not yet in China in October 2020.

NMPA's involvement in ICH since its May 2017 accession to the ICH and successful election to the ICH Management Committee in 2018 further exemplifies China's reform efforts. In 2021, NMPA was re-elected to the ICH Management Committee. Being an active ICH member will further encourage NMPA's harmonization with international regulatory standards, including but not limited to the China Pharmacopeia 2020, enforcement of harmonized global regulatory practices (including

[149] *Id*.

good manufacturing and clinical practices) and further implementation of standardized electronic submission for new drug applications (eCTD) and safety reporting, which will enable companies to pursue global simultaneous drug development and accelerate Chinese patient access to innovative medicines. Industry and other ICH stakeholders have high expectations for NMPA to implement fully ICH's technical guidelines in the coming years. CDE is working on implementing various ICH guidance documents and has established related training programs.

Clinical Trial Applications

To help China further integrate into the global innovation network and reduce the time it takes for innovative medicines to reach patients, it is critical for China to shorten the CTA review and approval time. As discussed above, China now permits a new drug clinical trial to move forward if NMPA has not raised objections within 60 business days. Under the 2019 DAL and 2020 DRR, this 60-day implicit approval now applies to all trials. Also, the 2019 DAL permits filing administration of clinical trial sites to proceed via a faster notification process to increase the availability of resources. PhRMA recognizes and applauds these important steps NMPA is taking to make the development process more efficient.

But there is still more that could be done. Based on PhRMA member company experience in other major markets, NMPA should maintain consistent and specific timelines for reviewing and approving applications. In addition, applications should be evaluated based on a clear set of standardized criteria coupled with science-based and risk-based decision making (principles embedded in ICH guidelines) that applies equally to both local and foreign manufacturers and matches the stage of development.

Specifically, we are encouraged that the 2019 DAL and 2020 DRR create a more uniform system that does not draw distinctions between local trials and international Multi-Regional Clinical Trials (MRCT). To enable simultaneous global development and facilitate access to innovative treatments, we encourage China to fully implement ICH E-17 (MRCT) guideline and accept a pooled region approach as well as sample size allotments for Chinese patients. In addition, it is critical that laws seeking to protect data and patient privacy in China do not unduly hinder China's ability to efficiently and effectively participate in MRCTs.

i. Human Genetic Resources Requirements

One of the more significant recent impediments to development has been an additional approval or notification now applicable to all trials conducted in China by foreign companies or their affiliates that collect *any* samples that contain Chinese human genetic resources, regardless of whether those samples are for genetic testing. Pursuant to HGR Regulations that have been in effect since 1998 (but were largely unenforced until 2015) foreign applicants must apply to the HGRAC, under MOST, before they can collect and transfer these samples and associated data. The trial may not commence until this process is complete. While an amendment to the HGR Regulations in 2019 now permits

manufacturers to submit a notification (rather than an approval application) for trials that are intended to support a marketing application in China, provided that no samples from the trial will be exported from China, the filing criteria are very stringent and the vast majority of cases do not qualify. In addition, other trials with the need to export samples and data still require approval.

The HGR application process can add months to the development timeline. Under the 2019 amendment, applicants must file any data that they intend to transfer outside of China with the HGRAO. This situation presents a hurdle for China to participate in global development and contradicts various reform policies to encourage innovation. The additional conditions for HGR research by foreign companies, limitations on data transfer and storage, and IP sharing requirements described above in the section on Mandatory IP Sharing Related to HGR Requirements raise serious questions about China's compliance with its international commitments, including Article 3(1) of the TRIPS Agreement, which prohibits the granting of less favorable treatment to foreign intellectual property right holders compared to national intellectual property right holders and Article 2 of the Trade Agreement. These requirements – which are unique to China – disproportionately burden foreign companies. If not eliminated entirely, they should be reduced to a simple notification procedure without restrictions on export of samples and data.

ii. Chemistry, Manufacturing and Control Data Requirements

An additional, increasingly concerning impediment to development is NMPA's unusually detailed information requirement for the manufacturing process at the CTA stage, which can include asking questions that require revealing proprietary information about manufacturing steps and requesting additional data beyond what is required on the face of the application materials. This is not in line with international best practice. The detailed information required not only delays the clinical trials but also raises concerns about potential disclosure of manufacturing CCI to third parties. In these instances, NMPA has been hesitant to permit redactions of these records or accept less sensitive substitutes. The NMPA requests for detailed information continue throughout the product life-cycle, including for NDA and post-approval submissions.

iii. Drug Approvals Process

PhRMA welcomes a number of other key regulatory reforms described above because they represent positive movement in China's progress toward supporting a simultaneous global development and registration framework in China. These reforms are consistent with industry's primary recommendations, including full implementation of the ICH E17 guideline, strengthened expedited programs, acceptance of foreign clinical data to satisfy registration in China, structured agency consultation and the establishment of an orphan disease list. Although the establishment of an orphan disease list is an encouraging step to better serve patients with rare diseases, it only contains 121 rare diseases of the about 8,000 rare diseases in total known today. As it is impossible to create a complete list, PhRMA suggests replacing this list with a definition of prevalence,

which is the approach taken in the United States and other ICH regulatory agencies. The rare diseases community in China has already developed and published a report for a definition based on prevalence of the disease that could be considered. In addition, PhRMA encourages China to pair the establishment of an orphan disease definition with an orphan drug regulatory framework that provides for the expedited development and review of orphan drugs, as well as regulatory incentives.

The 2019 DAL adopted a marketing authorization holder system nationwide and applies it to ex-China applicants. This system unifies the previously separate imported and domestically made drug pathways in certain ways. Applicants can now receive a marketing authorization tied to a product and have the freedom to contract out manufacturing and distribution to multiple partners, as long as it does not involve cross-border manufacturing. Also, the 2019 DAL unifies what were previously separate applications for the drug product, the active ingredient, excipients and primary packaging materials. Materials related to the latter three will be registered to certain applicants as part of a mandatory drug master file (DMF) system that began in 2017. Although the bundled system streamlines the review process, some of the required administrative and technical information for a DMF is burdensome for the companies as well as their suppliers and it is unnecessary to ensure product quality and safety. PhRMA recommends that the DMF system should be voluntary as is the case in the United States and the European Union.

To ensure Chinese patients receive timely access to new therapies, PhRMA recommends that NMPA continue to align its regulatory framework with accepted international standards and adopt science-based, transparent, consistent and predictable policies for evaluating and approving drugs and biologics. For example, on January 12, 2021, NMPA issued a Regulation on Post-Marketing Changes of Drugs, which speaks to the requirements that must be met for any post-approval variation to an approved medicine. Whereas international standards typically allow for the drug product to be manufactured but not released until approval of the change is obtained, this Regulation restricts the manufacture of the drug product until after the regulatory approval (or notification) of the change has been issued. Such an approach could negatively impact the supply of medicines – particularly biologics and vaccines with long manufacturing lead times – to the detriment of patients. PhRMA recommends that the NMPA align its approach for post-marketing approval changes with international practice.

PhRMA commends NMPA on its continued leadership at ICH and encourages its timely and robust implementation of all ICH guidelines. PhRMA recommends continued reforms to accelerate and simplify the drug regulatory approval process, unify requirements and practices for locally manufactured and imported products and clearly outline and streamline the criteria and timeline for reviewing and approving clinical trial and marketing application processes. PhRMA and its members stand ready and look forward to working closely with the U.S. and Chinese Governments to support China's regulatory reform efforts.

Foreign Investment Restrictions

China has removed a number of restrictions on foreign investment in recent years. Indeed, research and development and production of drugs using cell therapy technology and new drug production using bioengineering (excluding prohibited foreign investment areas) are currently encouraged areas under the 2020 Encouraged Foreign Investment Catalogue. However, pursuant to its Foreign Investment Negative List, China still flatly prohibits foreign investment in "the development and application of human stem cells, genetic diagnosis and treatment technology[.]"

This ambiguous provision could be interpreted to prohibit foreign companies from providing life-saving technologies including cell and gene therapies to China. Such a blanket prohibition on foreign investment and participation would make China an outlier in this area among other innovative markets, as the United States, the European Union and the United Kingdom do not contain such categorical restrictions in their laws. We urge China to eliminate this language in the Negative List or to define it to expressly exclude development and production of biological products, including cell and gene therapies, for commercial marketing.

Counterfeit Medicines

Pharmaceutical counterfeiting poses global public health risks, exacerbated by rapid growth of online sales of counterfeit medicines and the production and sale of unregulated APIs used to manufacture counterfeit products. China has increased enforcement efforts against counterfeited drugs in recent years, both through legislative reforms and increased police activity, and we commend the two governments on the commitments in Section G of Chapter One of the Trade Agreement to combat counterfeiting. In implementing these commitments, it will be particularly important to address online distribution of counterfeit medicines and unregulated API. Stories involving counterfeit medicines continue to make headlines, such as an arrest in 2021 of a manufacturer of fake COVID-19 vaccines in China.[150]

Under current pharmaceutical regulations, there is no effective regulatory control over the manufacture and distribution of API, which creates a major regulatory loophole that exerts a negative impact on the security of China's upstream drug supply chain. The 2019 DAL states that APIs used in drug production must comply with good manufacturing practice regulations and that drug producers must verify the compliance of APIs they purchase. But the DAL is not clear on the applicability of other regulations to APIs as it has removed API from the definition of "drug."

The DAL also contains provisions on a system for drug traceability. This includes building upon existing efforts to establish an online platform for collecting and publishing traceability records and a requirement for a unique identifier according to uniform coding

[150] China arrests leader of fake vaccine scam, BBC News, Feb 16, 2021, available at https://www.bbc.com/news/world-asia-china-56080092 (last visited Jan. 30, 2022).

rules on each drug package. In addition, the DAL also contains increased fines and longer debarment penalties for counterfeiting.[151] These provisions are helpful, but further measures are still needed to adequately address the problem, including:

- amending the Criminal Code to ease the burden of proof to prosecute brokers or API suppliers who knowingly deal with illegal APIs;
- empowering NMPA or another authority to regulate any party that manufactures API even if that party has not declared an intent to do so;
- empowering NMPA (through implementation of the revised DAL) to penalize API manufacturers based on *prima facie* evidence of a product having medicinal use or being an "API" or a "chemical drug substance" without cGMP certification; and
- deepening cooperation with major Internet Service Providers, portal sites and search engines for earlier identification and tracking of illegitimate API suppliers through business-to-business websites.

While the State Administration for Market Regulation plays a critical role in developing future solutions, any significant reform plan will require coordination and consultation among all relevant ministries within the central government. These efforts to crack down on unregulated API must go hand-in-hand with China's efforts against counterfeit drugs in order to enhance the effectiveness of China's national drug safety plan objectives.

PhRMA hopes that the U.S. Government will work with China to increase transparency of its anti-counterfeiting efforts, including enhancing information sharing with drug manufacturers to help evaluate the effectiveness of online actions and supporting enforcement efforts, given the importance of protecting patients. China's actions in this area could serve as a model for other countries facing similar challenges online.

PhRMA encourages the Chinese and U.S. Governments to continue and increase further their cooperation related to counterfeit medicines sold on the Internet, given the role of the Internet in the global counterfeit drug trade. This notably requires a holistic approach since not only finished counterfeit medicines are sold on the major online platforms in China but also separate materials (i.e., API, secondary packaging, primary packaging, labels) especially on business-to-business platforms for these to be assembled in and outside China.

Finally, while we commend China for improvements in customs regulations, which include monitoring and seizure of imports and exports, Chinese Customs authorities rarely exercise their authority to monitor pharmaceutical exports. PhRMA believes that

[151] *See* DAL Chapter 11. The potential fines for manufacturing or distributing counterfeit drugs increased from 2 to 5 times the value of the goods to 15 to 30 times the value of the goods with a minimum fine of RMB 1,500,000 (about USD 208,000). These entities can be debarred for 10 years. The maximum penalty for a responsible person increased from ten years' debarment to lifetime debarment from the pharmaceutical industry. For severe violations, the police department may detain the responsible person for five to 15 days.

Customs authorities need clear guidance, more and better trained resources and support should be targeted to monitoring pharmaceutical and chemical exports to ramp up efforts against counterfeiting and unregulated API producers. This could include, for example, encouraging greater cooperation between Chinese Customs and the Public Security Bureau to ensure the identification and prosecution of those manufacturing and exporting counterfeit medicines. In addition, Chinese Customs should consider working with the World Customs Organization to exchange information and potentially align activities, as well as customs authorities in recipient countries to jointly combat pharmaceutical crime. Close cooperation and intense risk analysis with key intermediaries such as online e-commerce platforms and postal courier companies is critical to effectively monitor and detect small parcels with counterfeit medicines.

PRIORITY WATCH LIST

ASIA – PACIFIC

INDIA

PhRMA and its member companies support India's efforts to create a stronger business, innovation and health care environment. Recent supportive policies and initiatives include Make in India, the National Intellectual Property Rights (IPR) Policy 2016, the National Health Policy 2017, the National Health Protection Scheme (NHPS), the Department of Pharmaceuticals' draft policy on facilitating biopharmaceutical research, development and innovation, and the opening of the Ayushman Bharat Mission health centers. PhRMA and its member companies also appreciate the significant funds allocated to the India COVID-19 Emergency Response and Health System Preparedness Package. These policies and initiatives can help improve access to health care for Indian patients, while also driving economic growth by enhancing India's global competitiveness and ease of doing business.

Despite these positive signs, PhRMA and its member companies remain concerned about the challenging policy and regulatory environment in India. Market access challenges persist and, despite announcements to increase funding and expand health care programs, the Indian Government has left public health care spending at only 1.8 percent of GDP during fiscal year 2020,[152] leaving more than 60 percent of the population without any health insurance and resulting in high out-of-pocket burdens.[153] Moreover, cumbersome procedures related to compensation prevent India from becoming a part of global clinical trial programs and thereby limit patient access to innovative medicines.

Biopharmaceutical innovators saw some positive signs from the Indian Government in 2019, including the release of the Manual of Patents Practice and Procedure (MPPP) that was notified by the Office of the Controller General of Patents Designs & Trademarks (CGPDTM) in November 2019. However, no real policy or practical changes have since been realized. To research, develop and deliver new treatments and cures to patients, biopharmaceutical innovators must be able to secure and effectively enforce intellectual property (IP) rights. With the right policies put in place, India could become a globally competitive leader in life sciences and biomedical development. The National IPR Policy, 2016 puts forward an important framework for strengthening India's innovation ecosystem; still, greater predictability and reliability is needed, and implementation and possible revision of the policy would offer an opportunity to advance concrete policy improvements. The recently published Standing Committee Report which reviewed the Intellectual Property Rights regime in India has acknowledged these and other issues and recommended a review of the 2016 policy.[154]

---

[152] *See* Economic Survey 2020-21, available at https://www.indiabudget.gov.in/economicsurvey/doc/vol2chapter/echap10_vol2.pdf (last visited Jan. 30. 2022).

[153] IQVIA Market Prognosis Country Report: India (2021).

[154] Department Related Parliamentary Standing Committee on Commerce, "Review of the Intellectual Property Rights Regime in India", available at https://rajyasabha.nic.in/rsnew/Committee_site/Committee_File/ReportFile/13/141/161_2021_7_15.pdf (last visited Jan. 30, 2022).

The innovative biopharmaceutical industry greatly appreciates the efforts to address these concerns at the highest levels of the U.S. and Indian Governments. We welcome the opportunity to continue working with both Governments to improve access to medicines for patients and advancing a "Healthy India" by removing market access barriers and fostering legal and regulatory certainty for the protection of IP in India.

Key Issues of Concern:

- **Unpredictable patent environment**: As identified recently by the Report of the Department Related Standing Committee on Commerce, a stronger IP protection framework would significantly contribute to India's economic growth and enhance the country's investment potential. India's legal and regulatory systems pose procedural and substantive barriers at every step of the patent process, including: impermissible hurdles to patentability posed by Section 3(d) of India's Patents Act, 1970, patent grant delays due to cyclic filings of pre-grant oppositions followed by rampant post-grant opposition proceedings, onerous patent application disclosure requirements and conditioning patent grant on unclear and subjective access and benefit sharing requirements that disproportionately affect foreign patent applicants. The issue of genus and species patents has recently been raised in a number of judicial proceedings and doubts over the validity of species patents beyond the term of any genus patent on a product have led to arbitrary court decisions. These shortcomings, coupled with the ongoing threat of compulsory licenses (CLs), demonstrate that much work needs to be done to improve the patent environment in India.

- **Lack of patent enforcement**: One of the most significant challenges facing biopharmaceutical innovators seeking marketing approval in India is that marketing and manufacturing approvals are not transparent or coordinated between federal and state agencies. Indian law allows the Central Drugs Standard Control Organization (CDSCO) to approve third-party manufacturers to commercialize copies of innovator products, regardless of whether those products potentially infringe on an innovator's patent(s). After four years of the medicine's first approval in India, a license from any of the state drug regulators to manufacture and market the product in India suffices. The State Drug Regulators are not required to inquire or assess whether the drug approval is being granted to a patent protected product, resulting in irreparable harm to patients, innovators and other follow-on producers. Coincident with changes to Indian customs procedures that eliminated patent enforcement at the border, biopharmaceutical innovators are seeing an increased incidence of infringing products manufactured outside India in neighboring territories being illegally imported into India. Not only do such products violate patents granted in India, they may also potentially threaten patient safety.

- **Regulatory data protection failures**: Contrary to India's obligations under Article 39.3 of the World Trade Organization (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), regulatory authorities in India rely

on test data submitted by originators to seek approval in India and/or another country when granting marketing approval to follow-on pharmaceutical products to third parties. This reliance results in unfair commercial use prohibited by the TRIPS Agreement and discourages the development and introduction into India of new medicines for unmet medical needs.

- **Discriminatory and non-transparent government pricing policies**: PhRMA and its member companies welcomed the decision by the Department of Pharmaceuticals (DoP) to amend Paragraph 32 of the Drug Price Control Order 2013 (DPCO), allowing manufacturers and importers of patented medicines to apply for exemption from price controls for five years from the commencement of marketing in India for patented products and exempting orphan drugs permanently. However, the potential benefits of the provision are yet to be seen given significant delays in implementation. Moreover, there remain significant concerns of an evolving price control regime that is discriminatory, unpredictable and opaque, including the threat of further amendments to the DPCO or dilution of Paragraph 32 that would significantly reduce the benefits of patent protection and create an unviable business environment. Separately, the recent application of the Trade Margin Rationalization (TMR) approach for price monitoring lacks transparency, predictability and reasonableness, amounting to a direct price control on non-scheduled products. Overall, the broad authority granted to the National Pharmaceutical Pricing Authority (NPPA) and continued lack of transparency and predictability in NPPA decisions further inhibits investment in India.

- **Discriminatory government procurement policies**: The Indian Government's Make in India policy has increasingly excluded or disadvantaged suppliers that do not manufacture in India from participating in tenders. The General Financial Rules were amended in 2020 to exclude the participation of non-local suppliers (i.e., suppliers that do not meet the 20 percent minimum local content requirement) from government procurement where the value of the goods to be procured is less than INR 2 billion. The Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry has consequently amended the 2017 Public Procurement Order (PPO) to disqualify non-local bidders in all government tenders of such value (except in permitted Global Tender Enquiries). The December 2020 notification issued by the Department of Pharmaceuticals for procurement of medicines requires a minimum 80 percent local content to qualify as a favored Class 1 local supplier and a minimum 50 percent local content to qualify as a Class 2 local supplier. This raises significant concerns about discrimination against imported products and that Indian patients will not have access to needed treatments.

- **High tariffs and taxes on medicines**: Taxes, duties and other levies contribute substantially to pharmaceutical prices in India. Import duties for active ingredients and finished products with the basic import duties average around 10 percent.

When combined with the Integrated Goods and Service Tax, the effective tax can be as high as 28 percent.[155]

- **Unpredictable environment for clinical research and new drug approval**: While the government is keen to reinvigorate clinical research in India, ambiguities and discriminatory practices in the Indian regulatory space continue to hinder that effort. In particular, the granting of waivers of India's local clinical trials requirements is highly subjective and unpredictable. While notification of the New Drugs and Clinical Trials Rules, 2019 promisingly proposed that local clinical trials could be waived if the clinical trials were conducted in certain countries, the list of relevant countries has yet to be published. Further, the provision allowing for deemed approval of clinical trials applications is discriminatory in nature, as it does not apply to drugs whose research and development was conducted outside of India. Furthermore, the Subject Expert Committees (SEC) that reviews and examines clinical trials and new drug applications do not have standard operating procedures (SOPs) or guidelines and, therefore, the recommendations made by them are often subjective and arbitrary. These issues perpetuate a burdensome environment for clinical research and new drug approvals that undermine the availability of new treatments and vaccines for Indian patients.

- **Counterfeit Medicines**: Counterfeit medicines pose serious and pervasive health and safety threats, and according to recent reports, more than half of the counterfeit medicines seized originated in India. Moreover, illicit trade in counterfeit medicines is growing, and the need to stem the flow of these counterfeit medications is even more pronounced given the global efforts to combat the COVID-19 pandemic.

For these reasons, PhRMA requests that India remain on the **Priority Watch List** in the 2022 Special 301 Report and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved.

Intellectual Property Protection

India announced the new National IPR Policy in May 2016.[156] The Policy recognizes the tremendous economic and socio-cultural benefits that a strong IP regime could bring to India through economic growth, employment and a vibrant R&D environment. While the government has established the Cell for IPR Promotion and Management under the National IPR Policy to conduct an IPR awareness campaign across the country in educational institutions, no concrete measures have been taken to improve the IP regime, i.e., to promote innovation.

[155] IQVIA Market Prognosis Country Report: India (2021).
[156] Department of Industrial Policy and Promotion, "National Intellectual Property Rights Policy," May 12, 2016, available at http://dipp.nic.in/sites/default/files/National_IPR_Policy_English.pdf (last visited Jan. 30, 2022).

The Policy also puts forward important administrative and procedural improvements. However, it should be strengthened to accelerate the reforms needed to foster medical innovation and enhance India's global competitiveness. For example, while the policy focuses on government, open-source R&D, Corporate Social Responsibility credits, tax breaks, loan guarantees for start-ups, support systems for Micro-, Small- and Medium-sized Enterprises and other mechanisms to encourage innovation in India, it is also important to incentivize the private sector and scientific institutions by providing effective and meaningful IP protection and enforcement mechanisms. Further, it has been more than five years since the National IPR Policy was announced. A revision and update of the Policy is necessary and should include a consultative process with relevant stakeholders and meaningful reforms to India's IP policies that lead to improvements in IP protection and enforcement for medicines. The Report of the Department Related Standing Committee on Commerce highlights the need to reduce the risk of further negative IP decisions and secure targeted improvements in India's IP laws and policies in the near-term, while laying the groundwork for a stable longer-term policy.[157] A comprehensive overview of the applicable legislation and policies, in line with the recommendations of the Standing Committee, is necessary to reassure India's commitment to a strong IP framework

Restrictive Patentability Criteria

PhRMA members continue to face considerable barriers at every step of the patent application process, including restrictive patentability criteria posed by Section 3(d) of India's Patents Act, 1970, narrow patentability standards applied during pre- and post-grant opposition proceedings, conditioning patent grant on unclear and subjective access and benefit sharing requirements, and outdated patent application disclosure requirements.

TRIPS Article 27 requires that patents shall be available for any inventions, whether products or processes, in all fields of technology, provided that an invention is new, involves an inventive step and is capable of industrial application. Section 3(d) of the Indian Patents Act, 1970, as amended by the Patents (Amendment) Act 2005, adds an impermissible hurdle to patentability by adding a fourth substantive criterion of "enhanced efficacy" to the TRIPS requirements. Moreover, this additional hurdle appears to be applied only to pharmaceuticals. Under this provision, salts, esters, ethers, polymorphs, metabolites, pure form, particle size, isomers, mixtures of isomers, complexes, combinations and other derivatives of known substances are presumed to be the same substance as the original chemical entity and thus not patentable, unless it can be shown that they differ significantly in properties with regard to therapeutic efficacy. Further, indiscriminate and routine use of Section 3(d) by the Indian Patent Office during prosecution of patent applications even for a novel compound or a derivative, with the

[157] Department Related Parliamentary Standing Committee on Commerce, "Review of the Intellectual Property Rights Regime in India", available at https://rajyasabha.nic.in/rsnew/Committee_site/Committee_File/ReportFile/13/141/161_2021_7_15.pdf (last visited Jan. 30, 2022).

onus of proof on the applicant to prove otherwise, poses an unreasonable and unnecessary burden on innovators.

Additional substantive requirements for patentability beyond those enumerated in the TRIPS Agreement are inconsistent with India's international obligations. For example, Article 27 of the TRIPS Agreement provides an exclusive list of the types of subject matter that can be precluded from patent coverage and this list does not include "new forms of known substances lacking enhanced therapeutic efficacy," as excluded by Section 3(d) of the Indian law. Therefore, Section 3(d) is inconsistent with the framework provided by the TRIPS Agreement. Moreover, Section 3(d) represents an additional hurdle for patents on inventions specifically relating to chemical compounds and, therefore, the Indian law is in conflict with the non-discrimination principles provided by TRIPS Article 27 and WTO rules.[158]

From a policy perspective, Section 3(d) undermines incentives for biopharmaceutical innovation by preventing patentability for improvements that do not relate to efficacy, for example an invention relating to the improved safety or toxicity of a product. Further, Section 3(i) of the Indian Patents Act, 1970, excludes method of treatment claims, effectively preventing U.S. biotechnology companies with needed treatment methods from entering the Indian market and providing life-saving products.

India's pre- and post-grant patent opposition system is another source of unreasonable restrictive standards for patentability. Patent revocations using "hindsight" analyses made during pre- and post-grant oppositions have cited a lack of inventiveness concluding that inventions were based on "old science" or failed to demonstrate an inventive step. In addition, the lack of clear rules guiding pleading and evidentiary standards during pre-grant opposition proceedings create further uncertainty relating to the patentability of inventions. Further, pre-grant opposition procedures under Section 25 of India's Patents Act, 1970, have created significant uncertainty and delayed the introduction of new inventions by undermining patent office efficiency and delaying patent prosecution. Frivolous pre-grant oppositions (by multiple independent individuals) and existing patent backlog and the absence of mechanisms such as patent term adjustment further complicate this process and contribute to the loss of patent life.

Weak Patent Enforcement

Indian law permits CDSCO to approve third-party manufacturers to commercialize copies of innovator chemically synthesized products, regardless of whether those products potentially infringe on an innovator's patent(s). After four years of the medicine's first approval in India, a medicine is deemed to no longer be a new drug.[159] As such,

[158] The additional patentability hurdle imposed by section 3(d) was recently reinforced by the Pharmaceutical Patent Examination Guidelines issued in October 2014.
[159] As per Rule 2(1)(w) of the New Drugs Clinical Trials Rules, 2019 a drug (apart from a modified or sustained release form of a drug or novel drug delivery system of any drug or a vaccine, r-DNA derived product, living modified organism, monoclonal anti-body, stem cell derived product, gene therapeutic

approval from CDSCO is not required and a mere license from any of the state drug regulators to manufacture and market the product in India suffices. Neither the Central nor State regulatory authorities are required to verify or consider the remaining term of the patent protection on the original product. Therefore, an infringer can obtain marketing authorization from the Central drug regulator and manufacturing authorization from the state drug regulator for a generic version of an on-patent drug, forcing the patent holder to seek redress in India's court system, which often results in irreparable harm to the patent holder.

India's National IPR Policy, 2016 calls for identification of important areas of potential policy development related to ambiguities between IP laws and other laws or authorities whose jurisdictions impact administration or enforcement of patents.[160] At a minimum, India should amend its rules for "new drugs" in the New Drugs and Clinical Trials Rules, 2019, by increasing the period a drug is considered "new" from four years to ten years (thereby extending the period before which a manufacturer can seek approval for a follow-on product).

India also does not provide mechanisms for notification or resolution of patent disputes prior to marketing approval of generic products. Such mechanisms are needed to prevent the marketing of potentially patent infringing products and resolve disputes in a timely manner. The SUGAM initiative launched in November 2015 to implement e-Governance with respect to the licensing system within India's CDSCO lacks transparency and does not facilitate timely notification to a patentee of a possible infringement. In April 2017, India amended Form 44 of the Drugs and Cosmetics Rules[161] to omit Item 8 which previously required new drug applicants to disclose the "patent status of the drug."[162] This action further eroded the ability of patent owners to effectively and timely notify generic manufacturers and state drug regulatory authorities of existing patents related to medicines approved by CDSCO or get timely and adequately notified of filing of applications for marketing or manufacturing approval by any subsequent applicant. CDSCO's Notification GSR 19(E) dated January 10, 2019, falls short in providing an opportunity to facilitate notification of manufacturing applications between government agencies and patent holders under the SUGAM initiative. The industry has submitted many formal representations urging the Ministry of Health and Family Welfare (MoHFW) to take immediate steps to increase transparency and cooperation between central and state medicines regulatory authorities. At a minimum, MoHFW should ensure all biopharmaceutical manufacturers, the relevant Indian authorities and the broader public have timely notice of marketing and manufacturing applications filed with central and state regulators.

With regard to patent enforcement, in at least one specific case, the patent holder was forced to wait seven years before receiving a court decision upholding its patent. In

---

product or xenografts, intended to be used as drug) "*shall continue to be new drugs for a period of four years from the date of their permission granted by the Central Licensing Authority ….*"

[160] *See* Secs. 3.8 and 3.8.3 of the National IPR Policy.

[161] Form 44, Schedule A, Drugs and Cosmetics Rules, 1945.

[162] *Id.*

that case, the court ultimately did not grant an injunction because by the time the decision was issued the patent was close to expiration.[163] In another case, a company waited two years for a Court to grant an injunction. During that time the infringing product was marketed and sold.[164] Recent cases[165] also reveal that defendants have started to obtain market authorizations and manufacturing licenses without the knowledge of the innovator and pre-emptively filing declaratory suits as to the non-infringement of the patents in a civil court so as to delay grant of any injunction orders. Moreover, while some innovators have been recently successful in obtaining interim injunctions, that relief is often very limited because infringers are only enjoined from future infringing acts, i.e., it does not prohibit the marketing of products already manufactured and/or launched.

The Commercial Courts, Commercial Division and Commercial Appellate Division of High Courts Act, 2015 (as amended in 2018) provides for the creation of commercial and commercial appellate divisions in High Courts and commercial courts at the district level to assist in addressing disputes in a timely manner. While this is a promising provision, these courts are overburdened with cases and will require a significant amount of technical expertise and commitment of resources to be properly implemented. Further, abolition of a dedicated appellate body, i.e., the Intellectual Property Appellate Board via the Tribunals Reforms Act, 2021, and the transfer of IP disputes to the High Courts further burdens an already overwhelmed court system and further delays access to timely court decisions and proceedings. Patents involve technical issues and therefore, designation of a specialized tribunal with the appropriate knowledge is critical for accurately examining and interpreting the issues involving complex technologies.

While the draft National IPR Policy proposed to establish specialized patent benches at the High Court level and designate an IP court at the district level, the final National IPR Policy did not include this provision.[166]

Compulsory Licensing

The grounds for issuing a CL in India under the Patents Act, 1970 are broad, vague and appear to include criteria that are not clearly related to legitimate health emergencies. While the Indian Government continues to take a more measured and cautious approach in responding to recent CL cases, the MoHFW continues to entertain potential recommendations to impose CLs on certain anti-cancer and rare disease medicines under the special provisions of Section 92 of India's Patents Act, 1970, which would cause further difficulty for patent owners to defend their patents. Moreover, some Indian pharmaceutical companies routinely initiate requests for voluntary licenses under Section

[163] *F. Hoffman-La Roche Ltd v. Cipla*, RFA(OS) 92/2012, Delhi High Ct., (Nov. 27, 2015), available at http://delhihighcourt.nic.in/dhcqrydisp_o.asp?pn=258821&yr=2015 (last visited Jan. 30, 2022).
[164] *Merck Sharp & Dohme Corp. v. Glenmark Pharms*, Delhi High Ct., 2015 (64) PTC417(Del).
[165] FAO(OS) 158/2019 – Natco Pharma Ltd. vs. Bayer Healthcare LLC, order dated July 11, 2019.
[166] Department of Industrial Policy and Promotion, Press Release, Oct. 22, 2014, available at http://dipp.nic.in/sites/default/files/ipr_PressRelease_24October2014_0.pdf (last visited Jan. 30, 2022); "National Intellectual Property Rights Policy," May 12, 2016, available at http://dipp.nic.in/sites/default/files/National_IPR_Policy_English.pdf (last visited Jan. 30, 2022).

84(6)(iv) of the Patents Act as a precursor to seeking a CL, reducing CLs to a commercial tool rather than a measure of last resort. Internationally, in various multilateral forums, India has advocated for the broad adoption and implementation of legislation that facilitates the use of CLs, contrary to the spirit of the TRIPS Agreement. A market with ongoing threats of CLs perpetuates an unreliable environment for patent protection and investment.

In addition, Section 146 of the India Patents Act, 1970, further exacerbates the uncertainty and scope of India's CL provisions. Rules promulgated under that section require all patent holders to file an annual statement summarizing "the extent to which the patented invention has been worked on a commercial scale in India."[167] Notwithstanding the commercially sensitive nature of information required to satisfy Section 146, it also provides an impermissible basis for local companies to seek CLs, as occurred in 2012. Moreover, the rationale for requesting this information is unclear and appears merely to be a disguise for facilitating questionable administrative challenges to existing patents. While PhRMA members are appreciative of the amendments brought about in Form 27 vide GSR 652(E) dated October 19, 2020, the ambiguity around the definition of 'working of patents' remain.

We believe that resort to CLs is not a sustainable or effective way to address health care needs. Voluntary arrangements independently undertaken by our member companies can better ensure that current and future patients have access to innovative medicines. Statements from the government incorrectly imply that CLs are widely used by other governments, both developed and developing.[168] These are misunderstandings and do not justify widespread use of compulsory licensing.

At a minimum, India should ensure that CLs are exercised with extreme caution and as a measure of last resort and specified as such in the India Patents Act, 1970. India should also clarify that importation satisfies the "working" requirement, pursuant to TRIPS Article 27.1. Further, India must maintain the confidentiality of the working statement disclosures made under Form 27.

Administrative Burdens

PhRMA welcomes the Indian Government's ongoing work to address India's patent examination backlog including the commitment to reduce examination periods from up to seven years to 18 months from initial submission. Backlogs undermine incentives to innovate and hinder timely patient access to valuable new treatments and cures. Because the term of a patent begins on the date an application is first filed, unreasonable delays can directly reduce the value of granted patents and undermine investment in future research activity. For biopharmaceutical companies, patent

[167] India Patents Act, Section 146(2).
[168] *See*, *e.g.*, Nirupama Rao, The Hill (op-ed), "India honors – not dishonors – patent laws," available at http://thehill.com/blogs/congress-blog/campaign/316883-india-honors--not-dishonors--patent-laws (last visited Jan. 30, 2022). These misstatements of wide-spread use of CLs in the U.S. and the premise that CLs can resolve access problems in India have been refuted by OPPI and PhRMA.

examination backlogs can postpone clinical trial activity and ultimately the introduction of new medicines in India. Generic manufacturers are also affected by patent examination backlogs. So long as a patent application is unreasonably delayed, generic manufacturers cannot assess whether they will have freedom to operate. That lack of certainty could discourage the launch of generic medicines or expose generic companies to damages once the patent is granted. In addition to increasing the number of patent examiners, it is equally important to assess administrative procedures that unduly extend patent examination timelines.

Section 8 of the Indian Patents Act sets forth requirements that have been interpreted in a manner that creates heightened and unduly burdensome procedures that mainly impact foreign patent applicants – those most likely to have patent applications pending in other jurisdictions. Section 8(1) requires patent applicants to notify the Controller and "keep the Controller informed in writing" of the "detailed particulars" of patent applications for the "same or substantially the same invention" filed outside of India. Section 8(2) requires a patent applicant in India to furnish details to the Indian Controller about the processing of those corresponding foreign patent applications if that information is requested. These additional patent application processing requirements have been interpreted in a manner that creates heightened and unduly burdensome patent application procedures that mainly impact foreign patent applicants – those most likely to have patent applications pending in other jurisdictions.

Section 8 was enacted in 1970 when the information was only available from the applicant; much of the information sought is now publicly available on patent office websites in most major jurisdictions. For example, through the Global Dossier Initiative of five major patent offices (the U.S. Patent and Trademark Office, the European Patent Office, the State Intellectual Property Office of China, the Japanese Patent Office and the Korean Intellectual Property Office), the current file histories from each of these offices are accessible at one website. Thus, accurate information about counterpart foreign applications is readily available to the India Patent Office examiners. Recent court decisions provide greater clarity on the applicability and scope of Section 8. In particular, current jurisprudence limits Section 8 to information that is material to patentability and to deliberate failures to disclose this information.[169]

Additionally, requests pursuant to Section 8(2) for the translation of foreign search and/or examination reports are not only unduly burdensome but costly as well. In practice, attorneys routinely receive informal translations of foreign search and/or examination reports intermingled with local attorney advice and counsel (information subject to attorney-client privilege). Moreover, translations of the search and/or examination reports may not yet be available at the time of the Section 8(2) request.

[169] *See Telefonaktiebolaget Lm Ericsson v. Intex Technologies (India) Ltd.*, Delhi High Court Judgment dated Mar. 13, 2015 in CS (OS) No. 1045 of 2014, available at http://164.100.69.66/jupload/dhc/MAN/judgement/16-03-2015/MAN13032015S10452014.pdf (last visited Jan. 30, 2022); *Sukesh Behl & Anr. v. Koninklijke Phillips Electronics*, Delhi High Court, 2015(61) PTC183(Del); *Merck Sharp & Dohme Corp. v. Glenmark Pharms*, Delhi High Court, 2015 (64) PTC417(Del).

Further, the remedy for failure to comply with Sections 8(1) and 8(2) is extreme compared to other countries with similar (but less onerous) administrative requirements. In India, the failure to disclose under Section 8 can be treated as a strict liability offense that by itself can invalidate a patent (although a recent court decision indicates some flexibility for mere clerical errors). This is in contrast to a requirement that the failure to disclose be material and/or intentional as in the U.S. or Israel. Thus, India's disclosure requirement and remedy are each more burdensome as compared to other jurisdictions, thereby creating a barrier to patentability that has an unfairly greater effect on foreign patent applicants and, in some instances, resulted in India revoking patents and denying injunctions on the grounds of non-compliance with this particular provision.[170]

PhRMA welcomes the Guidelines provided for the examiners in the Manual of Patent Office Practice and Procedure (MPOPP) that was notified by CGPDTM on November 26, 2019. Of particular promise, Section 8 directs patent examiners to utilize resources available at WIPO DAS (Digital Access Service) and WIPO CASE (Centralised Access to Search and Examination) and to recognize the evolved jurisprudence by the Indian Courts. In particular, industry was glad to see that the initial proposal in the MPOPP to expand the definition of "person interested" beyond the definition provided under the Patents Act, 1970, was dropped in the final MPOPP. However, implementation of the Guidelines remains inconsistent such that examiners continue to seek information from applicants that is available in the WIPO DAS and CASE databases.

PhRMA also welcomes the adoption of a Patent Prosecution Highway (PPH) programme between the Indian Patent Office (IPO) and the Japan Patent Office (JPO) and the release of the Procedure Guidelines for the PPH. However, the guidelines lay down procedures to file a PPH request in certain specified technical fields only, namely, Electrical, Electronics, Computer Science, Information Technology, Physics, Civil, Mechanical, Textiles, Automobiles and Metallurgy while JPO may receive applications in all fields of technology. We believe that PPH requests in India should be extended to all fields of technology, including biopharmaceuticals.

The Tribunals Reforms (Rationalisation and Conditions of Service) Act 2021 has abolished India's IP Appellate Board (IPAB) and has transferred its functions to the country's already burdened Commercial and High Courts. This move may further exacerbate delays in availing legal remedies in cases of infringement and disputes amongst right holders. While the move is intended to deal with pending cases and strengthen the IP protection and enforcement system, it remains to be seen if the high courts with their existing backlogs and lack of technical members will be able to discharge their functions effectively. PhRMA believes the designation of a specialized tribunal with the appropriate knowledge is critical for accurately examining and adjudicating IP disputes involving complex technologies.

[170] *See*, *e.g.*, *Ajantha Pharma Ltd. v. Allergan*, Intellectual Property Appellate Board (2013) and *Astrazeneca AB and Ors. vs. Torrent Pharmaceuticals Ltd. and Ors*. [MANU/DE/2064/2020].

Regulatory Data Protection Failures

Contrary to its TRIPS Article 39.3 obligation, India fails to prevent unfair commercial use of the regulatory data submitted by an innovator in securing marketing approval in India or in a third country. Rather, when a pharmaceutical product has been previously approved by a Regulatory Authority in India or in another country, India requires only limited clinical data (in some cases involving as few as 16 Indian patients). This is *in lieu* of requiring submission of the entire dossier by the applicant for review by India's regulatory authority. Moreover, in some instances when an applicant seeks approval for a generic or biosimilar product that has already been approved in other countries, Indian authorities waive the requirement to submit even this data.[171] In those circumstances, any subsequent approval of the drug granted to an entity who is not an innovator in India is based entirely on the prior approval granted to the innovator in a third country.

By linking approval in other countries that require the submission of confidential test and other data to its own drug approval process, India, in effect, uses those countries as its agents. Approval by the Indian regulatory authorities to third parties based on other-country approvals amounts to indirect and unfair reliance on the clinical trial and other test data generated and submitted by the innovators for such other-country approvals. This indirect reliance results in unfair commercial use, which is prohibited by TRIPS Article 39.3.

Market Access

Discriminatory and Non-Transparent Government Pricing Policies

Despite decades of government price controls ostensibly seeking to improve patient access to medicines, just 17 percent of new medicines launched globally in the past decade are available in India and even basic medicines are not easily accessible.[172] This is despite having thousands of biopharmaceutical manufacturers which operate in a very competitive environment with some of the lowest prices of medicines in the world.[173] Instead of resorting to failed price control policies, India should focus on removing key barriers to patient access, including insufficient health care financing, infrastructure and quality.

[171] *See* Rules 75 and 80 of the MoHFW, "The New Drugs and Clinical Trials Rules, 2019," available at https://cdsco.gov.in/opencms/export/sites/CDSCO_WEB/Pdf-documents/NewDrugs_CTRules_2019.pdf (last visited Jan. 30, 2022).
[172] PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2020. June 2021.
[173] Analysis based on IMS MIDAS Data.

In 2014, an Inter-Ministerial Committee was constituted to suggest a methodology to be applied to pricing of patented medicines in India.[174] Earlier, a DoP Committee Report on Price Negotiation for Patented Drugs (February 2013) recommended an international reference pricing scheme with a purchasing power parity adjustment for government procured patented medicines, with those patented medicines to be provided through health insurance. A final decision on the 2014 Inter-Ministerial Committee recommendations has yet to be made. However, PhRMA and its member companies are highly concerned that the 2013 proposals could be adopted, which would significantly reduce the benefits of patent protection, *de facto* discriminate against importers in order to pacify the domestic generic industry and create an unviable government pricing framework and business environment for innovative pharmaceutical companies.

PhRMA and its member companies supported the DoP decision to amend Paragraph 32 of the Drug Price Control Order 2013 (DPCO) allowing manufacturers and importers of patented medicines to apply for exemption from price controls for a period of five years from the commencement of marketing in India for patented products and for life for orphan drugs. However, the potential benefits of the provision have not been realized due to significant delays in implementation and applications made by industry remain pending. Moreover, there remain significant concerns of an evolving price control regime that is discriminatory, unpredictable and opaque, including the threat of further amendments or dilution of Paragraph 32. For example, the DoP is considering amending the DPCO 2013 to include several provisions which would enlarge the scope of price controls in India to all strengths and doses of a scheduled medicine, establish annual price revisions based on a Wholesale Price Index for all medicines including in the non-scheduled market and impose ceiling prices on new medicines. Moreover, in September 2021, two patented medicines were added to the National List of Essential Medicines, automatically subjecting them to price controls under the DPCO and exceeding the mandate of the National Pharmaceutical Pricing Policy (NPPP) 2012. These proposals and actions to set prices of patented medicines under the DPCO significantly reduce the benefits of patent protection and create an unviable business environment

PhRMA and its member companies generally supported the 2019 introduction of TMR as a more sensible approach to monitoring the price build-up by actors in the retail supply chain for non-scheduled products. Specifically, the government proposed regulating a retail ceiling price based on the price-to-stockist (PTS) plus a 30 percent margin. However, the PTS used by the government was not the actual PTS (which is verifiable from government data sources) but rather a derived figure that includes products which do not have retail trade channels, including government supplies, free products and products supplied through patient assistance programs. Inclusion of these products serves to bias downward the regulated retail ceiling price, making the application of TMR less about regulating retail trade margins and more about imposing arbitrary price

[174] Government of India Speed Post No. 31011/5/2009/PI-II(pt), Ministry of Chemicals & Fertilizers, Department of Pharmaceuticals, Subject: Inter-Ministerial Committee on Prices of Patented Drugs, New Delhi, Feb. 17, 2014, available at https://pharmaceuticals.gov.in/sites/default/files/Inter-Ministerial%20Committee%20on%20Prices%20of%20Pateneted%20Drugs.pdf (last visited Jan. 30, 2022).

controls on non-scheduled products. As a result, the retail ceiling prices set by the government under TMR are as much as 70 percent lower than the company's Maximum Retail Price and therefore significantly exceed the existing trade margins added by other actors in the supply chain. This is inconsistent with the mandate of DPCO 2013 and NPPP 2012, which envisaged TMR as solely a price monitoring mechanism for non-scheduled products. These recent developments underscore how the broad authority granted to the NPPA and the continued lack of transparency and predictability in NPPA decisions further inhibit investment in India.

The expansion of price controls to a broader scope of medicines will not substantially improve access to medicines in India, as the real barriers are insufficient health care financing, poor access to physicians and inadequate health care facilities.[175] For example, even therapies and vaccines offered free of charge often do not reach the patients who need these medicines.[176] A 2015 study by IMS titled "Analyzing the Impact of Price Controls on Access to Medicines" found that price controls are neither an effective nor a sustainable strategy for improving patient access. The study found that the primary beneficiaries of price controls have been high-income patients, rather than the intended low-income population.[177] A considerable body of evidence demonstrates that price controls contribute to lower investment in pharmaceutical research and development, ultimately harming patients who need improved therapies.[178] The Annual Economic Survey last year also clearly highlighted that price control of medicines has not improved access. Finally, the National List of Essential Medicines (NLEM) 2021 is currently being finalized by the Ministry of Health. At this stage, there is considerable ambiguity regarding the NLEM and how it will impact India's price control regime and the basis upon which prices will be set.

PhRMA and its member companies are committed to engaging with the Indian Government to discuss more pragmatic public policy approaches, including the development of government pricing and reimbursement mechanisms that provide patients with greater access to medicines, recognize innovation and encourage continued investment into unmet medical needs.

---

[175] "A Study of Healthcare Accessibility," Dr. DY Patil Medical College, Pune, India, prepared for India Health Progress, Mar. 2011; Wagstaff, Adam, "Health System Innovation in India Part I: India's health system challenges," available at http://blogs.worldbank.org/developmenttalk/health-system-innovation-in-india-part-i-india-s-health-system-challenges (last visited Jan. 30, 2022).

[176] *See*, *e.g.*, Patra, Nilanjan, "'When Will They Ever Learn?': The Great Indian Experience of Universal Immunisation Programme," Dec. 2009, available at http://www.isid.ac.in/~pu/conference/dec_09_conf/Papers/NilanjanPatra.pdf (last visited Jan. 30, 2022).

[177] IMS, "Assessing the Impact of Price Control Measures on Access to Medicines in India," June 2015.

[178] U.S. Department of Commerce, International Trade Administration, Pharmaceutical Price Controls in OECD Countries: Implications for U.S. Consumers, Pricing, Research and Development, and Innovation, December 2004, available at https://web.archive.org/web/20190414170009/https://2016.trade.gov/td/health/DrugPricingStudy.pdf (last visited Jan. 30, 2022); Vernon, John, "Drug Research and Price Controls," *Regulation*, Winter 2002-2003, available at https://www.cato.org/sites/cato.org/files/serials/files/regulation/2002/12/v25n4-7.pdf (last visited Jan. 30, 2022).

Discriminatory Government Procurement Policies

The Indian Government's Make in India policy has increasingly excluded or disadvantaged suppliers that do not manufacture in India from participating in tenders. On May 15, 2020, the General Financial Rules 161(iv) were amended by inserting a new clause (b) prohibiting international tenders where the value of the goods to be procured is less than INR 2 billion. In addition, in September 2020, the Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry issued a Public Procurement Order that discriminates against non-local bidders (i.e., products with less than 20 percent local content) in all government tenders (except in permitted international tenders), although there are some exemptions to ensure operational continuity. The revised PPO further provides for exclusion of bidders from countries that do not allow Indian bidders in their government procurements.

Further, in December 2020, the DoP issued yet another restrictive order requiring a minimum 80 percent local content to qualify as a favored Class 1 local supplier and a minimum 50 percent local content to qualify as a Class 2 local supplier.[179] The Make in India Policy of the Government has increasingly excluded suppliers that do not manufacture in India from participating in tenders. This raises significant concerns about discrimination against imported products and that Indian patients will not have access to needed treatments.

High Tariffs and Taxes on Medicines

PhRMA member companies operating in India face high import duties for active ingredients and finished products. Though the basic import duties for pharmaceutical products average about 10 percent, due to the integrated GST imposed on imports, the effective taxes on imported medicines can exceed 20 percent. Moreover, excessive duties on the reagents and equipment imported for use in research and development and manufacture of biotech products make biotech and pharmaceutical operations difficult to sustain. Compared to other Asian countries in similar stages of development, import duties in India are very high. And while certain essential and life-saving medicines may be granted exemptions from some of the taxes, the eligibility criteria are vague and subject to constant revision and debate.

GST was implemented in July 2017 and, while it is expected to significantly reduce layers and complexity in the indirect tax system, it levies a 0 to 28 percent tax on

[179] Guidelines for implementing the provisions of Public Procurement (Preference to Make in India) Order (PPO), 2017 - revision, related to procurement of Goods & Services in Pharmaceutical Formulations December 30, 2020, available at https://pharmaceuticals.gov.in/sites/default/files/PPO%20SIGNED%20DRUGS.pdf (last visited Jan. 30, 2022).

medicines. Measures to exempt life-saving drugs from GST and customs duties should be expanded to all medicines.[180]

Insufficient Financing and Low Access to Care

PhRMA's members are concerned about the general lack of access to health care in India. The Indian Government released the National Health Policy in March 2017,[181] which calls for greater access to health care for low-income patients, and the NHPS in February 2018.[182] The National Health Policy denotes expanding comprehensive primary health care through health and wellness centers, including care for major non-communicable diseases (NCDs), mental health, geriatric health care, palliative care and rehabilitative care services. The policy also calls for increasing public health expenditure to 2.5 percent of GDP by 2025.

While these calls to action are laudable, India nevertheless has insufficient numbers of qualified health care personnel, inadequate and poorly equipped health care facilities, and most importantly lacks a comprehensive system of health care financing that would pool financial risk through insurance and help to share the cost burdens. Although Prime Minister Modi launched Ayushman Bharat, India has a shortage of health care workers. According to a Finance Commission report released in October 2020, India had only 115,400 registered allopathic medical doctors, 296,600 nurses and 112,500 pharmacists in 2018 for a population of 1.35 billion, resulting in ratios that are significantly lower than the norms set by the World Health Organization.[183] This shortfall is exacerbated by limited government investment and low allocation for health care in the national budget.[184] Despite the encouraging and ambitious goals in the new National Health Policy and the MoHFW's goal of increasing health spending as a percentage of GDP to 2.5 percent by 2025, government spending on health care is currently 1.8 percent which is one of the lowest levels in the world.[185] Without increased resources (both in terms of government spending and through reducing barriers for commercial health insurance) and a full implementation of the reform, high out-of-pocket spending on health care and pressure on the cost of medicines will persist.

[180] Hindu Business Line, "GST: The right prescription," Aug. 5, 2016 (updated Jan. 17, 2018), available at http://www.thehindubusinessline.com/specials/pulse/gst-the-right-prescription/article8949378.ece (last visited Jan. 30, 2022).
[181] *See* National Health Policy, available at https://main.mohfw.gov.in/sites/default/files/9147562941489753121.pdf (last visited Jan. 30, 2022).
[182] National Health Protection Scheme, available at https://www.indiabudget.gov.in/doc/bspeech/bs201819.pdf (last visited Jan. 30, 2022).
[183] 15th Finance Commission Report (October 2020).
[184] Center for Disease Dynamics, Economics & Policy (CDDEP), "Access Barriers to Antibiotics," available at https://cddep.org/publications/access-barriers-to-antibiotics/ (last visited Jan. 30, 2022).
[185] *See* Economic Survey 2020-21, available at https://www.indiabudget.gov.in/economicsurvey/doc/vol2chapter/echap10_vol2.pdf (last visited Jan. 30, 2022).

Unpredictable Environment for Clinical Research and Drug Approval

India has many of the components of an effective regulatory system, such as institutional capacity across central and state regulators and a robust technical framework. India also has several components to support a broader ecosystem for clinical research and drug development, such as the presence of a highly skilled workforce of qualified scientists, hundreds of medical colleges and a large and diverse patient pool.

We welcome the fact that the MoHFW and CDSCO have undertaken regulatory reforms, including adoption of New Drugs and Clinical Trials Rules, 2019, with the goal of strengthening the regulatory regime and reinvigorating clinical research. Strong, transparent and predictable regulatory frameworks are essential to protecting patients as well as to promoting globally competitive innovative and generic pharmaceutical industries. However, as noted above, the New Drugs and Clinical Trials Rules, 2019 include significant ambiguities and several discriminatory provisions, which create uncertainties in the regulatory process for clinical trials and threaten the overall clinical research environment in India. These issues must be addressed in order to increase the availability of new treatments and vaccines for Indian patients.

Further, certain challenges that existed in the Drugs and Cosmetics Rules, 1945 continue to exist in the New Drugs and Clinical Trials Rules, 2019. Rule 41 of the New Rules, which describes attributable causes of injury for clinical trials participants, is overly broad and lacks a legally or scientifically sound process for determining causality of injury. Definitions for “trial related injury” and “standard of care,” remain uncertain. Furthermore, many provisions in the New Drugs and Clinical Trials Rules, 2019 are ambiguous and highly subjective. For example, the provisions on local phase III clinical trial waiver lack clarity; the list of countries to be notified by the regulator under the New Drugs and Clinical Trials Rules, 2019 for seeking waiver of local phase III clinical trial is yet to be notified; the provision on deemed approval is discriminatory in nature as it is limited to drugs whose research and development was conducted in India; and the New Drugs and Clinical Trials Rules, 2019 do not designate an appellate authority for hearing appeals arising from the recommendations of SECs. Further, with no guidelines/SOPs for the Subject Expert Committee (SEC) reviewing the applications for clinical trials and new drug approval heightens the existing subjectivity. Furthermore, requests for review of SEC decisions tend to be reviewed by the same SEC panel against the principles of *nemo judex in causa sua* and therefore in breach of principles of natural justice.

As a result, adoption of the New Drugs and Clinical Trials Rules, 2019 leaves great uncertainty relating to future costs and liabilities associated with conducting clinical trials in India, resulting in many sponsors not launching clinical trials in India until these uncertainties have been resolved. Research shows that if India were to address outstanding concerns, India could see an increase in the number of new clinical trials per

year to above 800, adding over $600 million in economic gains.[186] Greater clarity and predictability are needed for administrative procedures and regulations *qua* drug registration applications, drug labelling standards and drug review standards and procedures in order to make the latest research products available in India.

Further, PhRMA members are concerned that the MoHFW has notified draft amendments to the New CT Rules vide GSR 354(E) dated June 5, 2020 proposing to permit import & manufacture of unapproved new drug but under Phase-III clinical trial in the country or in any other country for compassionate use for diagnosis, treatment, mitigation or prevention any life threatening disease or disease causing serious permanent disability or disease requiring therapy for unmet medical need under a treatment protocol by not only the innovators but also by third parties. PhRMA members believe that such a proposal will not only discourage research and development that is critical for addressing unmet medical needs but would also put patient safety at risk.

Counterfeit Medicines

Illicit trade in counterfeit pharmaceutical products, particularly during the COVID-19 pandemic, poses significant global public health risks. Exacerbated by the rapid growth of online sales of counterfeit medicines, studies indicate that more than half the counterfeit medicines seized in recent years originated in India.[187] Moreover, Indian authorities have seized large quantities of counterfeit COVID-19 related medical products ranging from oxygen to antivirals.[188] Indeed, in August 2021, the World Health Organization issued an alert related to counterfeit COVID-19 vaccines present in multiple countries including India.[189] The Indian government should work with relevant stakeholders to address the growing illicit trade in counterfeit pharmaceuticals which is putting lives at risk and complicating global efforts to combat the COVID-19 pandemic.

[186] Pugatch Consilium, "Quantifying the Economic Gains of Strengthening India's Clinical Research Policy Environment," Sep. 2015, available at http://www.pugatch-consilium.com/reports/Quantifying%20the%20Economic%20Gains%20from%20Strengthening%20the%20Clinical%20Research%20Policy%20Environment%20in%20India.pdf (last visited Jan. 30, 2022).
[187] *See*, *e.g.*, OECD, "Covid-19 crisis underscores need to address trade in fake pharmaceuticals, say OECD & EUIPO" (Apr. 21, 2020), available at https://www.oecd.org/governance/covid-19-crisis-underscores-need-to-address-trade-in-fake-pharmaceuticals-say-oecd-and-euipo.htm (last visited Jan. 30, 2022).
[188] *See*, *e.g.*, Aljazeera, "Fake medicines, recycled PPE: Scammers worsen India COVID misery", (Jun. 4, 2021) available at https://www.aljazeera.com/news/2021/6/4/fake-medicines-recycled-ppe-scammers-worsen-india-covid-misery (last visited Jan. 30, 2022).
[189] WHO, "Medical Product Alert N°5/2021: Falsified COVISHIELD vaccine (Update)" (Aug. 31, 2021), available at https://www.who.int/news/item/31-08-2021-medical-product-alert-n-5-2021-falsified-covishield-vaccine (last visited Jan. 30, 2022).

INDONESIA

PhRMA and its members companies operating in Indonesia see tremendous opportunities to contribute further to Indonesia's health care goals. However, longstanding market access and intellectual property (IP) barriers in this large and growing market continue to hinder possible partnerships from delivering on their full potential. The Indonesian Government appears sincere in its desire to address these barriers, notably through recent regulatory reforms in the 2020 Omnibus Law, which revises 76 existing laws, including a significant partial revision of the 2016 Patent Law and the 2014 Halal Law. However, the 2020 Omnibus Law was declared partly unconstitutional by the Constitutional Court (MK) in 2021. While the MK decision essentially raises procedural issues, the ruling creates uncertainty regarding the 2016 Patent Law revisions. Further complicating matters are reports that the Indonesian government has issued compulsory licenses (CLs) for certain antiviral COVID-19 therapeutics. Indeed, for one of these treatments, it appears the Indonesian government disregarded the voluntary licensing agreement already in place with the right holder. Unfortunately, it appears the Indonesian government is leveraging the COVID-19 pandemic to impermissibly implement industrial policy, including providing advantages to domestic companies.

Additionally, PhRMA recognizes that the Indonesian Government has initiated a process to more comprehensively amend the 2016 Patent Law. This process has included positive steps, such as meetings with stakeholders in Jakarta, and PhRMA is hopeful that legislation will result in positive reforms in 2022. Such revised legislation would be a significant indication that Indonesia is serious about positively changing their investment environment and perception globally. PhRMA member companies are prepared to work collaboratively with Indonesian authorities to find solutions that benefit patients in Indonesia while maintaining adequate and effective IP protections. However, PhRMA member companies remain concerned that recent compulsory licensing activity negates some of the recent steps taken by the Indonesian Government to protect IP.

Key Issues of Concern:

- **Compulsory licensing**: In 2021, Indonesia issued CLs for antiviral COVID-19 therapeutics. Moreover, Indonesia issued a CL for one of these antiviral therapeutics despite entering into a voluntary licensing agreement with the right holder. Also, in 2020, Indonesia issued Presidential Regulation No. 77/2020 on government use of CLs. The regulation was published in final form without consulting stakeholders. The regulation broadly enables government agencies to request CLs for pharmaceutical products to address emergency needs in the public interest. If a CL is granted and the government is unable to implement the patent, it may appoint a third party to do so. Despite efforts in 2019 to address and revise existing CL regulations to more appropriately align with global norms and best practices, this new regulation and the process by which it was developed and

issued, along with the CLs for the antiviral COVID-19 therapeutics, send a troubling signal to innovators.

- **Restrictive patentability criteria**: 2016 amendments to the Patent Law preclude patents on new uses (indications) and establish an additional patentability criterion of "increased meaningful benefit" for certain forms of innovation, such as new salts or new dosage forms. These restrictions are overly broad and will undermine support for important innovations and appear to conflict with existing international obligations by imposing additional or heightened patentability criteria that discriminate against particular classes of technology. The Patent Office has been implementing technical guidelines that remove this impermissible restriction, but the underlying provisions in the 2016 Patent Law remain unchanged. In addition, the 2016 Patent Law still imposes new patent disclosure requirements regarding the source and origin of genetic resources. Such requirements introduce uncertainties into the patent system that inhibit innovation in relevant technologies and undermine the potential of benefit-sharing.

- **Forced localization requirements**: While the recent revisions to Article 20 of the 2016 Patent Law in the 2020 Omnibus Law are a positive step forward, other forced localization requirements still remain in Decree 1010. PhRMA looks forward to additional measures to address outstanding concerns regarding Decree 1010 to ensure that Indonesian patients have access to new medicines.

- **Cost-focused formulary decisions**: While Indonesia is to be commended for developing guidelines and an online portal for listing new medicines on the Indonesian National Formulary, actual listing decisions appear to be primarily based on price and the overall National Health Insurance (JKN) budget. Consistent with Indonesian Government guidelines, listing decisions should better reflect all evidence submitted, including scientific data demonstrating the product's safety and efficacy. To this end, PhRMA member companies are encouraged that the government procurement agency is considering implementation of a more holistic approach to health technology assessment (HTA) for procuring medicines.

- **Mandatory halal certification**: On November 2020, the Indonesian Parliament revised the 2014 Halal Products Law through the Omnibus Law. The Law has broad application to all consumables, including biopharmaceuticals, and requires that producers label their products as "halal" or as "non-halal," based on whether the products are halal certified. PhRMA's member companies recognize and support religious and cultural sensitivities but are concerned that this mandatory labeling requirement, including audits and certification for COVID-19 vaccines and therapeutics, could have unexpected negative implications on patient health and broader public health priorities.

For these reasons, PhRMA requests that Indonesia remain on the **Priority Watch List** in the 2022 Special 301 Report. Further, we urge USTR to provide an opportunity for

an assessment of Indonesia's IP and market access environment through an **Out-of-Cycle Review**, so that the U.S. Government can evaluate progress on these important issues and dedicate the required bilateral attention necessary to make progress on the barriers confronted by U.S. businesses in Indonesia.

Intellectual Property Protection

Compulsory Licensing

In 2021, Indonesia issued CLs for antiviral COVID-19 therapeutics. For one of these antivirals, Indonesia issued a CL despite entering into a voluntary licensing agreement with the right holder. Also, in 2020, Indonesia issued Presidential Regulation No. 77/2020, on government use of CLs. The regulation was published without consulting stakeholders. The regulation enables government agencies to request CLs for pharmaceutical products to address emergency needs in the public interest and establishes a process to evaluate requests. If a CL is granted and the government is unable to implement the patent, it may appoint a third party to do so, subject to certain conditions. While the government must notify the patent holder when a request is accepted for review, there is no formal procedure allowing patent holders to dispute claims in a request or recommend alternatives. If a CL is granted to address emergency needs, the right holder must continue to pay fees to maintain the patent. The regulation also does not expressly permit or prohibit imports or exports of products manufactured under CLs.

While this new regulation is not targeted at specific products, it clearly poses an immediate threat to COVID-19 treatments and vaccines and could be used against other products the government deems necessary for emergency purposes in the future without due process or engagement with the patent holder. Indeed, PhRMA and its members are concerned about the Indonesian Government's government-use licensing for COVID-19 medicines that are already available to Indonesian patients under voluntary licensing agreements. Before resorting to compulsory or government-use licenses, Indonesia should first consider the unprecedented industry collaboration and access strategies, including voluntary licensing, deployed by pharmaceutical companies to address emergencies like the current COVID-19 pandemic. CLs will not necessarily speed access to complex set of treatments and vaccines that are currently being tested and developed and should only be used in accordance with international rules and as a measure of last resort. Further, such actions are likely to undercut Indonesia's effort to attract foreign investment and negate the recent positive steps undertaken to align public policy reforms to global best practices. The Indonesian Government should focus on accelerating the necessary regulatory approvals and streamlining procurement processes for COVID-19 medicines, rather than assuming IP is a barrier to access medicines or leveraging the COVID-19 pandemic and CLs to impermissibly implement local industry policy.

The 2016 Patent Law and implementing regulations create further uncertainty in this area by discouraging voluntary licensing agreements between private parties and promoting compulsory licensing on grounds that are vague or appear to be inconsistent

with Indonesia's international obligations. In particular, Article 79 of the Patent Law unnecessarily requires disclosure of private licensing agreements. However, we welcome that the Omnibus Law decouples the local production requirement from CLs and aligns Indonesia's patent working requirements with international rules to include the manufacture, importation and/or licensing of a patented invention in Indonesia. Unfortunately, the CLs issued for antiviral COVID-19 therapeutics negate some of these positive developments. These CLs undermine manufacturing commitments and voluntary licensing initiatives in Indonesia. They also potentially increase the presence of substandard or counterfeit medicines and risk meaningful patient access. Moreover, these CLs could undercut Indonesia's effort to attract foreign investment and compromise the country's efforts to align its patent regime with global best practices.

Separately, PhRMA and its member companies also welcome the process the MLHR has initiated to amend the existing Patent Law (2016). While current proposals to revise the relevant provisions in the Patent Law would eliminate some of the more egregious elements (including some that explicitly discriminate against the pharmaceutical industry), further revisions are needed to ensure that CLs are used only in exceptional circumstances. Indonesia should make clear in the revised law that any compulsory licensing action needs to be taken on a patent-by-patent basis with full consideration of the particular circumstances in each case. CLs should only be used in extraordinary circumstances as a last resort rather than standard government practice. As a general matter, CLs are not a sustainable or effective way to address health care needs. Voluntary arrangements independently undertaken by member companies better ensure that current and future patients have access to innovative medicines.

Restrictive Patentability Criteria

The Patent Law precludes patents on new uses (indications) and establishes an additional patentability criterion of "increased meaningful benefit" for certain forms of innovation, such as new salts or new dosage forms. These restrictions undermine support for important innovations and are contrary to existing international obligations by imposing additional or heightened patentability criteria in a manner that discriminates against particular classes of technology. While this issue has been partially addressed through revisions to the Patent Office's internal technical guidelines, the underlying 2016 Patent law provisions remain unchanged. Such requirements introduce uncertainties into the patent system that inhibit innovation in relevant technologies and undermine the potential of benefit-sharing.

To bring valuable new medicines to patients, biopharmaceutical innovators must be able to secure patents on *all* inventions that are new, involve an inventive step and are capable of industrial application. Restrictions that narrow patentability prevent innovators from building on prior knowledge to develop valuable new and improved treatments that can improve health outcomes and/or reduce costs by making it easier for patients to take medicines and improving patient adherence to prescribed therapies.

Additional substantive requirements for patentability beyond that the invention be new, involve an inventive step and capable of industrial application, are inconsistent with the TRIPS Agreement. Article 27 of the TRIPS Agreement provides a non-extendable list of the types of subject matter that can be excluded from patent coverage and this list does not include new uses of existing compounds. Therefore, the Patent Law appears to be inconsistent with the framework provided by the TRIPS Agreement. Moreover, the Patent Law imposes an additional hurdle for patents on inventions specifically relating to chemical compounds and, therefore, is in conflict with the non-discrimination principle provided by TRIPS Article 27. Promisingly, consultations during the summer suggest that the Indonesian Government plans to eliminate this patentability restriction when it revises the Patent Law. PhRMA and its members strongly support this proposal.

Burdensome and Vague Disclosure Obligations

The Patent Law also requires disclosure of the origin of genetic resources or traditional knowledge "related" to inventions. We support the objectives of the Convention on Biological Diversity ("CBD") and recognize the national sovereignty of States over biological resources. However, such requirements introduce uncertainties into the patent system that inhibit innovation in relevant technologies and undermine the potential of benefit-sharing. The current proposed amendments to the Patent Law (as discussed during the consultations over the summer) do not adequately address this concern. Instead, we recommend eliminating these disclosure requirements that introduce uncertainty for innovators and undermine the sustainable use of technology related to biological resources.

Market Access

Forced Localization Requirements

Ministry of Health (MoH) Decree 1010/MENKES/PER/XI/2008 ("Decree 1010"), formally implemented in November 2010, prevents multinational research-based biopharmaceutical companies from obtaining marketing authorization for their products. Under Decree 1010, only companies registered as "local pharmaceutical industry" are granted marketing approval. As several of PhRMA's member companies do not manufacture products in Indonesia, they are instead classified as distributors, or "PBF" enterprises even though they follow globally recognized good manufacturing practices in the same manner as other high quality pharmaceutical firms manufacturing in Indonesia. Products of multinational research-based pharmaceutical companies and other foreign companies are barred from the Indonesian market unless (1) a local manufacturing facility is established; or (2) sensitive IP is transferred to another pharmaceutical firm with local manufacturing facilities in Indonesia. The first condition is not possible for many PhRMA member companies, given the structure of their global pharmaceutical supply chains. The second condition poses a serious threat to IP protection and patient safety.

Another key concern with Decree 1010 is the requirement to locally manufacture imported products within five years after the first importation with some exceptions, e.g.,

products under patent protection. Even for companies with local manufacturing facilities in Indonesia, this is not always possible for several reasons, including the structure of their global pharmaceutical supply chains and lack of required technology within their local facilities to produce innovative products.

Rather than amend Decree 1010 to mitigate damaging provisions, the MoH created Decree 1799 on December 2010, altering the definition of local manufacturing and introducing the concept of partial manufacture. PhRMA member companies have sought clarification on several vague and conflicting provisions of Decree 1799 since its release. The guidelines for Drug Registration (popularly known as the Brown Book) developed by Food and Drug Monitoring Agency (BPOM), issued in July 2011 and revised in 2013 and 2016, were comprehensively renewed in November 2017; some of the provisions in this latest Brown Book provided leeway for PhRMA member companies to comply with the requirement to locally manufacture imported products within five years of patent expiration. While PhRMA member companies acknowledge the initial steps taken by BPOM to engage in consultations, key concerns remain unresolved with the existing provisions in Decree 1010 and Decree 1799.

Recently, in October 2020, the Indonesian parliament passed the government-initiated Omnibus Bill into law that revises 76 existing laws, including partial revision of the 2016 Patent Law. Specifically, the Omnibus Law revises Article 20 of the 2016 Patent Law, such that a manufacturer is no longer required to locally produce the product in order to be considered “working” the patent in Indonesia. This is as a very positive development to strengthen the IP environment in Indonesia. As a result of this change, patent holders are required to ensure the availability of the patented products in Indonesia in order to preserve their patents, which can be achieved through importation or licensing.

Another important issue is the local content requirement established as a result of Presidential Instruction No. 6/2016, as a means to accelerate the development of the biopharmaceutical and medical device industry in Indonesia. Under the regulation, a local content requirement calculation is imposed as a threshold criterion for government procurement of biopharmaceutical and medical device products. The method to calculate the threshold as set forth in MOI Regulation No. 16 of 2020 on the Provisions and Procedures for the Calculation of Local Content Level of Pharmaceutical lacks clarity such that it may be impossible to implement or monitor. It is critical that these requirements are not applied in a manner that restricts patient access to innovative medicines in Indonesia.

In short, PhRMA member companies are concerned about Indonesia’s localization requirements as well as the lasting harm to market access, IP protection and patient health if left unresolved.

Cost-Focused Formulary Decisions

Indonesia’s national formulary (FORNAS) serves as a basis for pharmaceutical reimbursement and public-sector procurement. While Indonesia should be commended for developing guidelines and an online portal (eFORNAS) for listing new medicines on

FORNAS, actual listing decisions appear to be primarily based on price and the overall National Health Insurance (JKN) budget. PhRMA encourages FORNAS to consider broader health and economic evidence for listing decisions that improve health outcomes for Indonesian patients. Moreover, although products can be added or removed annually, formal updates to the FORNAS only take place every two years. Recent moves to delist products based on arbitrary standards for cost-effectiveness have raised additional concerns.

Consistent with the Indonesia Government's guidelines, listing decisions should reflect all evidence submitted, including clinical evidence demonstrating the product's safety and efficacy. PhRMA and its member companies are encouraged that the government procurement agency is considering implementation of a more holistic approach to HTA (e.g., multiple criteria decision analysis) for procuring medicines. PhRMA encourages the establishment of a more transparent and credible decision-making process. PhRMA also encourages FORNAS to consider more flexible, innovative contracting models to increase patient access to medicines.

Presidential Regulation No. 12/2021 and its implementing regulations simplify the listing process of pharmaceutical products in the government procurement catalogue, allowing for the inclusion of any FORNAS-listed drug priced below the ceilings set by the MoH. However, procurement is no longer done by the government, but by individual health care facilities that now have the authority to negotiate prices with suppliers. This mechanism introduces a great deal of uncertainty surrounding the price and supply of pharmaceutical products, potentially leading to shortages and reduced patient access. It could also prompt questionable business practices between certain purchasers and suppliers. PhRMA and its member companies encourage the government to issue technical guidelines to ensure catalogue-listed products meet certain standards (i.e., product quality and supplier capacity) and await further clarity on the pricing of medicines.

Mandatory Halal Certification

The Omnibus Law on Job Creation has amended Indonesia's 2014 Halal Product Assurance Law, which mandates Halal certification and labeling for food and beverages, medicines, cosmetics, chemical products, biological products and genetically-engineered products. The legislation establishes a new Halal certification authority called the Halal Product Assurance Organizing Agency (BPJPH) and requires pharmaceutical firms to hire a Halal specialist and disclose sensitive product formulas to the new Halal authority. The newly issued Omnibus Law revisions to the Halal Law aim to streamline the process of halal certification, simplify the certification renewal process and provide clearer timelines.

The government also issued Regulation No 39/2021 in February 2021, replacing Regulation No 31/2019 as an implementation of the Omnibus Law. The regulation nonetheless stipulates a phased implementation of the law. Manufacturers will be required to provide halal certification for over-the-counter drugs between October 2019 to October 2029 and for prescription drugs between October 2021 to October 2034.

However, it is understood that the President and the MoH are drafting further regulations that provide biopharmaceutical products and vaccines with a grace period until 2049. It is important that Indonesia adopt a waiver for Halal certification requirements for all COVID-19 vaccines and therapeutics recognizing that the current pandemic and emergency context requires speed of access.

The Presidential regulations will provide a more specific implementation of the Halal certification process, including Halal traceability, production processes and labeling requirements. PhRMA member companies urge the government to ensure that the stipulations and requirements for Halal certification take into consideration and align with the biopharmaceutical industry's rigorous standards and practices already in place that ensure quality, efficacy and good manufacturing processes. Further, while PhRMA's member companies recognize and support the religious and cultural sensitivities of all Indonesians, it is critical that these regulations do not hinder patient access to the medicines they need.

Counterfeit Medicines

Although PhRMA's member companies welcome Indonesia's ongoing efforts to promote the use of safe medicines, there is an urgent need to expand national enforcement efforts. New leadership at BPOM have focused their efforts on combatting counterfeit food and medicine products, but the budget and resources for this effort remain inadequate. Increasing and enforcing the penalties for criminals caught manufacturing, supplying, or selling counterfeit pharmaceuticals as well as unsafe medicines will greatly assist Indonesia's efforts to reduce the harmful impact of counterfeit medicines.

Research conducted by Masyarakat Indonesia Anti-Pemalsuan (MIAP), Indonesia's anti-counterfeiting society, suggests that losses incurred by the state as a result of counterfeiting continue to rise each year. Greater collaboration and government initiatives, such as a nationwide campaign and devoted budget to combat counterfeit products, should be intensified to ensure the health and safety of Indonesian patients.

Hence, PhRMA's member companies support Indonesia's ongoing legislation agenda for finishing the Drug and Food Supervision Bill in 2021 as a legal basis for creating a stronger drug administrator and drug supervision process.

KOREA

PhRMA and its member companies remain highly concerned with several market access and intellectual property (IP) issues in Korea. Korea's drug pricing policies severely devalue U.S. IP and favor Korea's own pharmaceutical industry at the expense of U.S. companies. As a result, America's cutting-edge R&D and manufacturing sectors are losing out. The consequence is fewer U.S. jobs, fewer U.S. exports and fewer new medicines for patients worldwide. Korea's pricing practices are inconsistent with its commitments under the U.S.-Korea Free Trade Agreement (KORUS).

Recognizing these deficiencies, PhRMA and its member companies commended the U.S. Government for securing a commitment from Korea to amend its premium pricing policy for global innovative drugs to ensure non-discriminatory and fair treatment for U.S. pharmaceutical exports. While it was hoped that Korea would use this opportunity to demonstrate its broader pledge to appropriately value innovative medicines, Korea has implemented this commitment in a manner that eviscerates the ability of any company to qualify for premium pricing and is in contradiction with the spirit of their 2018 commitment. PhRMA stands ready to work with the U.S. and Korean Governments to secure amendments to Korea's pricing and reimbursement policies consistent with Korea's broader KORUS obligations.

Key Issues of Concern:

- **Impermissible government pricing and reimbursement policies**: On multiple levels, Korea's pricing policies contravene its KORUS commitments and negatively impact the rights of U.S. innovators. Korea's Health Insurance Review and Assessment Service (HIRA) often disregards evidence of clinical benefit and values innovative medicines using unreasonably low and outdated thresholds for cost-effectiveness that have declined in real terms over time. Rather than updating this threshold and adopting more appropriate assessment methods, HIRA announced in September 2021 that it would instead use "past assessment results," which risks further deteriorating the transparency and predictability of the assessment process. Following HIRA's review and recommendations, the National Health Insurance Service (NHIS) can also require additional concessions as a condition of NHIS reimbursement and impose excessive and repeated price cuts even if HIRA has already deemed these medicines to be cost-effective. As a result, Korea's government-set prices are among the lowest in the OECD. Combined, these price controls constitute a failure to "appropriately recognize the value of the patented pharmaceutical product," in violation of KORUS Article 5.2(b).

- **Lack of transparency, predictability and due process**: Compounding these challenges, Korea also does not provide meaningful transparency and due process for companies that apply for reimbursement, contrary to Korea's commitments under KORUS Article 5.3. Applicants are often not provided with a satisfactorily informative written basis for evaluations and decisions by HIRA subcommittees

and Korea has never honored its commitment in KORUS Article 5.3(5)(e) and the side letter thereto, to make available an effective independent review mechanism relating to medicine reimbursement.

- **Issues with patent term restoration (PTR)**: While Korea has implemented PTR, there are two significant issues. First, the PTR calculation should include all relevant essential clinical trials used for the approval of the Korean product, including international clinical trials that are submitted as a part of the Korean dossier for approval of the product. Failure to do so has a discriminatory effect on companies outside Korea that conduct necessary trials, on which the Korean Ministry of Health relies in approving the drug, outside of Korea. Second, there is a lack of due process in the PTR procedures. If the Patent Office determines a certain duration of PTR that is less than the full amount originally requested by the patentee and the patentee challenges that determination and subsequently loses the challenge, no PTR is granted; even the duration previously determined by the Patent Office is lost. This all-or-nothing approach significantly undermines a patentee's right to appeal, effectively deterring appeals of erroneous calculations, and undermines the patentee's rights.

- **Inadequate damages for patent infringement**: A recent Supreme Court decision has undermined patent enforcement in Korea and the ability of innovators to be awarded appropriate damages in the event that a patent-infringing generic launches on the market. When a generic product enters the Korean market, the price of the innovator product is automatically reduced. In November 2020, the Korean Supreme Court held that generic companies were not liable for damages caused by a mandatory price reduction to a patented product even if the patent was upheld and the generic company entered the market illegally, forcing the price cut in question. As a result, damages for infringement of biopharmaceutical patents in Korea are neither adequate to serve as a deterrent to further infringements, nor sufficient to cover the innovators losses, contrary to Korea's international commitments.

- **Patent enforcement concerns**: While Korea has implemented a patent linkage mechanism pursuant to its KORUS commitment, certain key issues of concern remain. These issues include the discretion afforded to the Ministry of Food and Drug Safety (MFDS) as to whether to list a patent in the Green List or to permit a change to the patent listing and the limited period of only nine months for a sales stay. In addition, if an innovator elects not to seek a stay of a second (or subsequent) generic/biosimilar, any stay granted against the first generic/ biosimilar application is cancelled. Moreover, preliminary injunctions take several months to be granted, thereby frustrating the ability of innovators to prevent irreparable damages in the event potentially infringing products enter the market.

For these reasons, PhRMA requests that Korea be placed on the **Priority Watch List** in the 2022 Special 301 Report and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved.

Market Access

Impermissible Government Pricing and Reimbursement Policies

Since the implementation of a positive reimbursement list system in 2007, new prices of innovative medicines are determined based primarily on cost reduction rather than a holistic assessment of value. Multiple pricing regulations are layered to set artificially low prices for innovative medicines and volume caps, which violates Korea's international obligations and results in reduced access to innovative medicines for Korean patients and doctors. Eighty-six percent of new medicines launched globally since 2011 are available in the United States compared to just 35 percent in Korea, with Korean patients waiting an average of 30 months from global first launch for the fewer medicines that do become available.[190]

Korea's Drug Reimbursement Evaluation Committee (DREC) operating under HIRA assesses the cost-effectiveness of innovative medicines using an unreasonably low and outdated threshold on how much can be paid for health gains, with few products exempted. This incremental cost per QALY threshold was set based on Korean GDP per capita in 2007 and has not been increased for most innovative medicines even though Korean GDP per capita is now 50 percent higher.

The challenges that this cost-effectiveness threshold present to biopharmaceutical innovators and Korean patients were raised during the 2020 National Assembly Audit, which resulted in a request to HIRA to review the need to adjust the threshold. Unfortunately, HIRA rejected the National Assembly request and further announced in September 2021 that it had removed references to Korean GDP per capita in the relevant regulations and instead would rely on "past assessment results." Apparently, HIRA would like to avoid tying the threshold to current Korean GDP per capita, but this change also risks further deteriorating the transparency and predictability of the assessment process.

Manufacturers are often required to make repeated price concessions as they move through the many DREC subcommittees before the final reimbursement recommendation, despite the ostensibly different roles and responsibilities of each subcommittee. For example, the oncology subcommittee tends to review materials that should be reviewed instead by the pharmacoeconomic subcommittee or the budget assessment subcommittee and rejects reimbursement despite proven clinical benefit. There may be other price concessions required that further disincentivize innovation, such as a dose-pricing formula that requires price cuts when a medicine developed for a pediatric indication uses a lower dose than that for adults. Even when a price is recommended following the cost-effectiveness evaluation, the Korean Government tends to impose additional risk sharing agreements in the form of expenditure caps or excessive rebates as a condition of reimbursement.

[190] PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2020. June 2021.

Following DREC review and recommendation of a maximum reimbursement price, the National Health Insurance Service (NHIS) conducts a price negotiation with the manufacturer. During negotiations, the price for a new innovative medicine recommended by the cost-effectiveness evaluation tends to be lowered based on the prices of off-patent and generic comparators, as well as the prices in other countries. However, since 2015, new medicines that HIRA evaluates based on WAP do not undergo NHIS price negotiations and instead are generally listed at 90 percent of WAP regardless of budget impact. Given the prevalence of off-patent and generic medicines in the WAP calculation, the prices of innovative medicines in Korea continue to be significantly depressed. The Ministry of Health and Welfare (MoHW) has the ultimate authority for approving all pricing and reimbursement decisions.

Over the last decade, the Korean Government has used excessive and repetitive measures to further reduce prices of innovative medicines, such as Actual Transaction Pricing (ATP) investigations and price cuts associated with volume and new indication expansions. If the reimbursement scope is expanded or claim amounts increased, then prices can be significantly reduced through various mechanisms during the period of patent protection. For example, NHIS implements mandatory volume-based price cuts whenever an innovative medicine exceeds by 30 percent the sales volume originally negotiated for the introductory year. As a result, the likelihood of subsequent price cuts is very high. Greater flexibility is needed to establish reasonable volume targets beyond the introductory year. Moreover, decreases in prices through ATP investigations have created incentives for larger hospitals to force biopharmaceutical companies to supply drugs at lower prices. The result is that innovative medicines are subject to repeated and excessive price cutting mechanisms.

Combined, Korea's pricing policies negatively impact the rights of U.S. innovators and constitute a failure to "appropriately recognize the value of the patented pharmaceutical product," in violation of KORUS Article 5.2(b).

Moreover, Korea's pricing and reimbursement regime goes far beyond a "limited exception" to the patentee's exclusive rights and thus is inconsistent with KORUS Article 18.8(3) and Korea's broader obligations under the World Trade Organization (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). TRIPS Article 28 provides that a patent "shall confer" on its owner the exclusive rights to prevent third parties without the owner's consent from "the acts of: making, using, offering for sale, selling, or importing for these purposes that product."[191] In turn, TRIPS Article 30 permits WTO members to grant only "limited" exceptions to these exclusive rights, provided that such exceptions do not conflict with the "normal exploitation" of the patent and do not prejudice the legitimate interests of the patent owner.[192] The *Canada – Pharmaceutical Patents* panel appropriately recognized that the "normal exploitation" of a patent includes the realization of anticipated "economic returns" during a defined period of exclusivity "as

[191] TRIPS Article 28.
[192] *Id.* Article 30.

an inducement to innovation."[193] This TRIPS jurisprudence supports a parallel reading of KORUS Article 18.8(3).

Under terms of a premium pricing policy for global innovative drugs approved in June 2017, Korea impermissibly provided reimbursement price preferences and other advantages to products developed by local companies. These policies discriminated against U.S. and other foreign-based innovative biopharmaceutical companies and were the subject of renegotiated KORUS commitments agreed to in 2018. Following this agreement, HIRA revised the premium pricing policy for global innovative drugs effective from January 2019. However, the new criteria are so strict and unworkable that it is highly unlikely that any innovative medicine would be eligible for premium prices. While it was hoped that Korea would use this opportunity to demonstrate its broader pledge to appropriately value innovative medicines, Korea has implemented this commitment in a manner that eviscerates the ability of companies to qualify for premium pricing and is contrary to the spirit of the commitment it made to the U.S. Government.

Lack of Transparency, Predictability and Due Process

Since 2010, MoHW has repeatedly changed its pharmaceutical pricing and reimbursement policies without considering the long-term implications for innovation and market predictability, resulting in an uncertain business environment for innovative pharmaceutical companies in a manner that is inconsistent with Korea's transparency and due process obligations under KORUS Article 5.3.

- Korea also does not provide meaningful transparency and due process for companies that apply for reimbursement. The various subcommittees involved in the reimbursement process do not share the outputs of their deliberations and

[193] WTO, Panel Report, *Canada – Patent Protection of Pharmaceutical Products*, WT/DS/114/R, ¶¶ 7.54-55 (adopted Mar. 17, 2000), available at https://www.wto.org/english/tratop_e/dispu_e/7428d.pdf (last visited Jan. 30, 2022). Similarly, the TRIPS Agreement negotiating history indicates that the "rights conferred" by a patent within the meaning of TRIPS Article 28 include the right to sell pharmaceutical products at prices that would permit recoupment of investments and provide an incentive to develop innovative products. In a 1987 statement, the United States set forth this view, stating that "price control" was not a legitimate reason to deny intellectual property protection or to "impose conditions that preclude reasonable compensation for use of an invention or creation." Statement by the United States at Meeting of 25 March 1987, MTN.GNG/NG11/W/2 (Apr. 3, 1987), at 3. As the United States expressed at that time, "[s]uch policies interfere with obtaining and maintaining intellectual property rights and thus reinforce the direct distortion of trade that results from such policies." *Id.* Others involved in the TRIPS negotiations made similar statements. At a September 1989 meeting, a participant discussed providing patentees "the right to exclude others from making, using or selling the patent or invention for a specified time" and asserted that "[t]hese rights were necessary to provide patentees with the necessary economic incentive to justify investment in innovation." Negotiating Group on Trade-Related Aspects of Intellectual Property Rights, Meeting of the Negotiating Group of 12-14 July 1989: Note by the Secretariat, MTN.GNG/NG11/14 (Sept. 12, 1989), ¶ 75. In a previous meeting, another TRIPS negotiator noted that "the recovery of an investment [of a patented product] depended not only on the duration of patent[] rights[s] but also on a number of other factors, for example whether there was price control." Negotiating Group on Trade-Related Aspects of Intellectual Property Rights, Meeting of Negotiating Group of 16-19 May 1988: Note by the Secretariat, MTN/GNG/NG11/7 (June 21, 1988), ¶ 11.

applicants are often not provided with a satisfactorily informative written basis for evaluations and decisions, as well as reasonable opportunities for appeal. In addition, following the HIRA review, there is a separate and onerous review by the NHIS on price and volume determinations, resulting in additional price concessions below the prices already set by HIRA.

Finally, under Article 5.3(5)(e) of KORUS and the side letter thereto, Korea agreed to "make available an independent review process that may be invoked at the request of an applicant directly affected by a [pricing/reimbursement] recommendation or determination." Korea has taken the position, however, that reimbursed prices negotiated with pharmaceutical companies should not be subject to the independent review mechanism because the NHIS does not make "determinations" and merely negotiates the final price at which a company will be reimbursed. Moreover, for many innovative medicines, prices are decided by HIRA based on WAP without subsequent price negotiations with NHIS. However, this interpretation negates the original purpose of the independent review mechanism, which should apply to the process for setting prices of all reimbursed medicines, particularly patented medicines. While an independent review process is actively used for medical devices, there is not an effective independent review mechanism relating to medicine reimbursement, in part because regulations permit HIRA to conduct re-evaluations even after an independent review has taken place.

Intellectual Property Protection

Patent Term Restoration

While Korea has implemented PTR, there are two significant issues. First, the PTR calculation should include all relevant essential clinical trials used for the approval of the Korean product, including essential clinical international trial that are submitted as a part of the Korean dossier for approval of the product. Failure to do so has a discriminatory effect on companies outside Korea that conduct necessary trials, on which the Korean Ministry of Health relies in approving the drug, outside of Korea. The Korean Patent Court has recently held that foreign clinical trials should not be excluded from the calculation of the extended term. The Patent Office should reflect this holding and immediately change its current unfair practice.

Second, there is a lack of due process in the PTR procedures. If the Patent Office determines a certain duration of PTR that is less than the full amount originally requested by the patentee and the patentee challenges that determination and subsequently loses the challenge, no PTR is granted; even the duration previously determined by the Patent Office is lost. This all-or-nothing approach significantly undermines a patentee's right to appeal, effectively deterring appeals of erroneous calculations, and undermines the patentee's rights.

Inadequate Damages for Patent Infringement

A recent decision by the Korean Supreme Court has undermined patent enforcement in Korea and the ability of innovators to be awarded appropriate damages if a patent-infringing generic launches on the market. When a generic product enters the Korean market, the price of the innovator product is automatically reduced. In November 2020, the Korean Supreme Court held that generic companies were not liable for damages caused by a mandatory price reduction to a patented product even if the patent was upheld and the generic entered the market illegally, forcing the price cut in question.

This jurisprudence is inconsistent with Korea's international commitments. Specifically, Article 41(1) of the TRIPS Agreement requires WTO members to provide "remedies which constitute a deterrent to further infringements". The Supreme Court decision essentially eliminates any deterrent for a generic company to launch their product during ongoing patent litigation. Further, it contravenes Korea's commitment in Article 18.10(5)(b) of KORUS that "in determining damages for infringement of intellectual property rights, its judicial authorities shall consider … the value of the infringed good or service measured by the market price …." That market value cannot reasonably be the reduced price triggered by the launch of a patent infringing generic.

Strong patent protection is necessary for innovative companies to continue to invest in R&D for innovative medicines. The Korean Supreme Court ruling undermines that foundation and will inevitably have an adverse impact on future R&D and public health in Korea. A patent right should be protected during the entire patent term. Where a final decision to invalidate a patent is not yet rendered, a generic company willing to take the risk of infringing the patent should bear full responsibility for its choice. However, the Supreme Court's recent decision and current legal system in Korea make it difficult to substantively protect patents for innovative medicines, considerably undermine the value of drug patents and will discourage future investments and innovations.

Patent Enforcement

Consistent with its IP obligations under KORUS,[194] effective March 15, 2015, Korea implemented the framework of an effective patent enforcement system. PhRMA continues to monitor a number of key issues concerning this system. First, the system provides overly broad discretion to MFDS to determine whether to list a patent in the Green List or to permit a change to the patent listing. Second, the system only provides for a nine-month sales stay. In the ordinary course, this is not an adequate period of time to resolve a patent dispute (consistent with Article 18.9(5)(b) of KORUS) before an infringing product is allowed to enter a market. Third, the sales stay system mechanism is problematic in that it requires the patentee to seek a sales stay against all generic/biosimilar applications, regardless of whether those products may infringe the innovator's patent(s), as long as they are the same in terms of (i) active ingredient and amount thereof, (ii) formulation, (iii) dosage and administration, and (iv) efficacy and

[194] *See* U.S.-Korea Free Trade Agreement, Art. 18.9, para. 5.

effectiveness. If the patentee fails to do so, the sales stay against the first generic/ biosimilar is cancelled. Moreover, while preliminary injunctions are available in Korea, in practice it takes several months for them to be granted, thereby frustrating the ability of the innovator to seek an injunction before potentially infringing products are allowed to enter the market.

MALAYSIA

PhRMA and its member companies operating in Malaysia remain concerned by the Government of Malaysia's continued actions that undermine intellectual property (IP) protection. It is already misleading other countries in the region to take similarly damaging actions that impact U.S. IP.

Key Issues of Concern:

- **Compulsory licensing**: Through a flawed and non-transparent process, the Malaysian Government issued a compulsory license (CL) for a breakthrough innovative medicine developed in America that provides a cure for patients suffering from hepatitis C. This action was taken despite the fact that the U.S. manufacturer had agreed to include Malaysia in its voluntary license program. While this CL has not been renewed, the Malaysian Government is considering legislative amendments that could further promote ambiguous grounds for compulsory licensing and introduce unnecessary procedures that would undermine granted patents. These actions undermine innovator confidence in Malaysia and set a negative precedent for other markets, adoption of which would significantly undermine the R&D model for innovative medicines on which the U.S. pharmaceutical industry and patients around the world rely.

- **Medicines Price Control proposal**: Only 24 percent of new medicines launched globally since 2011 are available in Malaysia.[195] The industry shares a common goal with the Malaysian Government to improve patient access to innovative medicines. However, the planned introduction of the Medicines Price Control (MPC) to set wholesale and retail ceiling prices for medicines will not resolve long-term health care cost challenges and could further delay patient access to new medicines. The Malaysian Government has taken a positive step to conduct a comprehensive cost-benefit analysis of the proposal, in collaboration with industry associations, before any further pricing policy is decided by the Government. Preliminary findings of the cost-benefit analysis were shared on the Malaysian Productivity Council Unified Public Consultation platform in late November 2021 to seek feedback from interested parties. Preliminary findings indicate that a loss of jobs and worsened health outcomes would result if the MPC was implemented.

- **Listing medicines on the national formulary**: As of 2016, Malaysia adopted a new process for listing medicines on the Ministry of Health (MoH) Medicines Formulary. While this was a welcome development, PhRMA and its members are concerned that the final guidelines require six or 12 months of post-marketing surveillance data prior to listing and that there is no mechanism to ensure that patients who benefited from the medicines during local clinical trials can maintain access during this period. In addition, if a product is not approved for listing on the

[195] PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2020. June 2021.

formulary, the applicant should be provided a detailed explanation for that decision so that it can better understand the criteria for listing and to determine if it may negotiate an alternative access scheme with the government. MoH listing decisions continue to lack transparency and are based on ambiguous criteria.

- **Preferential treatment of local manufacturers**: The Malaysian Government indirectly discourages a fair, open and competitive marketplace for international pharmaceutical compounds through procurement preferences for locally manufactured products. For example, the Malaysian Government has announced that it will grant three-year procurement contracts to companies that move production of imported products to Malaysia, with the potential for a two-year extension if those locally produced products are exported.

- **Halal pharmaceuticals**: In December 2017, the MoH published a guideline on prescribing and administration of non-halal pharmaceuticals. PhRMA's member companies, while strongly supportive of religious and cultural sensitivities, do not believe that the government should provide preferential treatment to such products in government procurement, but instead adhere firmly to the tenets of safety, quality and efficacy of medicines. Furthermore, it is important to ensure that patients, in partnership with their health care providers, are prescribed the appropriate medicine for their conditions.

- **Inadequate IP protection and enforcement**: Malaysia does not have an effective patent enforcement system that allows for early resolution of patent disputes before marketing approval is granted to potentially infringing products during the patent term. In addition, Malaysia's regulatory data protection (RDP) system fails to provide (1) adequate protection for biologics; and (2) effective protection for a sufficient period of time for chemically-synthesized drugs from the date of marketing approval in Malaysia.

- **Patent and trademark laws**: Proposed amendments to Malaysia's IP laws that include provisions for disclosure of traditional knowledge and genetic resources, as well as compulsory licensing, raise concerns for the research-based pharmaceutical industry. PhRMA urges the government to continue consultative processes with stakeholders before such amendments are implemented in order to avoid policies that deter or discourage innovation across fields of technology.

For these reasons, PhRMA requests that Malaysia be placed on the **Priority Watch List** in the 2022 Special 301 Report and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved.

Intellectual Property Protection

Compulsory Licensing

In September 2017, the Malaysian Government utilized a non-transparent process to issue a CL on a patent-protected innovative U.S. medicine to treat hepatitis C. This unnecessary and unjustified measure was taken in a unilateral and non-transparent fashion, despite the fact that the U.S. manufacturer had decided to include Malaysia in its voluntary licensing program. The CL has sent a signal to America's biopharmaceutical innovators that their patents are not safe in Malaysia. Moreover, the Malaysian government appears to be inappropriately leveraging the CL to encourage medical tourism and travel to Malaysia.[196]

While imposing a license is rarely, if ever, an appropriate mechanism to improve patient access, that is particularly true in this instance. Industry experience clearly demonstrates that collaborative access policies enable significantly better treatment access outcomes. Malaysia's CL reportedly only treated 1,501 patients with hepatitis C over a 12-month period in 2018.[197] However, cooperative discussions and collaborative access policies like voluntary licensing treated over 15,000 patients over the same period in neighboring Vietnam.[198]

While this CL has significantly undermined investor confidence in Malaysia, industry is glad to see that the Malaysian Government elected not to renew the CL when it expired in October 2020. This promising action may be undermined, however, by reports that Malaysia is considering CLs for other products.[199]

Further, in August 2019, Malaysia's intellectual property office (the Intellectual Property Corporation of Malaysia or MyIPO), released for public comment a "consultation paper" on proposed amendments to the Patents Act 1983.[200] The consultation paper and commenting period were not widely publicized. While the consultation paper lacked specific textual proposals, PhRMA members are very concerned that the proposed

[196] *See*, *e.g.*, "Malaysia hopes to become Asia's treatment hub for hepatitis C; offering treatment at fraction of cost: Health minister," CNA (Nov. 16, 2021), available at https://www.channelnewsasia.com/asia/malaysia-hepatitis-c-medical-tourism-2316876 (last visited Jan. 30, 2022).
[197] "Malaysia to make drug to treat Hepatitis C," *The Star* (Mar. 8, 2019), available at https://www.thestar.com.my/news/nation/2019/03/08/malaysia-to-make-drug-to-treat-hepatitis-c (last visited Jan. 30, 2022).
[198] "Five Takeaways: Bridging access and innovation in healthcare policy," Observer Research Foundation (Oct. 31, 2019), available at https://www.orfonline.org/research/five-takeaways-bridging-access-and-innovation-in-healthcare-policy-57163/ (last visited Jan. 30, 2022).
[199] *See*, *e.g.*, "MOH mulls implementing compulsory licensing for medicines other than Remdesivir – Dr Adham," The Sun Daily (Aug. 6, 2020), available at https://www.thesundaily.my/home/moh-mulls-implementing-compulsory-licensing-for-medicines-other-than-remdesivir-dr-adham-CD3342307 (last visited Jan. 30, 2022).
[200] Consultation Paper on Proposed Amendments to the Patents Act 1983 [Act 291] published on Aug. 30, 2019.

amendments could promote vague and ambiguous grounds for compulsory licensing, restrictions on what can be patented and unnecessary procedures that would undermine granted patents. Considering the preliminary nature of that consultation paper and limited information, PhRMA provided MyIPO an initial response calling for the Malaysian Government to engage in a meaningful and transparent consultation process.

Regulatory Data Protection (RDP)

Biopharmaceutical innovators work with hospitals, universities and other partners to rigorously test potential new medicines and demonstrate they are safe and effective for patients who need them. Less than 12 percent of medicines that enter clinical trials ever result in approved treatments.[201]

To support the significant investment of time and resources needed to develop test data showing a potential new medicine is safe and effective, governments around the world protect that data submitted for regulatory approval from unfair commercial use for a period of time. TRIPS Article 39.3 requires WTO members, including Malaysia, to protect proprietary test data submitted to market authorizing bodies, including the MoH, "against unfair commercial use" and against "disclosure."

The stated objective of Malaysia's Directive (11) dlm. BPFK/PPP/01/03 Jilid 1 is "to protect the undisclosed, unpublished and non-public domain pharmaceutical test data … for the purpose of scientific assessment in consideration of the quality, safety, and efficacy of any new drug product ...."[202]

Further, paragraph 4.2 of that Directive provides:

> An application for Data Exclusivity shall only be considered if the application in Malaysia for:
>
> (i) New drug product containing a New Chemical Entity is made within eighteen (18) months from the date the product is first registered or granted marketing authorization; AND granted Data Exclusivity / Test Data Protection in the country of origin or in any country, recognized and deemed appropriate by the Director of Pharmaceutical Services ….[203]

As such, Malaysia requires the marketing authorization application of the new medicine to be filed within 18 months from the first worldwide regulatory approval in order to be considered as a "new chemical entity" and, thus, eligible for RDP in Malaysia. If the

[201] DiMasi JA, Grabowski HG, Hansen RW; Tufts Center for the Study of Drug Development. Innovation in the pharmaceutical industry: new estimates of R&D costs. In: Briefing: Cost of Developing a New Drug, available at https://f.hubspotusercontent10.net/hubfs/9468915/TuftsCSDD_June2021/pdf/Microsoft+PowerPoint+-+Tufts+CSDD+briefing+on+R%26D+cost+study+-+Nov+18,+2014.pdf (last visited Jan. 30, 2022).
[202] *See* paragraph 1.2 of Directive BPFK/PPP/01/037.
[203] *Id.*

18-month deadline is not met, the product loses data protection, allowing a follow-on molecule to be approved based on the originator's regulatory data during what should have been the RDP period. It is challenging – if not impossible – to meet the 18-month application requirement if the first worldwide registration was not in the EU or the United States (both are relied upon for the Certificate of Pharmaceutical Product application).

In addition to this inappropriate restriction on products eligible for RDP in Malaysia, the actual term of the protection in Malaysia is measured from the date of first approval in the world. Thus, if a new chemical entity is registered in Malaysia one year after first approval in the world, Malaysia only provides four years of RDP. Indeed, the only instance in which an innovator can receive the full five years of RDP in Malaysia is if they seek marketing approval in Malaysia first.

Malaysia's flawed Directive improperly penalizes innovators for first seeking marketing approval in other countries. As in other markets that seek to promote research and development into innovative medicines, Malaysia should measure the term of the RDP protection from the time that the new molecule is approved in Malaysia.

Finally, Malaysia fails to provide any RDP for biologics. Made from living organisms, biologics are complex and challenging to manufacture and may not be protected adequately by patents alone. Without the certainty of a substantial period of exclusivity, innovators may not have the incentives needed to conduct the expensive, risky and time-consuming work to discover and bring new biologics to market.

Effective Patent Enforcement

PhRMA members encourage Malaysia to efficiently and effectively enforce its Patent Act. A competent and practical enforcement mechanism provides redress and solutions to infringements of IP rights and deters future infringement. Timely and efficient patent enforcement gives owners an appropriate period over which to recoup the value of their significant efforts and investment. For example, patent protection and enforcement would be enhanced by structured enforcement guidelines and a mechanism to curb unfair promotion and sale of generic drugs either prior to patent expiry of innovator drugs, or, in the event of a patent dispute, prior to a court decision on patent disputes.

Malaysia is poised to ratify the Comprehensive and Progressive Trans-Pacific Partnership (CPTPP). While CPTPP requires Malaysia to adopt a patent notification system and make available early dispute resolution mechanisms, current proposals to implement these obligations would put the onus on patent holders to monitor the submission of follow-on marketing applications rather than provide direct notice to the innovator that a follow-on application has been filed that may infringe the innovator's patents. PhRMA strongly encourages the Malaysian Government to work with industry to ensure that implementation of these CPTPP commitments results in mechanisms that strengthen patent enforcement and the ability to resolve outstanding patent concerns prior to marketing approval and launch of follow-on products. These mechanisms could greatly enhance Malaysia's business environment by: (1) providing transparency and

predictability to the process for both innovative and generic pharmaceutical companies; (2) creating a more predictable environment for investment decisions; and (3) ensuring timely redress of genuine disputes.

Patent and Trademark Laws

Proposed amendments to Malaysia's patent and trademark laws that include provisions for disclosure of traditional knowledge and genetic resources, as well as compulsory licensing, raise concerns for the research-based pharmaceutical industry. PhRMA encourages a continued consultative process with stakeholders before such amendments are implemented in order to avoid policies that deter or discourage innovation across fields of technology. These proposed amendments also include provisions for effective patent enforcement and patent term restoration. PhRMA member companies are eager to engage in meaningful dialogue with Malaysian Regulatory Authorities to build a system that reflects international best practices.

Market Access

Medicines Price Control Proposal

Only 24 percent of new medicines launched globally since 2011 are available in Malaysia.[204] The industry shares a common goal with the Malaysian Government to improve patient access to innovative medicines. However, the MPC proposal to set wholesale and retail ceiling prices for medicines will not address long-term health care cost challenges and could further delay patient access to new medicines. Further, the proposed phased implementation of the MPC to first target single-source products, which are generally patent-protected, appears to discriminate against foreign companies. A comprehensive cost-benefit analysis that includes meaningful engagement with industry and other stakeholders was initiated in August 2021. This is a positive step towards understanding the full impact of a government price control policy on the Malaysian health care system. Preliminary findings of the cost-benefit analysis were shared on the Malaysian Productivity Council Unified Public Consultation platform in late November 2021 to seek feedback from interested parties. Preliminary findings indicate that a loss of jobs and worsened health outcomes would result if the MPC was implemented. PhRMA and its member companies recommend that the Malaysian Government re-evaluate alternatives to the MPC to reduce its negative impact.

Listing Pharmaceuticals on the National Formulary

The industry welcomed Malaysian Government guidelines introduced in January 2016 that allowed companies to request inclusion on the national formulary. However, the listing process lacks transparency and appears to be based on unclear criteria. In addition, the guidelines require six or 12 months of post-marketing surveillance data prior

[204] PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2020. June 2021.

to listing. As a result, patients in local clinical trials cannot automatically continue receiving the product. A policy is needed to bridge the gap for patients from the end of a clinical trial to listing on the national formulary. In addition, if a product is not approved for listing on the formulary, the applicant should be provided a detailed explanation for that decision so that it can better understand the criteria for listing and to determine if it may negotiate an alternative access scheme with the government. MoH listing decisions, both by the body responsible for conducting HTA and making listing recommendations and the panel responsible for the ultimate listing decision, currently lack transparency and are based on unclear criteria.

Further, as the Malaysian Government pursues reforms aimed at improving patient access to medicines, PhRMA member companies hope that sufficient financing is provided to ensure that more patients can receive innovative medicines in a timely manner. Short-term measures, such as cost-containment policies, should not become a barrier to patient access and the government should consider fair mechanisms to value innovations that are proven to raise health care standards in Malaysia.

Preferential Treatment of Local Manufacturers

Malaysia's National Medicines Policy, which prioritizes the medium- and long-term goals set by the government for the pharmaceutical sector, endorses price controls, automatic generic drug substitution and preferences for generics and local manufacturers for medicines on the National Essential Medicines List. These discriminatory preferences for locally manufactured products discourage an open and competitive marketplace.

Halal Pharmaceuticals

In December 2017, the MoH published guidelines on prescribing and administration of non-halal medicines.[205] PhRMA member companies support religious and cultural sensitivities but believe that it is important to ensure that patients, in partnership with their health care providers, are prescribed the appropriate medicine for their conditions.

[205] Guideline on the Use of Medicines with Non-halal Ingredients, available at https://www.pharmacy.gov.my/v2/ms/dokumen/panduan-penggunaan-ubat-ubatan-mengandungi-unsur-tidak-halal.html (last visited Jan. 30, 2022).

THAILAND

PhRMA and its member companies operating in Thailand remain concerned about significant intellectual property (IP) and market access challenges. Notably, Thailand does not provide sufficient IP protection or equitable and reasonable market access for new medicines developed and manufactured in the United States. In addition, many of the IP-related changes proposed by the Thai Government are contrary to international or regional best practices.

Key Issues of Concern:

- **Uncertain IP protections and enforcement**: Uncertain IP protections and lack of enforcement hinder the ability of U.S. innovators – in particular, biopharmaceutical innovators – to fairly access the Thai market. Key IP concerns in Thailand include patent backlogs and failure to provide meaningful regulatory data protection (RDP). PhRMA welcomes improvements Thailand has made to its patent system in recent years, including increasing the number of patent examiners to improve processing time for patent applications. We also welcome the proposed amendments to the Patent Act that seek to build upon this progress, such as provisions that seek to speed up the patent registration process by decreasing the period of time of requesting substantive examination from five years from the application date to three years. In light of Thailand's significant patent delays, these improvements will be key to reducing the patent backlogs and improving efficiencies in Thailand's patent system. While these developments make progress towards improving the registration and availability of patents in Thailand, barriers to patent ownership in the country remain an obstacle to innovation and certain provisions in the amended Patent Act threaten to undermine effective patent protection and enforcement.

- **Maximum price setting for government procurement**: The Thai Ministry of Public Health (MoPH) and the National Drug System Development Committee are authorized to establish a "median procurement price" for pharmaceuticals. In practice, this price is not calculated as a median, but rather used as a "maximum procurement price" (MPP) for medicines. The MPP process, combined with Thailand's recent preference for domestic companies, harms U.S. and other foreign innovators and could delay or prevent the introduction of new medicines. Industry stands ready to work with the Thai Government to standardize the MPP process and to ensure increased transparency and predictability.

- **Discrimination and unpredictability in government procurement policies**: The Thai Government continues to implement procurement policies that facilitate procurement privileges for the domestic Thai industry. These policies have created a discriminatory and unpredictable investment climate that creates challenges for U.S. companies seeking to compete on a level playing field in Thailand.

For these reasons, PhRMA requests that Thailand be placed on the **Priority Watch List** in the 2022 Special 301 Report and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved.

Intellectual Property Protection

Patent Backlogs, Protection and Enforcement

Although the Department of Intellectual Property (DIP) has taken some important initial steps to help clear the patent backlog – including hiring more patent examiners – patent review timelines in Thailand remain unpredictable and average 10 years after application submission. As such, we welcome the proposed amendments to the Patent Act that seek to speed up the patent registration process by decreasing the period for requesting substantive examination from five years after the application date to three years.

Long patent grant delays create uncertainty regarding investment protection and increase the risk that a third party will use a patentable invention that is the subject of a pending patent application during the pending/review periods. Indeed, at least one PhRMA member has experienced a third-party launch of a product that was the subject of a pending patent application. In that instance it took over 18 years for the patent to be granted and even then the member was unable to obtain meaningful enforcement of the patent. Patent term adjustments are not available in Thailand to compensate for unreasonable patent office delays, thereby reducing the effective patent term and further exacerbating the uncertainty caused by its patent grant delays.

Additionally, though some of the recent draft amendments to the Patent Act seek to streamline some procedures during the patent application process, other draft provisions could undermine efforts to support innovation and further exacerbate Thailand's backlog. For example, one of the proposed amendments seeks to introduce a mechanism that would allow third parties to file challenges against a patent application up to the date of patent grant as well as to allow for pre-grant opposition after the substantive examination. These proposed opposition mechanisms would compound the existing patent backlogs and undermine the investment climate in Thailand. Other provisions, such as Section 17/1 of the Act, could impose procedural barriers by requiring applicants to disclose information regarding the use of genetic resources as part of their patent application. In some cases, compliance with such requirements is impossible, particularly where the existence or origin of any genetic resources incorporated into a product may be unknown or untraceable. Such disclosure requirements could present significant barriers to patentability and should be removed from the draft amendments.

The proposed amendments also raise concerns that patent owners will be deprived of their patents for late payment of patent maintenance fees, without sufficient notice or opportunity to make payment prior to revocation. In addition, Thailand's restrictive application of patent eligibility criteria denies adequate protections to valuable new uses of existing pharmaceuticals.

Compulsory Licensing

Despite assurances that Thailand would be judicious in its use of compulsory licenses (CLs) and consult with affected parties as required by the World Trade Organization (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), Thailand continues to threaten the use of CLs. Thailand's compulsory licensing regime lacks sufficient due process and dialogue with affected companies and suffers from a lack of transparency in the reasoning behind CL decisions. DIP's proposed amendments to the Patent Act to add provisions on compulsory licensing raise concerns that Thailand may be seeking to increase its use of compulsory licensing in the future. Even the mere potential that Thailand may use compulsory licensing in the future brings into question the predictability and enforceability of patents in Thailand. Such doubts undermine incentives for development of new medicines and innovative treatments, thereby threatening to slow the introduction of new medicines in Thailand and decrease access to medicine for Thai patients. If DIP moves forward with amendments to its compulsory licensing regime, it should do so in a manner that adopts international best practice and adheres to Thailand's international treaty obligations under Articles 31 and 31*bis* of the TRIPS Agreement.

PhRMA believes governments should grant CLs in accordance with international rules and only in exceptional circumstances and as a last resort. Decisions should be made through fair and transparent processes that involve participation by all stakeholders and consider all relevant facts and options.

Regulatory Data Protection Failures

Ministerial regulations issued by the TFDA regarding the Trade Secrets Act of 2002 do not provide RDP that would prevent generic or biosimilar drug applicants, for a fixed period of time, from relying on the innovator's regulatory data to gain approval for their versions of the innovator's product. The Act aims only to protect against the "physical disclosure" of confidential information.

PhRMA's member companies strongly encourage the Royal Thai Government to institute meaningful RDP. Specifically, Thailand should: (1) implement new regulations that do not permit generic or biosimilars producers to rely directly or indirectly on the originators' data, unless consent has been provided by the originator, for the approval of generic or biosimilar pharmaceutical products during the designated period of protection; (2) bring the country's regulations in line with international standards by making clear that data protection is provided to test or other data submitted by an innovator to obtain marketing approval; (3) provide protection to new indications; and (4) require TFDA officials to protect information provided by the originator by ensuring it is not improperly made public or relied upon by a subsequent producer of a generic or biosimilar pharmaceutical product.

Market Access

Maximum Price Setting for Government Procurement

The MoPH and the National Drug System Development Committee are authorized to establish a "median procurement price" for pharmaceuticals. In practice, this price is not calculated as a median, but rather used as the MPP for medicines.

The MPP process, combined with Thailand's recent preference for domestic companies, harms U.S. and other foreign innovators and could further delay or prevent the introduction of new medicines. Currently, only 27 percent of new medicines launched globally since 2011 are available in Thailand.[206] Fortunately, the Public Procurement Act introduced in August 2017 mandates the creation of a Reference Price Subcommittee for Pharmaceutical and Medical Supplies, which would be responsible for handling reference price issues and standardizing the procedure. The innovative biopharmaceutical industry seeks the expedited formation of this subcommittee, as well as the inclusion of members from the private sector so that all stakeholders may collaborate on appropriate policies that address the fiscal concerns of the Thai Government in the procurement of pharmaceuticals, as well as the concerns of innovators and the needs of Thai patients. Further, while industry welcomed the Thai Government's issuance of an annual plan related to the MPP process, additional relevant details are needed to increase transparency and predictability.

Preferential Procurement of Thai "Innovation" List

In 2016, the Thai Government established the Thai Innovation List, an initiative to develop domestic industrial capacity in several innovation sectors, including pharmaceuticals. Only Thai majority-owned companies qualify to be listed. Once listed, Thai companies receive special government procurement privileges, including an earmark for at least 30 percent of orders by Thai Government agencies. Paradoxically, it appears that to qualify as a pharmaceutical innovator and be eligible for inclusion on the list, the Thai company needs only to demonstrate that their generic copy is bioequivalent to the originator product. As such, the so-called Thai Innovation List exists solely to favor local generic companies to the exclusion of U.S. and other foreign research-based biopharmaceutical companies.

The Innovation List was created under the Thailand 4.0 policy to incentivize innovation development. However, by excluding international companies, it deters international collaborative investment to promote innovation in Thailand. A more inclusive criteria that values research investment and embraces the creation of innovation without a nationality focus would foster a more investment-friendly environment.

[206] PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2020. June 2021.

Inconsistent and Non-Transparent Oncology Preauthorization System (OCPA)

The OCPA was established in 2006 as a direct reimbursement system to hospitals for "high-cost cancer drugs" administered to patients under the Civil Servants Medical Benefit Scheme (CSMBS). The system was intended to reduce out-of-pocket disbursements for its beneficiaries and to ensure rational use of certain innovative cancer medicines by identifying those products for which government hospitals would be directly reimbursed through prior authorization and approval based upon a pre-defined protocol of individual cancer medicines. Unfortunately, the process and criteria involved in the OCPA lack predictability and are applied inconsistently between different companies and different products. Further, recent revisions to the OCPA will result in certain innovator products being deemed not eligible for "direct reimbursement" based on unclear selection criteria or "non-reimbursable" if newly approved.

Specifically, while many innovative medicines, including cancer medicines, had been directly reimbursable by the CSMBS immediately upon being granted marketing authorization, revisions to OCPA procedures in February 2018 structured reimbursements on a tiering system: Group 1 (OCPA) or Group 2 (certain innovative and non-OCPA) products continue to be directly reimbursable, Group 3 (other innovative and non-OCPA) products require patients to provide advance payment for their medicines with no guarantee of reimbursement and then apply for government reimbursement and Group 4 (newly-approved) products are non-reimbursable and fully paid by the patient. These revisions, which were due to government budget constraints, will create access barriers to patients who cannot pay out-of-pocket for medicines and will limit provider and patient choice. For example, only one medicine per indication will be allowed in Group 1, meaning that patients treated by other medicines will be forced to pay out-of-pocket or switch treatments. Moreover, the criteria for how products are placed into each group are unclear and potentially are based on which products have the lowest procurement price.

To ensure patient access to innovative medicines and to respect physician determinations regarding the most appropriate treatment for a given patient, the government should establish transparent procedures and criteria for OCPA reimbursement evaluation, with consideration to clinical outcomes and needs rather than pure cost-containment. Unfortunately, such a transparent process has not been established since the revision of the OCPA procedures three years ago. In addition, Thailand should provide greater flexibility to allow for negotiation of alternative financial models with manufacturers so that patients have better access to new medicines and the government is afforded greater certainty over health care spending.

Preferential Procurement Privileges for the Government Pharmaceutical Organization (GPO)

The GPO, a Thai State-owned enterprise that manufactures pharmaceutical products in Thailand, benefits from preferential procurement privileges. Per Ministerial Regulation B.E.2560 (2017), government hospitals must procure at least 60 percent of their medicines budget from the National List of Essential Medicines (NLEM). Specific

procurement methods are required if the product on the NLEM is manufactured by the GPO or the Thai Red Cross Society. Purchases from other suppliers are permitted only when the GPO or the Thai Red Cross Society is unable to produce and distribute the product. In addition to these procurement preferences, under the Drug Act B.E. 2510 (1967), the GPO is not required to obtain FDA approval prior to launching medicines on the Thai market. There is no such exemption for private sector manufacturers or sellers, all of whom must obtain appropriately market authorization from the Thai FDA prior to selling their products in the Thai market. Further procurement privileges are also being extended to local vaccine producers under National Vaccine Committee Regulations on "Vaccine Procurement in Government Sector" that went into effect on August 14, 2020.

CANADA

CANADA

PhRMA and its member companies operating in Canada are extremely concerned about Canada's market access environment and intellectual property (IP) protections for patented medicines. Of particular concern are Canada's new pricing policies for patented products that would significantly undermine the practical benefits to U.S. companies of Canada's trade-related intellectual property commitments and which create uncertainty for patients. In addition, Canada's IP regime continues to lag behind that of other developed nations in several respects.

Key Issues of Concern:

- **The Patented Medicine Prices Review Board (PMPRB)**: On August 21, 2019, Canada published amendments to the Patented Medicines Regulations ("Amended PMR") governing the PMPRB. While the PMPRB's regulatory mandate has not changed – the PMPRB remains responsible for ensuring the prices of patented medicines are "not excessive" – the changes to the PMR related to how a "not excessive" price is to be determined are profound. The amended regulations change the basket of reference countries to include those with onerous price controls, introduce flawed economic factors to determine whether a price is "excessive" and require manufacturers to report all indirect price reductions for the purpose of a national ceiling price regulation. The PMPRB subsequently issued Guidelines that implement the Amended PMR and contain concepts and price tests which are beyond the PMPRB's jurisdiction. These Guidelines further compromise the rights of patent holders and are subject to ongoing litigation. On July 15, 2021, the PMPRB proposed several Guideline changes, including a new and arbitrary change to the international price test for existing medicines and their line extensions from the highest of the international schedule to the median (the July Proposals). These proposals represented a very concerning development in response to government mandated regulatory implementation delays and legal setbacks. While the PMPRB subsequently announced that it will not be proceeding with the July Proposals on December 17, 2021, the possibility of future unexpected and destabilizing changes remains. PhRMA and its member companies also remain very concerned that the Amended PMR and the PMPRB Guidelines, currently scheduled for implementation on July 1, 2022 after postponement due to the COVID-19 pandemic and need for further stakeholder consultation, will significantly undermine the marketplace for innovative pharmaceutical products by undervaluing and discouraging medical advances, delaying or preventing the introduction of new medicines in Canada due to a suboptimal pricing environment, and reducing investments in Canada's life sciences sector where free-market pricing is not upheld.

- **Regulatory barriers to patient access to new medicines**: Canada has many bureaucratic barriers that extend the time between submission to the federal government of newly discovered medicines and vaccines for regulatory approval

and their availability to patients through public reimbursement plans. These barriers significantly delay the benefits of new medicines and vaccines for Canadian citizens and erode the time that companies have to commercialize their innovations.

- **Weak patent enforcement**: The Canadian Patented Medicines (Notice of Compliance) Regulations (the "PM(NOC) Regulations")[207] include several key deficiencies that weaken Canada's enforcement of patents, including excessive and windfall damage awards to generic litigants, and limitations and inequitable eligibility requirements on the listing of patents in the Patent Register. Recent jurisprudence under the PM(NOC) Regulations has also resulted in a heightened level of liability for patent owners akin to punitive damages. PhRMA and its member companies are also troubled to see that Canada has used implementation of the Canada-EU Comprehensive Economic and Trade Agreement (CETA)[208] to implement reforms not required by that Agreement, which expose innovators to even greater potential liability under Section 8 of the PM(NOC) Regulations. PhRMA members are also concerned about potential damage awards which could stem from various common law theories within the Canadian provincial courts.

- **Inadequate patent term restoration (PTR)**: Under CETA, Canada is required to provide innovators with some compensation for delays in obtaining marketing approval for pharmaceuticals. The USMCA also requires Canada to provide PTR for unreasonable delays during the prosecution and issuance of any patent. However, in its CETA implementing regulations, Canada has chosen to implement an "export" exception that is inconsistent with the fundamental purpose of restoring a portion of the patent term lost due to the marketing approval process and has only adopted the minimum term of PTR negotiated under CETA further deviating from global standards. Furthermore, Canada's adoption of restrictive time limits and eligibility criteria will unduly and unreasonably limit patent term restoration eligibility in Canada in a manner that is contrary to the intent of the negotiation and the CETA text itself. Finally, Canada is interpreting the PTR regulations required by CETA in a narrow manner that is inconsistent with the treaty text.[209] PhRMA's member companies believe Canada should support innovation by ensuring that its PTR system effectively ameliorates the effects of lengthy regulatory processes, which can significantly erode the duration of the IP rights of innovators.

- **Standard for the disclosure of confidential business information (CBI)**: In November 2014, Canada enacted legislation to update its Food and Drugs Act (Bill C-17).[210] Provisions in that law granted the Health Minister discretion to disclose a

[207] Patented Medicines (Notice of Compliance) Regulations, SOR/93-133.
[208] *See* CETA, Final Text, as published by the Government of Canada, available at http://www.international.gc.ca/trade-commerce/trade-agreements-accords-commerciaux/agr-acc/ceta-aecg/text-texte/toc-tdm.aspx?lang=eng (last visited Jan. 30, 2022).
[209] *GlaxoSmithKline Biologicals S.A. v. The Minister of Health*, 2020 FC 397.
[210] *See* https://www.parl.ca/DocumentViewer/en/41-2/bill/C-17/royal-assent (last visited Jan. 30, 2022).

company's CBI without notice to the owner of the CBI and in accordance with a standard that is both inconsistent with other similar Canadian legislation and Canada's treaty obligations. On March 20, 2019, regulations were put in place respecting these authorities to release information about therapeutic products.[211] Further, on July 9, 2018, the Federal Court of Canada issued a decision ordering Health Canada to release vast amounts of pharmaceutical clinical trial data on five medications to a researcher, undercutting the federal government's attempts to keep the information confidential. The decision, which was not appealed by Health Canada, has the potential to exacerbate the negative impacts of the draft regulations and guidelines on biopharmaceutical innovators.[212]

For these reasons, PhRMA requests that Canada be placed on the **Priority Watch List** in the 2022 Special 301 Report. Further, we urge USTR to provide an opportunity for an assessment of Canada's IP and market access environment through an **Out-of-Cycle Review**, so that the U.S. Government can evaluate progress on these important issues and dedicate the required bilateral attention necessary to make progress on the barriers confronted by U.S. businesses in Canada.

Market Access

The Patented Medicine Prices Review Board (PMPRB)

The PMPRB is a quasi-judicial body created under the Canadian Patent Act[213] with a legislative mandate to ensure that prices of patented medicines are not "excessive." Due to its power in shaping the real-world benefits of IP property protections, the PMPRB is an important institution within Canada's broader IP regime for pharmaceuticals. The PMPRB regulates the maximum allowable price that a manufacturer can charge for all patented medicines in Canada regardless of payer. The PMPRB does not make decisions about the amount of reimbursement for a product, which is appropriately the responsibility of separate federal and provincial/territorial government agencies, or private insurers.

On August 21, 2019, Health Canada published the Amended PMR.[214] The Amended PMR was largely unchanged from the proposals previously released on December 2, 2017.[215] The PMPRB changes were initiated as part of the PMPRB's professed role as a "counterweight to the patent rights of pharmaceutical

[211] Canada Gazette, Part II, Volume 153, Number 6 Regulations Amending the Food and Drug Regulations (Public Release of Clinical Information) SOR/2019-62, available at http://canadagazette.gc.ca/rp-pr/p2/2019/2019-03-20/html/sor-dors62-eng.html (last visited Jan. 30, 2022).
[212] *Doshi v. Canada (Attorney General)*, 2018 FC 710.
[213] Patent Act, R.S.C. 1985, c.P-4, ss.79-103.
[214] Canada Gazette, Part II, Regulations Amending the Patented Medicines Regulations (Additional Factors and Information Reporting Requirements), Vol. 153, No. 17, Aug. 21, 2019, available at http://www.gazette.gc.ca/rp-pr/p2/2019/2019-08-21/html/sor-dors298-eng.html (last visited Jan. 30, 2022).
[215] Canada Gazette, Part I, Regulations Amending the Patented Medicines Regulations, Vol. 151, No. 48, Dec. 2, 2017, available at http://www.gazette.gc.ca/rp-pr/p1/2017/2017-12-02/html/reg2-eng.html (last visited Jan. 30, 2022).

manufacturers."[216] The Amended PMR constitutes an impermissibly broad exception to IP rights in contrast to Canada's obligation under the World Trade Organization (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), which requires that a member state not impose measures that "unreasonably conflict with a normal exploitation of the patent" and not "unreasonably prejudice the legitimate interests of the patent owner."[217] The changes could negatively impact the innovative biopharmaceutical industry, the availability of new medicines to Canadian patients and the competitiveness of Canada for research-based pharmaceutical investment. The Amended PMR[218] has been further delayed on four occasions to account for the COVID-19 pandemic and the need for further stakeholder consultation in the context of other initiatives, and is scheduled to come into force on July 1, 2022.[219] In response to previous delays, on July 15, 2021, the PMPRB proposed several changes, including a change to the international price tests for grandfathered medicines and their line extensions (the July Proposals). In its feedback on the proposed changes, Innovative Medicines Canada (IMC) – the innovative biopharmaceutical industry association based in Canada – and a number of PhRMA and IMC member companies highlighted that the July Proposals to change the international price tests from the highest of the international schedule to the median is arbitrary, inconsistent with the PMPRB's role as a regulator of excessive ceiling prices and will harm both patentees and other elements of the pharmaceutical supply chain in Canada (e.g., distributors, pharmacies and generics). Under this proposed change, the proportion of existing products requiring list price reductions would double to 54 percent and impacted products would face average price reductions of 24 percent, with no effective transition measures. On December 17, 2021, the PMPRB announced its decision not to proceed with the July Proposals.[220] Despite the decision, industry remains concerned that similarly unexpected and destabilizing Guidelines proposals may be advanced in the future.

---

[216] PMPRB 2015-16 Report on Plans and Priorities, available at http://www.pmprb-cepmb.gc.ca/view.asp?ccid=1163 (last visited Jan. 30, 2022).

[217] TRIPS Article 28 provides that a patent "shall confer" on its owner the exclusive rights to prevent third parties without the owner's consent from "the acts of: making, using, offering for sale, selling, or importing for these purposes that product." In turn, TRIPS Article 30 permits WTO members to grant only "limited" exceptions to these exclusive rights, provided that such exceptions do not conflict with the "normal exploitation" of the patent and do not prejudice the legitimate interests of the patent owner. The *Canada—Pharmaceuticals* panel appropriately recognized that the "normal exploitation" of a patent includes the realization of anticipated "economic returns" during a defined period of exclusivity "as an inducement to innovation." *See* WTO, Panel Report, *Canada – Patent Protection of Pharmaceutical Products*, WT/DS/114/R, ¶¶ 7.54-55 (Mar. 2000), available at https://www.wto.org/english/tratop_e/dispu_e/7428d.pdf (last visited Jan. 30, 2022).

[218] Canada Gazette, Part II, Regulations amending the Regulations Amending the Patented Medicines Regulations (Additional Factors and Information Reporting Requirements), Vol. 155, No. 14 , July 7, 2021, available at https://canadagazette.gc.ca/rp-pr/p2/2021/2021-07-07/html/sor-dors162-eng.html (last visited Jan. 30, 2022).

[219] Government of Canada, Order in Council, available at https://orders-in-council.canada.ca/attachment.php?attach=41417&lang=en (last visited Jan. 30, 2022).

[220] PMPRB Notice and Comment – On the change to the definition of Gap medicines, the references to the comparator countries and the international price tests for Grandfathered medicines and their line extensions, available at https://www.canada.ca/en/patented-medicine-prices-review/services/consultations/notice-comment-references-comparator-countries.html (last visited Jan. 30, 2022).

Through the Amended PMR, Canada amended the PMPRB's basket of reference countries with the goal of setting ceiling prices of patented medicines at the OECD median despite Canada being at the forefront of OECD economies in terms of wealth and other metrics. Specifically, the PMPRB changed its reference basket to remove the United States and Switzerland – two countries that take a more holistic view of the value of medicines – and to add six jurisdictions with lower drug prices and more onerous price controls: Australia, Belgium, Japan, the Netherlands, Norway and Spain. The new reference basket will now consist of Australia, Belgium, France, Germany, Italy, Japan, the Netherlands, Norway, Spain, Sweden and the United Kingdom. The United States is Canada's largest trading partner and the pharmaceutical markets in both countries share many common features, including important supply chains for the pharmaceutical industry. While PhRMA and its member companies believe that international reference pricing is a deeply flawed methodology that undermines continued R&D into medicines that patients need most, it is particularly egregious for Canada not to reference the United States and other countries with pro-innovation biopharmaceutical policies.

The Amended PMR also introduced new economic factors to determine whether a price is "excessive." The new economic factors to regulate prices include pharmacoeconomic evaluation based on an arbitrary monetary threshold of the value of an additional year of life; price ceilings based on projected market size; and the proportion of gross domestic product spent on patented medicines. Such thresholds will impact the future viability of many drugs for rare diseases, oncology treatments, cellular and gene therapy, precision medicine and other similar innovations in Canada. While cost-effectiveness thresholds are used downstream in other nations in making public reimbursement decisions and to guide public reimbursement decisions in Canadian provinces, their utilization as part of a binding regulatory price ceiling would be unique to Canada and duplicate existing public reimbursement processes.

Finally, the Amended PMR requires manufacturers to report all indirect price reductions given as a promotion or in the form of rebates, discounts, refunds, free goods, free services, gifts or any other benefit in Canada – including confidential rebates agreed to with public or private insurers in Product Listing Agreements (PLAs). Given the lack of information on the purpose and use of this information, this requirement has raised a number of legal concerns and this change was invalidated in separate federal and provincial court decisions, both of which are currently being appealed.

Additionally, the PMPRB has prematurely proposed an internal Guideline Monitoring and Evaluation Plan (GMEP) to monitor the anticipated impact of the proposed amendments to the PMR and Guidelines. Feedback from industry and other stakeholders has highlighted concerns with the changes and that it is inappropriate for the PMPRB to assess the impact of its own controversial changes. This feedback also referenced recent

media reports related to access to information requests by Canadian legislators calling into question the objectivity and neutrality of PMPRB consultation processes.[221]

Innovative Medicines Canada challenged the Amended PMR on several grounds through a judicial review proceeding.[222] The hearing took place on June 1-2, 2020, and Justice Manson of the Federal Court issued his decision on June 29, 2020.[223] The Applicants were partially successful in their arguments, as the Court held that the requirement for manufacturers to report all indirect price reductions is unlawful, void and of no force and effect because it extends beyond sales made by the patentee at the factory-gate. The existing provision of the Regulations will continue to operate as it currently reads. However, the Court upheld the other amendments relating to the new economic factors and the revised basket of reference countries. These amendments were scheduled to come into effect on July 1, 2021, but were further delayed to July 1, 2022, to account for the COVID-19 pandemic. Industry continues to challenge the remaining amendments and filed an appeal with the Federal Court of Appeal on September 10, 2020. While the appeal hearing is expected to take place in the first quarter of 2022, it is uncertain whether the decision will be issued before the amendments come into force on July 1, 2022.

In addition, seven innovative pharmaceutical companies have challenged the constitutional jurisdiction of the PMPRB's legislative and regulatory framework in the Superior Court of Quebec on the basis that price regulation is a provincial responsibility.[224] On December 18, 2020, the Quebec Superior Court, like the Federal Court before it, held that the PMPRB does not have the authority to regulate rebates, such that the new requirement to disclose PLAs was a direct incursion into the field of provincial jurisdiction. In addition, while the Court upheld the constitutionality of the remaining aspects of the PMR Amendments, the Judge pointed out (at para. 401) that it would not be acceptable if the PMPRB's implementation of the new factors is merely an indirect way of carrying out pure price control or setting the price as low as possible, without regard to the existence of excessive prices. As in the Federal dispute, industry continues to challenge the remaining amendments and filed an appeal with the Court of Appeal of Quebec on January 25, 2021. The appeal hearing took place on December 13-15, 2021 and a decision is expected in Q1 or Q2 of 2022.

Moreover, the process of implementing the Amended PMR through changes to the PMPRB's Guidelines raise many additional points of uncertainty and risk for U.S.

---

[221] *See*, *e.g.*, John Ivison "Liberal policies are pricing Canada out of the pharma market," *National Post*, June 4, 2021, available at https://nationalpost.com/opinion/john-ivison-liberal-policies-are-pricing-canada-out-of-the-pharma-market?video_autoplay=true (last visited Jan. 30, 2022).
[222] *Innovative Medicines Canada et al. v. Attorney General of Canada*, T-1465-19, S.18.1 Application for Judicial Review.
[223] *Innovative Medicines Canada et al. v. Attorney General of Canada*, 2020 FC 725, available at https://decisions.fct-cf.gc.ca/fc-cf/decisions/en/item/481803/index.do?q=innovative+medicines+canada (last visited Jan. 30, 2022).
[224] *Merck Canada Inc., et al. v. Procureur Général du Canada et Procureur Général du Québec*, No. 500-17-109270-192 Avis de questions constitutionnelles.

biopharmaceutical innovators. The PMPRB released its draft Guidelines on November 21, 2019, and released revised draft Guidelines on June 19, 2020, and final Guidelines on October 23, 2020. The final Guidelines are extremely complex and create further uncertainty for patentees. The Guidelines exacerbate concerns arising from the Amended PMR and if implemented as proposed, will have significant negative impacts on patentees and patients. On November 23, 2020, Innovative Medicines Canada – together with 19 of its member companies – filed a judicial review application in the Federal Court of Canada. The application was filed on the basis that the final PMPRB Guidelines are outside of PMPRB's authority under the *Patent Act*. They also direct the PMPRB to consider the Maximum Rebated Price in defiance of the June 2020 decision in the abovementioned judicial review challenge brought before the Federal Court of Canada (as well as the subsequent Quebec Superior Court decision on December 18, 2020). A hearing in the judicial review of the Guidelines will not occur until later this year.

In the thirty years since the PMPRB was established, a variety of mechanisms have emerged in Canada for the government and industry to work together to ensure the affordability of medicines. These mechanisms include the Canadian Agency for Drugs and Technologies in Health (CADTH) Reimbursement Reviews, the Institut national d'excellence en santé et services sociaux (INESSS) in Quebec, the pan-Canadian Pharmaceutical Alliance (pCPA) and confidential PLAs directly with public and private payors, among others. Indeed, the specific change to include a cost-effectiveness factor as part of PMPRB's price evaluation overlaps with and duplicates the work of existing publicly funded agencies (e.g., pCPA) and its major beneficiary would be for-profit private insurers as opposed to patients. Any expansion of the PMPRB's mandate is therefore unnecessary and would harm U.S. innovative biopharmaceutical companies and the patients they serve.[225]

Patented medicines accounted for only 6.5 percent of Canadian health care spending in 2019[226] and have not grown in real terms over the last decade.[227] These data suggest that patented medicines are not the primary cost driver of health care spending, which calls into question whether the regulatory changes will generate benefits to outweigh the potential risks to access and innovation that will result. Low prices should

[225] As it is, PMPRB is already taking decisions that exceed its statutory mandate. On July 29, 2021, the Federal Court of Appeal ruled against a decision of the PMPRB requiring that the price of Alexion's Soliris® be lower than that in the Board's seven comparator countries. *See Alexion Pharmaceuticals Inc. v. Canada (Attorney General)*, 2021 FCA 157, available at https://decisions.fca-caf.gc.ca/fca-caf/decisions/en/item/500849/index.do?q=alexion (last visited Jan. 30, 2022). The Federal Court of Appeal held forcefully that the Board's decision went beyond its statutory mandate, engaging in the regulation of what it viewed to be reasonable prices for medicines, rather than its proper mandate of determining whether a medicine's price is "excessive", i.e., an abuse of the innovator's patent rights. The federal government has sought leave to appeal to the Supreme Court of Canada and that application is pending.

[226] Based on analysis of information from the *Canadian Institute for Health Information*, available at https://www.cihi.ca/sites/default/files/document/nhex-trends-2020-narrative-report-en.pdf (last visited Jan. 30, 2022) and the PMPRB Annual Report 2019, available at https://www.canada.ca/en/patented-medicine-prices-review/services/annual-reports/annual-report-2019.html (last visited Jan. 30, 2022).

[227] *Id.*

not be the only goal of pharmaceutical policy and we urge the government to carefully consider the impact of pricing policies on access to new medicines, clinical studies, launch of new treatments, investment, jobs and the research ecosystem as a whole.

PhRMA requests that the U.S. Government urge the Canadian Government to reconsider any changes to the PMPRB's mandate that would harm U.S. innovative biopharmaceutical companies and undermine the competitiveness of Canada's life sciences sector. The PMPRB's role must be placed in its proper context with the many other agencies already active in the Canadian pharmaceutical marketplace and should not be a means to unreasonably prejudice the legitimate interests of a patent owner, consistent with Canada's international obligations to protect patents.

The PMPRB is also required to report to the Federal Minister of Health on pharmaceutical trends and on R&D spending by pharmaceutical patentees. Due to the antiquated 1987 tax law formula used to measure R&D spending, which is referenced in its governing regulations, PMPRB has consistently and systematically under-reported the R&D levels of innovative pharmaceutical companies operating in Canada for many years, underestimating the industry's contribution to private sector R&D spending and lessening the government's willingness to address the myriad issues described above. To the extent that the PMPRB should have a mandate to report on R&D spending in Canada, PhRMA members urge the U.S. Government to encourage Innovation, Science and Economic Development Canada to engage with industry as it assesses how to update the regulatory R&D definition so that the PMPRB can more accurately calculate the significant R&D contributions made by pharmaceutical patentees to the Canadian knowledge-based economy.

Regulatory Barriers to Patient Access to New Medicines

Beyond the regulatory approval for safety and efficacy, there are additional market access barriers that significantly delay Canadian patients' ability to access new medicines and vaccines. These include the PMPRB review, health technology assessments, price negotiations through the pan-Canadian Pharmaceutical Alliance (pCPA) and, finally, the execution of PLAs with individual public and private drug plans. Eighty-six percent of new medicines launched globally since 2010 are available in the United States compared to just 47 percent in Canada, with Canadian patients waiting an average of 17 months from global first launch for the fewer medicines that do become available.[228] However, even after a medicine becomes available in Canada, there are additional delays to listing on a public formulary. Following market authorization, the time it takes to list products on provincial formularies has almost doubled since the 2013-2015 period.[229] In 2020, time to listing data for products launched between September 1, 2019, to August 31, 2021,

[228] PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2020. June 2021.
[229] Innovative Medicines Canada analysis of Health Canada, CADTH, INESSS, pCPA, and provincial listing data collected by IQVIA, available at http://innovativemedicines.ca/resource/les-regimes-dassurance-publics-canadiens-et-les-retards-dans-lacces-des-patients-aux-medicaments-novateurs/ (last visited Jan. 30, 2022).

indicate that it took an average of 280 to 673 days across the different provinces after Health Canada approval before patients were able to access a new medicine.[230] In comparing the national average to international reimbursement data, time to listing in Canada takes 264 more days than the OECD median.[231]

Overall, these barriers significantly delay the benefits of new medicines and vaccines for Canadian citizens and erode the already limited time that innovative companies have to commercialize their significant investments in R&D, clinical trials and regulatory approval processes. PhRMA and its member companies urge the U.S. Government to engage with the Canadian Government on these growing delays that are hindering patient access to new medicines.

Intellectual Property Protection

Weak Patent Enforcement

In 1993, the PM(NOC) Regulations were promulgated for the stated purpose of preventing the infringement of patents by the premature market entry of generic drugs as a result of the "early working" exception. In 2015, the Canadian Government helped resolve significant difficulties related to inappropriate court decisions that prevented the listing of patents relevant to combination inventions, which seriously undermined patent enforcement actions relevant to those inventions. However, serious and systemic deficiencies remain with the PM(NOC) Regulations. The regulations do not reliably provide "expeditious remedies to prevent infringements and remedies which constitute a deterrent to further infringements," as required under USMCA and the TRIPS Agreement. For example:

1. Proceedings under the PM(NOC) Regulations and appeal rights

The negotiated CETA text stipulates that "patent linkage" systems must provide all litigants with "equivalent and effective rights of appeal." The intention behind this negotiated outcome was to address the asymmetry in legal rights that flowed from Canada's previous restrictive PM(NOC) Regulations regime under which a patent owner did not have an equal ROA as that afforded to a generic drug producer. CETA simply required Canada to correct this imbalance. The changes to the PM(NOC) Regulations,[232] however, have proven to be far more extensive than necessary to comply with Canada's CETA obligations in a manner that prejudices existing innovator rights.

For example, despite adopting significantly more procedural complexity under the new regime, including full pleadings, discovery and trials in order to make final patent

[230] IQVIA Formulary Acceptance: Monitoring & Evaluation (FAME) Database. November 2021.
[231] Innovative Medicines Canada analysis of IQVIA International Reimbursement Comparison data, available at http://innovativemedicines.ca/resources/pcpa-trends-update/ (last visited Jan. 30, 2022).
[232] Regulations Amending the Patented Medicines (Notice of Compliance) Regulations, 2017, available at http://www.gazette.gc.ca/rp-pr/p2/2017/2017-09-07-x1/html/sor-dors166-eng.php (last visited Jan. 30, 2022).

determinations in a single proceeding, Canada has maintained the same 24-month statutory stay that governed the old summary system. As a result, the innovative industry is concerned that patentees will now be forced to choose between the surrender of procedural rights and obtaining any kind of meaningful injunction under the new regime, contrary to Canada's many other related international obligations to protect intellectual property rights.

2. Limitation on Listing of Valid Patents and Inequitable Listing Requirements

Patent owners continue to be prevented from listing their patents on the Patent Register established under the PM(NOC) Regulations if the patents do not meet certain arbitrary timing requirements that are not present in the United States under the Hatch-Waxman Act. The effect of these rules is to deny innovative pharmaceutical companies access to enforcement procedures in the context of early working for any patent not meeting these arbitrary listing requirements.

In addition, the PM(NOC) Regulations may only apply to patented products that are marketed in Canada, despite being approved by the health authority and having an assigned drug identification number.[233] This is contrary to Canada's obligations under USMCA, which require effective patent enforcement for all "approved" drugs.

3. Excessive Level of Liability for Lost Generic Profits

The PM(NOC) Regulations allow an innovator to seek an order preventing a generic manufacturer from obtaining Notice of Compliance, on the basis that the innovator's patent covers the product and is valid. When the innovator seeks such an order, but is ultimately unsuccessful, Section 8 provides the generic manufacturer the right to claim damages in the form of lost profits for the period of time they could have been selling the product, but for the innovator's action. As such, Section 8 unreasonably prejudices the legitimate interests of the patent owner. One legitimate right of a patent owner is to petition the government to enforce a patent which that government granted in the first place. Unless the patent owner has obtained its patent by fraud or otherwise knows that the patent is invalid or uninfringed, any grievance or damages claim by a generic manufacturer in connection with a patent that is later found invalid or uninfringed should not result in punishment of a patent owner for relying in good faith on a patent duly issued by the Canadian Intellectual Property Office (CIPO).

PhRMA members are also concerned that Canadian courts have taken an approach to Section 8 damages that allows for excessive damages. Subsection 8(1) compensates for all losses actually suffered in the period during which the second person/company was held off the market – a provision that, as currently interpreted by the courts, has led to instances of overcompensation. The Courts have granted damages in excess of 100 percent of the total generic market, despite holdings that the provision

[233] Patented Medicines (Notice of Compliance) Regulations, SOR/93-133, s 5(1), available at https://laws-lois.justice.gc.ca/eng/regulations/sor-93-133/index.html (last visited Jan. 30, 2022).

is meant to be compensatory and not punitive in nature. Such overcompensation is contrary to the law of damages and reflects a punitive as opposed to a compensatory theory of damages.[234, 235]

Recent CETA implementing regulations established new rules that further expose innovators to excessive liability under Section 8. The amended PM(NOC) regulations eliminate previous language specifying that the period during which the innovator is liable to the competitor for any losses suffered ends on the date the stay is withdrawn or discontinued by the innovator or is dismissed or reversed by the court. This unwarranted change is likely to result in excessive damages awards by enabling competitors to claim indefinite future losses and to seek compensation for production "ramp-up" costs they may have incurred before the stay was granted and after it was lifted. In addition, innovators are now "jointly and severally" liable for any damages. Expanding the scope of liability in this manner will enable competitors to claim damages from local subsidiaries or licensees, as well as their licensors or corporate partners in the United States.

Also in the area of excessive damage liability, PhRMA members are concerned about ongoing litigation under various common law theories within the provincial courts. In spite of Canadian PM(NOC) Regulations governing compensatory damages for generic companies held off the market due to patent litigation, other proceedings have been allowed to proceed under various common law theories (Statute of Monopolies, Trademarks Act, unjust enrichment and others). These cases could result in damages or liability for PhRMA members which exceed the compensatory threshold.

Therefore, PhRMA members request that the U.S. Government urge Canada to implement amendments to the PM(NOC) Regulations to address this issue.

Inadequate Patent Term Restoration

PTR seeks to compensate for a portion of the crucial effective patent life lost due to clinical trials and the regulatory approval process. Most of Canada's major trading partners, including the United States, the European Union and Japan, offer forms of PTR

[234] The Supreme Court of Canada granted leave with respect to a Section 8 damages case, but in April 2015 dismissed this case from the bench, stating that it did so substantially for the reasons of the majority in the Federal Court of Appeal. *Sanofi-Aventis, et al. v. Apotex Inc., et al.*, SCC. 35886, available at http://www.scc-csc.gc.ca/case-dossier/info/dock-regi-eng.aspx?cas=35886 (last visited Jan. 30, 2022). The dismissal of the appeal provided parties to Section 8 damages litigation with no meaningful higher court guidance with respect to how these damages are to be calculated in future lower court decisions, which means any clarity must come from regulatory amendments by the Government of Canada.

[235] On April 23, 2018, Eli Lilly Canada (Lilly) applied to the Supreme Court of Canada for leave to appeal in respect of a March 2018 decision of the Federal Court of Appeal. The Federal Court of Appeal had dismissed Lilly's appeal of a trial decision awarding more than $70 million to Teva Canada (Teva) under Section 8. The Federal Court of Appeal granted Teva's cross-appeal seeking to add to its recovery lost sales and an adjustment to account for an under-reporting of sales in the data relied on by both parties' experts. *Eli Lilly Canada Inc v Teva Canada Limited*, 2018 FCA 53, available at https://decisions.fct-cf.gc.ca/fca-caf/decisions/en/307557/1/document.do (last visited Jan. 30, 2022). Lilly was denied leave by the Supreme Court of Canada on November 8, 2018.

which generally allow patent holders to recoup a valuable portion of a patent term where time spent in clinical development and the regulatory approval process has kept the patentee off the market. In these countries, up to five years of lost time can be recouped.

By way of implementing CETA, Canada has made a potentially significant step to provide innovators with some compensation for delays in obtaining marketing approval for pharmaceuticals. Under CETA, Canada agreed to implement a "*sui generis* protection" period of between 2 to 5 years for pharmaceuticals to compensate for delays in drug marketing approval, subject to certain specified conditions.

However, PhRMA has concerns with Canada's implementation of this commitment under the new Certificate of Supplemental Protection (CSP) Regulations.[236] At a fundamental level, the *sui generis* protection provided by the CSP does not appear to grant the full patent protections that PTR is intended to provide and instead appears to be implemented subject to an exception for "manufacture for export." While this is permitted by the CETA text, this is not consistent with Article 20.46 of the U.S.-Mexico-Canada Agreement (USMCA) or PTR in other jurisdictions.[237] Implementing PTR so that it does not confer full patent rights, e.g., providing an exception for "manufacturing for export" or other infringing activities, is not consistent with the fundamental purpose of restoring patent term lost due to the lengthy marketing approval process.

Moreover, having only adopted the minimum term of PTR negotiated under CETA (i.e., Canada's term is capped at two years of a possible five), Canada's further adoption of restrictive time limits and eligibility criteria will unduly and unreasonably limit CSP eligibility in Canada in a manner that is contrary to the intent of the negotiation and the CETA text itself.

In particular, the CSP Regulations introduce a new and complex CSP application requirement whereby only those Canadian new drug submissions (NDSs) filed within 1 year of any first international drug submission filed for the same drug (in any of EU, US, Australia, Switzerland or Japan) will be CSP eligible (the "Timely Submission Requirement"). The Timely Submission Requirement is a novel requirement in Canada that is unprecedented amongst the PTR regimes of Canada's major trading partners, including the United States. PhRMA is concerned that the 1-year time limit being enforced under the Timely Submission Requirement will inappropriately bar otherwise deserving and eligible innovative medicines from benefiting from the period of *sui generis* protection.

Moreover, Canada's new PTR regime requires that CSP-eligible medicinal ingredients be "first" approvals. Unlike other jurisdictions, Canada has further implemented a list of "variations" of medicinal ingredients and other prior drug approvals that will automatically exclude new drug submissions from possible CSP eligibility. Neither

[236] Available at http://www.gazette.gc.ca/rp-pr/p2/2017/2017-09-07-x1/html/sor-dors165-eng.php (last visited Jan. 30, 2022).
[237] *See* Solovy, E., "A Manufacturing-for-Export Exception to Patent Protection: A Proposal for Exporting Violations of the TRIPS Agreement and Beyond," Journal of IP Law and Practice (Sep. 2017).

the U.S. nor EU patent term extension regimes provide enumerated lists of excluded variations ineligible for CSP.

Finally, Canada is interpreting the CSP Regulations in a manner that is inconsistent with CETA and in a way that disregards clear clinical evidence. In the first judicial review decision under the CSP Regulations, the Federal Court reinforced Canada's requirement to comply with the rationale, purview and specific constraints of the statutory scheme and any relevant international law, including CETA.[238] However, the Federal Court's decision was overturned on appeal.[239]

We urge the U.S. Government to engage with the Canadian Government on this issue in all available fora and encourage Canada to join the ranks of other industrialized countries who are champions of IP protection internationally and to provide for effective and competitive PTR measures in Canada. CSP eligibility should not be circumscribed by overly restrictive enumerated exclusions on medicinal ingredients and patents.

Implementing Patent Term Adjustment

Under USMCA, Canada must introduce legislation to implement a patent term adjustment (PTA) mechanism to compensate patentees for "unreasonable" delays in the patent examination process. While Canada has until January 1, 2025, to enact such legislation, to date no consultations have been announced for stakeholder input. We urge the U.S. government to initiate discussions with the Canadian Government to implement these crucial IP protections in a fulsome and meaningful way.

Standard for the Disclosure of Confidential Business Information

PhRMA members are concerned with amendments to the Food and Drugs Act,[240] which could allow for an unprecedented disclosure of CBI contained in clinical trial and

[238] On April 7, 2020, the Federal Court issued its first judicial review decision under the CSP Regulations. The Court held that the Minister's decision to deny a CSP for the drug Shingrix® was unreasonable. While the Minister was ordered to redetermine the matter on the merits, the Minister is appealing the court's decision. The parties disagree on whether a particular vaccine adjuvant is a medicinal ingredient for the purpose of applying the CSP Regulations. Protecting vaccine adjuvants as "medicinal ingredients" promotes innovation and is consistent with the object of CETA. In determining that the Minister's decision was unreasonable, the Federal Court held that Minister's rationale demonstrated "administrative tunnel vision" and failed to address "highly relevant considerations."
GlaxoSmithKline Biologicals S.A. v. The Minister of Health, 2020 FC 397, available at https://decisions.fct-cf.gc.ca/fc-cf/decisions/en/item/468729/index.do?q=shingrix (last visited Jan. 30, 2022).

[239] On April 14, 2021, the Federal Court of Appeal issued its decision allowing the appeal in favour of the Minister of Health. The Court held that, while there was more than one reasonable interpretation of the legislation, the Minister's reading was a reasonable one. With respect to CETA, the Court found that Canada had only agreed to provide protection in a "very specific and limited way of doing so". *The Minister of Health v GlaxoSmithKline Biologicals S.A.,* 2021 FCA 71, available at https://decisions.fca-caf.gc.ca/fca-caf/decisions/en/item/495570/index.do (last visited Jan. 30, 2022).

[240] *See* http://www.parl.gc.ca/HousePublications/Publication.aspx?Language=E&Mode=1&DocId=6676418&File=4 (last visited Jan. 30, 2022).

other data submitted by pharmaceutical companies in the course of seeking regulatory approval for medicines. The amendments could significantly impact incentives for drug innovation and are inconsistent with Canada's international treaty obligations.

There is particular concern surrounding issues of confidentiality, the broad definition of CBI (broad enough to also cover trade secrets) and the threshold for the disclosure of CBI by Health Canada to governments and officials, as well as to the public. These amendments are inconsistent with the standards set out in other Canadian federal health and safety legislation, including similar provisions in more recent federal legislation,[241] are inconsistent with Canada's treaty obligations under USMCA and TRIPS as well as the standards and practices of other national health regulators, including the U.S. Food and Drug Administration.

Both USMCA and the TRIPS Agreement require that CBI be protected against disclosure except where necessary to protect the public. For disclosure to the public, the amendments require a "serious risk," but it does not reach the standard set out in the treaty language since subjective and discretionary language has been included: the Minister may disclose CBI "if the Minister believes that the product may present a serious risk of injury to human health." (Emphasis added.) In other words, it is not necessary that there be a serious risk of injury to justify the disclosure; rather the amendments merely require that the Minister believes the disclosure to be necessary.

The amendments also state that the Minister may disclose CBI to a person who "carries out functions relating to the protection or promotion of human health or safety of the public" and this can be done "if the purpose of the disclosure is related to the protection or promotion of health or safety of the public." There is no necessity requirement for the disclosure to occur, only that it be related to protecting or promoting health. USMCA and TRIPS do not refer to disclosure for the promotion of health, but rather to disclosure needed to protect the health of the public.

Finally, the amendments provide inadequate protections to ensure that there is no unfair commercial use of the disclosed CBI as required by TRIPS Article 39.3. The potential recipients of the disclosed CBI are very broad and there is no mechanism, such as a confidentiality agreement, to ensure that those recipients (or anyone else to whom they disclose that data) are not able to use the divulged CBI to secure an unfair commercial advantage.

In July 2015, a final guidance document was issued by Health Canada with respect to the administration of its powers to require and disclose CBI.[242] PhRMA and its member

[241] *Hazardous Materials Information Review Act*, Amendments to the Act, 2019, Subdivision H, Disclosure of Confidential Business Information, available at https://www.parl.ca/DocumentViewer/en/42-1/bill/C-97/royal-assent (last visited Jan. 30, 2022).
[242] *See* Amendments to the Food and Drugs Act: Guide to New Authorities (power to require and disclose information, power to order a label change and power to order a recall), available at http://www.hc-sc.gc.ca/dhp-mps/legislation/unsafedrugs-droguesdangereuses-amendments-modifications-eng.php (last visited Jan. 30, 2022).

companies are pleased that the document provides some reassurances with respect to the administration of Health Canada's new powers under the amended Food and Drugs Act. However, the document is a non-binding guidance as opposed to binding law or regulations.

In September 2015, a pharmaceutical company was subjected to a disclosure by Health Canada of CBI related to its pharmaceutical product, representing the first known usage of the new legislative disclosure powers. Following a request made under the new mechanisms in the Food and Drugs Act, approximately 35,000 pages of raw trial data were released, demonstrating the potential prejudice to U.S. innovative biopharmaceutical companies that could result from future CBI disclosures.[243]

More recently, in December 2017, Health Canada released a draft regulatory package that would amend the Food and Drug Regulations (Regulations) and facilitate automatic public access to manufacturer submitted clinical information following the issuance of a final Health Canada regulatory decision.[244] As previously noted, those Regulations were published March 20, 2019.

The Regulations specify the scope of clinical information in drug submissions that cease to be CBI following the issuance of a final regulatory decision (Notice of Compliance, Notices of Non-Compliance – Withdrawal, or Notice of Deficiency – Withdrawal). The amendments authorize the Minister to release information that has ceased to be CBI to the public without notifying or receiving consent from the originator. Clinical information provided in drug submissions would continue to be treated as confidential during the regulatory review process. In addition, the Regulations apply to drugs for human use and medical devices and apply to clinical information in drug submissions filed with Health Canada both before and after the coming into force of the Regulations. The Regulations establish a mechanism to release previously submitted information, even from years or decades prior, within the scope of public disclosure.

Further complicating matters, on July 9, 2018, the Federal Court of Canada issued a decision ordering Health Canada to release vast amounts of pharmaceutical clinical trial data on five medications, undercutting the federal government's attempts to keep the information confidential. The effect of this decision, which Health Canada chose not to appeal, on the Regulations and/or the guidelines document is unknown at present, but it

[243] *See* selected media reports on the CBI disclosure: David Bruser and Jesse McLean, "Health Canada Hands Over Documents But Muzzles Doctor," *Toronto Star* (Oct. 14, 2016), available at https://www.thestar.com/news/canada/2015/10/14/health-canada-hands-over-documents-but-muzzles-doctor.html (last visited Jan. 30, 2022); Anne Kingston, "Health Canada OKs research into popular morning-sickness drug," *Macleans* (Nov. 23, 2015), available at http://www.macleans.ca/society/health/health-canada-oks-research-into-popular-morning-sickness-drug/ (last visited Jan. 30, 2022).

[244] Canada Gazette, Part II, Regulations Amending the Food and Drug Regulations (Public Release of Clinical Information), Vol. 151, No. 49, December 9, 2017, available at https://canadagazette.gc.ca/rp-pr/p1/2017/2017-12-09/html/reg3-eng.html (last visited Jan. 30, 2022).

presents the risk that the scope of clinical information susceptible to public release will be made even broader than under the current regulatory and guidance document proposals.

PhRMA members therefore urge the U.S. Government to press the Canadian Government to ensure that regulations to implement these amendments to the Food and Drugs Act are consistent with Canada's international treaty obligations.

EUROPE

RUSSIA

PhRMA and its member companies operating in Russia are dismayed by steps taken by the Russian Government to issue and extend further a compulsory license (CL) for a COVID-19 medicine, and legislative amendments that would enable the government to issue compulsory licenses on vague and ambiguous grounds. These actions follow years of legislative and judicial efforts to expand inappropriately compulsory licensing mechanisms in Russia. In addition, we are concerned with a number of market access barriers, especially those linked to intellectual property (IP) protection, planned government procurement restrictions and import substitution efforts, all of which undervalue innovation in Russia and the benefits it brings to Russian patients.

Key Issues of Concern:

- **Compulsory licensing**: Over the last few years several actions have been taken at the legislative, executive and judicial level to facilitate compulsory licensing in Russia. This includes passage of federal legislation to allow for the issuance of CLs both for use in Russia and for export, as well as the imposition of a CL at the end of 2020 (via Decree No. 3718-r) on a COVID-19 therapeutic, which was recently extended for another year. Similarly, PhRMA members are witnessing a rising trend in court cases seeking CLs for dependent patents. Russian courts, in at least two cases, have granted CLs to generic companies for innovative foreign medicines based on an extremely low evidence test and standard of proof.

- **Weak patent enforcement**: Russian courts rarely grant preliminary injunctions in patent infringement cases related to pharmaceuticals. As a result, biopharmaceutical innovators face significant legal challenges in seeking to effectively protect their innovative products against infringement, resulting in significant damages that are rarely compensable. This practice is out of step with the rest of the world and considerably weakens Russia's IP protection regime. There is no effective mechanism in place in Russia to provide patent holders with an opportunity to resolve patent disputes prior to the launch of a follow-on product. This has led to the approval and marketing of follow-on products during the period of patent protection. In light of these problems, PhRMA and its member companies are encouraged by recent legislative proposals to implement a Unified Register of Active Pharmacological Substances Protected by Patents. All necessary medicine patents should be included in the register in order to ensure its utility and effectiveness."

- **Localization barriers and government procurement restrictions**: Despite being in the process of acceding to the World Trade Organization (WTO) Agreement on Government Procurement (GPA), Russia continues to pressure local production of medicines through its government procurement system (e.g., restrictions on public procurement of imported medicines where there are at least two pharmaceuticals with locally produced finished dosage forms, so-called

"three's a crowd") and 25 percent price preference for products for which all stages of production are carried out locally. If "three's a crowd" is not applicable, a 15 percent price preference is applied. The Russian Government has prioritized the complete (*i.e.*, "full-cycle") localization of production in the national Pharma 2030 strategy. Moreover, in August 2020, Russia released a list of more than 200 "strategically important medicines" that must be produced in Russia.

- **Deteriorating government pricing environment**: On October 18, 2018, a new pricing methodology for products included on the Essential Drug List (EDL) came into force that impacts ceiling price calculation and the international reference pricing methodology. In addition, in December 2019, the Russian Government approved Resolution No. 1683 in accordance with which market participants were forced to carry out mandatory re-registration of all maximum selling prices for EDL medicines in 2019-2020. Motivated by significant disruptions to state tenders and medicine shortages, in 2020, the Russian Government adopted measures permitting increases in the registered prices for EDL medicines.

For these reasons, PhRMA requests that Russia remain on the **Priority Watch List** in the 2022 Special 301 Report. Further, we urge USTR to provide an opportunity for an assessment of Russia's IP and market access environment through an **Out-of-Cycle Review**, so that the U.S. Government can evaluate progress on these important issues and dedicate the required bilateral attention necessary to make progress on the barriers confronted by U.S. businesses in Russia.

Intellectual Property Protection

Compulsory Licensing

PhRMA and its member companies are deeply concerned by compulsory licensing actions in Russia and by enacted legislative changes that could promote the use of this drastic measure.

On April 30, 2021, Federal Law No. 107-FZ on "Amendments to Article 1360 of Part IV of the Civil Code of the Russian Federation" was approved, thereby authorizing the Government to issue CLs on numerous grounds including to protect the life and health of Russian citizens in an emergency.[245] Furthermore, on June 11, 2021, Russia passed legislation (Federal Law No. 212-FZ) to allow for exports of compulsory licensed medicines pursuant to Article 31bis of the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS).[246]

[245] The Federal Law of April 30, 2021 No. 107-FZ "On Amendments to Article 1360 of Part IV of the Civil Code of the RF" entered into force on May 11, 2021. See http://publication.pravo.gov.ru/Document/View/0001202104300061 (last visited Jan. 30, 2022).
[246] The Federal Law of June 11, 2021 No. 212-FZ "On Amendments to Part IV of the Civil Code of the RF" introducing new article 1360.1 on compulsory licensing for export purposes entered into force on June 22, 2021. *See* http://publication.pravo.gov.ru/Document/View/0001202106110074 (last visited Jan. 30, 2022).

On October 18, 2021, the Russian Government adopted Resolution No. 1767 "On the Methodology for Determining the Compensation Amount Payable to a Patent Holder if a Decision Has Been Made to Use an Invention, Utility Model, or Industrial Design without the Consent of the Patent Holder and on the Payment Procedure." Contrary to the requirement in Article 31(h) of the TRIPS Agreement that "the right holder shall be paid adequate remuneration in the circumstances of each case, taking into account the economic value of the authorization," the Government approved a standardized royalty of just 0.5 percent. Similarly, the Government of Russia released a draft Resolution "On the Use of the Invention for the Production of a Medicine for the Purpose of its Export in Accordance with an International Agreement of the Russian Federation." Again, contrary to the requirements of the TRIPS Agreement, the draft proposes a standardized royalty of just 0.5 percent for a CL for export.[247]

PhRMA members are concerned that these mechanisms may be used broadly – beyond the limited exception anticipated by TRIPS – particularly given the imposition of a CL at the end of 2020 on a COVID-19 therapeutic based on so-called national security concerns,[248] which was recently extended by another year.[249] Industry has also witnessed an overall rising trend in court cases seeking CLs for dependent patents. In its decision dated June 8, 2018, the Moscow Arbitration Court (1st Instance) granted a CL for an innovative cancer medicine developed in the United States to a local generic drug company.[250] This decision was based on an extremely low evidence test and standard of proof. The dependent patent was later annulled by Rospatent on November 26, 2018, and the court case was dismissed. In early 2019, the Moscow Arbitration Court (1st Instance) issued a CL against another innovative manufacturer based on a counterclaim by the same local generic drug company;[251] the decision was upheld by the appellate court, the IP Court (Oct. 2019) and by the Russian Supreme Court (Feb. 2020).[252] These decisions establish dangerous precedents based on low or incorrect standards of proof and misinterpretations of international jurisprudence.

Restrictive Patentability Criteria

On May 27, 2016, the Federal Antimonopoly Service (FAS) published on its official website, the draft *Roadmap for Development of Competition in the Healthcare Sector*. As noted above, the Roadmap was approved by the Russian Government on January 12,

[247] *See* Project ID: 02/07/09-21/00120219, available at http://regulation.gov.ru/p/120219 (last visited Jan. 30, 2022).
[248] *See* Decree No. 3718-p (Dec. 31, 2020).
[249] *See* "Russia extends production of COVID-19 drug remdesivir without patent for a year," Reuters (Dec. 30, 2021), available at https://www.reuters.com/business/healthcare-pharmaceuticals/russia-extends-production-covid-19-drug-remdesivir-without-patent-year-2021-12-30/ (last visited Jan. 30, 2022).
[250] Available at http://kad.arbitr.ru/Card/322413fa-38a7-4085-9cc7-3c8ff9fd7d92 (last visited Jan. 30, 2022).
[251] Available at http://kad.arbitr.ru/Card/3a0440d1-5ba5-4049-ac4c-7be5b9edc09c (last visited Jan. 30, 2022).
[252] Available at https://kad.arbitr.ru/Document/Pdf/3a0440d1-5ba5-4049-ac4c-7be5b9edc09c/71db5389-d61e-4190-a963-a1ccf50d0184/A40-166505-2017_20200220_Opredelenie.pdf?isAddStamp=True (last visited Jan. 30, 2022).

2018, via Decree No. 9-r. The Roadmap, *inter alia*, proposed amendments to patentability criteria, for any new property or new application of a known active ingredient of a medicinal product (including new indications, new treatment methods, new combinations and new pharmaceutical forms and manufacturing methods). Those recommendations have been advanced by the Ministry of Economic Development (MoED), first through Order No. 527 on "double patenting" of pharmaceutical compositions and their uses (2018) and more recently through Order No. 155 (March 2021), which imposes heightened patentability criteria for new forms (e.g., isomers, stereoisomers, enantiomers and polymorphs) and uses of a known chemical compound or derivatives (e.g., salts, solvates, esters, etc.). PhRMA and its members are monitoring the implementation of the relevant amendments, but are highly concerned that these new criteria will be used to deny patents on important innovations.

Weak Patent Enforcement

Russia does not maintain an effective mechanism for early resolution of patent disputes before potentially infringing products enter the market. Follow-on drug manufacturers can apply for and receive marketing approval for a generic product – and in turn participate in state tenders – even though a patent for the original drug is still in force.

Further, while there have been some positive court decisions (including by the Russian Supreme Court),[253] there are still very few mechanisms available to enforce those decisions. Furthermore, Russian courts rarely grant injunctive relief and some lower courts do not appear to follow the Supreme Court's decision. This results in instances where cases need to be remanded multiple times to the lower courts in order to issue decisions that are consistent with the Supreme Court's jurisprudence.[254] In short, biopharmaceutical innovators face significant legal challenges effectively protecting their innovative products against infringement, resulting in significant irreparable damages.

Such practices are contrary to Russia's obligations under TRIPS and the assurances Russia made to the WTO Working Party on the Accession of the Russian Federation to the WTO. In particular, they are inconsistent with TRIPS Article 41, which requires Members to provide "expeditious remedies to *prevent* infringements" (emphasis added) and provisions of Article 50 with respect to provisional measures. Russia assured the WTO Working Party that it would "counteract ... infringements of intellectual property through improvements in enforcement." However, considering the current efforts by the government to improve the situation, the industry stands ready to contribute to the formation of an effective IP protection environment.

[253] Available at http://kad.arbitr.ru/Card/414811f6-22f6-4719-a406-23e3c00a82eb (last visited Jan. 30, 2022) (upholding the findings of the lower courts that registration of a generic, as well as registration of its price, may be a threat to the original patent protecting the active ingredient. As a result of this case, a generic manufacturer was ordered by the court to apply to the Ministry of Health to annul its registration certificate.).
[254] *See*, *e.g.*, https://kad.arbitr.ru/Card/53f07f2a-fe8f-4674-aef4-d6d19f474c42 (last visited Jan. 30, 2022).

Encouragingly, in August 2021, the Ministry of Economic Development released a Draft federal law "On the Register of Pharmacologically Active Substances Protected by Patents for Invention" and made this draft available for public discussions in December 2021. Per that draft, Russia would create a national register of certain patents on pharmacologically active substances in the Russian Federation. There is a general understanding that the register may be used in the future as an additional IP protection tool in court proceedings. Industry is actively engaging with the Russian Government on the development of the law to ensure that it meets its promise and includes provisions to allow for the effective resolution of patent disputes before potentially infringing follow-on products enter a market, obtain state price registration or participate in tenders.

Regulatory Data Protection Failures

As part of its accession to the WTO in 2012, Russia agreed to provide six years of regulatory data protection (RDP) for all medicines.[255] Article 18 of the Federal Law No. 61-FZ[256] ostensibly provided this protection by prohibiting follow-on manufacturers (unless with the innovator's consent) from securing approval for their product based on the preclinical and clinical trial data submitted by the innovator for the reference product for a period of six years.[257] However, when the new Eurasian Economic Union (EAEU) rules for registration of new medicines across the Union went into effect on January 1, 2021, this aspect of Federal Law No. 61-FZ formally ceased to exist. Given that the new EAEU registration rules did not ultimately include similar provisions to ensure RDP in Russia (and across the EAEU), Russia's Ministry of Health (MoH) has taken the position that they no longer have a basis for rejecting follow-on marketing approval applications during the six-year RDP term included in the former registration law. To date, we are aware of at least one instance in which the MoH has accepted a generic application for review even though less than four years has passed since the underlying innovative product was approved.[258] Notably, approval was sought for the same generic product under the previous Russian registration system (Law No. 61-FZ), but was denied review consistent with Article 20 of that law. Industry through its local associations has proposed

[255] Report of the Working Party on the Accession of the Russian Federation to the World Trade Organization, WT/ACC/RUS/70, WT/MIN(11)/2 (Nov. 17, 2011), at para. 1295, incorporated in Protocol on the Accession of the Russian Federation, WT/MIN(11)/24, WT/L/839 (Dec. 17, 2011), at para. 2.
[256] The Federal Law No. 61-FZ dated 12 April 2010 "On Circulation of Medicines".
[257] In turn, Articles 20 and 21 of Law No. 61-FZ specified that generic and biosimilar applications could not be submitted for state registration until four and three years after approval of the reference innovative product, respectively.
[258] See https://pharmvestnik.ru/articles/Djenerikam-svetit-zeleneushii-krasnyi.html?utm_source=letternews&utm_medium=letter&utm_campaign=daily (last visited Jan. 30, 2022).

solutions to remedy this issue at both the EAEU and national level, but as yet no action has been taken to ensure that Russia honors its WTO commitment to provide RDP.

Parallel Imports

Currently, parallel imports are prohibited from countries outside the EAEU, based on the regional principle of exhaustion of trademark rights. However, in April 2017, the Board of the EEC approved the draft Protocol on Amendments to the Treaty on the Eurasian Economic Union of May 29, 2014, which suggested granting the Eurasian Intergovernmental Council the authority to use the international principle of exhaustion of trademark rights in respect to certain products (pharmaceuticals were one of the product groups under discussion). Although no further steps were made by the EEC since 2017, PhRMA and its member companies remain concerned that these discussions may at some point be renewed and cause medicine shortages in exporting countries and compromise the security of medicine supply chains.

Market Access

Localization Barriers and Government Procurement Restrictions

Russia is in the process of acceding to the GPA and currently participates in the Committee as an observer.[259] Notwithstanding the GPA accession process, Russia continues discriminatory practices in its government procurement practices. Indeed, in July 2021, the European Union requested consultations with Russia in the WTO regarding certain Russian measures that restrict or prevent EU companies from selling goods and services to Russian state-owned enterprises and other entities through procurement for commercial purposes.[260]

In November 2015, the Russian Government adopted Resolution No. 1289 "On Restrictions and Conditions of Access of Foreign Essential Medicines to State and Municipal Tenders", which codifies the so-called "three's a crowd" approach in relation to medicines included on the EDL. According to Resolution No. 1289, if two or more EAEU pharmaceutical manufacturers bid on a tender for an EDL product, then any foreign bid for that same tender must be rejected. Medicines not covered by Resolution No. 1289 remain subject to the tender preferences established by the MoED, where local companies receive a 15 percent price preference.

In May 2018, the Russian Government adopted Resolution No. 572 "On Amendments to the Resolution of the Russian Government No. 1289", amending the "three's a crowd" regulation and introducing the regulatory framework for additional preferences in state procurement of essential medicines for products made using locally

[259] *See* https://www.wto.org/english/news_e/news16_e/gpro_22jun16_e.htm (last visited Jan. 30, 2022) and https://www.wto.org/english/tratop_e/gproc_e/memobs_e.htm (last visited Jan. 30, 2022).
[260] Available at https://ec.europa.eu/commission/presscorner/detail/en/ip_21_3748 (last visited Jan. 30, 2022).

manufactured active pharmaceutical substances. In November 2018, the Order of the Ministry of Finance dated June 4, 2018, No. 126n entered into force and introduced additional preferences for local (EAEU) full-cycle medicines, applied from January 1, 2019. The order states that if EAEU finished dosage forms and EAEU full-cycle products participate in a tender, an EAEU full-cycle product is expected to win, if its price does not exceed the lowest price suggested for EAEU finished dosage form by more than 25 percent.

From November 15, 2021 to December 3, 2021, public discussions were held on a draft Government Resolution to introduce a "second one out" rule.[261] Under this rule, a local (EAEU) full-cycle medicine manufacturer would win if all other bidders are foreign; however, if multiple local manufacturers bid, then the lowest-price local bid would win. The "second one out" rule is suggested to be piloted on 15 INNs that are included on the list of strategically important medicines. Although the regulation has not been approved, PhRMA and its member companies are concerned implementation could undermine fair-market competition and ultimately harm patient access to critical therapies.

In addition, the Russian Government has taken several steps to isolate certain segments of the pharmaceutical market for sole-supply contracts given to Russian companies. For example, on May 12, 2020, the Russian Government issued Decree No. 1257-r appointing National Immunobiological Company (NIB) in 2020-2021 as the sole supplier of certain immunobiological products produced at all stages of the technological process in Russia under the National Immunization Schedule. Many other measures aimed at supporting local manufacturers are under development and implementation in Russia. For instance, in November 2019, the Russian Government signed Resolution No. 1464 and approved the Rules for granting subsidies from the federal budget to Russian organizations for the partial reimbursement of expenses to implement industrial projects related to "modern technologies", including the launch and sale of medicines. And in December 2019, the Russian Government signed Resolution No. 1908, which approved rules for the provision of federal subsidies to stimulate demand and increase the competitiveness of Russian industrial products.

Finally, since 2018, the Russian Government has been developing a national Pharma 2030 strategy, which was adopted by the Government on December 29, 2021, and came into force on January 1, 2022. As expected, the strategy is focused on complete (i.e., "full-cycle") local production of certain medicines to ensure import independence.[262] The main objective of the strategy is double the volume of medicines and medical devices manufactured locally by 2030, such that 90 percent of strategic medicines are fully manufactured in Russia (including local API). Although PhRMA member companies welcome a long-term strategy, several aspects of this policy raise significant concerns.

[261] *See* Project ID: 02/07/10-21/00121413, available at http://regulation.gov.ru/p/121413 (last visited Jan. 30, 2022).
[262] *See* https://pharmvestnik.ru/content/news/Minpromtorg-Rossii-nazval-sroki-prinyatiya-Strategii-Farma-2030.html (last visited Jan. 30, 2022).

Deteriorating Government Pricing Environment

On October 18, 2018, new pricing registration rules and a new pricing methodology came into force. These measures change the methodology for calculating maximum ceiling prices for EDL medicines and skew the international reference pricing basket used to set prices towards the lowest price in the following countries: Belgium, the Czech Republic, France, Greece, Hungary, The Netherlands, Poland, Romania, Slovakia, Spain, Turkey and the country of origin. In addition, Federal Law 134-FL "On Amending the Law on the Circulation of Medicines in Terms of Regulation of Prices for the Medicines Included in the List of Vital and Essential Drugs" came into force on June 7, 2019. These policies could result in a downward price spiral that threatens biopharmaceutical innovation.

In accordance with Federal Law No. 134-FZ, all prices for EDL medicines were subject to obligatory re-registration in 2019-2020. On December 16, 2019, the Russian Government approved Resolution No. 1683 "On Amendments to Certain Acts of the Russian Government in Relation to Registration and Re-registration of Maximum Selling Prices for Essential Medicines" (Resolution No. 1683). Products with prices that were not re-registered by January 1, 2021, could no longer be sold.

On December 19, 2019, MoH annulled its Order No. 871n from October 2017 and adopted new Order No. 1064n, which sets forth the procedure for determining the initial auction prices for medicines. Motivated by significant disruptions to state tenders and drug shortage caused by Order No. 871n, MoH Order No. 1064n aimed at improvement of the regulatory framework for calculating a medicine's initial auction price.

Due to the COVID-19 pandemic, the Russian Government introduced the right to exercise specific price control measures on medicines not included in the EDL. From July 27, 2020 to August 21, 2020, public discussions were held regarding the draft Resolution of the Russian Government "On Approval of the Rules for Formation of the List of Medicines not included on the List of Vital and Essential Medicines in Respect of Which it is Possible to set the Maximum Selling Prices of the Manufacturers, Maximum Wholesale and Retail Markups." Subsequently, Government Resolution No. 1310 was adopted on August 29, 2020.

To mitigate the risks of medicine shortages due to their low prices, Government Resolution No. 1771 "On the Specifics of State Regulation of the Maximum Selling Prices of Manufacturers for Medicines Included in the List of Vital and Essential Medicines" was adopted on October 31, 2020. The prices for certain essential medicines were already increased based on Resolution No. 1771.[263]

[263] *See* https://rg.ru/2020/11/27/fas-rossii-soglasovala-proizvoditeliam-ceny-na-dva-deficitnyh-onkopreparata.html (last visited Jan. 30, 2022).

Interchangeability of Medicines

Federal Law No. 475-FZ, amending the Law on the Circulation of Medicines, reduced the list of non-interchangeable medicines and set out a number of options for considering the interchangeability of medicines under one international non-proprietary name (INN). Several subsequent regulations and decrees have been issued pursuant to this law, which went into effect on January 1, 2021. Law No. 475-FZ contains several provisions that may adversely affect patients, including establishing a pathway for "non-medical switches." As such, PhRMA members are closely monitoring these developments, regulatory practice and the decisions of the medical experts responsible for the interchangeability determinations. Resolution No. 1360, dated September 5, 2020, approved the procedure for determining the interchangeability of medicines for human use and Resolution No. 1357, dated September 4, 2020, approved rules for the use of information on the interchangeable medicines for human use and provided further clarifications. In addition, on October 1, 2020, the Russian Government issued Resolution No. 1583 "On Approval of the Rules for the Circulation of Generics (Biosimilars) Before the Expiry of the Period to Study their Bioequivalence or Therapeutic Equivalence, or Introduce Changes to the Instruction for Medical Use While Defining Interchangeability."

In September 2021, the Russian Government approved the National Plan for the Development of Competition in all industries, which was developed by FAS. It provides that interchangeability should be established for at least 50 percent of medicines by July 1, 2022, and for at least 70 percent of medicines by the end of 2025. The MoH will prepare a progress report on the implementation.

PhRMA and its member companies are concerned that the interchangeability determination process is based on registration dossier documents without conducting respective clinical trials to prove that switching patients from one product to another is safe. In addition, mandatory use of information on interchangeability in public procurement may lead to numerous non-medical switches which is not in the best interests of patients and which may increase health care costs due complications.

Eurasian Economic Union

The EAEU, comprised of Russia, Belarus, Kazakhstan, Armenia and Kyrgyzstan, entered into force in January 2015. The treaties establishing the Eurasian Customs Union and the Single Economic Space were terminated by the agreement establishing the EAEU, which incorporated both into its legal framework. The EAEU envisages the gradual integration of the economies of its Member States, establishing a free trade area, unbarred financial interaction and unhindered labor migration. One of the first sectors to be integrated is the pharmaceutical sector through the creation of a single pharmaceutical market. To this end, the EAEU Agreement on Common Principles and Rules of Drug Circulation in the EAEU was executed in December 2014, and the EAEU Intergovernmental Council approved the necessary regulations to establish a common pharmaceutical market in the EAEU entered into force in May 2017.

As of January 1, 2021, all new pharmaceutical registrations in Russia must meet the EAEU regulations. However, on December 23, 2020, the Council of the Eurasian Economic Commission (EEC) adopted Decision No. 128 "On amendments to the Resolution of the Council of the Eurasian Economic Commission dated November 3, 2016 No. 78," which extended until July 1, 2021, the opportunity for pharmaceutical manufacturers to choose a national registration procedure in the four EAEU Member States other than Russia. Moreover, all medicines on the market must meet the EAEU registration requirements by January 1, 2026 (or they will be withdrawn from the market).

Although the first market authorization under the EAEU rules in Kazakhstan was approved in 2018[264] and the first market authorization under EAEU rules in Russia was issued by the MoH in November 2019,[265] a number of technical issues with electronic dossier format remain unresolved, which creates additional barriers for the formation of the common EAEU market.

The EAEU unified system should ensure integrity and continuous communication with national information systems so that applicants in all territories of the EAEU can follow the mutually recognized procedures. The innovative pharmaceutical industry stands ready to work with the government and EEC to ensure that there is a robust regulatory review system and continued patient access throughout the EAEU.

Track and Trace System

At the end of 2018, the Russian Government adopted Resolution No. 1556, which introduced a new, compulsory system for tracking pharmaceuticals from manufacturer to end user. Members expressed serious concerns to the Russian Government on the technical requirements of the proposal as well as the aggressive implementation timeline.

Mandatory labeling for all medicines was to commence on January 1, 2020, but due to non-readiness by various stakeholders, the deadline was postponed to July 1, 2020. Recognizing that there continued to be difficulties in implementing the track and trace system, Federal Law No. 206 was signed on July 13, 2020, to exempt products manufactured before October 1, 2020. This built on Government Resolution (No. 955) dated June 30, 2020, which allowed for import of medicines manufactured before October 1, 2020, to be imported without applying identification codes in order to avoid potential drug shortages, as per a decision of the specially established committee reviewing each individual request.

Since then, further measures have had to be implemented to simplify the monitoring system to prevent the collapse of the pharmaceutical supply system. The

[264] Available at https://gmpnews.ru/2019/02/fakticheskoj-datoj-zapuska-edinogo-rynka-lekarstv-eaes-mozhet-stat-konec-marta-nachalo-aprelya/ (last visited Jan. 30, 2022).
[265] Available at https://pharmvestnik.ru/content/news/Minzdrav-Rossii-vydal-pervoe-registracionnoe-udostoverenie-po-pravilam-EAES.html?utm_source=Fbpost&utm_medium=Group&utm_campaign=Minzdrav_Rossii&fbclid=IwAR2moYAg2p6ByiW12Xcs_BX1HuksJ69Fk-5uSUfEurqbB7XvW_xhZBJBUuY (last visited Jan. 30, 2022).

latest of those measures (Government Decree No. 1069 of June 30, 2021 "On amendments to the Regulation on the system for monitoring the movement of medicinal products for medical use") extends the simplified procedures until February 1, 2022. The industry will continue to work with the Russian Government and EAEU Commission to ensure that the new track and trace requirements are not implemented in a manner that imposes unnecessary obstacles to trade and medicine shortages for Russian patients.

Orphan Drugs Legislation

The Law on the Circulation of Medicines includes a definition and an accelerated registration procedure for orphan drugs that eliminates the need for otherwise obligatory local trials. However, the Law on the Circulation of Medicines is not yet in compliance with EAEU regulations on the definition of orphan drugs. To date, MoH also lacks a long-term strategy for orphan diseases having listed only around 270 orphan diseases,[266] while the European Organization of Rare Diseases list identifies more than 5,000 orphan diseases. Promisingly, the Russian Government recently created a dedicated fund to support children with disabling or life-threatening conditions, including orphan diseases, but much still needs to be done to improve awareness and to build an ecosystem that promotes the development and launch of medicines in Russia to treat orphan diseases.

Although the industry, as a general matter, supports accelerated pathways for orphan drugs, the procedure lacks sufficient detail to fully evaluate its effectiveness. PhRMA's members are hopeful that these issues may be resolved under the EAEU regulatory framework.

Biologic and Biosimilar Products

As noted above, regulatory approval of all medicines in Russia, including biologics and biosimilars, are subject to EAEU regulatory norms, i.e., Eurasian Commission Resolution No. 89. While these rules are ostensibly in line with European Union legislation and standards, there remain some concerns regarding implementation of the relevant regulations (determining the interchangeability of biologic drugs, mutual recognition of inspections and import testing, etc.). PhRMA's members are hopeful that these issues will be resolved under the EAEU regulatory framework.

.

[266] Available at https://static-0.minzdrav.gov.ru/system/attachments/attaches/000/058/377/original/Перечень_редких_%28орфанных%29_заболеваний.pdf?1637233469 (last visited Jan. 30, 2022).

TURKEY

PhRMA and its member companies operating in Turkey face several market access and intellectual property (IP) challenges due to forced localization measures, arbitrary pricing and reimbursement policies, unpredictable registration timelines, weak patent enforcement and regulatory data protection (RDP) failures. The use of an artificially low Euro/Turkish Lira exchange rate for the sole purpose of regulating medicine prices, as well as frequent deviations from the pricing regulations in effect, is also creating an unviable business environment and threatening patient access to new medicines.

Over the past decade, Turkey has undertaken reforms to modernize its economy and expand health care for Turkish patients. However, a general lack of transparency and predictability in government decision-making has contributed to policies that undermine Turkey's investment climate and damaged market access for PhRMA member companies. While PhRMA and its member companies appreciate the recent increased dialogue between the Turkish Government and the innovative biopharmaceutical industry, more attention should be paid to the negative impact of these policies on incentives for innovation and the operating environment in Turkey.

Key Issues of Concern:

- **Forced localization measures**: Following implementation of the 10th Development Program and provisions in Article 46 of the 64th Government Action Plan released in December 2015, the Turkish Government initiated a forced localization program which calls for delisting imported products from the Social Security Institution (SSI) reimbursement list if they are not produced locally and provides preferential reimbursement for domestic products. PhRMA member companies began receiving notices in February 2017 that their products would be delisted within 12 months unless localization plans were in place. Subsequently, new waves of product delisting were announced in May and November 2018 and further implemented in 2019. In April 2019, the European Union (EU) launched a World Trade Organization (WTO) dispute against these forced localization measures. Because parties to the dispute have failed to reach a settlement during the consultation process, the WTO Dispute Settlement Body agreed in September 2019 to establish a panel. While Turkey had appeared to suspend its localization plans during the dispute, some PhRMA member companies received notices in August 2021 to submit localization plans, suggesting that Turkey may be reactivating its forced localization program. Turkey's measures could have significant long-term consequences for the industry's operating environment and for patient access to medicines.

- **Arbitrary pricing and reimbursement policies**: The Turkish Government continues to set an insufficient budget for medicines that disregards exchange rate fluctuations and patient needs. Turkey regulates pharmaceutical prices using international and therapeutic reference pricing and a fixed exchange rate instead

of a market-based exchange rate to convert the value of the Euro into local currency. Although Turkish regulations had specified that the exchange rate would be updated at the beginning of each year to reflect 70 percent of the average exchange rate the preceding year, the Turkish Government changed the regulation a day before implementation to 60 percent of the average exchange rate in 2019. Such discretionary actions create significant uncertainty in the Turkish market. The practice of using an artificially low exchange rate, which is applied only to the biopharmaceutical sector, coupled with Turkey's currency fluctuations and inflation (year-over-year consumer price index (CPI) increases of 36.08 percent as of January 2022), threaten both supply continuity and the sustainability of the industry. Industry requests the immediate resolution of this issue through a progressive move toward use of a market-based exchange rate.

- **Local inspection requirements and delays**: PhRMA and its member companies welcome efforts by the Turkish Drug and Medical Device Agency (TITCK) to improve the regulatory approval procedures of highly innovative and/or life-saving products with limited therapeutic alternatives in Turkey. Specifically, prioritizing Good Manufacturing Practices (GMP) audit procedures and allowing a parallel marketing application process decreased delays in approving these products. However, while products deemed highly innovative are receiving preferential reviews, products without this designation face increased delays due to the lack of resources and efficient procedures for GMP inspections. PhRMA and its member companies commend Turkey for becoming a PIC/S (Pharmaceutical Inspection Convention and Co-operation Scheme) member to better align its GMP inspections with other members of the scheme. However, GMP inspection delays continue to add to registration delays, hindering patient access to innovative medicines and negating the benefits of the patent and data protection periods for many products. In addition, the Ministry of Health (MoH) requires companies to submit a price commitment and two-year budget analysis as part of the GMP and registration prioritization submission, inappropriately linking pricing and reimbursement to the separate science-based determination of whether a new medicine (and the manufacturing facility) is safe and effective.

- **Weak patent enforcement and regulatory data protection failures**: While patents and regulatory test data have received IP protection in Turkey since 1995 and 2005, respectively, significant improvements are still needed. For instance, while Turkey's Industrial Property Law, which was passed by the Turkish Parliament in 2016, better aligns Turkey with the European Patent Convention, certain provisions in the new law inappropriately expand the possibility of granting compulsory licenses (CLs) in Turkey. In addition, Turkey does not provide an effective mechanism for resolving patent disputes before the marketing of follow-on products. Further, Turkey inappropriately ties the RDP period to the patent term and the lack of RDP for combination products is still an unresolved issue. Critically, the RDP term begins with first marketing authorization of the original product in any of the EU-Turkey Customs Union Area Member States and thus, as a result of significant regulatory approval delays in Turkey, the effective RDP term is

reduced significantly. Consistent with Turkey's international obligations, the RDP term should begin when a product receives marketing authorization in Turkey.

For these reasons, PhRMA requests that Turkey be placed on the **Priority Watch List** in the 2022 Special 301 Report and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved.

Intellectual Property Protection

Weak Patent Enforcement

In January 2017, Turkey enacted a new Industrial Property Law (No. 6769) that addresses IP, including patents. While the specialized IP courts have improved IP enforcement options in Turkey, IP Court judges lack relevant, and notably technical, training and capacity to effectively resolve patent disputes. Consequently, the quality of IP trials remains insufficient, all the more as the Court of Appeals case law requires that all patent validity cases are referred to court-appointed expert panels, which often consist of a single patent attorney and lecturers from universities. Despite the new law on court appointed experts, the expert examination system also lacks appropriate procedural safeguards. While relevant case law provides that the IP Court judge can deviate from the expert panel's opinion where he or she provides a reasoned opinion to the contrary, in practice, decisions in the majority of cases mirror the opinions of the panel.

Compulsory Licensing

In addition, PhRMA and our member companies are concerned about the CL provisions of Industrial Property Law No. 6769. That law inappropriately expands the discretion to consider CLs in cases of non-use of the patent and in cases where a third-party claims that domestic demands are not being met. The vagueness of that provision creates significant uncertainty for patent holders and may be abused by competitor third parties. PhRMA believes governments should grant CLs in accordance with international rules and only in exceptional circumstances and as a last resort. Decisions should be made on public health grounds through fair and transparent processes that involve participation by all stakeholders and consider all relevant facts and options.

In December 2021, TITCK published the updated "Regulation on the Registration of Medicinal Products for Human Use" (Registration Regulation). While the Registration Regulation includes a provision on compulsory licensing, the regulation does not clarify essential substantive and procedural requirements.

Regulatory Data Protection Failures

In 2005, the Turkish Government took positive steps toward establishing protection for the commercially valuable regulatory data generated by innovative pharmaceutical companies and now provides RDP for a period of six years for products starting from the first MA registration in any of the EU-Turkey Customs Union Member States. Several

aspects of this regime are however of significant concern for the innovative pharmaceutical industry.

The period of RDP currently begins on the earliest marketing authorization in any country of the EU-Turkey Customs Union. Considering the extended regulatory approval times and delays stemming from the GMP certification approval period and prioritization process, including the requirement for budget impact projections, current estimates are that it could take one to three years, and longer in some cases, to register a new medicine in Turkey, i.e., long after approval in the EU. Under these adverse circumstances, new products receive, in practice, no more than one to two years of RDP in Turkey, undermining incentives needed for innovators to undertake risky and expensive research and testing.

In addition, if a product is patented in Turkey, RDP ends when that patent expires, even if this is prior to the end of the six-year RDP term. RDP is a form of protection that serves a different purpose than patent protection and is independent and separate from patent protection. Therefore, it should not be limited to the period of patent protection.

RDP in Turkey is further undermined by the Regulation to Amend the Registration Regulation of Medicinal Products for Human Use.[267] This Regulation, contrary to EU standards, does not provide RDP for combination products, unless the combination product introduces a new indication. Innovative companies invest considerable amounts of time and effort to develop products that provide increased efficacy and safety for the benefit of patients, as well as new indications, from new combinations of separate molecules.

Market Access

Forced Localization Measures

PhRMA and its member companies have serious concerns about the Turkish Government's forced localization measures for medicines. In 2018, the Turkish Government began implementing policies announced in December 2015 that call for delisting imported products from the reimbursement list.[268] As part of the first wave of delisting notices, which impacted 71 products with additional products in 2018, PhRMA member companies began receiving notices in February 2017 that their products would be delisted within 12 months unless they submitted plans to "localize" these products in Turkey. The second wave of delisting notifications was announced in May 2017 and affected 176 products, of which 119 products were delisted as of July 2018 with an eventual 185 products delisted over 2018 and 2019. However, following the filing of a complaint with the WTO in 2019, there have been no further delistings. However, since August 2021, a few PhRMA members have received notices to submit localization plans, suggesting that Turkey may be reactivating its forced localization program.

[267] Official Gazette No. 27208 (Apr. 22, 2009).
[268] *See*, *e.g.*, Article 46 of the 64th Government Immediate Action Plan.

PhRMA and its member companies believe these measures are inconsistent with Turkey's national treatment obligations under several WTO agreements and constitute a significant restriction on trade.[269] An administrative lawsuit challenging the validity of these measures has been filed by the Association of Research-Based Pharmaceutical Companies (AIFD) in Turkey. The hearing was held in October 2019 and followed by a verdict in favor of SSI. AIFD has appealed the verdict, which is currently pending. In April 2019, the EU initiated a WTO dispute raising the inconsistency of this measure with Turkey's national treatment obligations, among other commitments. Following the end of the consultation period, the WTO Dispute Settlement Body agreed to establish a panel in September 2019. Briefings were completed by the end of June 2020 and a decision is expected in the second half of 2021.

With just 25 percent of new medicines launched globally since 2011 available in Turkey,[270] the vast majority of all medicines sold in Turkey are distributed through the SSI reimbursement list and exclusion from this list effectively bars market access for these products. Turkey's forced localization measures could have significant long-term consequences for the ability of U.S. and other foreign biopharmaceutical companies to operate in Turkey and for patient access to new medicines.

Arbitrary Pricing and Reimbursement Policies

In Turkey, pharmaceutical pricing is regulated by TITCK under the Decree for Pricing of Medicinal Products for Human Use, which sets prices at a discount below the lowest price in a basket of five European countries (France, Portugal, Spain, Italy and Greece) and the country of origin and the country of batch release. In addition, TITCK uses a fixed exchange rate instead of a market-based exchange rate to convert the value of the Euro into local currency. Over the last couple of years, TITCK has begun to annually adjust the fixed Euro/Turkish Lira exchange rate used to set prices under the Decree. However, per this Decree, the fixed exchange rate is currently set at 60 percent of the preceding year's actual exchange rate, automatically building in further discounts for the Turkish Government. To exacerbate the problem, Turkey has moved the goal posts over the past two years, with the percentage coefficient not being met in 2018 and then being lowered from 70 percent to 60 percent in 2019. While the exchange rate was updated in February 2020 based on the new 60 percent coefficient, the percentage coefficient was not met in 2021 (the fixed exchange rate adjustment was calculated to be 26.5 percent

[269] *See*, *e.g.*, the General Agreement on Tariffs and Trade (GATT), Art. III:4 (requiring that imported products "shall be accorded treatment no less favourable than that accorded to like products of national origin in respect of all laws, regulations and requirements"), as incorporated into Article 2.1 of the WTO Agreement on Trade-Related Investment Measures. Compelling manufacturers of patented pharmaceuticals to produce locally in order to remain or be added to the reimbursement list as part of the fifth phase of implementation of this policy would also be inconsistent with Article 27.1 of the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) (requiring that "patents shall be available and *patent rights enjoyable without discrimination as to* the place of invention, the field of technology and *whether products are imported or locally produced*" (emphasis added)).
[270] PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2020. June 2021.

but a 20 percent adjustment was applied). Biopharmaceutical companies continue to be confronted with uncertainty of the likelihood and parameters of the update every year.

By definition, Turkey's arbitrary fixed exchange rate discriminates not only against pharmaceuticals – the only sector subject to this fixed exchange rate – but also against imported pharmaceuticals contrary to Turkey's national treatment obligations. Whereas prices for imported products are determined based on the fixed exchange rate, domestic manufacturers of innovative products that are only available in Turkey and for which there is no international reference product available would be permitted to negotiate prices directly with the MoH based on clinical and economic evidence. The practice also appears inconsistent with Article II:3 of the Bilateral Investment Treaty (BIT) between U.S. and Turkey, which requires that investments "shall at all times be accorded fair and equitable treatment and shall enjoy full protection and security in a manner consistent with international law." Failure to update the exchange rate to reflect the actual exchange rate at the time of calculation has undermined the U.S. biopharmaceutical industry's "legitimate expectations" as to the how prices would be calculated. It is also "tantamount to expropriation," in that it substantially deprives the U.S. pharmaceutical industry of the reasonably-to-be-expected economic benefits of its investments in Turkey to the obvious benefit of the Turkish Government, contrary to Article III:1 of the U.S.-Turkey BIT.

The public reimbursement system is based on a positive list and reimbursement decisions are made by the inter-ministerial Reimbursement Commissions, led by the SSI under the Ministry of Labor and Social Security (MoLSS). The reimbursement decision process lacks transparency and is not subject to clearly defined decision criteria. Over the last few years, only cost-saving generics and original products with a potential to create cost savings in the related therapeutic area were added to the reimbursement list. Further, contrary to best practices in health technology assessment, the process is not based on pre-defined evaluation criteria, does not require the publication of an official medical evaluation report to support the assessment and does not consider the perspectives of patients, physicians and other relevant stakeholders. Companies requesting reimbursement are required to submit a cost-effectiveness analysis, but the assessment of these submissions is opaque. On the rare occasion that a company receives a formal written decision, it is a simple one-page document stating acceptance or rejection, without any explanation of the grounds upon which the decision was made. Finally, companies are expected to offer additional price concessions and rebates through poorly defined managed entry agreements that have delayed patient access to new medicines.

The government's insufficient budget allocated to the health care system, especially for medicines, fuels the problems describe above and remains a major concern for PhRMA member companies. Compared to other OECD countries, of which Turkey is a member, the government's budget does not support an innovative health care ecosystem and patient needs. In 2020, Turkey's health care spending as a percentage of GDP was among the lowest of OECD countries at just 4.6 percent. In turn, Turkey's pharmaceutical spending is below one percent of GDP, among the lowest in OECD countries.

Pharmaceutical Product Registration

Marketing of new medicines in Turkey is governed by the regulatory procedures prescribed by TITCK. Per those procedures, TITCK is required to assess and authorize the registration of medicinal products within 150 days, 180 days or 210 days, for high priority products, prioritized products and normal priority products, respectively, of the product's dossier being submitted. Although efforts have been taken to improve the regulatory process, a 2020 survey by AIFD indicates that the median regulatory approval period is 377 days for high priority products, 435 days for prioritized products and 938 days for normal priority products. Furthermore, without additional resources to complete product registrations, expediting certain applications over others only further delays the review time for those applications not receiving prioritized attention. To partially mitigate these delays, industry is requesting that prioritized products are also included in the scope of the parallel GMP and registration application, similar to highly prioritized products.

The delays at TITCK have been compounded by the fact that between November 2019 through to August 2020 the Scientific Advisory Commissions did not operate. New Commission members were appointed and the Commissions resumed meeting in August 2020. It is estimated that approximately 2,000 registration dossiers are pending, approximately 1,000 of which are for priority designated products. Considering the significant backlog, TITCK has become reluctant to issue further prioritization decisions as the agency fears it will not have the necessary resources to assess the applications. Recognizing that even prior to COVID-19 TITCK was reviewing approximately 700-750 marketing authorization processes per year, it is evident that reducing this significant backlog will take a long time. While TITCK has committed to work on some solutions, progress has been limited to date. The biopharmaceutical industry representatives have showcased examples of solutions implemented in other countries to ensure continuity of registration operations during the COVID-19 pandemic. Accelerated and flexible regulatory pathways (reliance, verification, mutual recognition, etc.) are needed to reduce the backlog and ensure that Turkish patients have timely access to needed medicines (recognizing that counterfeiters can otherwise seek to fill the void in the market).

In May 2016, TITCK published a "Guideline for the Operating Procedures and Principles of the Priority Evaluation Committee of Medicinal Products for Human Use" and PhRMA's member companies appreciate TITCK's efforts to create an expedited pathway for product registration. While not included in the May 2016 TITCK document, the agency is inappropriately requiring companies to commit to a specific retail and public sale price and to estimate the number of SKUs that will be sold at the time the company submits its prioritization application.

Promisingly, on May 27, 2020, TITCK was accepted as a full member of the International Council for Harmonisation (ICH). The ICH provides valuable work toward harmonizing international drug development and regulatory standards. In light of TITCK's commitment to act as a full ICH member, it is important that this Regulation meets international standards.

Local Inspection Requirements and Delays

The MoH's revisions to the Registration Regulation have compounded the country's registration delays.[271] Effective March 1, 2010, a GMP certificate that is issued by the Turkish MoH must be submitted with each application to register a medicinal product for each of the facilities at which the product is manufactured. The GMP certificate can only be issued by the MoH following an on-site inspection by Ministry inspectors, or by the competent authority of a country that recognizes the GMP certificates issued by the Turkish MoH. However, for the reasons explained further below, neither option can be completed in a timely manner.

Despite increasing the number of inspectors at the end of 2013, the MoH still does not have adequate resources to complete these GMP inspections in a timely manner, with a median inspection period of 309 days for highly prioritized products (GMP 1).[272]

On a positive note, the TITCK's 2018-2022 Strategic Plan stipulates that the Agency is responsible for accelerating the GMP inspection and certification processes of priority medicines which are needed on the market within 1 year. However, the absence of strategic performance indicators for products prioritized by TITCK may give rise to uncertainty in the GMP inspection processes of these products.

Furthermore, although the Amended Registration Regulation permits applicants to submit GMP certificates issued by competent authorities in other countries, it does so only to the extent that the pertinent country recognizes the GMP certificates issued by Turkey. While PhRMA commends Turkey for joining PIC/S in January 2018, this is but the first of many steps that will be required before Turkey could enter into mutual recognition agreements with the United States and other trading partners. Until mutual recognition agreements are in place, Turkey, at a minimum, should allow for parallel processing of the GMP review and the review of the registration submission.

Due to COVID-19 pandemic, TITCK has exercised further flexibility regarding GMP submissions and GMP Certification dates. On June 2020, TITCK announced Supplementary Measures to be Applied During the Pandemic regarding GMP Inspections and Certifications including an extension for validity of certificates and acceptance of file-based inspection submissions for high priority products. As of December 2021, file-based inspection submissions have been expanded to priority products and the validity period of all GMP certificates has been extended until the end of 2022.

[271] Regulation to Amend the Registration Regulation of Medicinal Products for Human Use, Official Gazette No. 27208 (Apr. 22, 2009) (Amended Registration Regulation); MoH, *Important Announcement Regarding GMP Certificates*, (Dec. 31, 2009) (establishing an implementation date for the GMP certification requirement).
[272] Based on AIFD Survey 2020.

Financial Impact Projection Request in GMP and Registration Prioritization Applications

TITCK requests price commitments and a "two-year financial impact projection" in their assessment process for "prioritization of good manufacturing practices (GMP)" and "prioritization of registration" applications for innovative products. Prioritization of GMP and registration inspections should be based on a clinical and technical evaluation of the scientific data, not the proposed price of the drug or its price in other markets (particularly when prices in other countries may not yet be available or indicative of the actual price/appropriate price in Turkey). Industry is concerned that, given the difficulties in obtaining the information needed for the budget impact projection, this requirement also results in further delays in prioritization and overall registration decisions. Such projections may also be inadequately used as a cost-containment tool, thus delaying the launch of new medicines developed by U.S. biopharmaceutical companies in Turkey.

Orphan Drug Guidelines

Since 2009, the MoH has been developing a pathway for orphan medicines in Turkey. Although there have been some successful workshops to progress the issue, there remains no published pathway. In August 2015, the Ministry of Industry and Technology (MoIT) published an in-depth analysis of the impact of rare diseases on Turkey's population in its "Pharmaceutical Sector Strategy and Action Plan of 2015." This study called for the creation of a national orphan drug policy. The innovative pharmaceutical industry looks forward to working with key stakeholders, including the MoH, SSI, MoIT, Ministry of Trade, Ministry of Industry & Technology, Ministry of Treasury and Finance and civil society organizations, to establish a market access pathway and appropriate incentives to facilitate the development and commercialization of medicines to treat rare diseases and thereby better ensure that Turkish citizens have access to the medicines they need. As part of this process, it will be critical for Turkey to define rare diseases and orphan drugs based on international best practices, including current EU prevalence standards.

LATIN AMERICA

ARGENTINA

PhRMA and its member companies operating in Argentina continue to face longstanding market access barriers and serious intellectual property (IP) issues. While the previous administration had signaled willingness to address significant IP concerns related to patentability and regulatory data protection (RDP), no reforms were initiated and IP issues remain a concern. Regulatory reforms by the sanitary authority that brought Argentina closer to international standards and reduced clinical trial approval times are already attracting investment in early phase trials. Although general registration and evaluation regulations for biopharmaceutical products exist, some complementary regulations are missing and the established evaluation deadlines are not being met, thus generating legal and business uncertainty for PhRMA member companies.

Key Issues of Concern:

- **Restrictive patentability criteria**: The Argentine Government amended its criteria for granting pharmaceutical patents in 2012. A joint regulation issued by the Ministries of Health and Industry and the Argentina Patent Office (Instituto Nacional de la Propiedad Industrial or INPI) significantly limits the type of pharmaceutical inventions that can be patented. These guidelines are contrary to Argentina's obligations under the World Trade Organization (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) and have led to the rejection of many pharmaceutical patent applications.

- **Regulatory data protection failures**: Argentina does not provide protection for regulatory test data, as required under TRIPS. Specifically, Law 24,766 and Decree 150/92 permit Argentine officials to rely on data submitted by originators to approve requests by competitors to market similar products.

- **Compulsory licensing**: On December 21, 2019, the Argentine Congress passed economic emergency legislation that, among other things, raises the risk of compulsory licenses of patents in Argentina. Article 70 of the new law empowers the Ministry of Health to establish a mechanism to monitor the prices of medicines and to utilize measures such as compulsory licensing against "problems of availability or unjustified or irrational price increases."

- **Flawed cost containment measures**: During 2021, the Argentine Government has made several statements regarding their plans to establish price controls for "high-cost" medicines through an international reference pricing (IRP) methodology. Because this methodology limits the flexibility and adaptation of prices to local market conditions, as well as other reasons, the biopharmaceutical industry does not consider this tool appropriate for achieving competitive prices and improving patient access to innovative medicines.

For these reasons, PhRMA requests that Argentina remain on the **Priority Watch List** in the 2022 Special 301 Report and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved.

Intellectual Property Protection

Restrictive Patentability Criteria

In 2012, the Argentine Government published a regulation that significantly narrowed the scope of chemical compounds and compositions that can be patented, leading to the rejection of many pharmaceutical patent applications. The regulation contemplates that similar limitations could be added in the future for "pharmaceutical biological inventions."

The regulation (Nos. 118/2012, 546/2012 and 107/2012), issued jointly by the Ministries of Health, Industry and INPI sets out Guidelines for Patentability Examination of Patent Applications on Chemical and Pharmaceutical Inventions. It expressly states that pharmaceutical patents are not available for compositions, dosages, salts, esters and ethers, polymorphs, analogous processes, active metabolites and pro-drugs, enantiomers and selection patents. Also, the ability to describe and claim an invention using Markush-type claims is severely limited.

The imposition of additional patentability criteria for pharmaceutical patents beyond those of demonstrating novelty, inventive step and industrial application is arbitrary and inconsistent with Articles 1 and 27.1 of TRIPS, as well as Argentina's obligations under its bilateral investment treaty with the United States.[273] While the prior Argentine administration recognized that the guidelines and resolution are problematic, it did not take action to reform them and the current administration has not indicated that reform is part of its political agenda.[274]

In 2015, INPI passed Resolution 283/2015 which narrows the patentability of certain biotechnological inventions, including inventions based on nucleotide or amino acid sequences. The resolution also expands the scope of subject matter that is not patentable to include genetically modified organelles. These and other restrictions in Resolution 283/2015 potentially create an unprecedented class of inventions that are excluded from patentability.

[273] See United States of America-Argentina Bilateral Investment Treaty, 103rd Congress 1st Session 103-2, Nov. 14, 1991, available at https://tcc.export.gov/Trade_Agreements/All_Trade_Agreements/exp_000897.asp (last visited Jan. 30, 2021).

[274] On June 6, 2012, CAEMe, joined by over 40 innovative biopharmaceutical companies, filed an administrative petition seeking to invalidate the Joint Resolution. That administrative review petition was dismissed on April 5, 2013. On August 30, 2013, CAEMe filed a civil complaint in federal court challenging the Joint Resolution, the administrative review dismissal, and application of the Guidelines to pharmaceutical patent applications. That complaint is still pending.

Regulatory Data Protection Failures

Biopharmaceutical innovators work with hospitals, universities and other partners to rigorously test potential new medicines and demonstrate they are safe and effective for patients who need them. Less than 12 percent of medicines that enter clinical trials ever result in approved treatments.[275]

To support the significant investment of time and resources needed to develop test data showing a potential new medicine is safe and effective, governments around the world protect that data submitted for regulatory approval from unfair commercial use for a period of time. WTO members considered such protection so important to incentivize biopharmaceutical innovation that they established a TRIPS provision (Article 39.3) requiring each country to safeguard regulatory test data for a period after the approval of a new medicine in that country.

Argentina was among the countries that crafted that provision, but has so far failed to provide protection of test and other data in a manner consistent with its international obligations. Indeed, Law No. 24,766 and Decree 150/92 allow Argentine officials to rely on data submitted by innovators in other markets to approve requests by competitors to market similar products in Argentina. The Law provides no period of protection against reliance and does not define key terms including "dishonest" use.

Weak Patent Enforcement

A critical tool to protect against irreparable harm from the loss of IP is the ability to seek a preliminary injunction to prevent the sale of an infringing product during litigation. Preliminary injunctions become all the more important when there are no other effective mechanisms to facilitate early resolution of patent disputes.

Articles 83 and 87 of Law No. 24,481 on Patents and Utility Models provide for the grant of preliminary injunctions. These Articles were amended in 2003 by Law 25,859 to fulfill the terms in the agreement to settle a dispute between the United States and Argentina (WT/DS171/13). The agreed-upon terms were intended to provide, under certain conditions, effective and expeditious means for patent owners in Argentina to obtain relief from infringement before the conclusion of an infringement trial. Unfortunately, these terms, as implemented in the Argentine legal system, have not had the intended effect. Member companies have reported that the process of obtaining injunctive relief has become very lengthy and burdensome, thereby denying the relief that they were intended to provide.

[275] DiMasi JA, Grabowski HG, Hansen RW; Tufts Center for the Study of Drug Development. Innovation in the pharmaceutical industry: new estimates of R&D costs. In: Briefing: Cost of Developing a New Drug, available at https://f.hubspotusercontent10.net/hubfs/9468915/TuftsCSDD_June2021/pdf/Microsoft+PowerPoint+-+Tufts+CSDD+briefing+on+R%26D+cost+study+-+Nov+18,+2014.pdf (last visited Jan. 30, 2022).

A visible regulatory process on the status of regulatory submissions could help anticipate and mitigate potential patent infringements. Regulatory approvals are only made public at the end of the process, but they are mostly published after delays and sometimes even after the marketing authorization is granted.

Further, the procedures for enforcing patents and seeking damages are ineffective due to the lengthy judicial process and inadequate damages awards that do not make the patent holder whole. These impediments eviscerate the value of patents in Argentina.

Compulsory Licensing

Among other things, the economic emergency law passed by the Argentine Congress in December 2019 (Law No. 27,541 on Social Solidarity and Productive Reactivation) empowers the Ministry of Health to establish a compulsory or mandatory licensing mechanism, or to directly import certain medicines, to address potential problems caused by unjustified or unreasonable price increases that affect the population's access to medicines in a way that could put their health at risk.

Empowering the Ministry of Health to establish new mechanisms of compulsory licensing will undermine the incentives for innovators to develop and bring new therapies to Argentine patients, and will lead to greater uncertainty and potential legal challenges. Moreover, such a mechanism appears to encourage additional use of compulsory licensing in a manner that will not only undermine patient access to new medicines but also appears inconsistent with Argentina's international obligations.

As a general matter, CLs should only be used in extraordinary circumstances as a last resort rather than standard government practice. CLs are not a sustainable or effective way to address health care needs. Voluntary arrangements independently undertaken by member companies better ensure that current and future patients have access to innovative medicines.

Patent Backlogs

The ability to secure a patent in a reasonable period is critical to attracting investment in the research and development needed to create new medicines and bring them to patients who need them. Patent backlogs hinder innovation by creating uncertainty and significantly raising investment risk.

Patent application delays can be lengthy in Argentina, where life science innovators wait an average of 6.6 years for patents to be granted.[276] According to some estimates, the overall patent backlog is approximately 21,000 applications. Argentina's patent law does not provide for patent term adjustments to compensate for unwarranted

[276] Schultz M. and Madigan K, The Long Wait for Innovation: The Global Patent Pendency Problem, CPIP (2016), available at https://sls.gmu.edu/cpip/wp-content/uploads/sites/31/2016/10/Schultz-Madigan-The-Long-Wait-for-Innovation-The-Global-Patent-Pendency-Problem.pdf (last visited Jan. 30, 2022).

delays in the examination of patent applications. Although the Argentine Patent Office implemented a Patent Prosecution Highway (PPH) mechanism under Regulation P-56/2016 in order to accelerate the examination process, restrictions on the application of this mechanism make it inapplicable to patent applications for pharmaceutical products.

To address this challenge, Argentina should open the PPH mechanism to all inventions, including innovative biopharmaceutical products. In addition, Argentina should accede to the Patent Cooperation Treaty (PCT), a step that would facilitate the filing and examination of patent applications in Argentina as it does now in more than 152 Contracting Parties. While the Argentinian Congress has long-considered accession to the PCT, no action has been taken. Accession to the PCT could allow Argentina to reduce its current patent application backlog and use the PCT system to lower filing costs and reduce the review period for future patent applications. Indeed, it is noteworthy that there are concrete examples where Argentine national institutions, such as the National Scientific and Research Council (Consejo Nacional de Investigaciones Científicas y Técnicas, or CONICET), have established a mechanism to access PCT in order to pursue the recognition of the Argentine inventions in other countries. It is time, therefore, that Argentina extends the benefit of acceding to the PCT to innovators in other countries.

Market Access

Flawed Cost Containment Measures

Since the Argentine midterm primary elections on September 12, 2021, members of the Argentine Government have made several statements regarding their plans to establish price controls for “high-cost” medicines through an IRP methodology. As a general matter, IRP suffers from serious flaws as a mechanism for biopharmaceutical pricing. It assumes similarity across all countries in the reference basket and implicitly imports the pricing policies of those countries without accounting for circumstances that justify price differentiation. Importantly, IRP ignores the local value of the product by ignoring the local standard of care, patterns of disease burden and socioeconomic factors. IRP also imports circumstances unrelated to a product’s value, such as budget overruns in reference countries that lead to price cuts. For these reasons, the biopharmaceutical industry does not consider IRP appropriate for achieving competitive prices and improving patient access to innovative medicines in Argentina.

Discriminatory Reimbursement Policies

On October 1, 2015, the Ministry of Health and the Secretary of Commerce issued Joint Resolutions 1710 and 406, which establish a preferential reimbursement system for national generics and biosimilar products. These resolutions provide that health insurance agents must give preference to Argentine products available in the market that have the same active ingredient or that are a biosimilar to those originating abroad. This resolution is subject to the condition that the final selling price of the Argentine products must be significantly lower than the average price of similar products of foreign origin.

Key terms remain undefined and while these policies were never applied the reimbursement system appears to be inconsistent on its face with international biosimilar guidelines (providing that biosimilars cannot be automatically substituted for the original biologic) and Argentina's national treatment obligations under the WTO General Agreement on Tariffs and Trade.

In addition, provisions of Law No. 27,437 on Buy Argentine and Development of Suppliers further restrict market participation in Argentina for foreign innovators. Foreign companies are required to submit Productive Cooperation Agreement Proposals (ACPs) to participate in public tenders – including details on their relationships with subcontracting companies, direct investment, technology transfer or other capacity building programs. Argentina's Instituto Nacional de Servicios Sociales para Jubilados y Pensionados (INSSJP), the agency that oversees health insurance for retirees, has recently granted preferential commercial conditions in its pharmaceutical purchasing agreements to local products on the grounds introduced by Law No. 27,437.

On December 27, 2021, the Executive Branch sent a bill to the Argentinian Congress amending Law No. 27,437 to increase the price preference for local manufacturers and explicitly expand the legal regime to procurement by the INSSJP. Congressional action is pending.

BRAZIL

PhRMA and its member companies operating in Brazil recognize the efforts of the Brazilian Government to liberalize economic opportunities by attracting foreign trade and investment. The current government has a tremendous opportunity to address concerns regarding intellectual property and government pricing policies. PhRMA and its member companies strongly support further strengthening of trade ties to resolve these issues. Absent comprehensive negotiations, however, ongoing trade and investment discussions between the United States and Brazil and Brazil's ambition to join the OECD present important near-term opportunities to resolve these concerns.

Key Issues of Concern:

- **Compulsory licensing**: Members of Brazil's National Congress are pursuing efforts to expand inappropriately compulsory licensing provisions in Brazil's Industrial Property Law. These efforts, reflected in PL No. 12/2021, include several unprecedented, vague and broad provisions that go beyond what is contemplated in the World Trade Organization (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), which permits compulsory licensing as a limited exception to stable patent rights under certain narrowly defined conditions. PL No. 12/2021 fundamentally undermines the predictability and certainty necessary for U.S. innovators from all sectors to successfully invest in and accelerate the launch of new products in Brazil.

- **Patent backlogs**: Historically, patent applicants in Brazil have experienced some of the longest patent pendency times in the world. Brazil's patent backlog has exceeded 10 years (and even longer for pharmaceuticals), hindering innovation and significantly raising investment risk. PhRMA is encouraged by the National Institute of Industrial Property's (INPI) recent efforts to tackle the examination backlog and improve the efficiency of patent prosecution in Brazil, including expansion of the Patent Prosecution Highway pilot program to all sectors. Moreover, PhRMA welcomes the elimination of the dual examination process associated with the Brazilian National Health Surveillance Agency's (ANVISA) examination of pharmaceutical patent applications. Brazil should supplement these efforts by implementing a Patent Term Adjustment (PTA) mechanism to compensate for unreasonable delays during examination of patent applications. Indeed, restoring a portion of the patent term for unreasonable delays during patent examination is even more pronounced given the recent Supreme Court decision finding that the sole paragraph of Article 40 of the Patent Law, which ensured a minimum patent term of 10 years from the date of patent grant in Brazil, is unconstitutional. The decision leaves all patent applicants across all technology sectors with no recourse for unreasonable delays during examination of patent applications.

- **Lack of regulatory data protection**: Although Brazil applies RDP for veterinary, fertilizer and agrochemical products, the same protection is not provided to biopharmaceutical products.

- **Regressive taxes on medicines**: Combined federal and state taxes account for 31 percent of the cost of medicines in Brazil, one of the highest tax burdens on medicines in the world compared to the global average of 6 percent.[277] Proposals to eliminate taxes on certain products including medicines have previously lapsed. Currently, there are multiple tax reform proposals in the National Congress impacting the biopharmaceutical sector, and one proposed by the Executive branch and approved by the Lower House (Bill 2337/2021) would not help reduce the tax on medicines and its corresponding burden on patients. In fact, the proposed tax reform would impose new taxes on approximately 18,000 medicines that are currently exempt from taxes, increasing the costs to patients and public purchasers for those medicines by 12 to 18 percent.

- **Restrictive government pricing, reimbursement and access policies**: ANVISA's Drug Market Regulation Chamber (CMED) regulates the pricing and reimbursement of medicines in Brazil, which often creates market access barriers for PhRMA member companies and prevents timely patient access to new treatments and cures. Key challenges include delayed pricing decisions, government price ceilings on innovative medicines sold to private and public purchasers as a condition of market entry, delays in new medicine price definitions, price increases capped below inflation despite rising production costs and rigid health technology assessment requirements by the National Committee for Technology Incorporation (CONITEC) that prevent more flexible and value-based approaches to evaluating and paying for health care. Meanwhile, Brazil has recently begun to adopt certain transparency measures, without further reforms access and reimbursement policies in Brazil will continue to be a concern. Overall, just 33 percent of new medicines launched globally since 2011 are available in Brazil.[278]

- **Government purchasing and Product Development Partnerships**: Brazil has developed a regulatory framework for the establishment of Product Development Partnerships (PDPs). While this framework provides improved transparency, Brazil still lacks clear rules regarding the purchasing preferences offered to PDPs. In addition, while the Ministry of Health (MoH) is tasked with reviewing and approving PDPs, it can nevertheless approve a PDP submitted by a third party for products with a valid patent in Brazil although it is restricted from purchasing that product through the third party.

[277] IQVIA (2021). Market Prognosis Country Report: Brazil.
[278] PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2020. June 2021.

For these reasons, PhRMA requests that Brazil be placed on the **Priority Watch List** in the 2022 Special 301 Report and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved.

Intellectual Property Protection

Compulsory Licensing

On August 11, Brazil's National Congress finalized a bill (PL No. 12/2021) which expands the compulsory licensing provisions outlined in the Industrial Property Law. The bill grants broad and sweeping powers to the Brazilian Executive Branch or the National Congress to issue compulsory licenses based on vague and ambiguous grounds (i.e., by declaring a "public health emergency", "national or international interest", or in instances of "public calamity"). The bill also requires the preparation of an unwieldy list of target patents for compulsory licenses and allows public and private parties to petition for the inclusion of additional patents on this list. The sheer breadth of circumstances and patents that could be implicated by the bill subjects all sectors to the threat of unfettered compulsory licensing.

Once a compulsory license is issued, the bill goes even further by requiring patent owners to share necessary trade secrets, technical information and know-how to exercise that patent. Indeed, the bill also requires the sharing of biological material if deemed necessary to use the patent subject to the compulsory license. Patent holders who fail to provide this information, including the biological material, face the penalty of losing their patent entirely. This vastly exceeds the limited exception to patent rights permitted under the TRIPS Agreement.

On September 2, President Bolsonaro partially vetoed some of the most onerous elements of the bill, including provisions related to forced technology transfer (i.e., trade secrets, technical information and know-how) and the sharing of biological material related to an issued compulsory license. The vetoed text is reflected in Law No. 14.200. The National Congress is still evaluating Law No. 14.200 and whether it will override (i.e., reinstate) the provisions vetoed by the Executive Office.

Patent Backlogs

Patent backlogs hinder innovation and compromise the certainty and predictability necessary for the proper functioning of intellectual property regimes. PhRMA supports efforts at INPI implementing the "Plan to Tackle Patent Backlog" which aims to reduce the current backlog by 80 percent and to examine new patent applications within two years from the applicant's examination request. Indeed, the efforts are yielding positive results. In 2020, the backlog was reduced by approximately 50 percent. PhRMA also commends INPI's recently announced technology-neutral PPH pilot program and hopes to see that work expanded in the future. Leveraging work sharing programs with foreign patent offices to reduce examination delays is imperative. Brazil should ensure that such work-sharing programs are not unduly restrictive, both in the overall number of patent

applications allowed to each applicant and the frequency with which the applications can be filed. PhRMA encourages both the U.S. and Brazil Governments to support INPI and these initiatives. Brazilian authorities should ensure that INPI is properly funded and staffed. The U.S. Government can deepen its partnership with INPI with technical assistance built around the various ambitious initiatives INPI is spearheading to improve the intellectual property climate in Brazil.

PhRMA welcomes the recent promulgation of Law No. 14,195/21 which eliminates ANVISA's role with respect to the examination of pharmaceutical patent applications. Since 1999, Article 229-C of Brazil's Patent Law has allowed ANVISA to review all patent applications for pharmaceutical compound and/or process inventions. That article created a dual patent examination process for pharmaceutical inventions, resulting in both: contradictory and/or additive patentability requirements to those established by Brazilian Patent Law and adopted by INPI; and duplicative, prolonged patent reviews that contributed to the existing patent backlog. This new law will help with the patent backlog by eliminating the dual examination process which has adversely impacted biopharmaceutical innovators and bring some certainty and predictability into the patent prosecution process.

It is important to build upon these positive developments to tackle the patent backlog and reduce patent pendency times. Countries have long recognized that patent office delays diminish the incentive that patents are designed to provide and stunt critical investment to small and medium enterprises. It is noteworthy that several OECD countries – such as Chile, South Korea and the United States – have implemented mechanisms to restore a portion of the patent term for unreasonable delays during examination of a patent application, commonly referred to as Patent Term Adjustment (PTA). Indeed, the Supreme Court's decision to eliminate the sole paragraph of Article 40 now leaves all patent applicants with no recourse for unreasonable delays during examination of a patent application. Even worse for pharmaceutical and other health-sector innovators, the Supreme Court also held that the decision should be applied retroactively to their patents. Simply put, the time is ripe for Brazil to establish a PTA mechanism to ensure that innovators are not harmed by undue delays in the patent examination process, consistent with OECD best practices and international standards.

Lack of Regulatory Data Protection

Brazilian law (Law 10.603/02) provides data protection for veterinary, fertilizer and agrochemical products, but still does not provide similar protection for pharmaceutical products for human use, resulting in discriminatory treatment. Contrary to TRIPS Article 39.3, Brazil continues to allow government officials to grant marketing approval for pharmaceuticals to competitors relying on test and other data submitted by innovators to prove the safety and efficacy of their products. Additional efforts are needed to provide certainty that test and other data will be fully protected against unauthorized use to secure marketing approval for a fixed period of time.

PhRMA members continue to seek protection for their data through the judicial system. Although there have been lawsuits seeking to secure a period of data protection for specific products, so far the cases are still pending in the Brazilian courts, leaving innovators without reliable RDP.

National Intellectual Property Strategy

On December 11, 2020, Brazil published its National Intellectual Property Strategy. The National Intellectual Property Strategy has the potential to be a powerful framework to address longstanding intellectual property concerns and to proactively drive an intellectual property policy agenda that provides innovators the necessary certainty they need to collaborate with partners, support necessary research and development investments, and accelerate the launch of new medicines.

The strategy identifies essential policies related to the life science innovation, including patent examination and backlog procedures, regulatory data protection and others. Further initiatives such as the strengthening of the Brazilian PTO and enforcement actors are also provided for in the strategy. We urge Brazil to coordinate with all interested stakeholders including the innovative biopharmaceutical industry as it works to implement its national IP strategy and to clearly define a strategy and map out actions to eliminate the patent examination backlog. A successfully implemented IP strategy should align biopharmaceutical patentability and intellectual property enforcement criteria and procedures with international rules and best practices.

Market Access

Regressive Taxes on Medicines

Combined federal and state taxes account for 31 percent of the cost of medicines in Brazil, one of the highest tax burdens on medicines in the world compared to the global average of 6 percent.[279] Proposals to eliminate taxes on certain products including medicines have previously lapsed. Currently, there are multiple tax reform proposals in the National Congress impacting the biopharmaceutical sector, and one proposed by the Executive branch and approved by the Lower House (bill 2337/2021) would not help reduce the tax on medicines and its corresponding burden on patients. In fact, the proposed tax reform would impose new taxes on approximately 18,000 medicines that are currently exempt from taxes, increasing the cost to patients and public purchasers for those medicines by 12 to 18 percent. Recognizing the substantial burden that these taxes impose on Brazilian patients, PhRMA and its member companies support reform proposals under consideration by Brazil's Congress to eliminate taxes on medicines.

High tariffs and taxes can prevent access to new treatments for patients that need them. Under the WTO Pharmaceutical Agreement, 34 countries agreed to eliminate

[279] IQVIA (2021). Market Prognosis Country Report: Brazil.

import duties on a wide range of medicines and other health products.[280] However, the majority of Latin American economies, including Brazil, are not parties to the WTO Pharmaceutical Agreement. Between 2006 and 2013, the value of worldwide biopharmaceutical trade in countries that are not parties to that Agreement increased at a compound annual growth rate of more than 20 percent. This means that a larger proportion of medicines distributed around the world are potentially subject to tariffs.[281] To help remedy this trend, Brazil should accede to the WTO Pharmaceutical Agreement.

Restrictive Government Pricing, Reimbursement and Access Policies

ANVISA's CMED regulates the pricing and reimbursement of medicines in Brazil, which often creates market access barriers for PhRMA member companies and prevent timely patient access to new treatments and cures. Key challenges include government price ceilings on innovative medicines sold to private and public purchasers as a condition of market entry, delays in new medicine price definitions, price increases capped below inflation despite rising production costs and rigid health technology assessment requirements by CONITEC that prevent more flexible and value-based approaches to evaluating and paying for health care. Although new medicines are supposed to be available for patients within 180 days from the filing of a successful application, CONITEC assessments may take up to 9 months for a final decision, and the overall pricing and reimbursement process typically takes significantly longer. Overall, just 33 percent of new medicines launched globally since 2011 are available in Brazil.[282]

Government Purchasing and PDPs

The Brazilian Government issued Federal Law 12.349/10 in 2010, granting preferences for locally manufactured products and services in public tenders. A price preference of up to 25 percent is automatically applied to locally produced medicines in government tenders. More recently, an amendment to Portaria MDIC 279/11 provided a list of pharmaceutical products eligible for preference margins and defined the parameters for its application in public purchases. While the issuance of Portaria MDIC 279/11 brought more transparency to the purchase process, it still does not adequately define the compensation to be offered by those companies that benefit from this mechanism.

Meanwhile, a new PDP regulation (Portaria 2531/14, subsequently referenced in Consolidation Ordinance no. 5 in 2017) was issued in 2014 with participation of the private sector, which was intended to provide greater transparency and predictability. Since then, the Brazilian Government has announced several PDPs under the new regulation. It remains unclear what criteria were evaluated in assessing and approving these PDPs and the purchasing preferences that will be extended to an approved PDP. In addition,

[280] *Id*.
[281] Banik, N. and P. Stevens, "Pharmaceutical tariffs, trade flows and emerging economies," Geneva Network, Sep. 2015, available at http://geneva-network.com/wp-content/uploads/2015/09/GN-Tariffs-on-medicines.pdf (last visited Jan. 30, 2022).
[282] PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2020. June 2021.

the MoH does not consider or assess relevant intellectual property rights of products that are the object of a PDP application. As a result, the MoH has approved several third-party PDP applications for innovative and patent protected products. Recognizing these shortcomings, Brazil conducted a public consultation in 2018 toward revising PDP requirements, although the resulting updates to the Brazil's PDP ordinance did not progress.

As part of these efforts, in 2019, the MOH held a public consultation with industry to discuss updates to the PDP framework that seek to redefine eligibility criteria and update submission procedures and protocols for governance and monitoring. Nevertheless, the system continues to lack transparency and predictability. More recently, in July 2019, 19 PDP agreements were unexpectedly put into various phases of suspension for a wide range of reasons. Products included medicines to treat hepatitis C, autoimmune conditions and vaccines.

CHILE

PhRMA and its member companies operating in Chile are very concerned about actions by the National Congress that are pressuring Chile's Government to issue compulsory licenses (CLs) for certain innovative medicines, as well as proposed government price controls for which few details have been provided. These developments add to longstanding intellectual property (IP) problems, including Chile's failure to fully implement its patent enforcement and regulatory data protection (RDP) obligations under the U.S.-Chile Free Trade Agreement.

Key Issues of Concern:

- **Compulsory licensing**: Action is needed to protect American innovation in Chile. In 2020, Chilean legislators supported resolutions which, while nonbinding, called for or implicated compulsory licensing mechanisms related to COVID-19 technologies. Further, public pressure is building to compel the Ministry of Health to consider compulsory licensing of innovative COVID-19 treatments. Moreover, some provisions of the "Medicines II" bill have already been negotiated by legislators and approved by the health committee of the Senate, including articles on compulsory licensing. These Articles establish extremely vague and ambiguous grounds for the government and third parties to seek compulsory licenses in Chile.

- **Weak patent enforcement**: PhRMA member companies believe that the Chilean Government's draft legislative and regulatory proposals would, if approved by the Chilean National Congress and implemented, represent a step toward compliance with Chile's treaty obligations. Unfortunately, this legislation, introduced in 2012, continues to be unlikely to move forward in the near term.

- **Unjustified delays during patent prosecution**: Despite having patent term adjustment mechanisms in place, patent applicants are not being adequately compensated for INAPI delays, due to arbitrary interpretations by the TDPI (Industrial Property Court) of what constitutes an unjustified delay during the patent prosecution process.

- **Proposed trademark limitations**: As part of the "Medicines II" bill, Chile's Congress is currently considering provisions to significantly limit the use of trademarks in all pharmaceutical products packaging. That bill also makes the use of the International Non-Proprietary Name (INN) mandatory in drug prescriptions and restricts the ability of doctors to prescribe a medicine using its corresponding trademark.

- **Regulatory data protection**: The Chilean Government's enactment in December 2010 of Supreme Decree 107 corrected some deficiencies in Chile's existing system for protecting proprietary pharmaceutical test data. However, significant

practical and legal hurdles continue to deny innovators appropriate regulatory data protection (RDP).

- **Government price controls**: With the pending finalization of the Medicines II bill, the conference committee is reviewing price regulation proposals that would grant new powers to the Chilean government to use international reference pricing to regulate the price of patented medicines in the market. Unfortunately, these proposals do not address the underlying reasons why patients in Chile face high out-of-pocket costs for medicines, including insufficient health care coverage and markups in the supply chain. Few details have been provided regarding these proposals and consultation on them has largely excluded the biopharmaceutical industry.

For these reasons, PhRMA requests that Chile remain on the **Priority Watch List** in the 2022 Special 301 Report and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved.

Intellectual Property Protection

Compulsory Licensing

The Medicines II bill is pending conference committee consideration in the Chilean Congress. The committee has approved an article which enables the government to issue a compulsory license on vague and ambiguous grounds, such as "inaccessibility." PhRMA and its member companies are concerned about possible adoption and implementation of that article in a manner which would be inconsistent with international best practices and key provisions of the World Trade Organization (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). Specifically, once the Medicines II bill is finalized, relevant agencies will need to adopt corresponding implementing regulations reflecting the new law. We urge Chile to implement provisions of the finalized Medicines II bill in a manner consistent with its international obligations.

Moreover, a number of Congressional resolutions were passed in 2020 implicating compulsory licensing of different products related to COVID-19. While the resolutions are non-binding, they incorrectly assume that IP is a barrier to access and underscore the challenges faced by innovators in Chile.

The 2020 resolutions follow several politically-driven Congressional resolutions that have passed in the last few years calling for the compulsory licensing of innovative hepatitis C and other medicines. Starting in 2017, the Chilean Chamber of the National Congress passed a resolution[283] calling on the Minister of Health "to incorporate and use existing compulsory licensing mechanisms to facilitate [medicines] acquisition at

[283] Resolution No. 798, Chamber of Deputies, available in Spanish at https://www.camara.cl/verDoc.aspx?prmId=4692&prmTipo=RESOLUCION (last visited Jan. 30, 2022).

competitive prices."[284] In addition, the Chamber approved Resolution No. 1014 in January 2018, seeking to establish that access to certain hepatitis C medicines is not consistent with the constitutional right to health, thus warranting, they assert, a CL. Further, on March 9, 2018, the former Minister of Health issued Resolution 399 declaring that the compulsory licensing of hepatitis C treatments would be justified on public health grounds. In June 2018, the Chamber approved Resolution No. 68 asking the Minister of Health to request directly a CL for hepatitis C medicines. On August 28, 2018, the new Minister of Health issued Resolution 1165 rejecting the patentee's challenge to Resolution No. 399/2018. As a result of this latest resolution, there remains a heightened risk of a CL being issued in Chile.

The research-based biopharmaceutical industry is very concerned that these actions inappropriately expand the scope of the government's compulsory licensing authority to pursue objectives that are not clearly related to legitimate health emergencies.

Weak Patent Enforcement

Notwithstanding the requirement contained in Article 17.10.2 of the U.S.-Chile FTA, Chile has thus far failed to establish a satisfactory mechanism to enable effective patent enforcement before marketing approval decisions are made and implemented. Article 17.10.2 requires Chile to "make available to the patent owner the identity of any third-party requesting marketing approval effective during the term of the patent" and "not grant marketing approval to any third party prior to the expiration of the patent term, unless by consent or acquiescence of the patent owner."

During 2011, the Chilean Government acknowledged to USTR and the innovative pharmaceutical industry that it needed to enact new legislation aimed at establishing an effective patent enforcement mechanism that would bring Chile closer to compliance with its FTA obligations. PhRMA supports a policy framework that: (1) provides sufficient time prior to the grant of sanitary registration of a follow-on product to obtain a final decision regarding the validity of relevant patents; (2) enables patent holders to seek provisional enforcement measures, such as a stay or preliminary injunction, prior to the grant of sanitary registration for a potentially patent-infringing medicine; and (3) excludes the imposition of additional requirements or conditions that might prove unreasonable or unduly burdensome, and that might discourage reasonable patent enforcement efforts (e.g., excessive bond requirements and disproportionately high fines for declarations subsequently judged to be inaccurate).

PhRMA welcomed the government's work to introduce relevant draft legislation in January 2012. Unfortunately, that legislation has not received any attention since its introduction and, as a result, Chile is still not complying with its international obligations and the impact of a lack of effective patent enforcement continues to worsen.

[284] *Id.* (emphasis added) (unofficial translation).

Delays in Granting Pharmaceutical Patents

For many years, applicants for pharmaceutical patents in Chile have had to wait a significant amount of time to obtain final action on their applications by the Chilean patent office. In 2008, the Chilean Government, through the Under Secretariat of Economy and specifically the DPI, issued a special resolution "Circular No. 9," in part to remedy these unacceptably long delays. One of the Circular's stated objectives is to streamline the patent application review process by limiting the number of substantive office actions and facilitating rapid communication between applicants and examiners, thereby enabling it to rule more expeditiously on patent applications.

The administrative and procedural reforms implemented by INAPI to date have decreased waiting times, with most patent applications filed after 2007 receiving a definitive decision within four to five years. Therefore, while PhRMA supports the Chilean Government's work to improve patent application processing times, it believes that some further work must be done to expedite patent application reviews in Chile. PhRMA commends Chile's recent participation in the Global Patent Prosecution Highway program and implementation of a Patent Prosecution Highway partnership with USPTO to further improve prosecution time of patent applications.

Furthermore, despite a right granted to applicants in the Chilean Patent Law to request an adjustment to the patent term to offset unjustified delays during the patent prosecution process, applicants are being denied adequate patent term compensation due to arbitrary interpretations by the TDPI of what constitutes "unjustified delay" and narrowly interpreting patent term restoration requests. Without any legal basis for doing so, the TDPI has determined that many types of delays that are outside of the applicants' control are in fact justified, resulting in inadequate patent term restoration in Chile.

PhRMA is hopeful that certain issues regarding patent prosecution, including the application of the three-year prosecution rule, will be addressed as part of implementing the new Industrial Property Law.

Trademarks

During 2020, the conference committee of Congress reconciling the Medicines II bill approved articles that significantly limit the use of trademarks or other "fanciful" designations for any prescribed medicine. A trademark for a medicine designates its source and helps doctors and patients identify the quality, safety and intrinsic effectiveness of a given product – reputational capital and goodwill that manufacturers strive to build over time. Restricting the use of trademarks for medicines would significantly deviate from the current trademark protection guaranteed in Article 19 of Chile's Constitution and from Chile's multilateral (e.g., WTO TRIPS) and bilateral (e.g., U.S.-Chile FTA) obligations.

In addition, the conference committee approved measures that would severely limit the prescription of medicines based on their trademarked names, by requiring that, absent exceptional circumstances, prescribers use the INNs instead.

Regulatory Data Protection

Final enactment in December 2010 of Supreme Decree 107 resolved some longstanding concerns of the U.S. Government and PhRMA regarding deficiencies in Chile's RDP system. Nevertheless, Chile's RDP system contains significant weaknesses, ranging from inappropriate procedural barriers to seek and receive RDP to ambiguous carveouts precluding RDP for certain pharmaceutical innovations (e.g., new uses, formulations, compositions, dosage forms, etc.). Specifically, Chilean regulators inappropriately require innovators to request RDP for specifically identified data and deny RDP in the event subsets of clinical trial data were voluntarily disclosed publicly. Further, regulators are not obligated to protect clinical trial and other data against disclosure.

While Supreme Decree 107 made progress to advance implementation of Chile's RDP under the U.S.-Chile FTA, WTO TRIPS Agreement and other multilateral agreements, compliance with these commitments requires further action by the Chilean government to correct these deficiencies.

Market Access

Government Price Controls

Only 21 percent of new retail medicines launched globally since 2011 are available in Chile and patients face high out-of-pocket costs.[285] With the pending finalization of the Medicines II bill, the conference committee in Congress is reviewing price regulation proposals that would grant new powers to the Chilean government to directly set the price of patented medicines in the market. Unfortunately, these proposals do not address the underlying reasons why patients in Chile face high out-of-pocket costs for medicines, including insufficient health care coverage and markups in the supply chain.

Few details have been provided regarding these proposals and consultation on them has largely excluded industry stakeholders. However, it is widely speculated that the government price controls would be initially limited to patented medicines and involve international reference pricing of other countries in Latin America, nearly all of which have lower GDP per capita. Compounded by heavily devalued currencies throughout the region, these proposals would significantly reduce prices in Chile without creating the policy environment needed to increase patient access and affordability. PhRMA and its member companies stand ready to work with the Chilean government on more practical solutions.

[285] PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2020. June 2021.

COLOMBIA

PhRMA's member companies face urgent market access challenges and intellectual property (IP) issues in Colombia. Significant market access barriers have arisen from the Colombian Government's adoption of cost containment measures, which aim to address overall health care spending by disproportionately imposing price reductions and budget caps on prescription medicines. Other barriers include Decree 1782 of 2014, which establishes an unprecedented "third pathway" for approval of non-comparable biologics contrary to World Health Organization (WHO) guidelines and accepted standards of the United States and other countries. These standards are essential for ensuring the safety and efficacy of biosimilar products. Industry has also faced increasing regulatory delays over the last few years in both securing and renewing marketing authorizations, thereby reducing patient access to innovative medicines.

Regarding intellectual property, Colombia's food and drug regulatory authority (INVIMA) recently adopted a new interpretation of the regulatory data protection (RDP) Decree 2085 of 2002. According to that interpretation, INVIMA denies RDP upon approval of some new chemical entities, simply because they share a minor portion of their chemical structure with previously approved products. Additionally, Colombia's Congress is considering draft bills that would expand considerably compulsory licensing mechanisms and require mandatory disclosure of international non-proprietary names of drug molecules in patent applications.

Key Issues of Concern:

- **Substandard biologics regulation**: On September 18, 2014, Colombia issued Decree 1782, which establishes marketing approval evaluation requirements for all biologic medicines. As part of the Decree, Colombia created an unprecedented "abbreviated" pathway for the registration of non-comparable products, which is inconsistent with WHO guidelines and accepted standards in the United States and other countries, and which could result in the approval of medicines that are not safe and/or effective. Industry urged the Colombian Government to remove this third pathway from the Decree but was unsuccessful.

- **Cost containment measures focused solely on the biopharmaceutical industry**: Government measures to improve the sustainability of the Colombian health system have focused solely on the biopharmaceutical industry and have not addressed broader issues within the pharmaceutical supply chain or other health care sectors. For example, in 2020, the Colombian Government issued regulations to cap the expenditure of medicines not included in the publicly funded Health Benefit Plan (HBP) based on historical levels that would in effect block new innovative medicines from entering the country. These measures have been criticized for their technical shortcomings by virtually all sectors of the health system and academia.

- **Maximum reimbursement values**: In 2019, the Ministry of Health and Social Protection (MoH) established reimbursement caps ("*Valores Máximos de Recobro*" or VMR) for more than one thousand products reimbursed by the government. Maximum values per unit for each active ingredient are calculated based on past reimbursement values, adjusted for inflation, using a formula that skews toward lower prices by taking the 25th percentile of these values for multi-sourced products and the 10th percentile for single-sourced products. The reimbursement caps came into effect in May 2019 for 50 medicines and in January 2020 for the remaining group of medicines. These caps have reduced reimbursement across all impacted medicines (including single source, biologics and branded generics), by approximately 50 percent. Additional products subject to reimbursement caps were announced in August 2021, impacting both the institutional and retail sectors.

- **New drug price regulation methodology**: In 2019, the National Drug Pricing Commission (NDPC) began reviewing its regulation methodology in place since 2013. The Commission is expected to make its system of international reference pricing more restrictive by expanding the number of reference countries from 17 to 19 and changing the mix of countries to include those that are less supportive of innovation. The final methodology is expected to be issued by the end of 2021 after a public consultation process and then implemented. To date, the Commission has not disclosed whether the new methodology will be implemented in early 2022 or applied retroactively as of October 2021. Industry concerns raised back in 2019 should be discussed through an open and timely consultation process.

- **Persistent regulatory barriers under the National Development Plan**: Colombia's 2014-2018 National Development Plan (NDP), which was enacted as part of Law 1753 in May 2015, undermines gains Colombia has made to encourage innovation, delays access to cutting-edge technologies and is inconsistent with Colombia's international commitments. Concerns include Article 72, which inserts price and health technology assessment (HTA) criteria into the regulatory approval process that should be guided by safety, efficacy and quality; and continued uncertainty over price and value definitions for new molecules under consideration by the government, as well as the MoH playing a duplicative role in HTA apart from the *Instituto de Evaluación Tecnológica en Salud* (IETS).

- **Compulsory licensing**: Compulsory licensing in Colombia is a continued risk to the innovative biopharmaceutical industry. Currently, Colombia's Congress is considering expanding compulsory licensing powers via Bill 372 of 2020 (the "Pharmaceutical Safety Bill"). That bill threatens to expand the use of compulsory licenses in an unprecedented manner, including forcing the disclosure of technical and scientific data. In December 2017, the MoH accepted a Declaration of Public Interest (DPI) petition for review that could lead to the compulsory licensing of the entire class of innovative treatments for hepatitis C. The petition was accepted for

review contrary to Colombia's own procedures and appears to provide no justification for such an extreme and drastic action. Recently, a DPI request was made relating to a medication for acute myeloid leukemia. However, that DPI request was abandoned once a price reduction was reached between the Colombian Government and the drug's manufacturer.

- **Regulatory data protection failures**: Colombia fails to respect existing legislation that would otherwise provide RDP upon approval of novel pharmaceutical products.

- **Restrictive patentability criteria**: Contrary to its obligations under the World Trade Organization (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), Colombia does not grant patents for second uses.

- **Effective patent enforcement**: Despite having a specialized court under the auspices of the Superintendence of Industry and Commerce (SIC) designed to address IP infringement matters, Colombia needs to implement effective early resolution mechanisms that provide for the timely resolution of patent disputes before marketing approval is granted to infringing follow-on products during the patent term through increased collaboration between INVIMA and SIC.

For these reasons, PhRMA requests that Colombia be placed on the **Priority Watch List** in the 2022 Special 301 Report and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved.

Intellectual Property Protection

Compulsory Licensing

On December 20, 2017, the MoH issued Resolution 5246 accepting for review a DPI petition filed by Fundación IFARMA. The petition calls for the compulsory licensing of the entire class of innovative medicines for the treatment of hepatitis C, following a similar petition granted against an innovative cancer medicine in 2016. That earlier petition did not result in the awarding of any compulsory licenses but was resolved through a price reduction for the medicine in question.

Resolution 5246 is both legally and procedurally deficient. It appears to be inconsistent with Colombia's international obligations and aspirations. First, Resolution 5246 is based on a petition that failed to identify the patents for which the DPI is being requested, clearly falling short of the standard set forth in Decree 1074 of 2015 ("Decree"). There is no provision in the Decree that allows for the MoH to unilaterally correct omissions in the petition. On the contrary, Article 2.2.2.24.4 of the Decree expressly places the burden of proof on the petitioner to identify the patented technologies that are supposedly affecting the public interest.

Second, a DPI on a broad category of medicines, namely "antivirals for treatment of hepatitis C" would be baseless for a number of reasons, including that: a) the petition itself identifies an entire class of medicines, a class within which significant competition already exists; b) hepatitis C drugs were recently the subject of significant price reductions in Colombia, which the Ministry itself has publicly asserted were between 80 and 90 percent; and c) there is no indication that a health-related emergency regarding hepatitis C exists in Colombia. To the contrary, the incidence of hepatitis C is quite low in Colombia. The MoH could act on this deeply flawed petition at any time, potentially destroying an entire market for a class of innovative medicines developed in the United States.

Also, the Pharmaceutical Safety Bill, which was introduced in 2020, threatens to expand the use of compulsory licenses in an unprecedented manner, including forcing the disclosure of technical and scientific data. The bill also includes provisions facilitating compulsory licensing for nearly any reason if deemed to be in the "public interest." Further, it contemplates the suspension of procedures for the granting of patents or any other form of IP during a pandemic or other public health emergency for "related" technologies. Moreover, the bill inappropriately allows non-expert agencies to play a role in patent prosecution processes.

PhRMA urges USTR and other federal agencies to address this serious threat to American innovation through ongoing discussions under the U.S.-Colombia Trade Promotion Agreement.

Regulatory Data Protection Failures

Existing Colombian legislation, Decree 2085 of 2002 (and its subsequent interpretation through a March 2003 joint act signed by the Ministers of Trade and Health), requires that new chemical entities receive a five-year period of regulatory data protection upon approval. Nevertheless, the Colombian regulatory authority INVIMA recently has begun denying regulatory data protection upon approval of some new chemical entities, simply because they share a minor portion of their chemical structure with previously approved products.

This sudden and drastic change in procedure is inconsistent with the requirements of Decree 2085 of 2002 and contrary to the practice in other countries that provide regulatory data protection for such products. Such disregard of existing legislation undermines incentives to conduct clinical trials and develop new biopharmaceutical products in Colombia.

Restrictive Patentability Criteria

The Andean Court of Justice (ACJ) has issued several legal opinions (89-AI-2000, 01-AI-2001 and 34-AI-2001) holding that Andean Community members should not recognize patents for second uses. These decisions are contrary to long-standing precedents and inconsistent with TRIPS Article 27.1. Andean member countries,

including Colombia, have chosen to honor their Andean Community obligations, while ignoring their TRIPS obligations.

The failure to provide patents for second uses harms patients by undermining incentives for biopharmaceutical innovators to invest in evaluating additional therapeutic benefits of known molecules (second uses) and provide more effective solutions for unsatisfied medical needs. The ACJ position is dispositive on the issue and no further domestic appeals or remedies are possible.

In addition, Colombia's Congress is currently considering a bill that would force biopharmaceutical innovators to disclose International Non-proprietary Names (INN) in all patent applications and to report INNs for previously granted patents. If it becomes law, this requirement would be inconsistent with Andean Community law.

Effective Patent Enforcement

Despite having a specialized court under the auspices of the SIC designed to address IP infringement matters, Colombia needs to implement effective early resolution mechanisms that provide for the timely resolution of patent disputes before marketing approval is granted to infringing follow-on products during the patent term through increased collaboration between INVIMA and SIC.

Market Access

Numerous market access barriers have had a chilling effect on patient access to innovative medicines in Colombia, with only 26 percent of new medicines launched globally since 2011 available. Moreover, of those medicines that are available, Colombian patients had to wait an average of 50 months longer than patients in the countries where the drug first launched.[286]

Substandard Biologics Regulation

On September 18, 2014, Colombia issued Decree 1782, which establishes marketing approval evaluation requirements for all biologic medicines. As part of the Decree, Colombia has established an unprecedented "abbreviated" pathway for the registration of non-comparable products, which is inconsistent with sanitary and WHO standards and practices in the United States and other countries, and which could result in the approval of medicines that are not adequately evaluated in terms of safety and efficacy. Since issuing the Decree, the MoH has issued implementing guidelines, but these guidelines have not served to resolve the fundamental deficiencies of the abbreviated pathway.

[286] PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2020. June 2021.

PhRMA members participated actively in the public consultations and engaged extensively with MoH and their technical experts, specifically highlighting that the abbreviated "third pathway" created by the Decree is not in line with the WHO guidelines for approval of biologics. In contrast to the Full Dossier Route (for originators) and the Comparability pathway (pathway for Biosimilars) found in WHO guidelines, the "Abbreviated Comparability Pathway" as described in the Decree allows for summary approval of non-comparable products and does not provide adequate controls or any clarity regarding how the safety or efficacy of a product approved via this pathway will be evaluated and assured.

Furthermore, per the Decree, a product approved via the "Abbreviated Comparability Pathway" will use the same non-proprietary name as the innovator, even though any similar biologic product would be a distinct biologic product from that of the originator or other biosimilar products. Assigning identical non-proprietary names to products that are not the same could result in inadvertent substitution of the products, generate a false sense of equivalence or substitutability and would make it difficult to quickly trace and attribute adverse events to the correct product. In addition, a product approved via the "Abbreviated Comparability Pathway" will receive approval of the same indications as the innovative product without demonstrating safety or efficacy .

The local innovative biopharmaceutical industry association AFIDRO has filed a legal challenge against the Decree, but as yet no decision has been issued. In the interim, industry will continue to work closely with all stakeholders to ensure that the quality of the information submitted for the approval of biosimilars meets international standards for demonstrating the similarity between the biosimilar and originator product.

Cost-containment Measures Focused Exclusively on the Biopharmaceutical Industry

Government measures to improve the sustainability of the Colombian health system have focused solely on the biopharmaceutical industry and have not addressed broader issues within the pharmaceutical supply chain or other health care sectors. These measures have been developed in an arbitrary, hasty manner that leaves industry unable to plan for transitions. For example, in 2020, the Colombian Government issued Resolutions 205 and 306 to cap the expenditure of medicines not included in the publicly funded HBP. Most of these are innovative medicines, including products developed by PhRMA member companies. The budget caps set by the resolutions and the implementing regulations are based on historical spending, which by definition does not include more recent innovative medicines, and are inadequate to ensure that Colombian patients have access to new treatments and cures.

The calculation of these budget caps has been strongly criticized by virtually all sectors of the health system and academia for technical limitations. These problems are aggravated in the methodology published for 2021, which set caps based on the historical minimum prices paid and atypical utilization volumes observed during 2020 because of the COVID-19 pandemic. As part of this calculation, the government publishes the estimated prices for each product according to the information reported by the

government-sponsored HMO system (EPS), which may contain errors and does not provide opportunity for relevant stakeholders to verify the quality of the information. PhRMA and its member companies request that any cost containment measures consider the entire health care system, be developed and implemented through a participatory process with relevant stakeholders and include appropriate transition periods. In addition, MoH should consider alternative approaches to addressing uncertainty over spending, such as managed entry agreements.

Maximum Reimbursement Values

In 2019, the MoH established reimbursement caps (VMR) for more than one thousand products reimbursed by the government. The maximum reimbursement values correspond to the maximum cost that can be reclaimed from the Administrator of the Resources of the General System of Social Security in Health (ADRES) by EPS. Maximum values per unit for each active ingredient are calculated based on past reimbursement values during the reference period, adjusted for inflation. This formula skews toward lower prices by taking the 25th percentile of these values for multi-sourced products and the 10th percentile for single-sourced products. The reimbursement caps came into effect in May 2019 for 50 medicines and in January 2020 for the remaining group of medicines. These caps have reduced reimbursement across all impacted medicines (including single source, biologics and branded generics), by approximately 50 percent. Additional products subject to reimbursement caps were announced in August 2021, impacting both the institutional and retail sectors.

New Drug Price Regulation Methodology

During 2019, the National Drug Pricing Commission began reviewing its regulation methodology in place since 2013. The MoH is expected to make its system of international reference pricing more restrictive by expanding the number of reference countries from 17 to 19 and changing the mix of countries to include those that are less supportive of innovation (e.g., replacing Germany with Greece, South Africa and Turkey).

PhRMA and its member companies have additional concerns about the new price regulation methodology, including the frequency of price adjustments and a new cost containment mechanism that would adopt the lowest unit price observed domestically or internationally among groups of products that differ in strength, formulation, delivery system and quality. This approach fundamentally punishes continued innovation to better meet diverse patient needs. Until now, the methodology has not been issued by the MoH but is expected to be published in 2022.Concerns raised by industry in 2019 should be discussed through an open and timely process.

Persistent Regulatory Barriers under the National Development Plan

Colombia's 2014-2018 NDP, which was enacted in May 2015 as part of Law 1753, undermines recent gains Colombia has made to encourage innovation, delays patient access to cutting edge technologies and is inconsistent with Colombia's international

commitments. Specifically, Article 72 states that for certain identified drugs, including innovative medicines, an HTA by IETS and the setting of a price by the MoH based on that evaluation should both be prerequisites for marketing approval and renewal.

The MoH, following a warning from the Colombian Constitutional Court, implemented regulations for Article 72 that would separate INVIMA's market approval processes from HTA and price measures. However, the Council of State responded by issuing Decrees 433 and 710 of 2018, which partially and provisionally suspended these regulations and again required new drugs to be assessed by IETS before INVIMA could issue a marketing approval: "IETS must carry out the assessment … simultaneously with the Sanitary Register process before INVIMA. The assessment carried out by IETS cannot be a condition for the granting of the Sanitary Register by that entity, which may issue it once its own assessment procedure is completed."

At this time, the Council of State is reviewing an appeal filed against its provisional suspension. If a full suspension is declared, the HTA carried out by IETS would be required for INVIMA to issue a marketing approval as set forth by Article 72. It is additionally concerning that no maximum term is provided for IETS to carry out its assessments, as the 180-day term initially contemplated was removed by Decrees 433 and 710. Without a fixed term for IETS to complete its HTA and price assessments, these requirements could severely delaying market access for innovative medicines in Colombia. Moreover, there is continued uncertainty about price and value definitions for new molecules under consideration by the government, as well as the MoH playing a duplicative role in HTA apart from IETS.

Regulatory Decisions Inconsistent with Global Best Practices

Products approved by reference authorities such as the U.S. Food and Drug Administration (FDA), the European Medicines Agency (EMA) and Brazil's National Health Surveillance Agency (ANVISA) are frequently either denied approval in Colombia or approved with deviations from their approvals in reference countries (e.g., approximately 80 percent of new medicines denied by INVIMA have been approved by the FDA and/or EMA). The data provided for these drugs is pharmacologically the same as provided to reference country authorities and no explanation is provided for why the outcome of their evaluation in Colombia would be different. These inconsistent outcomes underscore the need for ongoing collaboration between the MoH and INVIMA to ensure that the MoH adopts and applies regulatory assessment procedures that are consistent with international best practices.

Moreover, Decree 677 of 1995 allows that, when a product has been approved in at least two reference countries and has not been rejected in any other reference country, the pharmacological evaluation will only consider a summary of the product's clinical information. Despite this regulation, INVIMA in practice denies without justification the approval of innovative medicines that comply with these requirements, which blocks the entry of innovative medicines and ultimately increases trade barriers.

Arbitrary and Non-Transparent Pricing Policies

Colombia sets a maximum price for both the public and private markets at the distributor level. These different channels are dissimilar in most characteristics, in that they serve different patient populations via different business models. In addition, the pricing system is highly subjective. For example, certain price control exceptions may be permitted for products with a significant technical benefit over medicines containing the same active ingredient (i.e., standard versus extended-release tablets), yet the criteria required to grant such exceptions are unclear.

MEXICO

PhRMA and its member companies operating in Mexico are increasingly concerned with changes to Mexico's pharmaceutical policies, particularly with respect to market access delays due to challenges in the regulatory approval process, accessing public formularies and new public procurement processes, weak patent enforcement and other significant intellectual property (IP) issues, and, more broadly, with growing legal uncertainty and a lack of transparency around government decision-making processes. With the United States-Mexico-Canada Agreement (USMCA) now in effect, it is critical that Mexico implement and maintain systems that are consistent with its trade commitments.

Key Issues of Concern:

- **Market access delays**: The Federal Commission for Protection against Health Risks (COFEPRIS) has severely delayed the marketing authorization process for pharmaceutical products since early 2019 . In addition, significant existing market access barriers remain due to lengthy, non-transparent and unpredictable procurement processes. A lack of transparency around the implementation of a National Medicines Compendium and disease-specific treatment guidelines, as well as challenges and uncertainty in accessing the formularies of public health institutions, create additional delays which restrict patient access to innovative medicines.

- **Challenges with new public procurement practices**: Since 2018, Mexico has made frequent and nontransparent changes to its public procurement system. Following the uncertainty created by Mexico in 2019 in consolidating and transferring authority for the public procurement of medicines from the individual public health institutions to the Ministry of Finance, in 2020 Mexico decided to outsource a significant proportion of its public purchases of medicines to the United Nations Procurement Office (UNOPS). The UNOPS process has lacked transparency, predictability and effectiveness. These many significant changes and unreasonable implementation timelines have created significant market access barriers for PhRMA member companies, have resulted in supply chain challenges and product shortages for Mexican patients and raised concerns about pharmacovigilance and patient safety.

- **Weak patent enforcement and regulatory data protection failures**: Mexico, in response to its USMCA commitments, promulgated the Federal Law for Protection of Industrial Property which entered into force on November 5, 2020. While this is a welcome step, implementing regulations have not yet been issued. PhRMA's member companies are still waiting for details regarding how relevant authorities will implement mechanisms that strengthen patent enforcement and the ability to resolve outstanding patent concerns prior to marketing approval and launch of follow-on products. Further, obtaining effective preliminary injunctions or final

decisions on cases regarding IP infringement within a reasonable time (as well as collecting adequate damages when appropriate) remains the exception rather than the norm. Additionally, despite its commitments under USMCA, Mexico still lacks measures to restore a portion of the patent term lost during the regulatory approval process and consolidation of substantive regulatory data protection (RDP) in a federal law is still pending. Furthermore, the new Mexican Federal Law for Protection of Industrial Property does not appear to provide RDP for biologics, only for chemical compounds and combinations thereof, contrary to Mexico's USMCA commitments.

For these reasons, PhRMA requests that Mexico be placed on the **Priority Watch List** in the 2022 Special 301 Report and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved.

Intellectual Property Protection

Weak Patent Enforcement

Several deficiencies have confounded the effective enforcement of patents in Mexico. Recognizing that these deficiencies hinder its new commitments to protect and enforce patents in the USMCA, Mexico enacted the Federal Law for Protection of Industrial Property, which entered into force on November 5, 2020, in order to address them. However, implementing regulations have not been released and at this point PhRMA and its member companies are unable to assess whether the new law will address the deficiencies in Mexico's patent enforcement system as outlined below.

To ensure adequate and effective protection of IP rights for the research-based biopharmaceutical sector, mechanisms that provide for the early resolution of patent disputes before an infringing product is allowed to enter the market are critical. Mexico has taken some positive steps to improve patent enforcement, including adopting the Linkage Decree of 2003, although the decree has not been implemented in a comprehensive and consistent manner. The publication in the Official Gazette of medicine-related patents is a positive step toward the goal of eliminating unnecessary, costly and time-consuming court actions to obtain appropriate legal protection for biopharmaceutical patents. However, compound, formulation and medical use patents still require lengthy and costly litigation to achieve inclusion in the Official Gazette. Furthermore, COFEPRIS appears to apply linkage inconsistently and possibly in a discriminatory manner. In some cases, marketing authorizations have been issued despite patents listed in the Official Gazette. As a result, there have been concerning instances (at least three in April 2017) where COFEPRIS granted marketing authorization for entry of products for which a valid patent exists. Additionally, the lack of implementing regulations for the Federal Law for Protection of Industrial Property has left PhRMA members without key details regarding the scope of the patent enforcement regime, including which patents would be subject to the system. This undermines company confidence in the IP system in Mexico and impedes companies' ability to do business in Mexico.

Further, PhRMA member companies are unable to obtain accurate and timely information from COFEPRIS prior to marketing authorization being granted on a generic or biosimilar drug where the innovator product is used as a reference. As a result, innovators have little to no notice that a potentially patent infringing product is entering the market. Securing effective preliminary injunctions or final decisions on cases regarding IP infringement within a reasonable time (as well as collecting adequate damages when appropriate) remains the exception rather than the norm. Although injunctions may be initially granted subject to the payment of a bond, counter-bonds, or in some proceedings only on applications, motions may be submitted by the alleged infringer to lift the injunction and allow the challenged product to enter the market.

Even if an innovator successfully enforces its IP rights in Mexico, seeking monetary damages is extremely burdensome. In order to claim damages from patent infringers in Mexico, litigants are required to first obtain a final administrative action and then seek damages through a civil action, actions that can take longer than ten years.

Mexico has repeatedly committed to provide effective patent enforcement mechanisms in NAFTA, the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) and most recently in the USMCA. It is critical that Mexico act on its commitments by implementing an effective patent enforcement system. In order for Mexico to succeed in this effort, it will be essential that Mexico reject calls from some in Congress that would inappropriately limit the scope of Mexico's patent linkage system. PhRMA and its member companies encourage the Mexican Government to hasten patent infringement proceedings, use all available legal mechanisms to enforce Mexican Supreme Court decisions and implement procedures necessary to provide timely and effective preliminary injunctions.

Additionally, on November 18, 2020, COFEPRIS issued an executive order under which it will expedite the market authorization process for medicines that have been approved by certain foreign regulatory agencies, including the U.S. Food and Drug Administration, European Medicines Agency, or the World Health Organization Prequalification Program for Medicines and Vaccines.[287] Applications for these medicines will be automatically approved within five days unless COFEPRIS issues a request for further information from the applicant. As yet, it is unclear how COFEPRIS plans to ensure that any medicines approved under this new mechanism will not infringe on an innovator's IP rights, mindful of Mexico's international commitments.

Lack of Patent Term Restoration (PTR)

Mexico remains one of the few members of the OECD that does not provide PTR for effective patent term lost during the lengthy development and regulatory approval process. This situation is exacerbated by the current delays of COFEPRIS in approving

[287] Executive Order dated November 18, 2020, available at: https://www.dof.gob.mx/nota_detalle.php?codigo=5605237&fecha=18/11/2020 (last visited Jan. 30, 2022).

medicines, resulting in significant patent term lost due to no fault of the inventor or patent owner. PhRMA appreciates that Mexico has agreed to implement such term restoration in the USMCA subject to a 4.5-year transition. Nonetheless, the lack of such protection undermines the term of patent protection in Mexico and consequently undermines the ability of our members to sustainably bring new therapies to Mexican patients. PhRMA urges USTR and other federal agencies to encourage Mexico to implement appropriate PTR provisions as soon as possible.

Regulatory Data Protection Failures

Biopharmaceutical innovators work with hospitals, universities and other partners to rigorously test potential new medicines and demonstrate they are safe and effective for patients who need them. Less than 12 percent of medicines that enter clinical trials ever result in approved treatments.[288]

To support the significant investment of time and resources needed to develop test data to prove that a new medicine is safe and effective, the international community has developed a mechanism recognized as essential to biopharmaceutical innovation whereby the data submitted is protected from unfair commercial use for a period of time. The mechanism is enshrined in TRIPS Article 39.3, which requires WTO members to protect undisclosed test and other data submitted for marketing approval in that country against disclosure and unfair commercial use.

RDP is essential for all medicines and particularly critical for biologic therapies. Produced using living organisms, biologics are complex and challenging to manufacture and may not be protected adequately by patents alone. Unlike generic versions of traditional chemical compounds, biosimilars are not identical to the original innovative medicine and there is greater uncertainty about whether an innovator's patent right will cover a biosimilar version. Without the certainty of some substantial period of market exclusivity, innovators will not have the incentives needed to conduct the expensive, risky and time-consuming work to discover and bring new biologics to market. Unfortunately, the new Mexican Federal Law for Protection of Industrial Property does not appear to provide RDP for biologics, only for chemical compounds and combinations thereof, contrary to Mexico's commitments under Articles 20.48 and 20.49 of the USMCA.

In June 2012, COFEPRIS issued guidelines to implement RDP for a period not less than five years – an important step toward fulfilling Mexico's international obligations. PhRMA members initially welcomed this decision as an important confirmation of Mexico's obligations and its intention to fully implement the NAFTA and TRIPS provisions.

[288] DiMasi JA, Grabowski HG, Hansen RW; Tufts Center for the Study of Drug Development. Innovation in the pharmaceutical industry: new estimates of R&D costs. In: Briefing: Cost of Developing a New Drug, available at https://f.hubspotusercontent10.net/hubfs/9468915/TuftsCSDD_June2021/pdf/Microsoft+PowerPoint+-+Tufts+CSDD+briefing+on+R%26D+cost+study+-+Nov+18,+2014.pdf (last visited Jan. 30, 2022).

As guidelines, however, their validity may be questioned when applied to a concrete case. Further, they could be hard to enforce and may be revoked at any time. Therefore, PhRMA members strongly urge the passage of binding federal regulations on RDP to provide certainty regarding the extent and durability of Mexico's commitment to strong IP protection, consistent with Mexico's international commitments under the USMCA.

Potential Abuse of the "*Bolar*" Exemption

Mexico allows generic manufacturers to import active pharmaceutical ingredients and other raw materials contained in a patented pharmaceutical for purposes of preparing marketing authorizations during the last three years of the medicine's patent term (or the last eight years for a biologic), per the *Bolar* exemption. However, since the secondary regulations of the new IP Law are still pending, Mexico fails to impose any limits on the amount of raw materials that can be imported under this exception.

Given some of the import volumes reported, PhRMA's members are very concerned that some importers may be abusing the *Bolar* exemption by stockpiling and/or selling patent-infringing and potentially substandard medicines in Mexico or elsewhere. PhRMA members encourage Mexican authorities to establish clear criteria for the issuance of import permits that respect patent rights and appropriately limit imports to quantities required for testing bioequivalence.

Market Access

Market Access Delays

The local innovative pharmaceutical industry association, Asociación Mexicana de Industrias de Investigación Farmacéutica (AMIIF), has estimated that it takes four years on average for Mexican patients to access innovative medicines following regulatory approval and that this delay is increasing. Key reasons for this delay are the need to obtain the approval of the New Molecules Committee prior to filing a marketing authorization request, excessive times required for public formulary inclusion and the five-year marketing authorization renewal process, all of which significantly exceed stated timelines. COFEPRIS previously made improvements to the marketing authorization process despite limited resources. However, since early 2019, progress backtracked when the agency ceased communication with the biopharmaceutical industry and put on hold the work and processes of its New Molecules Committee. While the New Molecules Committee has made progress in recent months, delays remain a problem. There are currently many clinical trial applications pending a response from COFEPRIS, 13 delayed new molecule applications and 22 delayed applications for marketing authorizations. All of these applications have already been approved by reference regulatory agencies.

Once COFEPRIS grants a marketing authorization, there remain significant barriers for patients, primarily those covered by public institutions, in accessing important medicines. This additional delay is caused by the lengthy, non-transparent and uncertain

public procurement system used in Mexico, which adds, on average, two years to patient access timelines in the public sector (if a medicine is made available at all). In addition, inclusion into the basic formulary of a public health institution does not automatically result in the purchase and subsequent availability of those medicines to patients.

More specifically, after COFEPRIS grants marketing authorization, the National Health Council (NHC) decides which medicines should be included on the national formulary. Until 2018, recommended prices of patented and single-source medicines (or those with exclusive distributors) for all public health institutions were negotiated with the Coordinating Commission for the Negotiation of Prices of Medicines and Other Medical Supplies under the supervision of the Ministry of Public Function (SFP) and the Mexican Antitrust Authority (COFECE). Following this recommendation, the public health institutions at federal and local levels – such as the Mexican Institute for Social Security (IMSS), Institute of Security and Social Services for State Workers (ISSSTE) and Institute of Health for Welfare (INSABI) – then procured the medicines at the negotiated prices. While this process had significant flaws, it has been largely supplanted since the beginning of the current administration. Overall, just 31 percent of new medicines launched globally since 2011 are available in Mexico.[289]

Challenges with New Public Procurement Practices

In 2019, the Mexican Government further consolidated and transferred authority for the public procurement of medicines from the individual public health institutions (e.g., IMSS, ISSSTE, INSABI, etc.) to the Ministry of Finance. The National Health Council supports this centralized process by developing disease-specific treatment guidelines aimed at reducing the number of medicines on the National Medicines Compendium, but without clear criteria and transparency. Several tenders and purchases without tenders were conducted under this process based on new rules that lacked transparency in process and requirements, and that are inconsistent with Mexican public procurement and antitrust laws, as well as Mexico's obligations under NAFTA (in force at that time) and USMCA (see below). For example, Mexico bypassed its normal procurement process and conducted open international tenders. While the Mexican Government asserted that the price preference granted under such tenders for Mexican products would be extended to products originating from FTA trading partners, the rush and lack of transparency regarding how the awards were granted raised questions as to whether those assurances were honored.

Adding to these challenges, in 2020 Mexico published executive orders to permit the procurement of medicines not approved by the Federal Commission for Protection against Sanitary Risk (COFEPRIS) and amended the Federal Procurement Law to outsource its purchases of medicines to UNOPS. These sweeping changes are being made without meaningful stakeholder consultation, present safety concerns and are further contributing to an unviable business environment for PhRMA member companies.

[289] PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2020. June 2021.

- In January 2020, the Mexican Government published executive orders that would allow procurement and imports of medicines that have not been approved by COFEPRIS. Instead, the products will simply need regulatory approval from either (1) the country of origin; (2) regulatory authorities in Australia, Canada, Europe, Switzerland or the United States; (3) PAHO/WHO Regional Reference Authorities which additionally include Argentina, Brazil, Chile, Cuba and Colombia; or (4) any of the 53 authorities participating in the Pharmaceutical Inspection Cooperation Scheme (PIC/S). PhRMA has urged the Mexican Government to limit the procurement process to products that meet all relevant regulatory standards and to adopt specific measures to honor IP protections in the context of these approvals.

- Subsequently, in August 2020, the Mexican Government amended the Federal Procurement Law to permit the procurement of medications, vaccines and medical equipment directly from international organizations – such as the Pan American Health Organization (PAHO) and UNOPS – outside of Mexico's normal procurement process. The legal changes apply to open tenders, restricted tendering, qualification of suppliers and selective tendering. They do not establish a clear methodology or government accountability for procurement through international organizations or include any specifications on how market research will be conducted to determine whether it is appropriate and efficient to purchase medicines through international organizations. Nor do they ensure the protection of patent and other intellectual property rights by requiring exclusive procurements for patented medicines (e.g., UNOPS initially issued an open tender for molecules with intellectual property protection in Mexico). Moreover, the measure does not ensure that U.S. suppliers will be allowed to participate in the tenders. This exclusion opens a wide range of pharmaceutical procurements to being conducted outside of the normal legal framework.

- In September 2020, the Mexican House of Representatives began discussions to further amend the Federal Procurement Law. Discussions on these proposals are ongoing but do not appear to have considered Mexico's government procurement commitments. On the contrary, many of the proposals deviate from those commitments and could become barriers to trade. For example, certain proposals suggest that market research provisions could be used to exclude tenders from certain countries, including the United States. This raises broad national treatment concerns as well as inconsistencies with Mexico's government procurement commitments under the USMCA. The innovative biopharmaceutical industry is concerned that if these proposals are enacted, many of the benefits anticipated by U.S. manufacturers under the USMCA would be eliminated.

- In June 2021, the Executive Branch amended the secondary regulations of the Federal Procurement Law to permit the simultaneous supply in the purchase method known as the *direct award*, the equivalent to the limited tendering provided by the USMCA. That amendment may have the effect of circumventing public

tendering, contrary to Mexico's commitments under Chapter 13 of the USMCA (see below).

PhRMA member companies are currently experiencing significant challenges with the UNOPS procurement process that negatively impact commercial operations in Mexico and patient access to procured medicines. This new system, which has been operational for more than a year, suffers from (1) fragmented management of the end-to-end process for procuring, supplying and distributing medicines due to non-interoperability between the Mexican Government and UNOPS; (2) logistical barriers for distributors and hospitals that lack needed information to verify and accept delivery of procured medicines; and (3) lack of transparency and meaningful engagement with affected stakeholders to resolve concerns.

These challenges are resulting in shortages of medicines to patients in Mexico, subsequent and duplicate procurement requests from Mexico Government public health institutions outside of the UNOPS process, purchase orders that are significantly below the volume contracted by UNOPS, lack of payment for procured and supplied medicines and even significant daily fines to PhRMA member companies that are not permitted to deliver contracted supply due to Mexican Government bureaucratic delays. Unfortunately, neither the Mexican Government nor UNOPS accepts full responsibility for these challenges, allowing both parties to avoid ownership of the problems and needed solutions.

Mexican Secretary of Health Jorge Alcocer recently reported that UNOPS had conducted tenders for only 1038 (51 percent) of the 2034 medicine codes required for 2021-2022 (the Mexican Government independently procured the remainder) and that just 15 percent of the procured medicines have been distributed. Nonetheless, a second phase of tenders for a significantly larger number of medicine codes is expected to be conducted by UNOPS.

Under Chapter 13 of the USMCA, Mexico has generally committed to procure goods and services through open tendering procedures (Article 13.4.4). One of the limited exceptions to this commitment (Article 13.2.4) states that Chapter 13 does not apply to procurement conducted "under the particular procedure or condition of an international organization, or funded by international grants, loans, or other assistance if the applicable procedure or condition would be inconsistent with this Chapter." While Article 13 enables government projects to allow for the participation of international organizations, it does not provide a mechanism for the Mexican Government to sidestep its USMCA commitments by procuring all products from an international organization. As such, the amendment to the Federal Procurement Law, which permits the direct procurement of medicines with international organizations without restrictions, appears to exceed the limited exception provided by Article 13.2.4 of the USMCA.

Discussions on other proposals to amend the Procurement Law are ongoing but do not appear to have considered Mexico's government procurement commitments. On the contrary, many of the proposals deviate from those commitments and could become

barriers to trade. For example, certain proposals suggest that “market research” provisions could be used to exclude tenders from certain countries, including the United States. This raises broad national treatment concerns as well as inconsistencies with Mexico’s government procurement commitments under the USMCA. The innovative biopharmaceutical industry is concerned that if these proposals are enacted, many of the benefits anticipated by U.S. manufacturers under the USMCA would be eliminated.

Since the implementation of this restructured procurement process, Mexico has experienced significant supply chain challenges, resulting in persistent shortages of medicines, including treatments for diabetes, hypertension, cancer and HIV. PhRMA member companies are deeply concerned that these continuing procurement changes and shifting implementation timelines could result in further shortages of medicines for Mexican patients and create concerns for pharmacovigilance and patient safety. Based on industry’s experience with these new procurement practices, as well as the nature of the proposed changes, PhRMA urges the Mexican Government to provide greater clarity in process and requirements, ensure consistency with Mexican law and international commitments and allow for appropriate lead times so that companies can make any necessary operational adjustments to ensure supply continuity.

Finally, recent Executive Branch modifications to the regulations of the Procurement Law permit governmental entities to circumvent the tendering process by procuring products and services (medicines included) through a direct award. PhRMA’s member companies are concerned that these modifications could lead to increased use of procurements with limited tenders, in violation of Mexico’s commitment to open tendering under USMCA.

.

MIDDLE EAST / AFRICA

ALGERIA

Algeria's policies and actions pose significant market access and intellectual property challenges for PhRMA members. PhRMA and its member companies believe, however, that Algeria has the potential to foster investment in pharmaceutical innovation and to address the unmet medical needs of the country. Notably, since the election of a new government in December 2019, a new Ministry of Pharmaceutical Industry (MoPI) has been established with a mandate to energize the sector and improve its contribution to economic growth.

PhRMA noted some success in collaborating with the prior government in place until mid-2012, with that government stating publicly its support for a new strategy that better integrates the innovative pharmaceutical sector into Algeria's economy and health care system. Subsequent Ministers have reaffirmed their commitment to boosting Algeria's competitiveness in the innovative biopharmaceutical sector, but dozens of proposed reforms have not been implemented. Despite deterioration in the overall business and investment environment, PhRMA's member companies are hopeful for a cooperative dialogue with the government to address the key challenges they face in Algeria. Recently, the new MoPI hosted meetings and working sessions with industry which have included the Minister and his team. PhRMA members are contributing to the successful implementation of the national health care law through the local innovative pharmaceutical association as well as preparation and submission of other policy proposals as a contribution to ministerial orders (covering pricing, registration and access to innovation).

Key Issues of Concern:

- **Import restrictions and forced localization**: Algeria prohibits imports of most pharmaceutical products that compete with similar products that are manufactured domestically. Pharmaceutical products and active pharmaceutical ingredients (APIs) that are not locally manufactured are subject to annual import quotas.

- **Weak patent enforcement and regulatory data protection failures**: Algeria has inadequate patent protection, ineffective mechanisms to enforce patents, and does not grant regulatory data protection (RDP). Judicial training to handle complex patent disputes would greatly assist in improving the patent enforcement environment in Algeria. PhRMA appreciates recent meetings hosted by the MoPI during which they expressed willingness to work with our members to improve patent enforcement in Algeria.

- **Pricing procedures**: Algeria's pricing and reimbursement mechanisms are cumbersome and delayed. Historically, some patented medicines have been referenced against generic products deemed to be in the same therapeutic class. In addition, the new drug pricing procedure issued in August 2015 has key weaknesses related to its reference pricing system and the frequency of updates.

As a result, prices in Algeria do not recognize the value of innovative products, nor do they reward the significant investment involved in developing new medicines or encourage the development of tomorrow's cures. Notably, the new government has expressed interest in revising pricing procedures and it is anticipated that the local association will be invited to contribute through policy proposals.

- **Cumbersome and slow regulatory system**: Despite significant improvements in the Ministry of Health's (MoH's) registration process in 2013, the registration process remains slow and burdensome. As a result, patient access to innovative medicines in Algeria lags significantly behind peer countries. A new National Agency of Pharmaceutical Products (ANPP) has been created under the supervision of the MoPI and given the challenge of resolving the registration backlog of around 700 products awaiting clearance. The local association is proposing to support solutions to the backlog such as regulatory reliance.

- **Failure to renew representative office licenses**: Many pharmaceutical companies operating in Algeria have established representative offices. Licenses for such offices must be renewed every two years, and yet in 2018 the Ministry of Commerce suspended renewing these licenses until September 2019. (Renewals have been granted for companies in other sectors, but not for the pharmaceutical industry.) In addition to creating significant uncertainty as to the ability of these companies to continue operating in Algeria, it has resulted in local banks blocking access to member accounts and MoH suspending promotional activities as per an October 28, 2019 notice, until their office licenses are renewed. So far, concerned companies have been asked by the Minister of Commerce to submit again some files. Still the renewal would only be for one year.

For these reasons, PhRMA requests that Algeria be placed on the **Priority Watch List** in the 2022 Special 301 Report, and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved.

Intellectual Property Protection

Weak Patent Enforcement

Marketing approval authorities in Algeria improperly interpret current laws and regulations by granting marketing approval to patent infringing follow-on products while relevant patent(s) are still in effect. Despite patent owners' repeated attempts to alert Algerian authorities, Algeria's marketing approval agency has approved infringing follow-on products many years in advance of the original product patent expiration.

Compounding these actions, effective judicial remedies are not available to prevent infringement of patent rights. Algerian courts do not provide injunctive relief that could prevent irreparable harm prior to the resolution of the patent dispute, thus placing originators in an untenable position with no possibility to defend their rights. Violations of Algerian patents that have occurred in recent years have still not been corrected.

Regulatory Data Protection Failures

Algeria does not protect pharmaceutical test and other data from unfair commercial use and disclosure. Algeria should correct this deficiency through implementation of meaningful RDP.

Market Access Barriers

Import Restrictions

On October 21, 2008, the Algerian Government issued a decision[290] stipulating that, effective January 2009, the importation of pharmaceutical products that compete with similar products that are being manufactured locally is prohibited. This decision was essentially a reinstatement of a previous ministerial decree[291] that was suspended as part of the WTO accession process. Subsequently, the MoH published lists of such products comprising hundreds of branded medicines, and this import policy continues to be implemented in a non-transparent and arbitrary manner. Repealing this decision should be a prerequisite before Algeria can join the WTO.

In August 2015, the MoH issued a procedure for the inclusion of products on a list of pharmaceutical products prohibited for import. The innovative pharmaceutical industry is highly concerned about the proposed procedures to ban imports of certain products to promote local manufacturing. This proposal contradicts the government's aspirations to attract more investment by the innovative biopharmaceutical industry and for Algeria to accede to the WTO. As the procedures themselves recognize, such restrictions could have major consequences on patient access to innovative products as well as on the operations and sustainability of our member companies in Algeria.

In 2017, the Algerian Government arbitrarily imposed volume restrictions on imports of pharmaceutical products that compete with similar products produced domestically and/or imported generic products.

Algeria's restrictions on the importation of pharmaceuticals severely restrict patient access to innovative medicines, discriminate unfairly against PhRMA members, and are a significant barrier to trade. They have resulted in shortages of some drugs, further harming Algerian patients. During numerous discussions over the last few years between the Algerian Government and industry, officials signaled their intent to reform the system to improve access and minimize stock disruptions. As of today, however, the system remains unchanged. At the end of 2020, the MoH established a new commission to review the value of new drugs and evaluate innovative supply agreements.

[290] The decision was published in November 2008 under the name "Arrêté du 30 novembre 2008 relatif àl'interdiction des produits pharmaceutiques et dispositifs médicaux destinés à la médicine humaine fabriqué en Algérie."
[291] Instruction #5 for the Generalization of Generics (Sept. 2003).

Investments and Commercial Laws

In December 2008, the Algerian Government declared that any company engaged in foreign trade should have a minimum of 51 percent of local Algerian shareholders. While the 2020 Finance Bill removed this restriction for "non-strategic sectors", complementary legislation enacted in July 2020 identified the pharmaceutical industry as a strategic sector. As yet, however, the government has not defined what activities constitute investment.

Since 2009, importers have been required to secure letters of credit and set aside a percentage of the import value as a deposit on their purchase.

In May 2010, the MoH issued a circular that prohibits local manufacturers from selling products to wholesalers, and requires them to sell such products directly to pharmacies. Therefore, PhRMA members who invested in local manufacturing will now also have to invest in distribution infrastructure. While this circular has never been applied, the uncertainty of the regulation continues to concern PhRMA members.

In January the Finance Law 2021 was enacted, which further restricts the ability of foreign owned companies to import innovative products, seemingly in order to promote local manufacturing. The new regulations lack clarity and seem to contradict aspects of the Algerian constitution. We would kindly request the Algerian Government to provide immediate clarity on the intention of the Finance Law 2021 and the extent to which they will further impact imports into Algeria.

Volume Control

Algeria continues to impose an annual import quota for medicines and active pharmaceutical ingredients with the requirement that each shipment receives prior clearance from the MoPI.

The government routinely blocks imports as a temporary cost-containment tool. The unintended consequence, however, is that it leads to shortages in the market, to the detriment of Algerian patients. The narrow focus on cost means that it cannot capture the underlying value of promising new medicines for patients or reduce other costs in the health care system, such as avoiding expensive hospitalizations, surgery, rehabilitative or long-term care.

Pricing Procedures

The Algerian Government uses international reference pricing (IRP) to set the prices of medicines. As a general matter, IRP suffers from serious flaws as a mechanism for pharmaceutical pricing. It assumes similarity across all countries in the reference basket and implicitly imports the pricing policies of those countries without accounting for circumstances that justify price differentiation. Importantly, IRP ignores the local value of the product, patient benefits and physician requirements, existing standards of care,

placement within the health care system, patterns of disease burden, socioeconomic factors including ability to pay, stage in the pharmaceutical life cycle, etc. IRP also ignores circumstances unrelated to a product's value such as budget overruns that lead to price cuts. In short, IRP as a policy is inconsistent with Algeria's goal of promoting a local innovative biopharmaceutical industry.

In August 2015, the Algerian Government issued a new procedure for determining pharmaceutical prices. Key weaknesses in Algeria's pricing procedure and the IRP model include:

- The pricing procedure references a basket of countries including Greece and Turkey, which are inappropriate comparators. Prices in Turkey are based on deflated prices in Europe as a result of a discriminatory fixed Euro-Turkish Lira exchange rate, and prices in Greece have been set based on the ongoing economic crisis in that country. In short, the artificially low prices in both countries do not reflect the value of innovative medicines and certainly are not consistent with a country seeking to encourage local R&D. This measure ignores the damage that such policies have had on the innovative biopharmaceutical industry in those countries, where investment has stagnated and the industry is in a state of contraction. As such, Turkey and Greece should be removed from Algeria's basket of reference countries.

- To ensure greater predictability and fairness, the IRP calculation should be based on the average or median price in the basket of countries, not the lowest price in the basket.

- Re-referencing should be predictable, objective (*i.e.*, following the same procedures for both price increases and decreases in the reference countries) and limited to reasonable intervals, such as every five years during the marketing approval renewal process. While the industry commends Algeria for providing a process for allowing manufacturers to seek adjustments during the marketing approval renewal process to account for changes in the reference countries, it is not reasonable to require manufacturers to continually monitor prices in all of the reference countries (a significant administrative burden) and report on relevant alterations.

- Greater clarity is needed in the procedures around the exchange rates to be used to determine prices in the reference countries and how Algeria defines "the country of origin."

- While the innovative pharmaceutical industry commends the Algerian Government for providing an appeal mechanism, ten days is an insufficient period for a company to prepare the appropriate supporting documents for the appeal, particularly given that this will likely require coordination with regional offices and headquarters in other countries. Instead, we would propose that the appeal

deadline should be extended to 30 days after the date of the notification of the price established by the Economic Committee.

Cumbersome and Slow Regulatory System

Despite some improvements in the MoH's registration process since 2013 and recent structural changes to MoH's engagement with the pharmaceutical industry, the registration process remains slow and is now falling further behind regulatory reform trends observed in the region, namely in the largest pharmaceutical markets Egypt and Saudi Arabia. In those countries, new review procedures are expected to significantly reduce the time it takes to register new medicines by 90 percent. This will accelerate marketing authorizations and enable patients to access promising new treatments in as little as 30-60 days after those new medicines are approved for use in Europe or the United States. Algeria should adopt similar review procedures to achieve the same results.

Additional burdensome requirements for obtaining registration to market pharmaceutical products, especially innovative products, have been implemented. As a result, patient access to innovative medicines in Algeria lags significantly behind peer countries.

While the agencies responsible for drug registration processes in Algeria have been reorganized under the MOIP (with the goal of streamlining the drug registration), the agency still lacks sufficient resources and staffing to handle the current backlog in drug registration, price approval and testing on importation. Furthermore, for new drug applications, no assessment of pre-submissions has taken place since September 2018. Additionally, 700 new applications have been submitted to the Agency which are pending registration due to the Agency's lack of quality testing capabilities

In addition, the innovative industry continues to face significant and growing access challenges within the Reimbursement Committee (CRM) process led by the Ministry of Labor (MoL):

- The MoH via the Price Committee (MoL is a member of this committee) approves a price for the new medicine as part of the marketing approval process. However, this price is rarely accepted during the separate reimbursement process, even though MoH is a member of CRM. As a result, manufacturers are required to enter into separate reimbursement negotiations with the CRM, and the new lower price must then be re-approved by the MoH. These combined procedures are inefficient, redundant, and unfair to innovative pharmaceutical manufacturers.

- There is no clarity or fixed timeline between the first submission to the CRM of the dossier for reimbursement and the application at the pharmacy level. While the intent of the MoL is to reduce the maximum number of products on the list of reimbursable products, this particularly affects imported products so that a new (innovative) product has a very low chance of being reimbursed. And recently even

locally produced medicines are affected. Further, even when MoH lists the products, hospitals have not been supplied with those products creating significant uncertainty and operational challenges for PhRMA member companies and lack of access for Algerian patients.

Finally, since June 2010, pharmaceutical companies have noticed lengthy delays of many months in approving variations for imported products already available on the market, albeit that there have been some improvements in recent months.

Industry is hopeful that the newly established MoPI, which has been made responsible for all aspects of regulating the sector, will be better positioned to improve the regulatory environment in Algeria. The Ministry is expected to issue several decrees and PhRMA appreciates the involvement and consultations with industry regarding the draft decrees.

Failure to Renew Representative Office Licenses

Many pharmaceutical companies operating in Algeria have established representative offices. Licenses for such offices must be renewed annually, and yet in 2018 the Ministry of Commerce suspended renewing these licenses. In addition to creating significant uncertainty as to the ability of these companies to continue operating in Algeria, it has resulted in local banks blocking access to member accounts and MoH suspending promotional activities as per an October 28, 2019 notice, until their office licenses are renewed.

SAUDI ARABIA

PhRMA and its member companies welcomed Saudi Arabia's bold "Vision 2030" plan, which aims to transform the country into "a vibrant society, a thriving economy, and an ambitious nation" by the year 2030.[292] To achieve this goal, Saudi Arabia established the National Industrial Development and Logistics Program (NIDLP), which identifies the pharmaceutical industry as one of the promising and competitive industries prioritized for development.[293] Specifically, the NIDLP aspires to further promote innovation in the pharmaceutical sector to encourage increased local production as well as research and development.[294] In addition to the NIDLP, the Vision 2030 program also establishes the National Transformation Program, which sets strategic objectives for improving health care in Saudi Arabia and increasing the quality of life and life expectancy of citizens.[295]

As part of these efforts, in 2019 Saudi Arabia established a new authority responsible for intellectual property (IP) protection and enforcement (Saudi Authority for Intellectual Property – SAIP) to create and develop IP regulations, guidelines and mechanisms for IP protection and enforcement in coordination with other relevant agencies, including the Saudi Food and Drug Authority (SFDA). The Ministry of Justice established a commercial court dedicated to resolving commercia law disputes including IP cases.

Biopharmaceutical innovators have sought to engage SAIP and the relevant ministries to inform these developments and establish an IP regime in Saudi Arabia that can achieve the bold goals of Vision 2030. However, continued actions by SFDA, including authorizing generic medicines that rely unfairly on innovator regulatory data or during the term of relevant patents, are undermining these positive developments and the investment climate in Saudi Arabia. SAIP has issued compulsory licensing guidelines and proposed regulations on regulatory data protection (RDP) that further weaken – rather than improve – IP protections in the Kingdom. Further complicating matters is the future of the Gulf Cooperation Council Patent Office, which played a critical role for innovators to obtain patent rights in Saudi Arabia and the region.

Key Issues of Concern:

- **Ineffective patent protection, patent enforcement and RDP**: In mid-2017, the SFDA started granting marketing approval to generic versions of innovative medicines during the term of the patent(s) protecting those treatments or the period

[292] *See*, *e.g.*, Kingdom of Saudi Arabia, Vision 2030, p. 13. (2017), available to download at https://www.vision2030.gov.sa/v2030/overview/ (last visited Jan. 30, 2022).
[293] Kingdom of Saudi Arabia, National Industrial Development Logistics Program, Delivery Plan 2018-2020, pp. 10, 98 (Jan. 2019), available to download at https://www.vision2030.gov.sa/v2030/vrps/nidlp/ (last visited Jan. 30, 2022).
[294] *Id.*, pp. 87, 113-14.
[295] Ministry of Health, Health Sector Transformation Strategy, p. 13, available at https://www.moh.gov.sa/en/Ministry/vro/Documents/Healthcare-Transformation-Strategy.pdf (last visited Jan. 30, 2022).

of RDP. SFDA's repeated approval and related price listings of generic copies of innovative medicines is contrary to Saudi Arabia's own patent enforcement and data protection rules. These actions also contradict the country's World Trade Organization (WTO) commitments. SAIP has issued proposed regulations on compulsory licensing and RDP that have further weakened or would further weaken IP protections in Saudi Arabia.

- **Pricing guidelines do not appropriately value innovative medicines**: The SFDA pricing guidelines set prices for medicines in Saudi Arabia based on prices in a basket of reference countries, in practice taking the lowest price and subsequently imposing other re-pricing rules. This flawed methodology does not appropriately recognize the value of innovative medicines for the Saudi health system and patients. While the revised guidelines effective in January 2021 are a step forward compared to an earlier draft, the current rules are inconsistent with Saudi Arabia's vision to establish a more value-based approach to health care.

- **Government procurement lacks transparency and discriminates in favor of local manufacturers**: Frequent renegotiation of tenders, combined with the lack of clear timelines, have resulted in an unpredictable government procurement system. The recent creation of the Local Content and Government Procurement Authority (LCGPA) to identify lists of products that must be procured from local manufacturers, combined with 30 percent price preferences for medicines made with locally manufactured active pharmaceutical ingredients (API), serve to discriminate against foreign manufacturers and increase uncertainty in the Saudi market.

- **Ensuring the new health technology assessment system supports value-based health care**: Industry stands ready to work with the Saudi authorities to ensure that the new health technology assessment (HTA) system is not used exclusively as a cost-containment tool, but rather supports timely Saudi patient access to innovative medicines and moves the country towards the value-based health care system outlined in the Saudi Health Sector Transformation Strategy.

For these reasons, PhRMA requests that Saudi Arabia remain on the **Priority Watch List** in the 2022 Special 301 Report and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved.

Intellectual Property Protection

Ineffective Patent Protection, Patent Enforcement and RDP

Despite creating mechanisms to provide for effective patent enforcement and RDP, in mid-2017 the SFDA started granting marketing authorization to domestic drug companies to produce copies of innovative medicines produced in the United States and other countries during the period of patent or RDP protection. Furthermore, the Ministry of Health (MoH) has proceeded to procure the potentially infringing products despite

multiple appeals from the relevant innovators and, in one case, despite a favorable Saudi court decision. The local drug companies are now distributing these copies to the MoH and selected hospitals. Despite Saudi Arabia being on the Priority Watch List since 2019 and multiple political commitments to solve ongoing cases, rather than end this practice, SFDA is actively soliciting on its website for manufacturers to seek approval for generic products even where the innovative product is still subject to IP protections.

SFDA's actions appear designed to benefit Saudi Arabia's local industry, as evidenced by the tenders awarded by NUPCO. These actions harm U.S. manufacturers, potentially infringe proprietary technology and damage U.S. exports. Contrary to the country's aspirations to promote local investment, IP infringement and the lack of effective enforcement sends a hostile message to U.S. inventors and investors that their valuable IP rights are not secure in Saudi Arabia.

These actions also appear contrary to Saudi law and to Saudi Arabia's WTO commitments. For example, Article 5 of a Council of Ministers' Trade Secrets Protection Regulation (decision No. 3218, dated 25/03/1426 H, May 4, 2005), as amended by Ministerial Decision No. 431 of 1.5.1426H (June 8, 2005) states that the submission of confidential tests or other data, obtained as a result of substantial efforts, for the approval of the marketing of drugs or agricultural products which utilize a new chemical entity, shall be protected by the competent authority against unfair commercial use for at least five years from the approval date. Unfortunately, the Kingdom of Saudi Arabia has not complied with its own regulation and WTO commitments which gave rise to the regulations. Specifically, Saudi Arabia confirmed during its accession to the WTO that:

> [Its] Regulations provided for protection of undisclosed tests and other data submitted to obtain approval of a pharmaceutical or agricultural chemical against unfair commercial use for a minimum period of five years from the date of obtaining the approval including the establishment of the base price. No person other than the person who submitted such data could, without the explicit consent of the person who submitted the data, rely on such data in support of an application for product approval. Any subsequent application for marketing approval would not be granted a market authorization unless the applicant submitted its own data, meeting the same requirements applied to the initial applicant, or had the permission of the person initially submitting the data to rely on such data.[296]

The WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) imposes more than a non-disclosure obligation. Rather, TRIPS Article 39.3 additionally requires WTO Member States to prevent "unfair commercial use" of data generated by others. This is fulfilled by preventing reliance on regulatory test data and

[296] Report of the Working Party on the Accession of the Kingdom of Saudi Arabia to the World Trade Organization, WT/ACC/SAU/61 (Nov. 1, 2005) ¶ 261, available at https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=Q:/WT/ACC/SAU61.pdf (last visited Jan. 30, 2022).

approvals based on such data for a fixed period of time. In other words, protected data may not be used to support marketing approval for follow-on products for a set amount of time unless authorized by the original submitter of the data. Unfortunately, the SFDA is interpreting the Saudi Regulations in a restrictive way limited to non-disclosure that allows it to rely on the innovator's regulatory data or limited data published in scientific journals.

In September 2020, SAIP published new draft regulations for the protection of confidential business information, including regulatory test data. Far from improving on a prior draft issued in 2019, the new draft would further weaken RDP in Saudi Arabia. Among other things, the draft contains a general provision on RDP without specifying the term of protection and explicitly states that reliance on the clinical data package submitted by the innovator to SFDA does not constitute unfair commercial use. The draft also lacks clarity with respect to the scope of products covered, contains overly broad exceptions to RDP and continues to lack the necessary mechanisms for effective enforcement.

In addition to making no progress on RDP, in April 2020, SAIP issued damaging final regulations on the compulsory licensing of patents, which have the potential to frustrate Saudi Arabia's efforts to promote innovation and economic growth. The final regulations largely disregard comments biopharmaceutical innovators provided on draft regulations SAIP published in July 2019. PhRMA believes governments should grant compulsory licenses (CLs) in accordance with international rules and only in exceptional circumstances and as a last resort. Decisions should be made through fair and transparent processes that involve participation by all stakeholders and consider all relevant facts and options. By allowing SAIP to take patents away three years after they are lawfully granted for almost any reason and without prior notice to the patent holder, the regulations risk encouraging excessive use of CLs and denying patent holders the right to adequately defend their property interests.

PhRMA members acknowledge certain positive intentions to strengthen patent protection through a new initiative on protecting IP issued in summer 2020. However, not only is it limited to patents, but it also falls short of providing a truly effective patent enforcement system. In particular, the proposed initiative puts the entire burden of enforcement on the innovator, provides for relatively short timelines to detect potential infringements and raise objections, while not providing any notification system which is common practice in many other countries with robust IP protection systems.

Biopharmaceutical innovators have repeatedly engaged or sought to engage SAIP and other relevant Saudi ministries to address these concerns and to improve IP protection in the Kingdom. While some limited progress has been achieved, SFDA continues to act in ways that violate IP protections and that seemingly invite others to violate such protections. Rather than serve as a champion of innovation, SAIP appears to be moving towards weakening IP protection and enforcement. However, PhRMA and its member companies are encouraged by the new leadership of SAIP which may help to make progress against the challenges that are currently being faced by innovator companies and PhRMA will continue engaging with and maintaining an open dialogue with the Saudi authorities to best improve the IP environment in the country.

Market Access

Pricing Guidelines Do Not Appropriately Value Innovative Medicines

The SFDA relies heavily on international reference pricing (IRP) to set the prices of medicines, in practice taking the lowest price from a basket of reference countries and subsequently imposing other re-pricing rules. IRP suffers from serious flaws as a mechanism for pharmaceutical pricing. It assumes similarity across countries in the reference basket and implicitly imports the pricing policies of those countries without accounting for circumstances that justify price differentiation. Importantly, IRP ignores the local value of medicines by ignoring the local standards of care, patterns of disease burden and socioeconomic factors. IRP also imports circumstances unrelated to a product's value, such as budget overruns in reference countries that lead to government price cuts.

In August 2020, SFDA issued draft pricing regulations that would have compounded many flaws in the existing system. Following consultation with industry, a new version of the guidelines was implemented in January 2021 that makes several improvements over the draft version that will increase transparency and predictability. These include reducing the number of countries in the reference basket, limiting the circumstances for repricing after two years, with five years remaining the rule, as well as capping price reductions to 30 percent. While the system still does not appropriately value innovation and several provisions still require clarification, the industry acknowledges that these changes are a step forward compared to the previous draft that, if implemented, would have had detrimental effects on PhRMA member companies operating in Saudi Arabia.

Government Procurement Lacks Transparency and Discriminates in Favor of Local Manufacturers

The tendering and purchasing of pharmaceuticals in Saudi Arabia present many challenges. Although the tendering system is supposed to be closed, the practice of routine price renegotiations limit predictability, sustainability and fair competition. The lack of clear timelines for the procurement process hinders the ability of companies to plan and invest in bringing new medicines to the market and exposes Saudi Arabia to the risk of supply shortages. In addition, Saudi Arabia recently adopted a newly designed therapeutic class review process, whereby only a single product is identified for inclusion on formularies and for procurement. Such approaches unduly restrict patient and physician choice in identifying the most appropriate treatment for each patient. Finally, contrary to current practice, the National Unified Procurement Company for Medical Supplies (NUPCO) should not disclose confidential negotiated net prices as it harms competition and access to innovation.

In addition to these deficiencies in the procurement process, Saudi Araba recently constituted the Local Content Government Procurement Authority (LCGPA) to identify lists of products that government institutions must procure from local manufacturers. The

first list of products has been released and it identifies more than 100 medicines that are limited to local providers. Additionally, Saudi Arabia recently announced a price preference initiative of up to 30 percent for 42 locally manufactured products made using API manufactured in the country. These actions discriminate against foreign manufacturers and increase uncertainty in the Saudi market.

Ensuring the New HTA System Supports Value-based Health Care

Saudi Arabia is intensifying efforts to establish a formal HTA system. The Saudi HTA Center was recently established and began a pilot program in 2020 with voluntary submissions focused on innovative medicines in certain therapeutic areas (e.g., rare disease, oncology and HIV). Subsequently, in August 2021, a new HTA department was created under the MoH and is expected to be the leading body for HTA in the country. Nevertheless, the previously created HTA Center continues to exist, creating a certain level of confusion.

When designed well and used appropriately, HTA of medical tests, treatments and health care services can represent one of many tools to support well-informed, patient-centered health care. When misapplied, HTA has the potential to impose one-size-fits-all policies that impede patients' and physicians' ability to tailor care to individual needs and preferences. Poor forms of HTA can also hinder progress in developing innovative new therapies that address unmet medical needs.

PhRMA and its member companies recognize the ongoing efforts of the Saudi authorities to build an HTA system and stand ready to offer their expertise based on international experience. While we appreciate that the primary goal is to inform decisions on effective use of resources, it is critical that HTA not be used exclusively as a cost-containment tool, but rather be designed to improve patient choice and access. In the context of ongoing discussions on economic assessments and cost-effectiveness thresholds, PhRMA calls for a collaborative dialogue with all relevant stakeholders, as implementing restrictive assessment methods will inevitably create barriers to patient access. Furthermore, rather than overlaying the proposed HTA system on the already complex pricing and reimbursement framework, PhRMA recommends that the new HTA system progressively replace certain features of the existing system – including IRP and the current tendering process – that are incompatible with the value-based health care approach that Saudi Arabia aims to achieve through its Health Sector Transformation Strategy.

PhRMA welcomes the announcement of a clearer roadmap for the implementation of HTA based on a progressive approach, alongside the creation of the HTA Department within the MoH. However, compared to current practices, there is a need for greater transparency and predictability surrounding the HTA requirements and process, including more specific timelines for the implementation of the different phases foreseen in the roadmap. PhRMA therefore encourages the newly established HTA department to continue engaging PhRMA member companies in an open dialogue and seek their support to inform a fit-for-purpose HTA framework for the country.

WATCH LIST

ASIA – PACIFIC

AUSTRALIA

PhRMA and its member companies supported the U.S.-Australia Free Trade Agreement (AUSFTA) ratified by both countries in 2004. The Agreement has contributed to expanded patient access to new medicines in Australia, a key priority for PhRMA member companies. However, we believe there is much more to do to further improve market access as well as protect and strengthen Australia's intellectual property (IP) regime for new and innovative medicines, which will also serve to foster innovation in Australia's pharmaceutical and biotechnology sectors – a key priority of the Australian Government.

In the Pharmaceuticals Annex to the AUSFTA, Australia and the United States agreed to provisions for increased transparency and accountability, and enhanced consultation between the United States Government, industry and the Australian Government to improve the operation of Australia's Pharmaceutical Benefits Scheme (PBS). Annex 2-C of the AUSFTA at [1] commits the Parties to four principles to facilitate high quality health care and continued improvements in public health. These principles are: "(a) the important role played by innovative pharmaceutical products in delivering high quality health care; (b) the importance of research and development in the pharmaceutical industry; (c) the need to promote timely and affordable access to innovative pharmaceuticals through transparent, expeditious and accountable procedures; and (d) the need to recognize the value of innovative pharmaceuticals through the operation of competitive markets or by adopting or maintaining procedures that appropriately value the objectively demonstrated therapeutic significance of a pharmaceutical." Annex 2-C of the AUSFTA at [3] also establishes a Medicines Working Group (MWG) to promote discussion and mutual understanding of the importance of pharmaceutical research and development to continued improvement of health care outcomes.

While progress has been made in implementing these agreed principles, on-going collaboration is required to ensure that the full potential of the pharmaceutical industry can be realized. We look forward to constructive outcomes from the bilateral (Government-Industry) Strategic Agreement(s), including the mechanisms to deliver on reforms and process improvements such as the locally established Access to Medicines Working Group (AMWG), first established in 2006 as part of the first round of reforms to the PBS. Industry has also welcomed the implementation of a tranche of reforms to the regulations for the registration and market approval of medicines and medical devices in Australia that should streamline the review process and timeline. Ultimately, however, patient access to medicines in Australia is dictated by listing on the PBS (or Medical Benefits Scheme (MBS)).

PhRMA is encouraged by the recent bilateral discussions regarding the reconvening of the MWG. PhRMA recommends that, as set out in the AUSFTA, regular meetings under the MWG (which is distinct from AMWG) resume as a matter of urgency; it has been almost 15 years since this MWG last met. While intervening negotiations and

meetings may have provided opportunity for our officials to remain in contact, those contacts have been insufficient to address emerging industry issues.

Key Issues of Concern:

- **Difficulties in listing new medicines on the PBS**: PhRMA member companies continue to face challenges and uncertainty in securing positive recommendations from the Pharmaceutical Benefits Advisory Committee (PBAC) to list new medicines on the PBS. While the recent New Medicines Funding Guarantee is a welcome improvement, the PBS remains one of the few health programs in the world required to demonstrate a particular standard of cost-effectiveness, and investment remains low in comparison to the overall health budget. Policies such as lowest cost comparator selection, legislated price reductions for innovative therapies and restrictive subsidy caps that can result in prices far below the cost-effectiveness standard do not support investment in innovation and ultimately result in delayed access to innovative medicines for Australian patients.

- **Weak patent law enforcement**: Contrary to its obligations under Art. 17.10(4) of the AUSFTA, Australia has not yet implemented a system by which patent holders, as a matter of practice, receive advance notice of third-party applications for marketing approval of potentially patent-infringing pharmaceutical products. The lack of adequate patent holder notification makes it difficult to resolve patent challenges prior to competitor market entry, creating significant uncertainty for patent right holders. In the rare circumstances where any such advance notice is provided, the amount of notice may be inadequate to enable the final resolution of any patent infringement claims *before* the relevant third-party product obtains regulatory approval for market entry during the term of the relevant patent(s).

  PhRMA welcomes the Australian Government's response to the 2019 Therapeutic Goods Administration (TGA) consultation on "[w]hether the TGA should publish that a prescription medicine is under evaluation." In response to public demand for increased information on prescription medicines that are under evaluation, the Government has decided to implement enhanced transparency measures for prescription medicines. These measures will include: publishing a description of major innovator medicine applications that are under evaluation by the TGA from January 2021 forward; and for patent holders to be notified before a first generic or biosimilar medicine application has been accepted for TGA evaluation. We are encouraged by this progress and look forward to seeing the proposals in more detail including the legislation that underpins the patent notification requirement.

- **Market-size damages**: In cases of patent invalidation by the courts, the Australian Government has joined legal action against innovators for damages attributed to a delay in the PBS price reduction due to a preliminary injunction on generic launch while the patent dispute is being resolved. These so-called "market-sized damages" create significant uncertainty for pharmaceutical patent owners, who need to be able to rely on the rights conferred by granted patents (unless and until

they are finally invalidated). It also undermines the rights of patent holders in Australia by introducing a strong disincentive to exercise their core right to enforce their IP protections and is inconsistent with Australia's international commitments under the AUSFTA and the World Trade Organization (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS).

- **Compulsory licensing**: In August 2019, the Government passed amendments to the intellectual property legislation which appear inconsistent with the AUSFTA and which would unnecessarily broaden the scope of compulsory licensing. These amendments could permit compulsory licensing on grounds that are not related to a judicially or administratively determined remedy for anticompetitive behavior, a national emergency or other circumstance of extreme urgency as agreed in Article 17.9.7 of the AUSFTA.

For these reasons, PhRMA requests that Australia be placed on the **Watch List** in the 2022 Special 301 Report and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved.

Intellectual Property Protection

Weak Patent Law Enforcement

Mechanisms that provide for the early resolution of patent disputes before a potentially infringing product is allowed to enter the market are critical to ensuring adequate and effective protection of IP rights for the research-based pharmaceutical sector. Such mechanisms prevent marketing of a product potentially covered by a patent until expiration of the patent or until any dispute relating to infringement or validity of such a patent is resolved. An effective early resolution mechanism provides a procedural gate or safeguard. It ensures drug regulatory entities do not enable marketing authorization, PBS listing or the launch of a product which has been asserted to infringe patent rights. In this regard, the Australian Government's approach is highly concerning to PhRMA members because it encourages unnecessary, costly and lengthy litigation processes. The Australian Government has indicated that it will grant an application to list a competing generic product on the PBS, even when it has received a certificate submitted by the patent holder that:

- patent infringement proceedings in respect of that product have been commenced in good faith;
- the proceedings have reasonable prospects of success;
- the proceedings will be conducted without unreasonable delay; and
- even when a court has granted a preliminary injunction preventing the generic company supplying that generic product.

As indicated above, the AUSFTA provides that when marketing approval is sought by an applicant for a generic product or "product for an approved use," where the product

or approved use is claimed by a patent, the Party (here, Australia) should "provide measures in its marketing approval process to prevent" marketing of the generic product or use during the patent term without consent or acquiescence of the patent owner. Further, if Australia permits a third party to request marketing approval for a product or approved use claimed by a patent identified as claiming that product or approved use, it "shall provide for the patent owner to be notified of such request and the identity of any such other person."[297] This should include a database or other mechanism by which a third party may determine whether there are patents that may be infringed by the product or use for which the third party is seeking approval.

However, originator pharmaceutical companies in Australia generally do not receive any notice of a third party's intention to enter the market with a product that may infringe a valid and enforceable patent prior to its listing on the ARTG.

Originator companies are significantly impacted when generic medicines enter the market prior to the expiry of the originator patent, in part through mandatory and irreversible price cuts for innovator products listed on the PBS, and through market share erosion. The only legal option available to the innovator patentee to prevent the generic company from launching is to obtain preliminary injunctive relief (or equivalent relief), which in the case of PBS listing must be obtained in the weeks between the time marketing approval of the generic product is published on the ARTG and the next possible PBS listing date, in order to prevent the price reduction. The preliminary injunction process also comes with risk of market-sized damages as discussed below.

Currently, the lack of effective mandatory notification, the absence of an effective mechanism for the early resolution of patent disputes before an infringing product is launched in Australia and the unduly prejudicial penalties being sought by the Australian Government from patent holders for seeking to defend their IP (including liability for market-sized damages as discussed in detail above) significantly weakens the level of IP protection for pharmaceutical innovation in Australia, serving to deprive patent holders of expected benefits under international agreements including the AUSFTA.

In light of these shortcomings, PhRMA welcomes the Australian Government's response to the 2019 Therapeutic Goods Administration (TGA) consultation on "whether the TGA should publish that a prescription medicine is under evaluation." In response to public demand for increased information on prescription medicines that are under evaluation, the government has decided to implement enhanced transparency measures for prescription medicines. This includes two broad measures. The first is for the TGA to publish a description of major innovator medicine applications that are under evaluation by the TGA from January 2021 forward. The second measure is subject to the Australian parliament passing legislative amendments that were expected to be introduced in late 2020. These amendments will "require" that a patent holder must be notified by the sponsor of a generic or biosimilar medicine when their application has been accepted for evaluation by the TGA, before the TGA commences the evaluation. This obligation will

[297] *See* Article 17.10(4) of the AUSFTA.

apply to the first generic or biosimilar medicines that would be listed on the ARTG after the innovator's medicine.

We look forward to seeing these measures in greater detail, particularly the legislative amendments relating to earlier patent holder notification. If implemented appropriately, the resulting mechanism will benefit not only innovators, but also generics and biosimilar manufacturers and the Australian Government alike, by allowing all parties involved to assess, and hopefully resolve, possible patent infringement issues before generic products and biosimilars are approved. We note, however, that the legislation has yet to be introduced into the Australian Parliament, despite the fact that it was expected to be advanced in 2020.

PhRMA's members will continue to work with the TGA and await the opportunity to review the draft legislation when it becomes available.

Market-Size Damages

Biopharmaceutical innovators must be able to rely on and enforce patents issued by competent government authorities. Laws or policies that allow governments or other non-parties to join a patent dispute to collect "market-size damages" from innovators that pursue unsuccessful patent claims after being granted a preliminary injunction unfairly penalize and discourage the use of provisional enforcement measures as part of well-functioning early resolution mechanisms. These policies undermine legal certainty, predictability and the incentive provided by patents to invest in new treatments and cures.

Australia's Therapeutic Goods Act, as amended by the legislation implementing the AUSFTA, provides for the award of damages in limited specific circumstances, where a court determines that the patent holder has engaged in improper conduct specifically identified in that legislation in commencing proceedings or seeking a preliminary injunction.[298] Damages under this scheme have not been sought since its introduction. However, outside of that scheme, and pursuant to the usual undertaking as to damages provided by patent holders as a requirement for obtaining a preliminary injunction, since around 2012 the Australian Government has stated its intent to seek – and has sought – market-size damages from biopharmaceutical innovators that have legitimately but ultimately unsuccessfully pursued patent claims. It has done so even where the preliminary injunction was granted several years before the Australian Government first stated its intention to seek such damages. Those claims are purported to compensate the PBS for the effect of any delays in price reductions for patented medicine during the period of a preliminary injunction. The PBS imposes automatic price cuts on medicines as soon as competing versions are listed on the PBS, but the policy does not include any corresponding mechanism for PBS to reimburse innovators if it is found that those competing versions listed on the PBS were infringing the innovator's patents.

[298] *See* Schedule 7 of the U.S. Free Trade Agreement Implementation Act 2004, available at https://www.legislation.gov.au/Details/C2004A01355/ (last visited Jan. 30, 2022).

By pursuing market-size damages, the Australian Government is unfairly tipping the scales in pharmaceutical patent disputes and discouraging innovators from enforcing their granted patents. This policy permits the same court that granted a provisional enforcement measure in a patent dispute to allow that measure to be used as the basis for a claim for compensation by the government or another non-party to the dispute. It exposes innovators to significant additional compensation claims that may be difficult to quantify at the time the preliminary injunction was granted. The punitive size of these additional claims effectively equates legitimate patent enforcement, in circumstances where the market effects of infringing generic entry are difficult to quantify, with patent abuse. Allowing governments or other non-parties to a patent dispute to collect market-size damages undermines legal certainty, predictability and the incentives that patents provide for investment in new treatments and cures. Australia's practice appears to be inconsistent with the AUSFTA and with WTO intellectual property rules, including with respect to provisional measures.

Indeed, in the course of claiming market-size damages, representatives of the Australian Government have stated that the Australian Government will grant an application to list a competing generic product on the PBS (the effect of which is an automatic price cut), even when:

- the patentee has lodged a certificate, required as a result of the amendments to the Therapeutic Goods Act as a result of the legislation implementing the AUSFTA as a precondition for commencing patent infringement proceedings, stating that infringement proceedings in respect of that product have been commenced in good faith, have reasonable prospects of success and will be conducted without unreasonable delay; and/or

- a preliminary injunction has been granted by a court which prohibits the supply of that product by the generic company.

Such comments typify the disregard paid by the Australian Government to the legitimate interests of innovators in enforcing their granted patent rights.

PhRMA members urge USTR and other federal agencies to prioritize actions to address Australia's pursuit of market-size damages. The Australian Government should immediately and publicly abandon its policy of seeking market size damages, or any damages, when a patent holder has legitimately sought to enforce its patent rights.

Compulsory Licensing

October 2019 amendments to Australia's intellectual property legislation on compulsory licensing, including Crown use, are unnecessary, weaken patent protection, discourage investment and limit the potential benefits of innovation for Australians. These changes may encourage or make it easier for third parties to acquire innovative technologies without authorisation, which could have significant unintended

consequences. The amendments could also permit compulsory licensing on grounds that are potentially broader than the circumstances outlined in AUSFTA Article 17.9.7.

Inadequate Regulatory Data Protection (RDP)

Biopharmaceutical innovators work with hospitals, universities and other partners to rigorously test potential new medicines and demonstrate that they are safe and effective for patients who need them. Less than 12 percent of medicines that enter clinical trials ever result in approved treatments.[299]

To support the significant investment of time and resources needed to develop test data showing that a potential new medicine is safe and effective, governments around the world protect such data submitted for regulatory approval from unfair commercial use for a period of time. Indeed, TRIPS Article 39.3 requires each WTO member to protect undisclosed test and other data submitted for marketing approval in that country against disclosure and unfair commercial use.

RDP is essential for all medicines and is particularly critical for biologic therapies. Made from living organisms, biologics are complex and challenging to manufacture and may not be protected adequately by patents alone. Unlike generic versions of traditional chemical compounds, biosimilars are not identical to the original innovative medicine such that there can be greater uncertainty about whether an innovator's patent right will cover a biosimilar version. Without the certainty of some substantial period of market exclusivity, innovators may not have the incentives needed to conduct the expensive, risky and time-consuming work to discover and bring new biologics to market.

Strengthening RDP in Australia – in terms of the length and scope of protection – so it is aligned with global best practice would further enhance Australia's ability to compete for foreign investments in the knowledge- and innovation-intensive biomedical sector that can drive future economic growth. Australia should implement RDP terms that are consistent with international best practices. Presently, RDP for biologic products in Australia is five years (i.e., the same duration as for small molecule products) in contrast to other markets that provide longer durations for biologic products. In addition, extending RDP for new indications, new formulations, new patient populations and new dosage forms would result in consistency with other markets.

[299] DiMasi JA, Grabowski HG, Hansen RW; Tufts Center for the Study of Drug Development. Innovation in the pharmaceutical industry: new estimates of R&D costs. In: Briefing: Cost of Developing a New Drug, available at https://f.hubspotusercontent10.net/hubfs/9468915/TuftsCSDD_June2021/pdf/Microsoft+PowerPoint+-+Tufts+CSDD+briefing+on+R%26D+cost+study+-+Nov+18,+2014.pdf (last visited Jan. 30, 2022).

Market Access

Difficulties in Listing New Medicines on the PBS

The purpose of the PBS is to provide timely, reliable and affordable access to medicines for all Australians. Prescription medicines accessed via the PBS constitute the vast majority of prescription medicines dispensed in Australia.[300] Accordingly, the reimbursement process to obtain PBS listing, as well as PBAC guidelines and decision making, in effect dictate access to the Australian market. Unfortunately, policies such as lowest cost comparator selection, legislated price reductions and subsidy caps that can result in prices below the cost-effectiveness standard do not support investment in innovation and ultimately result in delayed access to innovative medicines for Australian patients. In fact, these policies can have a chilling effect – while 86 percent of new medicines launched globally since 2011 are available in the United States, just 38 percent are available in Australia, with Australian patients waiting an average of 23 months from global first launch for these fewer medicines that in fact do become available.[301] Even new medicines listed on the PBS experience delays of over a year, on average, between receiving TGA marketing authorization and PBS listing.[302]

The PBAC's approach of comparing new innovative products to the lowest cost comparator, combined with low thresholds for cost-effectiveness, creates an increasingly difficult barrier to patient access. In too many cases, comparators are old, off-patent medicines that are subject to generic or biosimilar competition and have undergone several rounds of price reductions. This practice undermines the intent of Australia's split F1 and F2 formulary system, which was originally designed to recognize the value of innovation by excluding patented products from the price reductions applied to off-patent products. Today's innovative medicines offer more personalized and targeted treatments for some of the most serious conditions. Comparing these medicines to older existing medicines that are less complex and developed decades earlier does not represent fair value for the innovation involved and is an additional disincentive to bringing innovative medicines to Australia. Recent activities to provide clarity on this issue have not led to widespread selection of the most appropriate comparator. Industry welcomes the Australian Government's commitment to address the issue of comparator selection by revising the National Health Act to give PBAC the discretion to select comparators that are not the lowest cost comparator.

In 2017, Medicines Australia signed a five-year Strategic Agreement with the Australian Government to secure greater predictability and stability in the PBS and policy

[300] *See Australian Statistics on Medicines 2014,* available at http://www.pbs.gov.au/statistics/asm/2014/australian-statistics-on-medicines-2014.pdf (last visited Jan. 30, 2022).
[301] PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2019. June 2021.
[302] Centre for Innovation in Regulatory Science. R&D Briefing 78: Review of HTA Outcomes and Timelines in Australia, Canada, and Europe 2015-2019, 2020, available at https://cirsci.org/wp-content/uploads/dlm_uploads/2020/08/CIRS-HTADock-briefing-RDB78.pdf (last visited Jan. 30, 2022).

environment. This Agreement was not without significant cost to the industry by cementing the application of a structured series of price reductions for patented medicines in the single-brand F1 formulary at 5-, 10- and 15-years post PBS listing. Additionally, the Agreement aims to resolve issues with the interpretation of section 99ACB of the National Health Act and commits to no new determination of therapeutic groups during the term of the Agreement. More recently, a new Strategic Agreement has been struck (in effect as of July 1, 2022), that lessens the statutory price reduction for patented medicines in the single-brand F1 formulary at 10 years and deepens the reduction at 15 years if no generic or biosimilar has entered the market. The application of "catch-up" price reductions in April 2023 will have a significant impact on older medicines in the F1 formulary. However, in turn, the government has also committed to an Independent Review of Health Technology Assessment (HTA) in 2022, including improvements to better reflect the patient perspective, horizon scanning and a potential interim medicines fund. The government has also committed to an early and fast review of the discount rate applied to the valuation of innovative medicines, with a view to meet international best practices that would likely reduce the discount rate from Australia's current 5 percent.

The October 2020 budget announcement from the Australian Government establishes a New Medicines Funding Guarantee for new and amended listings. Approximately $2.8 billion in new funding is expected to be committed over the next four years for the listing of new medicines on the PBS. Industry also welcomes the government's reaffirmation that the PBS is an uncapped, demand-driven medicines access system upon which all medicines recommended by the PBAC should be listed, as well as a new commitment to no longer require equal budget offsets for new medicine listings. These changes should help improve the timely listing of new medicines recommended by the PBAC.

A recent House of Representatives Committee Inquiry into the approval processes for new drugs and novel medical technologies resulted in substantial stakeholder interest with over 200 submissions. Issues raised in hearings focused on the slow time to access, the importance of access to treatments for rare diseases and the undervaluation of innovation in HTA. The report from the committee was published in November 2021 and included many recommendations that are aligned with industry asks from the submissions. The Australian Government's response to the report will provide early insight into its views on the upcoming HTA review in 2022.

Moving forward, it is important that the PBS and associated PBAC processes streamline and evolve as new and more advanced health technologies become available. Significant progress has been made in consultation with industry to improve regulatory review with the implementation of the Medicines and Medical Devices Review, including new fast-track regulatory pathways such as Priority Review and Provisional Approval. However, there is currently no corresponding change in the HTA and reimbursement system to accommodate these new pathways, although changes could be considered in the upcoming HTA review in 2022. Industry looks forward to working with the Australian Government to implement a fit-for-purpose HTA and reimbursement system to ensure that Australians have timely access to lifesaving and life-changing innovative medicines.

Government-Initiated Post-Market Reviews of PBS Listed Medicines

The Australian Government conducts post-market reviews of PBS-listed medicines to inform decision-making and to improve health outcomes for all Australians.[303] While the stated objective of these reviews has been to improve the quality use of medicines, most reviews have had an imbalanced focus on cost-containment. Industry hopes that considering the statutory price reductions included in the Strategic Agreement, the focus of future post-market reviews will be to improve the quality use of medicines.

Public Summary Document Changes

The PBAC has implemented new requirements for Public Summary Documents in which it will publish all clinical evidence relied upon by the PBAC to inform its decision-making process. The only exception will be for academic-in-confidence information. The PBAC does not consider that commercial-in-confidence issues should apply to the publishing of clinical data used for deliberations. While there has been ongoing consultation with the industry on this matter, industry remains concerned that the clinical data redaction criteria are too narrow and may discourage submission of commercial-in-confidence data in PBAC submissions. To that end, industry will proactively monitor this issue to address any unintended consequences or access barriers that arise.

Biosimilars

Contrary to Australia's goal of fostering a biotechnology industry, the government elected in early 2018 not to implement a unique naming convention for biologic medicines. The absence of such a policy has the potential to weaken pharmacovigilance, post-market monitoring and confidence in the introduction of biosimilar medicines. Moreover, the impact of the government's policy of allowing decisions regarding substitution (i.e., enabling a patient's medicine to be switched) between biologic and biosimilar products at the pharmacy level, particularly in a health system that does not support unique naming conventions for biological medicines, has not yet been assessed. It will be important to ensure that policies seeking to increase the use of biosimilars do not inadvertently disincentivize or hamper competition and discourage innovative manufacturers of original biologics to enter and remain in the Australian market. PhRMA strongly encourages the Australian Government to deepen consultation with industry as it seeks to develop evidence-based, consistent and comprehensive biosimilars policies that support appropriate use of biologics and biosimilar medicines.

.

[303] *See* http://www.pbs.gov.au/info/browse/reviews (last visited Jan. 30, 2022).

TAIWAN

PhRMA and its member companies have long supported closer economic ties between Taiwan and the United States, including opportunities to build on the bilateral Trade and Investment Framework Agreement (TIFA) and to contribute further to Taiwan's health care goals. In this regard, PhRMA welcomed the 11th TIFA Council meeting on June 30, 2021, and looks forward to working with the U.S. and Taiwan Governments as they seek to advance progress on key pharmaceutical market access and IP policy issues. We value ongoing discussions with the Taiwan Government on health policy reform measures designed to bring stability and predictability to the pharmaceutical market and to enable patients to live longer, healthier and more productive lives; however, we are concerned that Taiwan's drug pricing and reimbursement process does not appropriately value and reward innovation. In addition, PhRMA commends positive steps by the Taiwan Government to improve intellectual property (IP) protections for innovative medicines, including the establishment of a patent linkage (PL) system effective August 20, 2019. If implemented in a manner consistent with international best practices, the PL system will greatly improve Taiwan's climate for biopharmaceutical research and development. We urge USTR and other federal agencies to continue their engagement with the Taiwan Government to ensure a transparent, timely and value-based government pricing and reimbursement system for innovative medicines and to support full implementation of the PL system.

Key Issues of Concern:

- **Government pricing and reimbursement barriers**: Beginning with implementation of the second generation of National Health Insurance (NHI) in January 2013, the pricing and reimbursement process for new medicines has become much more complicated due to the Pharmaceutical Benefit & Reimbursement Scheme (PBRS). Under the scheme, average prices and approval rates for new medicines continue to be low and do not appropriately recognize the value of innovative medicines. Further, the approval process is inefficient and negotiations can be lengthy, resulting in overall timelines that can exceed two years. Finally, the system fails to recognize various forms of biopharmaceutical innovation, instead focusing on cost-containment.

- **Insufficient budget for innovative medicines and indications**: Under the current structure, most new medicines and indications are either rejected or experience delays in inclusion in the formulary due to insufficient budget allocation. This challenge significantly impacts patient access to treatments for life-threatening diseases such as cancer. PhRMA appreciates the Taiwan Government's budget proposal for new medicines and indications for 2021, which is more adequate than that of 2020. However, due to the COVID-19 pandemic and the impact on economic growth, the result may not be as positive as originally planned. For 2021, the Taiwan Central Bank recently forecasted 6.03 percent

economic growth.[304] PhRMA urges the Taiwan Government to plan a more realistic budget for new medicines and indications in 2022.

- **Drug expenditure target (DET)**: Under this price adjustment scheme, only compound and combination patented products are afforded some protection from price cuts. In order to encourage innovation, these price protections should be available to all products during their patent term, as well as to all products with regulatory data protection (RDP). PhRMA recognizes the efforts of the Ministry of Health and Welfare (MoHW) with respect to the DET and supports the continued piloting of DET to improve the methodologies and implementation. PhRMA urges the Taiwan Government to engage industry and other stakeholders (e.g., health care providers) in a balanced way and implement to ensure continued patient access to high quality innovative medicines. Any pharmaceutical expenditure regulations should appropriately recognize the value of innovative medicines.

- **Intellectual property protection**: In July 2019, the Taiwan Food and Drug Administration (TFDA) published the final PL regulation on its website and shortly thereafter the Executive Yuan announced implementation of the PL system effective August 20, 2019. While we applaud the establishment of a PL system, we are concerned that the TFDA is excluding from the PL system patents that protect new doses, new dosage forms or new unit strengths. If allowed to continue, this action will seriously undermine the value of Taiwan's PL system. PhRMA and its member companies stand ready to work with the Taiwan Government to support full implementation of the PL regulation.

For these reasons, PhRMA requests that Taiwan be placed on the **Watch List** in the 2022 Special 301 Report and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved.

Intellectual Property Protection

Effective Patent Enforcement and RDP

In July 2019, the TFDA published the final PL regulation and shortly thereafter the Executive Yuan approved implementation of the PL system effective August 20, 2019. We commend the Taiwan Government for taking this important step to improve Taiwan's climate for biopharmaceutical research and development. Specifically, the PL implementation rules confirm that the PL system includes both chemically synthesized and biologic medicines. Since biologics are the fastest growing segment of innovative medicines development and already account for a substantial share of pipeline products, applying the regulations to biologics and biosimilars will extend benefits of the amendments for domestic and overseas innovators alike.

[304] Reuters, "UPDATE 2-Taiwan c.bank raises GDP forecast, may hike rates in 2022," Dec. 16, 2021, available at https://www.reuters.com/article/taiwan-economy-rates-idCNL1N2T10ID (last visited Jan. 30, 2022).

While PhRMA applauds the establishment of a PL system, we are concerned that the TFDA is interpreting Taiwan's new linkage system in a way that is unduly narrow. Specifically, the TFDA has interpreted Taiwan's Pharmaceutical Affairs Act (PAA) to exclude patents protecting new doses, new dosage forms or new unit strengths from the linkage system. According to TFDA, drugs in these categories are not "new drugs," and consequently, the permit holders for these drugs are not eligible to submit patent information to the PL system under Article 48-3 of the PAA. This interpretation is inconsistent with the PAA and contradicts the purpose and policy behind a linkage system, as well as the expectations by all stakeholders that the system provide an efficient means to timely resolve any patent dispute before a generic or biosimilar version of an innovative drug is launched.

PhRMA urges TFDA to acknowledge that permit holders are, and must be, eligible to submit patent listing information on patents claiming a drug's new dosage form, new dose or new unit strength. Delisting, or not being allowed to list, the patents for a drug's new dosage form, new dose or new unit strength provides a significant loophole to follow-on manufacturers who may seek to sidestep the PL enforcement mechanism and the protections that it provides to an innovative product by simply seeking approval of the new dosage form, new dose or new unit strength.

In the longer-term, this action would undermine the certainty that PL is designed to provide and would discourage companies from researching, developing and launching new dosage forms, new doses or unit strengths in Taiwan. It is vital to encourage this type of development because a drug's dosage form, dose, or unit strength can have a valuable impact on its safety, effectiveness or convenience – and better serve patient needs. For example, changes to the formulation and delivery of a drug have been shown to be effective in encouraging adherence across a number of therapeutic areas. Implementing a robust PL system in Taiwan is a critical step towards ensuring that companies continue to innovate in ways that improve patient outcomes in Taiwan. We look forward to continuing to work with the Government of Taiwan to ensure full and timely implementation of the new PL system.

Market Access

Government Pricing and Reimbursement Barriers

Despite constructive engagement with the National Health Insurance Administration (NHIA) regarding the PBRS, average drug prices in Taiwan continue to be low compared to median A10 countries and even by global standards.[305] According to the latest NHIA report, "Comparisons of New-drug Approved Prices and International Drug

[305] Chen G.T., Chang S.C., and C.J. Chang . New Drug Reimbursement and Pricing Policy in Taiwan. Value Health Reg Issues. 2018 May; 15:127-132, available at https://pubmed.ncbi.nlm.nih.gov/29704659/ (last visited Jan. 30, 2022).

Prices in Recent Years," current new-drug approval practices have resulted in prices far below levels that incentivize innovation.

A key factor suppressing the prices of new medicines in Taiwan is that prices are determined based on comparator products that have experienced several rounds of annual price cuts and stand at new low prices at the time of comparison. Moreover, under the current NHI reimbursement mechanism, the lowest price among new drugs in the same therapeutic group is used as the benchmark price for reimbursement. This mechanism fails to reflect the clinical differences among new products and does not appropriately recognize the value of innovative medicines.

Uncertainty over the prices approved by NHIA has also increased. NHIA-approved prices are often much lower than what companies had forecasted based on NHIA's pricing methodologies and re-submission and re-negotiation of prices takes considerable time. This results in overall timelines that can exceed two years, particularly for specialty medicines including in oncology. PhRMA urges NHIA to improve the transparency and predictability of its pricing processes, so that companies may bring new medicines to patients in Taiwan with reasonable certainty of their timing and reimbursement.

In summary, low reimbursement prices decrease incentives to bring innovative medicines to Taiwan and to make further investments. PhRMA and its member companies urge NHIA to review and revise the current pricing system to more appropriately value innovative medicines.

Insufficient Budget for New Medicines and Indications

Under the current structure, most new medicines and indications are either rejected or experience delays in formulary listing due to insufficient budget allocation. This challenge significantly impacts patient access to needed treatments for life-threatening diseases, such as cancer. PhRMA appreciates the Taiwan Government's budget proposal for new medicines and indications for 2021, which is more adequate than that of 2020. However, due to the COVID-19 pandemic and the impact on economic growth, the result may not be as positive as originally planned. For 2021, the Taiwan Central Bank recently forecasted 6.03 percent economic growth. We urge the Taiwan Government to plan a more realistic budget for new medicines and indications in 2022.

PhRMA also supports the use of horizon scanning, which is a tool to forecast future budgets through systematic information collection and analysis. Yet, PhRMA and industry are concerned that the government is developing and implementing the budget planning methodology in a non-transparent manner. As a key stakeholder in the process, industry should be allowed to provide its proposed new medicine budget planning methodology to the NHIA for consideration and should also be included in the NHIA working group for new medicine budget planning. PhRMA welcomes the opportunity to support a health care dialogue with the Taiwan Government that appropriately addresses this and other related challenges, thereby resulting in a more transparent, timely and value-based pricing and reimbursement system for innovative medicines.

Drug Expenditure Target

In March 2017, the Taiwan Government implemented a price adjustment designed to maintain spending targets that ultimately granted only compound and combination patented products some protection from price cuts, creating an unfair pricing environment for other patented medicines. In order to encourage innovation, these price protections should be available to all products during their patent term, as well as to all products during their RDP term. As a starting point, we recommend that NHIA provide price protection to single-source products for which no alternatives are available, including products which carry no patent protection, but have been granted 5 years of RDP. PhRMA recognizes the efforts of the MoHW with respect to the DET and supports the continued piloting of DET to improve the methodologies and implementation.

PhRMA urges the Taiwan Government to engage in renewed consultation with the innovative biopharmaceutical industry to ensure that this and other government pharmaceutical pricing and reimbursement policies are transparent, offer due process to interested stakeholders and are based on scientific evidence and patient needs and benefits. Moreover, in the interest of rewarding innovation, developing new medicines for Taiwan's unmet medical needs and ensuring that Taiwanese patients have access to innovation, PhRMA strongly recommends that the U.S. Government encourage the Taiwan Government to implement fair and reasonable price adjustment policies.

EUROPE

EUROPEAN UNION

While the European Union (EU) generally maintains intellectual property (IP) protections and other incentives that enable such research and development, PhRMA and its member companies are concerned by the direction of the European Commission's (EC's) Pharmaceutical Strategy for Europe and options under consideration regarding IP and other incentives for orphan and pediatric medicines, which could weaken IP rights in one of the world's largest markets. The EU Pharmaceutical Strategy, published on November 25, 2020 neither appropriately recognizes the significant contribution of innovative medicines to the patients and economies of Europe, nor does it properly address the EU's role in this innovative sector. There is a clear need for the EU to strengthen, rather than undermine, key conditions that promote and enable tomorrow's innovations. PhRMA and its members also welcome the EC's "IP Action Plan" to unleash the EU's innovation potential and support resilience as a step in the right direction. However, PhRMA members are extremely concerned that proposals for compulsory licensing coordination in the Plan could undermine the EU's innovation and IP framework. Furthermore, certain Member States' compulsory licensing policies run counter to the EC's position of using such policies as "means of last resort." PhRMA member companies welcome the opportunity to collaborate with the EU in determining the best way to address these issues.

In addition, PhRMA member companies face a variety of national government restrictions across Europe that jeopardize incentives for biopharmaceutical innovation and patient access to innovative medicines. As a result of Europe's on-going economic challenges, several EU and European Free Trade Association (EFTA) Member States continue to seek additional cost savings at the expense of the innovative biopharmaceutical sector, thereby not carrying their fair share of costs to research and develop new medicines, as well as undermining U.S. biopharmaceutical competitiveness.

Key Issues of Concern:

- **EU intellectual property incentives review**: As part of a broad Pharmaceutical Strategy, the EC is conducting an analysis of the current EU legislative instruments and related incentives that aim to facilitate and support investment in the development of medicinal products. Following recent policy announcements, PhRMA and its member companies are concerned that this review will result in the weakening of existing incentive mechanisms for biopharmaceutical innovation and create an unlevel playing field for transatlantic medicines trade and investment. In 2019, the EU introduced changes to its legislation amending Regulation EC 469/2009 concerning the supplementary protection certificate (SPC) for medicinal products, to introduce an SPC export and stockpiling waiver (in force as of July 1, 2019). The waiver allows companies to manufacture generic and biosimilar products in Europe during the effective SPC period for export purposes to third (non-EU) countries and to stockpile during the last six months of the validity of the SPC for the domestic market. The SPC manufacturing waiver weakens the scope

of the exclusive rights conferred by an SPC and sends a negative signal to the world that the EU is weakening its commitment to IP incentives and innovation. Over the last year, the EC has initiated a number of consultations under its "Pharmaceutical Strategy" (released on November 25, 2020), including initial impact assessments related to the evaluation of the orphan and pediatric regulations and the general pharmaceutical legislation, with legislative proposals expected by the end of 2022. Troublingly, these policy documents include a number of proposals that could weaken existing incentives, including regulatory data protection (RDP), research exemption mechanisms and incentives related to medicinal products to treat rare diseases and children. PhRMA is particularly concerned with a recent EU public consultation on the revision of the EU pharmaceutical legislation. That consultation process introduced the concept of conditioning IP incentives on product launches in most if not all EU member states.

- **Government price controls and patient access to innovative medicines**: Among numerous government price controls in effect, many EU and EFTA Member States set prices of patent-protected innovative medicines based on policies that restrict availability, limit patient access and fail to recognize the value of state-of-the-art medicines for patients and societies. Some examples include regulations that set prices based on the prices in less wealthy countries or in countries with policies that do not support innovation and based on the prices of older and less innovative products deemed to be comparable, including generics. These and other government practices, coupled with rigid health technology assessment (HTA) interpretations of value, put at risk biopharmaceutical innovation and seriously harm patient access to needed medicines. As such policies and regulations continue to ratchet European prices lower, there are increased calls for cross-border sharing of confidential price information that undermines the ability to adapt to the different needs of each. Furthermore, although EU legislation[306] requires transparent and timely processes (e.g., within 180 days) for national pricing and reimbursement decisions, delays for medicines launched in Europe average 504 days and are particularly significant in some European countries.[307] Eighty-six percent of new medicines launched globally since 2011 are available in the United States compared to just 42 percent in EU Member States, on average.[308] These requirements for transparent and timely processes need to be enforced more rigorously across Europe and with broader oversight of national practices.

[306] European Council Directive 89/105/EEC, 1988, available at https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:31989L0105 (last visited Jan. 30, 2022).
[307] EFPIA Patient W.A.I.T. Indicator 2020 Survey, 2021, available at https://www.efpia.eu/media/602652/efpia-patient-wait-indicator-final-250521.pdf (last visited Jan. 30, 2022). Note that the Patient W.A.I.T. indicator also reflects delays which are not requirements under European Council Directive 89/105/EEC.
[308] PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2020. June 2021.

For these reasons, PhRMA requests that the European Union be placed on the **Watch List** in the 2022 Special 301 Report and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved.

Intellectual Property Protection

EU Pharmaceutical Strategy

In June 2016, the European Member State Health Ministers requested the European Commission to undertake a review of existing intellectual property-related incentives for the biopharmaceutical industry to gauge their effectiveness and impact on innovation and the availability, accessibility and affordability of medicines. The Commission undertook a review process which concerns the following pieces of legislation: SPCs (Regulation EC 469/2009), Medicinal products for human use (Directive 2001/83/EC and Regulation EC 726/2004), Orphan medicinal products (Regulation EC 141/2000) and Pediatrics (Regulation EC 1901/2006).

On August 11, 2020, the EU Commission published a study and staff working document (SWD) providing an analysis of orphan and pediatric incentives critical for the development of medicines for underserved populations. The SWD acknowledges that orphan and pediatric regulations have had positive effects and resulted in considerable progress in the development of medicines for patients suffering from rare diseases and children in certain therapeutic fields. However, on November 25, 2020, as part of its Pharmaceutical Strategy, the Commission published its "Inception Impact Assessment" for public consultation which lays out some options for revising the "Orphan and Paediatric Regulations," including the incentives for these medicines. Additionally, in October 2021, the EU Commission launched a consultation for the revision of the general pharmaceutical legislation which included preliminary proposals to revise RDP and the Bolar exemption. Disturbingly, initial proposals include conditioning IP incentives on the launch of the products in all or most EU member states, without regard as to the root causes of the differences in access to medicines across the EU. PhRMA and its member companies are very concerned that the EU's approach will set a negative precedent and lead to weakening of existing incentive mechanisms that support biopharmaceutical innovation. This would go against the EC's stated objective of supporting the European biopharmaceutical industry to remain a world leader in medical innovation, without contributing to the Commission's other objective to improve access to medicines for unmet medical needs. The failure to effectively safeguard these incentives in one of the world's largest markets for innovative medicines would harm U.S. exports and jobs and reduce investment in new treatments and cures for patients in Europe and around the world. The EU is considering both legislative and non-legislative actions, which could reduce the existing incentives that would further undermine the ability of innovative companies to bring new medicines to European patients. As noted in PhRMA's broader comments on the EU Pharmaceutical Strategy, there is a clear need for the EU to strengthen, rather than undermine, key conditions (including IP protections) that promote and enable tomorrow's innovations.

Supplementary Protection Certificates

As part of the broader incentives review, PhRMA is very concerned about the SPC manufacturing waiver which weakens the scope of the exclusive rights conferred under an SPC and may encourage other countries to reduce or eliminate intellectual property protections.

On May 28, 2019, the EC published legislation amending the SPC Regulation (469/2009) to introduce an SPC manufacturing waiver. The waiver allows companies to manufacture generic and biosimilar products in Europe during the effective SPC period for export purposes to third (non-EU) countries and stockpile during the last six months of the validity of the SPC for the EU market. This legislation reduces IP rights and sends a signal to the world that Europe is weakening its commitment to IP incentives and innovation.

SPCs are a critical part of the European IP system. They partially restore the effective patent term and thereby help to compensate for a portion of the time incurred during the testing and regulatory review period that may "make the period of effective protection under the patent insufficient to cover the investment put into that research."[309] The SPC Regulation itself declares that: "[p]harmaceutical research plays a decisive role in the continuing improvement in public health."[310] It states that "[m]edicinal products, especially those that are the result of long, costly research will not continue to be developed in the Community and in Europe unless they are covered by favourable rules that provide for sufficient protection to encourage such research."[311]

Preventing potential abuses of the SPC waiver will be very difficult. Such abuses may consist of illegal diversion of medicines produced pursuant to the exception within Europe, or in foreign markets where the relevant patent term has not expired. In the end, it may well be impossible to ensure that the exemption is used only to achieve its intended purpose. This could further reduce the effective protections SPCs are intended to provide.

In addition, the SPC waiver may be copied by other economies and may also encourage other countries to maintain or even weaken their already-low patent protection standards – possibly in an exaggerated form that is even more damaging to biopharmaceutical innovators in the United States, Europe and elsewhere around the world. Already, lawmakers in one Asian country have proposed to permit "manufacturing for export" during the 20-year patent term, which would be inconsistent with World Trade

[309] *See* EC Regulation No. 469/2009 concerning the supplementary protection certificate for medicinal products, at Recital 4 (May 6, 2009), available at https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32009R0469&qid=1635212292638 (last visited Jan. 30, 2022).
[310] *Id.*; *see also* Council Regulation (EEC) No. 1768/92 of 18 June 1992 concerning the creation of a supplementary protection certificate for medicinal products (no longer in force), available https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A31992R1768&qid=1635212352353 (last visited Jan. 30, 2022).
[311] EC Regulation No. 469/2009.

Organization rules.[312] If a leading developed economy like the European Union bends the rules, others are sure to break them.

Market Access

Government Price Controls and Patient Access to Innovative Medicines

As detailed further below, many EU countries engage in government pricing and reimbursement practices that restrict availability, limit patient access and fail to recognize the value of state-of-the-art medicines for patients and societies. Moreover, since the U.S. research-based industry is the world leader in the development of new medicines, PhRMA member companies and their innovative products disproportionately bear the brunt of these measures as they undermine the financial incentives for privately sponsored research and development. Not only does this threaten the development of new treatments and cures, it also directly threatens the competitiveness of the U.S. biopharmaceutical industry and its workers. Furthermore, although EU legislation requires transparent and timely processes (e.g., within 180 days) for national pricing and reimbursement decisions, delays for medicines launched in Europe average 504 days and are particularly significant in some European countries.[313] Eighty-six percent of new medicines launched globally since 2011 are available in the United States compared to just 42 percent in EU Member States, on average.[314] These requirements for transparent and timely processes need to be enforced more rigorously across Europe and broader oversight of national and subnational practices should be in place.

Austria

Since 2017, Austria has adopted a spate of new cost-containment measures. Despite being one of the wealthiest countries in Europe,[315] Austria sets relatively low prices on new medicines and imposes controls on utilization. Specifically, Austria sets a ceiling price for reimbursed new medicines based on the average price across all EU countries. In addition, Austria sets reimbursement conditions for new medicines using a traffic light colored box system: medicines in the red box are restricted while awaiting a reimbursement decision; medicines in the yellow box face prescribing restrictions as a condition of reimbursement; medicines in the green box are automatically allowed to be a prescriber's first choice but face additional automatic price cuts via therapeutic class reference pricing. In practice, medicines reimbursed by the statutory social insurance system, as well as in the hospital sector, are subject to additional substantial rebates

[312] E. Solovy and D. Raju, "A Manufacturing-for-Export Exception to Patent Protection: A Proposal for Exporting Violations of the TRIPS Agreement and Beyond?" *Journal of Intellectual Property Law & Practice*, Sep. 2017, available at https://doi.org/10.1093/jiplp/jpx161 (last visited Jan. 30, 2022).
[313] EFPIA Patient W.A.I.T. Indicator 2020 Survey, 2021, available at https://www.efpia.eu/media/602652/efpia-patient-wait-indicator-final-250521.pdf (last visited Jan. 30, 2022).
[314] PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2020. June 2021.
[315] IMF World Economic Outlook, 2021.

during the patent term and to price cuts when off-patent. Moreover, after the manufacturer's sales price (MSP) is set, a review of the average EU price and resulting Austria reimbursement price occurs on a regular basis.

Industry has grown increasingly concerned about the unilateral nature of these measures, which were made without meaningful opportunity for engagement. Overall, just 58 percent of new medicines launched globally since 2011 are available in Austria.[316]

Belgium

The Belgian government sets maximum MSPs for all reimbursed prescription medicines and also institutes several cost-containment measures that impact innovative medicines. For example, a turnover tax (7.73 percent) and marketing tax (0.13 percent) are applied to sales of reimbursed medicines. For orphan medicines, the turnover tax ranges from zero to five percent depending on the turnover. In addition, when the government's medicines budget is exceeded, manufacturer revenues are clawed back through a subsidiary tax up to 4 percent of the medicines budget. Also, domestically manufactured new medicines are permitted a 10 percent price premium in the manufacturing cost component of their MSP calculation, to the disadvantage of imported products.[317] In 2021, as part of the yearly saving measures, the Belgian government strengthened mandatory price cuts of up to 70 percent for products with active ingredients that have been on Belgium's reimbursement list for 12 years and/or face competition from biosimilars or generics. This was defined depending on total turnover.[318] Overall, just 41 percent of new medicines launched globally since 2011 are available in Belgium.[319]

Czech Republic

While the Czech government has increased investment in health care and expanded access to innovative medicines, the country's pharmaceutical share of total health spending has nevertheless declined considerably in the past decade from 22 percent in 2009 to 15 percent in 2019 due to rigid cost-containment regulations such as its "double referencing" system.[320] Under this system, the price of a new medicine cannot exceed the average price of the lowest three countries among 19 EU countries. In addition, in most cases, the reimbursed price will then be set at the lowest EU price of a therapeutic cluster of medicines, which can combine patented, off-patent and generic medicines.[321] In addition to facing some of the lowest prices in Europe, innovative medicines in the Czech Republic are subject to non-transparent and lengthy reimbursement processes that reduce patient access. For example, only 44 percent of

[316] PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2020. June 2021.
[317] IQVIA (2021). Pricing and Reimbursement Country Guide: Belgium.
[318] *Id.*
[319] PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2020. June 2021.
[320] IQVIA (2021). Market Prognosis: Czech Republic.
[321] *Id.*

new medicines launched globally since 2011 are available in the country,[322] and the median delay between drug approval and reimbursement listing for those that do launch is 557 days.[323] The target timeline for pricing decisions is 75 days from receipt of an application and 165 days for joint pricing and reimbursement decisions. In practice, decisions take more than a year on average.[324] In addition, broader usage of innovative medicines is often limited by volume caps imposed by managed entry agreements for new medicines and/or indications. One additional provision of the Czech health care legislation which could represent a significant threat to PhRMA member companies is mandatory delivery of medicinal products to wholesalers based on their market share, which imposes inappropriate limits on a manufacturer's freedom to select and contract with specific wholesalers and obstacles to entering the market.

Denmark

Although Danish law does not directly regulate prices, the government decides which medicines are reimbursed and in effect sets prices through an agreement with the local innovative pharmaceutical industry association that requires international reference pricing, price caps, tendering and other cost-containment measures. In effect, the prices of medicines have been capped since 2006.[325] Health technology assessments conducted by the Danish Medicines Council apply overly conservative approaches to evidence standards and sometimes reject reimbursement applications over concerns that the medicines might be used outside of the target patient population. Further, the Council's conservative approach affects the evaluation and approval of new cell and gene therapies, to which Danish patients have much worse access than in neighboring countries, such as Sweden and the United Kingdom.[326] Manufacturers also face pricing competition from parallel imports across Europe, which comprise approximately 13 percent of the Danish overall market for medicines and which are eligible for hospital tenders. Overall, these practices have created uncertainty for biopharmaceutical innovators and patient access, with just 52 percent of new medicines launched globally since 2011 available in Denmark.[327]

Finland

The Finnish pricing and reimbursement environment is both restrictive and lacks support for innovative medicines. Initially, nearly all new products are granted only basic reimbursement status (including innovative therapies for serious conditions, such as new

[322] PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2020. June 2021.
[323] EFPIA Patient W.A.I.T. Indicator 2020 Survey, 2021, available at https://www.efpia.eu/media/602652/efpia-patient-wait-indicator-final-250521.pdf (last visited Jan. 30, 2022).
[324] IQVIA (2021). Market Prognosis: Czech Republic.
[325] IQVIA (2020). Pricing and Reimbursement Country Guide: Denmark
[326] Life Science Insights Center. ATMP A Fact-Finding Mission. Aug. 2021.
[327] PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2020. June 2021.

cancer therapies and orphan drugs), leaving patients to cover 60 percent of costs. For chronic and/or severe illnesses there is a possibility for greater coverage that leaves patients to cover between 0 percent and 35 percent of costs. Manufacturers seeking greater coverage must apply for special reimbursement status through a lengthy, complex and non-transparent process where there is little dialogue with manufacturers. In addition, manufacturers must submit information on wholesale prices and reimbursement status in European Economic Area (EEA) countries since Finland includes all EEA countries in its international reference pricing system, with reports indicating that Finland's drug prices are at the lower end of EEA countries.[328] New medicines in Finland also undergo frequent reimbursement reviews, with the first approved price valid for less than two years. Although a risk-sharing system established in 2017 has improved reimbursed access, cost-containment measures over the past 15 years have brought the country's pharmaceutical spending as a percentage of total health spend well below the OECD average. Overall, just 50 percent of new medicines launched globally since 2011 are available in Finland.[329]

France

Characterized by a notoriously slow market access process, France heavily regulates the price of new innovative medicines and has established since 2004 annual plans of budget savings through price cuts, including a goal of saving €640 million in 2021 through price cuts alone. Over time, France has adopted several policies that impact the biopharmaceutical industry, including layered mechanisms such as taxes, price-volume clauses that trigger price cuts and an industry-wide clawback when national spending growth on reimbursed medicines exceeds 1 percent. This clawback (paid by all industries), represented $158 million in 2020.[330]

Additionally, there are serious challenges with France's HTA system, which rates the clinical added value of a product as major (ASMR I), important, (ASMR II), moderate (ASMR III), minor (ASMR IV) or no clinical improvement (ASMR V), with corresponding impacts on pricing. In practice, only one-third of new innovative medicines are assigned ASMR ratings of I, II or III (with a majority assigned ASMR III ratings) which means that health authorities judge two-thirds of new innovative medicines as providing only moderate, minor or no clinical improvement. The average delay from global first launch of a new medicine to availability in France is 21 months, which is substantially slower than Germany (11 months) or the United Kingdom (12 months).[331] However, for certain products that treat severe or rare diseases and that have not yet received European marketing authorization, this delay in market access can be moderated through the French Early Access Program, formerly known as Temporary Use Authorization (ATU) process.

[328] IHS Markit (2019). The International Reference Pricing Guidebook: 2019 Edition (Finland).
[329] PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2020. June 2021.
[330] IQVIA (2020). Pricing and Reimbursement Concise Guide: France.
[331] PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2020. June 2021

However, recently there have been some important positive signals to the innovative biopharmaceutical sector. A new agreement signed in March 2021 between the local innovative pharmaceutical industry association, Les Entreprises du Médicament (LEEM), and the French Government aims to reduce market access delays and promote investment for innovative products. During the CSIS[332] in 2021, President Macron announced that a pilot program for accelerated access would be implemented in 2022. In this new system, products rated with ASMR I to IV would be available on the market just following the HTA and during price negotiations. Recently, the ATU process was replaced by two fast tracks: the primary one, the "accès précoce," process is intended for innovative products. Nevertheless, the medicines budget for 2022 remains challenging and the impact of the new measures on patient access are yet to be seen. Market growth has been flat since 2009, and lower than in peer countries as the French Government seeks budget savings from medicines to preserve social security finances. Overall, just 48 percent of new medicines launched globally since 2011 are available in France.[333]

Germany

Germany's Pharmaceutical Market Restructuring Act (AMNOG) of 2011 restructured its pricing and reimbursement process away from market-based pricing toward a government-managed and payer-led system of clinical evaluation and price-setting. Under AMNOG, new medicines are promptly reimbursed after European Medicines Agency (EMA) approval at manufacturer prices for one year, while the Federal Joint Committee (G-BA) oversees a rigid early clinical benefit assessment and subsequent price negotiations with the umbrella organization of the German payers (i.e., Statutory Health Insurances) that are tied to the outcome of the G-BA assessment. The prices of products deemed not to provide additional clinical benefits are generally limited to the price of the comparator set by the G-BA.[334] Lowest-cost comparators and generics are often considered by the G-BA to be appropriate comparators; however, research shows that in 43 percent of cases, medical societies opposed the comparator because it was clinically inappropriate.[335] In addition, Germany implemented a price freeze on reimbursed medicines from 2010 through the end of 2022, which reduced comparator prices used to set the prices of many new medicines.

One of the chief complaints with the AMNOG procedure concerns the serious restrictions on the types of study designs and clinical endpoints that are admissible for demonstrating proof of additional clinical benefit. By 2020, this rigid assessment process and requirements resulted in G-BA deeming 60 percent of all assessments of innovative medicines to demonstrate no additional clinical benefit in the specified patient subpopulation (54 percent of non-orphan innovative medicines were deemed to

[332] CSIS: Conseil stratégique des industries de santé is a meeting organised by French government with global CEOs of pharmaceutical companies.
[333] PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2020. June 2021.
[334] IQVIA (2020). Pricing and Reimbursement Concise Guide: Germany.
[335] Bleß et al., "Impact of scientific opinions in the benefit assessment of medicinal products," IGES Institute, 2016.

demonstrate no additional clinical benefit in any patient subpopulation and 17 percent were withdrawn from the market).[336] In contrast, many of these treatments have been widely recognized as important and even breakthrough therapies in the United States and other countries. Only 64 percent of new medicines launched globally since the introduction of AMNOG in 2011 are available in Germany compared to 86 percent in the United States.[337] Although Germany has the highest share of newly launched medicines among EU countries, it has become less likely to be the country of first European launch since AMNOG was implemented in 2011.[338]

In July 2019, a new law (GSAV) enabled the G-BA to also recognize registry data in the assessment of certain medicines (e.g., medicines for orphan conditions or with conditional approval). Since then, one data collection has been commissioned while the process has begun for three additional cases. It remains to be seen whether this new law will facilitate greater recognition of real-world data and a less rigid assessment system, or if the G-BA will create additional pricing hurdles for certain medicines. The GSAV also calls for the introduction, after three years, of mandatory automatic substitution in pharmacies for biosimilars. In addition, there is a trend in tightening the methods of the AMNOG dossier even more, especially for patient reported outcomes and other patient relevant endpoints. Following elections in 2021, cost-containment pressures on medicines is expected to increase. The new, tripartite coalition agreement includes reducing the initial period of free pricing from one year to six months, retaining the price freeze and giving Statutory Health Insurers other options to limit drug prices in the future. Concrete implementation steps or timelines have not been outlined.

Greece

Greece's biopharmaceutical environment remains among the most challenging in Europe due to delays in essential policy reforms, inconsistent pricing and reimbursement processes and excessive mandatory clawbacks and rebates that undermine innovation and significantly delay patient access to new medicines. The public budget for outpatient medicines declined by 62 percent from €5.1 billion in 2009 to €2.0 billion in 2021, while the amount of budget overrun increased significantly over this period. The outpatient clawback for 2020 amounted to €796 million, which is a 28 percent increase over 2019 and an amount equal to 41 percent of the public budget for outpatient medicines.[339] The inpatient sector is also heavily underfunded in Greece. The public spending for inpatient medicines decreased by approximately 23 percent to €590 million in 2016 and has remained stable since. The budget overrun from 2016 to date has increased steadily each year and in 2019 industry was required to pay €546 million clawbacks and rebates, representing approximately 52 percent of total inpatient expenditure on medicines. The Greek Government established a separate budget for vaccines and heparins, and

[336] Kearney analysis of AMNOG procedure database, 2019.
[337] PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2020. June 2021.
[338] PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2020. June 2021
[339] IQVIA (2020). Pricing and Reimbursement Concise Guide: Greece.

exempted it from clawbacks, as well as abolished a mandatory market entry rebate for innovative medicines (which was applied on top of other rebates) that required companies to pay back 25 percent of an innovative medicine's sales for two years following admission to the reimbursement list. In 2020, the Greek Government implemented a new law that excludes generics and off-patent medicines from the growth rate component of the clawback and thus puts a disproportionate share of the clawback burden on patented medicines. While innovation has been defined as a pillar of growth for the country, the Greek government has not managed to apply pro-innovation strategies in all business sectors. Overall, just 24 percent of new retail medicines launched globally since 2011 are available in Greece.[340]

Hungary

Government pricing and reimbursement of medicines in Hungary has been under substantial pressure since the Pharma Economic Act of 2007 and the two Széll Kálmán austerity plans. Following the financial crisis, the biopharmaceutical budget was frozen for the first years of the last decade, but returned to its pre-crisis levels, in real terms, in 2018. However, Hungary is capping the prices for new products in Hungary to the lowest price at launch in any EU country. Hungary also engages in a "blind bidding system" for therapeutic reference pricing groups which can be comprised of both patented medicines that have been marketed for at least one year and off-patent medicines. The system requires manufacturers to submit "blind" price reductions to the National Health Insurance Fund of Hungary (NEAK) every six months.[341] Overall, just 39 percent of new medicines launched globally since 2011 are available in Hungary.[342]

In late 2020, the Hungarian Government granted a compulsory license (CL) on a COVID-19 treatment conditionally approved by the EMA, citing newly promulgated emergency Law Decrees 283/2020 and 478/2020. This action has been completely unnecessary as Hungary continues to have full access to the medicine via the EC's Joint Procurement Agreement (JPA) with the patent holder and continues to use it to meet its national needs. Throughout this process, the Hungarian Government did not contact the patentee to suggest that a CL was needed and the CL was granted with only a day's notice to the patentee. The CL action was challenged in the national court system, which ruled that the patentee did not have standing to challenge the grant of the CL per se, making it impossible to challenge the grant of any CL in Hungary. This approach of the Hungarian courts raises significant rule of law concerns and damages the environment for investment and ease of doing business in an EU member state. PhRMA and its members believe that this CL is unnecessary and unwarranted, and runs counter to the EC's IP Action Plan, which states that CLs can only "be used as a means of last resort and a safety net, when all other efforts to make IP available have failed."

[340] PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2020. June 2021.
[341] IQVIA (2021). Pricing and Reimbursement Concise Guide: Hungary.
[342] PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2020. June 2021.

Ireland

Ireland's biopharmaceutical industry is among the Irish economy's strongest performers, with robust growth in exports of medicines contributing positively to gross domestic product (GDP). However, Ireland continues to lag many other European countries when it comes to availability of new medicines, with just 39 percent of new medicines launched globally since 2011 available.[343] A new four-year Framework Agreement on the Supply and Pricing of Medicines between the Irish Government and the Irish Pharmaceutical Healthcare Association, combined with €80 million allocated by the Government in the past two annual spending plans, aims to broaden the range of innovative treatments available to patients and their physicians.

The Agreement provides a platform for raising health care standards through a more steady influx of innovative medicines within a sustainable funding framework. In addition, the industry continues to work with the Government on reimbursement process improvements so that decision-making on applications can be more efficient. PhRMA urges the U.S. Government to engage with their counterparts in the Irish Government on achieving and sustaining patient access to innovative medicines through a combination of process reforms and annual funding commitments.

Italy

Italy employs cost-containment measures for innovative medicines including industry revenue clawbacks when public spending exceeds the significantly underfunded public budget allocation. Overall, there is a shortfall of €1.5 billion between what is budgeted and what is ultimately spent on medicines. Moreover, a suboptimal distribution of the available budget for the retail channel vs. the hospital and direct purchasing channel exacerbates this problem, which resulted in a budget surplus in the retail channel vs. a €2.2 billion budget deficit in the hospital and direct purchasing channel in 2021. According to the current clawback rules, it is not possible to compensate a deficit with a surplus such that companies operating in the hospital and direct purchasing channel are still required to refund 50 percent of the €2.2 billion budget deficit. Given that more innovative products are mainly present in the hospital and direct purchasing channel, the unbalanced financing and clawback rules disproportionately penalize U.S. innovative biopharmaceutical companies, which have paid 47 percent of the cumulative €3.3 billion clawback from 2013 to 2018 even though they only account for 30 percent of sales.

Some improvements were introduced in the 2021 Budget Law that shifted budget to the hospital and direct purchase channel (€1.2 billion per year). However, a more adequate and proportional financing of the two budget caps is still necessary. Industry request that the Italian government adjusts the allocation of pharmaceutical budgets based on actual needs, improves the distribution of resources between the two channels and provides a compensation mechanism between surplus and deficit. The 2022 Budget

[343] PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2020. June 2021.

Law, adopted in December 2021, provides an increased and more balanced distribution of resources, which is a positive development, but these increases also come with difficult conditions for biopharmaceutical innovators.

In addition to these budget constraints and clawbacks, other policies present challenges for innovators and patient access to medicines, with just 52 percent of new medicines launched globally since 2011 available in Italy.[344] For example, when the Italian Medicines Agency (AIFA) deems therapeutic equivalence, public procurement tenders can require patented medicines to compete against other patented or generic medicines with different active ingredients, where price is the only selection criteria. In addition, there are varying sub-national access delays across Italian regions after a national decision has been made. Moreover, new measures in the Draft 2022 Budget Law allow for reviewing the reimbursed medicines formulary based on deemed therapeutic equivalence, and includes the possibility of excluding medicines marketed by companies that did not complete the 2019 and 2020 clawbacks if those medicines have alternatives of similar effectiveness. PhRMA and its member companies encourage the Italian government not to adopt this practice, which ultimately treats non-interchangeable patented medicines in a similar way to interchangeable generics, abrogating intellectual property rights and undermining clinical and patient choice.

In addition, PhRMA and its member companies are concerned about Italy requesting details of R&D costs as part of the pricing and reimbursement process. Requesting R&D costs disclosure as well as public contributions and incentives aimed at biopharmaceutical R&D programs is outside the scope of the pricing and reimbursement negotiation and is unlikely to be traceable to a single product or indication.

Netherlands

PhRMA and its member companies are concerned about the rising interest in the Netherlands regarding the use of compulsory licensing as a way to lower spending on medicines. In 2019, the government commissioned an academia-led compulsory licensing committee to examine legal and economic issues related to the use of compulsory licensing. In June 2020, the commission completed its work, unable to reach a joint conclusion. The Ministry of Economic Affairs took note of the commission's work and concluded that the existing legal framework was sufficient. However, some legislators have recently refocused discussions on compulsory licensing around COVID-19 related technologies, including both vaccines and therapies. PhRMA believes that future discussions about compulsory licensing need to consider the devasting effects on innovation and the research and development environment more generally. PhRMA welcomes the Prime Minister's recent statements making clear the government's position that compulsory licensing would not improve access to COVID-19 technologies and that the Ministry of Economic Affairs remains strongly opposed to any form of compulsory licensing.

[344] PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2020. June 2021.

The Netherlands has also recently intensified cost-containment measures on innovative medicines. For example, the government began a pilot program in 2015 that places innovative medicines into a reimbursement "lock" system that denies patient access until completion of a health technology assessment and subsequent price negotiations. The Netherlands initially implemented this system on a case-by-case basis, but announced in May 2018 that it would apply to all new medicines with an annual cost exceeding €50,000 per patient (when combined costs exceed €10 million) or a combined cost of €40 million.[345] Decision making criteria lack transparency and there is no time limit on the lock period, currently estimated to be 380 days.[346]

The Government also plans to further erode the prices of innovative retail medicines deemed by the Ministry of Health, Welfare and Sport to be therapeutically interchangeable by recalculating reimbursement limits to not exceed the average price of a therapeutic group, which can include off-patent medicines and generics. Beginning in 2020, all medicines were subject to an updated international reference pricing system that replaced Germany with Norway, where prices are an average of 9-13 percent lower than those in the Netherlands. This change was delayed from April to October 2020. It is estimated this change will reduce prices in the Netherlands by 5-10 percent and reduce annual spending on medicines by around €300 million.[347] In addition to facing these cost-containment measures, most new medicines in the Netherlands are required to navigate a complex path from regulatory approval to reimbursement formulary listing that takes 213 days to complete on average.[348] Recognizing this challenge, the Medicines Evaluation Board and the Dutch National Healthcare Institute began a pilot in collaboration with industry to reduce reimbursement delays. Overall, just 49 percent of new medicines launched globally since 2011 are available in Netherlands.[349]

In September 2020, the Ministry of Economic Affairs and the Ministry of Finance announced a €20 billion national growth fund to stimulate public and private investment, including in education and research and development. This presents many opportunities for public-private partnerships in the life sciences and health care. Last year, the local innovative pharmaceutical industry association, Vereniging Innovatieve Geneesmiddelen (VIG), published an eight-point plan to make the Netherlands a more attractive environment for biopharmaceutical innovators.

[345] IHS Global Insights (May 2018). Netherlands expands criteria for inclusion of high-cost drugs in "reimbursement lock," renegotiates price of Tecentriq® and Soliris®.
[346] Association of Innovative Medicines in the Netherlands, June 2020.
[347] IQVIA (2020). Market Prognosis: Netherlands.
[348] EFPIA Patient W.A.I.T. Indicator 2020 Survey, 2021, available at https://www.efpia.eu/media/602652/efpia-patient-wait-indicator-final-250521.pdf (last visited Jan. 30, 2022).
[349] PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2020. June 2021.

Poland

Poland caps the share of public spending on medicines using industry clawbacks; however, the share of National Health Fund (NFZ) spending on medicines has always remained relatively stable and under the 17 percent ceiling at which point industry clawbacks are mandated. In 2021, the Polish Government drafted an amendment to increase industry clawbacks above the cap from 50 to 100 percent and remove exemptions from the cap for risk-sharing schemes. The government has constricted public spending on medicines through a combination of therapeutic reference pricing that can tie the price of patented medicines to the lowest price generics, price cuts, fixed margins, high co-pays, restricted access to limited beneficiaries and other cost-containment measures.[350] Poland's government pricing and reimbursement system is underfunded and significantly backlogged, taking more than 815 days on average from EMA marketing authorization to patient access.[351] Overall, just 34 percent of new medicines launched globally since 2011 are available in Poland.[352] . To promote access to innovation needed by patients, Poland should ensure that public health spending is allocated a sufficient share of public spending and implement market access measures that promote access to innovative medicines.

Romania

The Romanian health care system has historically been one of the most underfunded in Europe, comprising an estimated 5.3 percent of GDP in 2019 from public sources.[353] Romania imposes significant market access barriers for medicines, including government price controls, other cost-containment measures and administrative hurdles that significantly delay patient access (e.g., an average of 883 days between EMA approval and government reimbursement[354] and 29 percent of global new medicines available).[355] The Romanian government operates a dual-pricing system aimed at relieving shortages from parallel exports to other EU countries. The Romanian government sets prices based on the lowest price in a basket of 12 EU countries for CANAMED (used for the public reimbursement process) versus the average of the lowest 3 countries for the Public Catalogue (used for parallel exports and international reference pricing by other EU countries). Moreover, the reimbursement process is strongly dependent on the completion of reimbursement processes in other European countries. While this pricing policy was originally intended to protect patients in a lower GDP per

[350] IQVIA (2020). Pricing and Reimbursement Concise Guide: Poland.
[351] EFPIA Patient W.A.I.T. Indicator 2020 Survey, 2021, available at https://www.efpia.eu/media/602652/efpia-patient-wait-indicator-final-250521.pdf (last visited Jan. 30, 2022).
[352] PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2020. June 2021.
[353] OECD and European Union, Health at a Glance: Europe 2020: State of Health in the EU Cycle, 2020.
[354] EFPIA Patient W.A.I.T. Indicator 2020 Survey, 2021, available at https://www.efpia.eu/media/602652/efpia-patient-wait-indicator-final-250521.pdf (last visited Jan. 30, 2022).
[355] PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2020. June 2021.

capita country, it has ultimately led to further product shortages and a lack of patient access, all of which is exacerbated as wealthier European countries seek to reference lower Romanian prices and to import lower priced products from Romania. Moreover, the inclusion of new medicines on the reimbursement list is an unpredictable process, often delayed by budget constraints.

In 2020, the government's claw back tax was capped at 25 percent of sales but still differentiated in ways that discriminate against foreign-based innovative companies: a 25 percent clawback tax on innovative products, a 20 percent clawback tax on generic medicines and a 15 percent clawback tax on medicines produced in Romania. Overall, the lack of health care funding, onerous pricing policies and long delays in accessing innovative medicines need to remain high on the political agenda. The new government has indicated a willingness to increase health care spending to six percent of GDP starting in 2022. Also, the government program aims to identify alternative funding to improve access to innovation by creating a Health Innovation Fund.

Moreover, although Romania has high potential for clinical trials, the number of clinical trials has drastically declined since 2008. Romania (98 clinical trials in 2019) lags smaller countries such as Bulgaria (108) and Hungary (207), thus further limiting patient access to innovative therapies. The market for clinical trials in Romania, could have the potential to reach EUR 802 million and even EUR 1.4 billion compared to the best performing EU countries.[356]

Spain

During the financial crisis of 2010-2012, Spain imposed aggressive cost-containment measures that remain in place despite the country's economic rebound. Since 2010, these measures have collectively reduced pharmaceutical spending by 30 percent. Specific measures include the reimbursement delisting of more than 400 medicines, frequent direct and indirect price cuts, imposition of a 7.5 percent mandatory discount on reimbursed innovative medicines, restricted access for certain patient subpopulations and changes in pharmaceutical co-payment policies (e.g., pensioners began contributing a 10 percent co-payment, subject to caps and other limits). Additional market access challenges have emerged with recent administrations. These include therapeutic reference pricing of innovative medicines based on a group of products that includes generics and biosimilars, mandatory prescribing by active ingredient for small molecules and biologics, and mandatory automatic substitution of biosimilars.

In an effort to provide greater predictability and avoid further *ad hoc* cost-containment measures, the local innovative pharmaceutical industry association, Farmaindustria, and the current administration recently agreed to tie growth in public spending on original branded medicines to GDP growth. However, in practice, historical

[356] IQVIA (2020). Clinical Studies: Foreign investments in Romania, available at https://www.accscr.ro/images/upload/images/Clinical percent20Trials percent20Study percent20Romania_20200827_RAPORT percent20FINAL_RO.pdf (last visited Jan. 30, 2022)

market access barriers, including at the subnational level, and government price controls persist. Only 55 percent of new medicines reviewed by Health Minister's Advisory Committee in 2018 were admitted to reimbursement and only 47 percent of new medicines launched globally since 2011 are available in Spain.[357] In 2019, an unprecedented level of rejections and delays by the Ministry of Health have negatively impacted patient access to new medicines.

Sweden

Although Sweden is one of the wealthiest countries in Europe, the proportion of national health expenditure accounted for by pharmaceuticals has fallen from 14.5 percent in 2000 to just 9.7 percent in 2019. Moreover, the Swedish Krona has declined against the Euro significantly over the course of the past decade, accounting for approximately 60 percent of the decline in the overall relative price index with European countries since 2014. According to the Dental and Pharmaceutical Benefits Agency (TLV), about 60 percent of the price reduction for innovative medicines over 2014-2019 was due to changes in exchange rates. With more than 25 countries referencing Sweden – including Canada, Germany and Switzerland – the global knock-on effects of the Swedish Krona's relative depreciation are significant.

Biopharmaceutical innovators face an increasingly challenging and non-transparent environment for government pricing and reimbursement. For example, manufacturers must submit a proposed price to the TLV as part of their combined pricing and reimbursement application. Unless the medicine has been identified as a candidate for a managed entry agreement, the application is either accepted or rejected in a nontransparent fashion. Although rejections can be appealed, the manufacturer is not permitted to provide new evidence to support its case. In making pricing decisions, the TLV employs an opaque "value-based" system which compares new products against comparators it deems therapeutically equivalent, including medicines used outside the reimbursement system and medicines used off-label. The TLV also engages in frequent re-assessments of reimbursed medicines, which commonly result in price cuts, new restrictions and even delisting. Overall, just 52 percent of new medicines launched globally since 2011 are available in Sweden.[358]

Switzerland

Switzerland has compulsory private health insurance, but the government regulates which medicines are reimbursed and sets the prices of those products based on the prices in other European countries (all with lower GDP per capita) as well as based on the prices of alternative therapies that may represent a lower standard of care.

[357] PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2020. June 2021.
[358] PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2020. June 2021.

Moreover, the pricing and reimbursement system lacks predictability and transparency and fails to appropriately account for changes in currency exchange rates. For example, in 2015 Switzerland expanded the basket of countries used in its international reference pricing system for setting and adjusting prices of patented medicines. However, given the increasing strength of the Swiss franc relative to other currencies in the basket (Euro, UK Pound, Swedish Krona and Danish Krone), the practice has become even more damaging as many of these currencies continue to lose value relative to the Swiss franc. Compounding this issue, in 2017 the Swiss Government began setting prices based on giving equal weight to the average international reference price and the average therapeutic reference price. The products chosen for the therapeutic reference price are often unpredictable and lack scientific evidence. Every year, one-third of the reimbursement list is subject to price adjustments based on this approach. For the group of 543 original brand medicines reviewed in 2018, 288 (53 percent) had their prices cut by an average of 19 percent. Similarly, for the group of 478 original brand medicines reviewed in 2019, 257 (54 percent) had their prices cut by an average of 17 percent. In 2020, 300 drugs had their prices cut by an average of 11 percent. Manufacturers may also be required to pay back revenue after a product's first triennial price review if the price was reduced by more than 3 percent and if the previous price generated more than CHF 20,000 in "excess revenue."

Over the past two years, government pricing authorities have begun using additional tools such as capitation, pay for performance, indication-based pricing, budget impact tests and rebating for drugs using in combination or by indication. As a result of these combined policies, Switzerland has experienced more pronounced market access delays for certain innovative medicines in recent years. Overall, just 46 percent of new medicines launched globally since 2011 are available in Switzerland.[359]

[359] *Id.*

UNITED KINGDOM

PhRMA and its member companies operating in the United Kingdom continue to work with the UK Government, the National Institute for Health and Care Excellence (NICE), the Scottish Medicines Consortium, the All Wales Medicines Strategy Group, NHS England and NHS Improvement, as well as other National Health Service (NHS) partners to support implementation of policies that strengthen the innovative pharmaceutical industry and address long-standing market access and pricing issues. Of particular concern are the continued challenges around patient access to innovative medicines, intellectual property (IP) threats post-Brexit and the need for continued support for the government's life sciences strategy.

Key Issues of Concern:

- **Longstanding restrictions on the valuation of innovative medicines and patient access**: Rigid health technology assessment (HTA) that require increasing discounts to meet low thresholds for cost-effectiveness – combined with overlapping cost containment measures across the health system designed to limit the pharmaceutical spending share below that of most developed markets[360] – remain significantly challenging for biopharmaceutical innovators and inhibit the ability of UK patients to access the full range of licensed indications for the latest innovative medicines. In comparison to peer countries, NHS patients cannot always access new treatments with proven added clinical benefit. Despite multiple initiatives, the progress on uptake has been limited and adoption of the newest medicines often remains slow and variable across the health system. More comprehensive reforms than one-off commercial agreements are needed to ensure wider availability and uptake of innovative medicines.

- **Continued need to deliver on ambitions for the life sciences sector**: When the current UK Government was elected in 2019, it ran on an ambitious platform with goals to increase R&D expenditure to 2.4 percent of GDP across the economy and make the United Kingdom a leading hub for life sciences. The sector forms a key pillar of the UK's economy and this is recognized by the UK Government. In July 2021, the UK Government published the *Life Sciences Vision*, setting out its industrial policy on the sector. The *Vision* is an evolution of the 2017 Life Sciences Industrial Strategy and was developed in partnership with industry and the wider life sciences sector. The recognition of the contribution of the life sciences sector to the health and wealth of the nation is both welcome and timely, as is the recognition of the integral role the NHS plays in contributing to and optimizing innovation from concept to delivery. PhRMA encourages the UK Government to continue to work with industry to fund and implement the *Life Sciences Vision*, including through meaningful reforms to the UK commercial environment, and also ensure that the NHS is an engaged partner in the UK life sciences ecosystem.

[360] IQVIA, "Drug Expenditure Dynamics 1995-2020," October 2021.

- **Intellectual property and other threats from Brexit**: The UK's exit from the European Union (EU) provides an opportunity to maintain strong IP protections and further drive robust innovation policies, including effective periods of regulatory data protection and supplementary protection to restore a portion of the time lost during the marketing approval process. Ongoing and future U.S.-UK trade negotiations provide an opportunity for the United Kingdom to affirm high IP standards.

For these reasons, PhRMA requests that the United Kingdom be placed on the **Watch List** in the 2022 Special 301 Report and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved.

Intellectual Property Protection

Effective IP protections and enforcement is essential to develop new medicines for patients who need them. Subsequent to the United Kingdom exiting the European Union, it is important that the United Kingdom maintain robust IP protections. In addition, the United Kingdom should seek to benefit from the opportunity to distinguish its innovation environment for the life sciences from the European Union by enhancing incentives where the European Union has unfortunately weakened its innovation framework. For example, the United Kingdom should consider eliminating the recently adopted EU "SPC waiver" that undermines life sciences innovation by exempting from infringement manufacturing of inventions during the SPC term.

Brexit does not change the UK's membership under the European Patent Convention (EPC) and any patent granted under the EPC can still be validated and enforced in the United Kingdom after Brexit. Following the end of the post-Brexit transition period, it is critical that the United Kingdom revise its legislation to calculate the duration of SPCs from the date of UK marketing authorization (rather than the earliest date of authorization in the European Union/European Economic Area or United Kingdom, as now). Continuing to make the duration of IP protection offered in the United Kingdom potentially still dependent on the acts of EU authorities is illogical, now that the UK and EU medicines regulatory systems are operating independently of each other, and consequently may erode the effective protection period in the United Kingdom.

Despite industry having raised these specific concerns strongly with the UK Government, these issues remain unresolved.

As the UK Government considers future free trade agreements post-Brexit, including with the United States, USTR should ensure that the UK affirms its commitment to strong IP protections. In particular, it should enshrine the provision of stable RDP and continue to ensure that orphan and pediatric exclusivities that meet the highest international standards remain in place (at a time when some in the European Union are seeking to undermine those incentives).

Market Access

Government Restrictions on the Valuation of Innovative Medicines and Patient Access

New medicines in the United Kingdom can be launched upon regulatory approval, potentially making it one of the world's fastest countries for market access. However, in practice, despite the introduction of the Early Access to Medicines Scheme (EAMS) and the Accelerated Access Pathway, UK patients experience materially longer delays in being treated with new medicines due to long standing cost-containment policies required for access in the NHS.[361] According to the UK Government, for every 100 patients in comparable countries who get access to a new medicine in its first year of launch (from the point of HTA approval), just 56 patients in the United Kingdom receive the same; even five years after the launch of a new medicine, only 69 patients in the United Kingdom receive the same.[362] 86 percent of new medicines launched globally since 2011 are available in the United States compared to just 60 percent in the United Kingdom, with UK patients waiting an average of 12 months from global first launch for the fewer medicines that do become available.[363]

A key reason why UK patients experience reduced access to new medicines is the high rate of either outright rejections by NICE or "optimized" recommendations that unduly restrict the patient populations who can access those medicines. When making recommendations, NICE assesses medicines using a baseline cost-effectiveness threshold of between £20,000 and £30,000 per quality-adjusted life year (QALY). This baseline threshold has not been revised – even in line with inflation – since NICE's inception in 1999, which means that the threshold has declined in real terms by 44 percent over the past two decades.[364] Innovative medicines exceeding a cost per QALY threshold of £30,000 (or £50,000 for end-of-life interventions and £100,000 to £300,000 for a small number of highly specialized technologies) are generally viewed as not cost-effective, leaving patients without access to clinically superior products. In addition, as companies develop new therapeutic advances, often in areas where there are many older off-patent medicines that are much lower in cost, demonstration of cost-effectiveness becomes exceedingly difficult. Moreover, NICE's inflexibility surrounding new medicines for which there is greater uncertainty about data (e.g., due to the immaturity of data or single-arm trials) disproportionately impacts patient access to treatments for small patient populations (e.g., rare conditions) or for subsets of populations (e.g., targeted therapies). NICE is due to publish updated technology appraisal guidance in February 2022, which industry hopes will support improved patient access to new medicines. The history of the Cancer Drugs Fund (CDF) and the proposal for a New Innovative Medicines Fund (IMF), which only partially address longstanding challenges with NICE assessments, further acknowledge the need for greater flexibility.

[361] IQVIA, P&R Guide: United Kingdom (2020).
[362] Office for Life Sciences, "Life sciences competitiveness indicators," July 2021.
[363] PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2020. June 2021.
[364] Bank of England Inflation Calculator, 2020, available at https://www.bankofengland.co.uk/monetary-policy/inflation/inflation-calculator (last visited Jan. 30, 2022).

Using primarily cost per QALY to measure cost-effectiveness in this way fails to appropriately recognize the value of innovative medicines. In this context, between March 2000 and January 2021, just 54 percent of all technology appraisals were recommended by NICE in line with marketing authorization; while 24 percent were recommended only for a restricted subset of patients, 4 percent were temporarily recommended under the Cancer Drugs Fund (CDF) and 3 percent for research only – and 14 percent were rejected altogether. Recommendations for cancer medicines were even more restrictive with just 50 percent of cancer appraisals recommended in-line with marketing authorization; while 14 percent were recommended for a restricted subset of patients, 12 percent under the CDF, 3 percent for research only – and 22 percent rejected altogether.[365]

Given these trends, industry welcomes the ongoing NICE Methods Review and urges NICE to deliver on the promise of "ambitious reforms" to support UK patients receiving access to the latest innovative medicines. PhRMA and its member companies are concerned that the subsequent UK Government pressure to make any changes "cost-neutral" to the NHS is creating a zero-sum game in which methodological improvements in one area are being offset by new methodological challenges in other areas. Ultimately, given the well-known limitations of QALYs, the United Kingdom should introduce a broader and more flexible framework to ensure that its assessments of innovative medicines more appropriately recognize the comprehensive health and non-health benefits to patients, the health system and society.

PhRMA member companies recognize NHS England's interest in controlling health care spending but spending on medicines is not currently a driver of growing health care costs. On the contrary, in the five years up to 2019, NHS spending on the majority of branded medicines was capped to 1.1 percent growth on average per year, a decline of 0.4 percent after inflation while overall NHS spending rose at 3.3 percent over the same period. Innovations in prevention and treatment will be vital to creating a more effective and resilient UK health system, as well as to improving health outcomes and providing high-quality care.

The UK invests less than other developed economies on medicines, with just 9 percent of its health care budget spent on medicines compared to an average of 15 percent.[366] There are a range of measures used by the NHS to manage expenditure on branded medicines, including cost-effectiveness thresholds set by NICE and a further budget impact test, as well as the Voluntary Pricing and Access Scheme (VPAS).[367] PhRMA member companies remain committed to a Voluntary Scheme that brings together agreements on affordability with other important aspects of medicines policy. However, the contribution required from industry to cap the market through double-digit percentage rebates is not sustainable and makes the UK uncompetitive. A sustainable long-term agreement is needed between industry, the UK Government and the NHS that

[365] National Institute for Health and Care Excellence (NICE), available at https://www.nice.org.uk/about/what-we-do/our-programmes/nice-guidance/nice-technology-appraisal-guidance/summary-of-decisions (last visited Jan. 30, 2022).
[366] IQVIA, "Drug Expenditure Dynamics 1995-2020," October 2021.
[367] Voluntary scheme for branded medicines pricing and access (VPAS).

supports the ambition of the *Life Sciences Vision* and promotes world-class patient outcomes, NHS financial sustainability and an innovative industry that can continue to invest in tomorrow's treatments and cures.

Therapeutic Tendering of Classes of Patented Medicines

The NHS has traditionally subjected off-patent medicines to competition through public procurement that invites bids from manufacturers of the same generic medicine. Over the last few years, however, NHS England has used public procurement for entire therapeutic classes of patented medicines with the aim of obtaining prices below the prices that NICE established when making coverage recommendations. The approach then uses financial incentives to influence health care providers to prescribe the lowest priced medicines. In addition to disrupting established incentives for patented medicines, this emerging practice undermines NICE guidance and treats non-interchangeable patented medicines in a similar way to interchangeable generics, undermines clinical and patient choice, and could ultimately destabilize the supply of medicines by concentrating procurement from a single supplier. This policy represents a fundamental shift in the UK model, thereby destabilizing the aim of VPAS, sending a strong anti-innovation signal to the biopharmaceutical industry and contradicting the UK Government's stated ambition in the *Life Sciences Vision* to be a global leader in life sciences. NHS England should abandon the practice of therapeutic tendering of patented medicines and focus instead on using the other levers at its disposal to address the low uptake of medicines in the targeted therapeutic classes.

Delivering on Ambitions for the Life Sciences Sector

When the current UK Government was elected in 2019, it ran on an ambitious platform with goals to increase R&D expenditure to 2.4 percent of GDP across the economy and make the United Kingdom a leading hub for life sciences. The sector forms a key pillar of the UK's economy and this is recognized by the UK Government. In July 2021, the UK Government published the *Life Sciences Vision*, setting out its industrial policy for the sector. The Vision is an evolution of the 2017 Life Sciences Industrial Strategy and was developed in partnership with industry and the wider life sciences sector. The Vision sets out the broad outline of sector policy for the next five to ten years. It is focused on three themes:

- Building on the UK's science and clinical research infrastructure and harnessing the UK's unique genomic and health data.
- Supporting the NHS to test, purchase and deploy innovative technologies, so that cutting-edge science and innovations can be embedded widely across the NHS as early as possible and rapidly adopted in the rest of the world more effectively.
- Creating the right business environment in the United Kingdom in which firms can access the finance to grow, be regulated in an agile and efficient way, and manufacture and commercialize their products in the United Kingdom.

Also forming a major part of the Vision is a mission-led approach to address some of the biggest health care problems faced by the NHS, including cancer, respiratory disease and dementia. Industry was particularly pleased to see the commitment within the Vision of the NHS being a central partner to delivering sector policy goals. Finally, there was recognition of the need for an end-to-end system of biomedical innovation in the Vision: this included a commitment to an ambitious outcome for the NICE Methods Review and plans to improve the uptake of innovative medicines in the NHS, which the Vision noted was an issue that needed to be addressed.

PhRMA welcomes the creation of the *Life Sciences Vision* and encourages the UK Government to continue to work with industry to ensure its successful implementation, including through meaningful reforms to the UK commercial environment.

MIDDLE EAST / AFRICA

EGYPT

PhRMA and its member companies remain concerned about the intellectual property (IP) and market access environment in Egypt. Despite Egypt undertaking major health care reforms to support universal health coverage and address significant unmet medical needs, the policy environment continues to pose challenges that the innovative biopharmaceutical industry seeks to improve.

The Egyptian President approved a law in August 2019 establishing the Egyptian Drug Authority (EDA) and the Egyptian Authority for Unified Procurement, Medical Supplies and the Management of Medical Technology (UPA). The creation of these authorities aims to develop the health system and medical industries, ensure the stable supply of medicines, counter monopolies in the health care sector, combat counterfeit medicines and accelerate patient access in Egypt. EDA officials have shown a willingness to engage with industry regarding issues of concern and potential solutions, and have expressed interest in supporting the innovative biopharmaceutical industry and encouraging investment in the country. For example, EDA has adopted an open and flexible approach to support individual companies in alleviating some of the losses due to the devaluation of the Egyptian pound via repricing policies. PhRMA encourages both EDA and UPA to continue engaging with industry before developing, changing or finalizing new policies.

Key Issues of Concern:

- **Weak patent enforcement and compulsory licensing threats**: Egypt lacks effective patent enforcement, enabling manufacturers to obtain marketing licenses for follow-on products prior to the expiration of the patent on the original product. Recently, the Egyptian Government has taken steps to set up a ministerial committee with broad discretion to issue compulsory licenses.

- **Government pricing, reimbursement and procurement**: Egypt continues to implement international reference pricing regulation that limits and delays access to innovative medicines. In addition, government procurement processes lack transparent criteria, contracting terms and timelines that further hinder the ability of companies to plan and invest in bringing new medicines to the market. UPA is currently planning to implement a new health technology assessment (HTA) system to inform pricing and reimbursement decisions, but important details have not been announced.

For these reasons, PhRMA requests that Egypt remain on the **Watch List** in the 2022 Special 301 Report and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved.

Intellectual Property Protection

Weak Patent Enforcement

Egypt is a member of the World Trade Organization (WTO) and has enacted patent laws, and issues patents through the Egyptian Patent Office. Despite recognizing the value of protecting biopharmaceutical innovations through its patent system, Egypt does not provide an effective mechanism to ensure that follow-on marketing licenses are not granted to companies making products that potentially infringe on an originator's patent. Egyptian officials need to put in place an effective patent enforcement system similar to the process used by the United States or in other neighboring countries.

In those neighboring countries, regulators who receive a marketing application from a generics company are required to check for any existing patents applying to the reference drug. Egypt should seek to provide innovators transparent and effective early dispute resolution mechanisms to avoid the marketing authorization of possible patent infringing products. At a minimum, Egypt should (1) require notification of the relevant holder of a patent on a biopharmaceutical product if another party applies for marketing approval for a generic or biosimilar version of that product; (2) enable the holder of a patent on a biopharmaceutical product to seek provisional enforcement measures, such as a stay, preliminary injunction or interlocutory injunction, to prevent the marketing of a potentially infringing generic or biosimilar version of that product; and (3) provide for the timely resolution of patent disputes before an infringing follow-on product is allowed to launch on the market.

Compulsory Licensing Decree No. 251/2020

In early February 2020, the Prime Minister issued Decree No. 251/2020 forming the Ministerial Committee stipulated in Article 23 of the Law with the authority to compulsory license or expropriate any patented product or process. The Decree and Egypt's Patent Law (Law no. 82/2002) give the committee broad discretion to take patents. The votes of only three of the five members of the committee are necessary to issue a compulsory license (CL).

The fact that the Government of Egypt has established a ministerial committee at this specific time – nearly two decades after the Patent Law entered into force – and without any prior notification to or engagement with the private sector has sent an alarming signal to the companies we represent and to many other innovative industries.

Experience and research demonstrate that compulsory licensing is not an effective way to improve access or achieve other public health objectives. It does not necessarily lower prices or speed access in the short-term or provide sustainable or comprehensive solutions to longer-term challenges. It does not address systemic barriers to access – from weak health care delivery systems to low national health care funding and high taxes and tariffs on medicines. Compulsory licensing is particularly ineffective relative to the

many alternatives available. Biopharmaceutical innovators support different tools and programs that make medicines available to patients who could not otherwise afford them.

PhRMA believes governments should grant CLs in accordance with international rules and only in exceptional circumstances and as a last resort. Decisions should be made through fair and transparent processes that involve participation by all stakeholders and consider all relevant facts and options.

Market Access

Pricing Decree No. 499/2012

Through Pricing Decree No. 499/2012, EDA continues to implement an international reference pricing regulation that limits and delays access to innovative medicines. PhRMA and its member companies remain concerned that Egypt has yet to systematically address the drawbacks of the current pricing system, including by establishing a method to adjust for exchange rate fluctuations and address other concerns regarding the basket of reference countries and the formula used to set prices. Ultimately, the current policies are incompatible with the country's goal of establishing a value-based health care system. Industry seeks to work with EDA to resolve the challenges of Pricing Decree No. 499/2012, hold the implementation of any new pricing mechanism that is not required by an existing national law or decree in the short term and transition to a value-based pricing and reimbursement policies in the medium term.

Government Procurement Authority

The UPA is a newly created government authority responsible for national procurement, tendering, medical supplies and HTA. The UPA aims to accelerate access to medicine through value-based procurement and reimbursement methodologies but currently lacks required capabilities and policies. As a result, PhRMA member companies face many challenges regarding government procurement of medicines. Frequent price renegotiations have limited predictability and fair competition, and there is a need for more transparent criteria, contracting terms and timelines so that companies can plan and invest in bringing new medicines to the market. In addition, contrary to current practice, Moreover, UPA should not disclose confidential negotiated net prices, as doing so harms competition and access to innovation.

Establishment of New HTA System

Over the past year, Egypt has intensified efforts to establish an HTA system. When designed well and used appropriately, HTA of medical tests, treatments and health care services can represent one of many tools to support well-informed, patient-centered health care. When misapplied, HTA has the potential to impose one-size-fits-all policies that impede patients' and physicians' ability to tailor care to individual needs and preferences. Poor forms of HTA can also hinder progress in developing innovative new therapies that address unmet medical needs.

PhRMA and its member companies recognize the ongoing efforts of the Egyptian Government to establish an HTA system and stand ready to offer expertise to support a system that is tailored to the needs of Egypt's health care system. While a pilot was announced and is expected to begin before the end of 2021, the overall HTA model has not been presented and various elements require greater clarity. While PhRMA recognizes the primary goal of informing decisions on the effective use of resources, HTA should not be used as a cost-containment tool but rather enable broad recognition of the value of innovation and support improvements in patient choice and access. In particular, the Egyptian Government has indicated their intention to adopt a model based on both clinical and cost-effectiveness assessments. As experienced in other countries, a restrictive framework involving low thresholds for cost-effectiveness may act as a barrier for patient access.

PhRMA is concerned about the consequences of implementing HTA within an already complex pricing and reimbursement framework that relies on international reference pricing and tendering to extract further price concessions. To enable value-based pricing and reimbursement decisions, certain tools that are incompatible with value-based health care, such as international reference pricing, should be phased out, and innovative medicines should be procured at a price negotiated based on an appropriate value assessment without further price pressures from tendering. PhRMA is also concerned about the insufficient clarity on the roles and responsibilities of different Egyptian bodies that currently have pharmacoeconomic departments (e.g., EDA, UHIA and UPA), potentially resulting in duplications of assessments and thereby creating uncertainty and delays in patient access to innovative medicines.

To support the implementation of a HTA system that supports patient access, rewards the value of innovation and creates a predictable market access environment for biopharmaceutical companies, PhRMA stresses the need for a collaborative dialogue between all relevant Egyptian authorities, industry and other relevant stakeholders. PhRMA is encouraged by the willingness of the Egyptian authorities to engage with our industry and we are hopeful that this will bring greater clarity to the system while optimizing its design.

ISRAEL

While Israel continues to consider and expand policies incentivizing biopharmaceutical research and development, PhRMA and its member companies are concerned about the direction of recent intellectual property (IP) proposals. In September 2021, the Israel Ministry of Justice published an exposure draft bill introducing a troubling biopharmaceutical "manufacturing waiver" exemption during relevant patent term restoration periods.[368]

In addition, Israel does not provide appropriate regulatory data protection (RDP) for biologic products. In 2018, the Israel Ministry of Health established an intergovernmental committee to assess and consider expanding RDP provisions to explicitly include biologics. That process appears to have stalled. PhRMA and its members urge Israel to complete that assessment and to extend the RDP provided to biologic products.

Key Issues of Concern:

- **Patent term restoration**: Following bilateral engagement with the United States, Israel committed to establish mechanisms for innovators to recoup a portion of the patent term lost during the lengthy regulatory processes required to develop and secure approval for biopharmaceuticals. In 2014, Israel's Parliament amended the patent law to establish a patent term restoration (PTR) system. Recently, the Ministry of Justice released an exposure draft bill that would erode the protection afforded during the PTR period. That draft bill seeks to exempt from patent infringement third-party companies manufacturing generic and biosimilar products in Israel during the effective PTR period for export and stockpiling purposes. The bill, if enacted, would reduce significantly IP rights and put into question bilateral and international commitments.

- **Regulatory data protection failures**: Consistent with the obligations under the WTO TRIPS Agreement, Israel must protect biopharmaceutical test data against "unfair commercial use" and disclosure. Despite providing RDP for small molecule medicines, Israel does not provide appropriate RDP for biologic medicines. In 2018, Israel's Ministry of Health launched an intergovernmental committee to assess reforms needed to extend the RDP provided to biologics. Committee progress appears to have halted after initial consultation with stakeholders. PhRMA urges Israel to reinvigorate the committee and to release policy recommendation establishing appropriate RDP for biologics.

- **Registration delays**: Under Government Decision No. 183 (2009), the Ministry of Health (MoH) is required to review applications for registration of pharmaceutical products within 270 days of the date of their submission. Compliance with this

[368] Explanatory Memorandum to the Patents Law (Amendment No. 14) (Increasing Competitiveness in the Israeli Economy), 5781-2021.

timeline is important not only in terms of the regulatory review process, but also in terms of securing adequate RDP in Israel given the manner in which it is calculated in Israel. Increasingly, member companies are reporting that this review timeline is not being met. Further, industry's ability to monitor compliance with this review timeline is hindered by the fact that registration performance data has not been published in Israel since 2018.

For these reasons, PhRMA requests that Israel be placed on the **Watch List** in the 2022 Special 301 Report and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved.

Intellectual Property Protection

Patent Term Restoration

The role PTR plays in biopharmaceutical innovation is critically important to incentivizing R&D and accelerating the launch of new medicines. Over the years, the science of new medicines development has become more difficult, and the scope, complexity and cost of conducting clinical trials has increased dramatically. In large part to meet growing regulatory demands, the number of individual data points that must be collected through such trials has nearly doubled to just under 930,000 between 2001-2005 and 2011-2015.[369] A typical Phase III clinical trial protocol now entails an average of 167 procedures – 60 percent more than at the start of the last decade.[370] All of this has contributed to an upward trend in the average period for clinical testing required to secure marketing approval for new treatments and to a shorter effective patent term. Indeed, it now takes an average of 10-15 years to develop and win approval for a new drug. Effective PTR mechanisms restore a portion of this lost patent life, including all of the rights that a patent provides. Without the ability to at least partially restore patent life lost to development and clinical testing, innovators would find it increasingly difficult to continue to invest in new research and development for the benefit of patients worldwide.

In September 2021, the Ministry of Justice released an exposure draft bill that would erode the protection afforded during the PTR period. That draft bill seeks to exempt from patent infringement third-party companies manufacturing generic and biosimilar products during the entire PTR period for export purposes and for stockpiling during the last six months of the PTR term for sale in Israel after the PTR term expires. The bill, if enacted, would reduce significantly IP rights and put into question bilateral and international commitments.

[369] Getz, K.A. and R.A. Campo, "New Benchmarks Characterizing Growth in Protocol Design Complexity," *SAGE Journals*, June 2017, available at http://journals.sagepub.com/doi/10.1177/2168479017713039 (last visited Jan. 30, 2022).
[370] Tufts Center for the Study of Drug Development, *Outlook 2016*, Tufts University, January 2016, available at https://static1.squarespace.com/static/5a9eb0c8e2ccd1158288d8dc/t/5aa2fc9d0852297555747051/1520630944033/Outlook-2016.pdf (last visited Jan. 30, 2022).

Regulatory Data Protection Failures

RDP is important to foster innovative research and development of new medicines, including biological products. Distinct from patent which reward the discovery of the underlying invention, RDP refers to the protection granted to data generated by an applicant to support its marketing application for a new medicine. Consistent with the obligations under Article 39.3 of the *Agreement on Trade-Related Aspects of Intellectual Property Rights*, Members of the World Trade Organization such as Israel must protect such pharmaceutical test data as a distinct form of intellectual property, in addition to any patent protection which covers the underlying pharmaceutical invention. In particular, such data must be protected against "unfair commercial use" and disclosure.

Section 47D of Israel's Pharmacist's Ordinance provides an exclusive period of protection (RDP) that allows innovators to recoup the substantial investments involved in studying and seeking approval of new medicines, after which follow-on applicants may rely on the innovator's data to seek approval of their products. RDP is particularly critical for biologic medicines, which may not be adequately protected by patents alone. Made using living organisms, biologics are so complex that it is possible for others to produce a version – or "biosimilar" – of a medicine that may not be covered within the scope of the innovator's patent. RDP offers a predictable period to reward innovators that undertake lengthy, expensive and risky R&D to bring new biological medicines and their significant therapeutic benefits to patients.

Acknowledging the importance of RDP, the Israel Ministry of Health announced in 2018 the establishment of an intergovernmental committee tasked with assessing RDP for biologics. However, that committee has yet to release a proposal or findings of its policy assessment. PhRMA stands ready to work with the government of Israel and encourages the Ministry of Health to reinvigorate that committee to release draft RDP regulations that provide an appropriate level and term of protection for biologics.

Market Access

Registration Delays

Under Government Decision No. 183 (2009), the MoH is required to review applications for registration of biopharmaceutical products within 270 days of the date of their submission. Increasingly, PhRMA member companies are reporting that this review timeline is not being met. Separate from the benefit of ensuring timely regulatory review of marketing approval applications, the commitment to undertake the registration process within 270 days was an integral element of the February 18, 2010 Memorandum of Understanding between the U.S. and Israeli Governments given the manner in which Israel calculates RDP. As such, it is critical that Israel honor the registration deadlines provided for in Government Decision No. 183. In addition, Israel should be strongly encouraged to publicize is registration performance so that industry and other interested stakeholders can ensure that the review timelines are being met (the last registration performance data was published in 2018).

OUT-OF-CYCLE REVIEW

UNITED ARAB EMIRATES

The United Arab Emirates (UAE) has made great progress in recent years to provide an increasingly competitive environment for operating and investing in the life sciences and innovative biopharmaceutical sector. This effort has resulted in attracting the regional headquarters for many international companies, increased investment in clinical research and expanding regional logistics, warehousing and manufacturing operations. In recent years, the UAE has taken positive steps, including accelerating licensing procedures to ensure that patients have timely access to cutting-edge vaccines and medicines. Building on that progress, further action is required to ensure that intellectual property (IP) is appropriately protected and enforced in the UAE.

Beginning in 2020, the UAE took steps to address longstanding deficiencies in its IP regime. For the first time, the UAE released an IP framework pursuant to Decree 321 (2020) to establish 8 years of regulatory data protection (RDP) for both small and large molecule biopharmaceutical products, create an effective early resolution mechanism for patent disputes, ensure appropriate protection of patents based on Decree 404 (2000) and other improvements. While industry welcomes the release of an updated Industrial Property Law (Law No. (11) on Regulation and Protection Industry Property Rights (May 31, 2021)), overly broad compulsory licensing provisions as well as RDP language that appears to be inconsistent with the level of protection included in Decree 321 are undermining the UAE's efforts to strengthen its IP regime. Further complicating matters is the future of the Gulf Cooperation Council Patent Office, which played a critical role for innovators to obtain patent rights in the UAE and the region.

Industry looks forward to continuing its constructive engagement with the UAE Government to ensure that these measures are consistent with the UAE's international commitments and implemented in a manner that provides effective and meaningful patent protection and RDP for all innovative pharmaceuticals.

Key Issues of Concern:

- **Effective patent enforcement and regulatory data protection**: The UAE has not historically had an adequate IP framework to ensure that patents are appropriately protected and enforced, and generic and biosimilar manufacturers cannot prematurely rely on the confidential information that innovators must submit to regulatory authorities to demonstrate the safety and efficacy of a medicine for marketing approval. Promisingly, on September 21, 2020, the UAE released Decree 321, which has the potential to address these deficiencies. Confusingly, however, this past summer the UAE released a new IP law (Law No. (11) of 2021) that appears to create a conflict with the protections promised in Decree 321 and would allow for compulsory licenses (CLs) to be issued on broad and vague grounds. We stand ready to work with the government to ensure that these measures are implemented consistently with international obligations and in a manner that provides effective and meaningful patent protection.

For these reasons and recognizing the significant progress that the UAE has already achieved, PhRMA requests that USTR conduct an **Out-of-Cycle Review**, so that the U.S. Government can continue to partner with the UAE Government on the implementation of Decree 321 in 2022.

Intellectual Property Protection

Effective Patent Enforcement and Regulatory Data Protection

The UAE has not historically had an adequate IP framework to ensure that patents are appropriately protected and enforced, and generic and biosimilar manufacturers cannot prematurely rely on the confidential information that innovators must submit to regulatory authorities to demonstrate the safety and efficacy of a medicine for marketing approval. Recognizing these deficiencies, the UAE issued Decree 321 on September 21, 2020. This highly promising decree provides eight years of RDP and anticipates the implementation of new systems in the UAE to ensure the effective enforcement of patents on innovative pharmaceutical products (including the enforcement of Decree 404 for innovative products approved prior to Decree 321 being published in the official gazette).[371] PhRMA and its members look forward to continuing our constructive engagement with the UAE Government to ensure that the Decree (and in particular the proposed exceptions in Article 5) are consistent with the UAE's international commitments and that it is implemented in a manner that provides effective and meaningful patent protection and RDP for all innovative pharmaceuticals (including biologics).

More broadly, industry also welcomes the UAE's efforts to update its IP regime through the release of a new Industrial Property Rights Law (Law No. (11) of 2021). While many of the core IP provisions are consistent with international best practices, it is disappointing that there was no opportunity for notice and comment on the updated legislation. As a result, the final legislation raises a number of concerns. It includes overly broad and vague grounds for issuing CLs in the UAE (i.e., whenever it is deemed that the patent is being "insufficiently utilized" in the UAE (Article 25)). CLs should only be granted in accordance with international rules and only in exceptional circumstances and as a last resort. Also, the final legislation contains RDP provisions that are inconsistent with those provided by Decree 321 (referencing only five years of RDP measured from the date of seeking marketing approval (Article 62.2) versus the eight years of protection from the date of marketing approval provided by Decree 321).

Industry stands ready to work with both the UAE and U.S. Governments to ensure that the new Industrial Property Rights Law is implemented in a manner consistent with Decree 321 and the UAE's broader international commitments. Indeed, building on recent industry engagement with MOHAP and the Ministry of Economy, bilateral government engagement is necessary to address these concerns with UAE's RDP and compulsory licensing regimes.

[371] Consistent with the MOU between the United States and the United Arab Emirates, it will be critical for the UAE to provide clarity on how it will define the country of origin of the original drug in order to ensure that the appropriate term of patent protection is provided.