# \*\*1NC WTO Topic- HWNovices\*\*

## \*\*1NC\*\*

### Off-Case: Innovation Disadvantage

#### First off is the innovation disadvantage.

**Uniqueness: Pharma profits are up from COVID vaccines, but patent waivers threaten this.**

**Buchholz 5-17-21**

(Katharina, https://www.statista.com/chart/24829/net-income-profit-pharma-companies/)

The profitability of coronavirus vaccines has been in the spotlight since U.S. President Joe Biden come out in support of temporarily lifting vaccine patents to make the production of the life-saving inoculations more financially feasible for poorer countries. EU leaders meanwhile remain divided over such a move. Company financial reports show that COVID-19 vaccine makers and developers like Johnson & Johnson, Pfizer, Moderna, AstraZeneca and BioNTech have seen their profits increase since the vaccine rollout, at times majorly. In early May, stocks of several companies that benefit from COVID-19 vaccine sales **took a nosedive on the news of Biden’s reversal**. Moderna stocks, for example, were still down more than 6 percent at close on May 5, the day of the announcement. Stocks recovered somewhat as German chancellor Angela Merkel came out against patent waivers the following day. While fluctuations in the stock market price have hurt drug makers in the **short term**, patent waivers would diminish the bottom line of companies involved with the development and production of COVID-19 **vaccines in the long term**. Pharma giants like Johnson & Johnson and Pfizer bring in billions of dollars of income every quarter from diverse sources, so the COVID bump was smaller for them. In the case of Pfizer, which has been a bigger producer than J&J, the year-over-year profit increase was a handsome 44 percent, however. For smaller AstraZeneca, the COVID year meant that its profits doubled. In the case of Moderna, the past year has turned a Q1 loss into a profit. The case is similar for German company BioNTech, which collaborated with Pfizer on its COVID vaccine. While Q1 2021 brought in a profit of $1.1 billion, the company ran a deficit since its founding in 2008 up until Q4 2020, when it posted a profit for the first time. The $446 million earned stood in contrast to losses of almost $428 million accrued in the first nine months of the year.

**Link: Strong IP protections spur innovation by encouraging risk-taking and incentivizing knowledge sharing. You should prefer our statistical analysis of multiple studies.**

**Ezell and Cory 19** [Stephen Ezell, vice president & global innovation policy @ ITIF, BS Georgetown School of Foreign Service. Nigel Cory, associate director covering trade policy @ ITIF, MA public policy @ Georgetown. "The Way Forward for Intellectual Property Internationally," Information Technology & Innovation Foundation, 4-25-2019, accessed 8-25-2021, https://itif.org/publications/2019/04/25/way-forward-intellectual-property-internationally] HWIC

IPRs Strengthen Innovation

Intellectual property rights power innovation. For instance, analyzing the level of intellectual property protections (via the World Economic Forum’s Global Competitiveness reports) and creative outputs (via the Global Innovation Index) shows that counties with stronger IP protection have more creative outputs (in terms of intangible assets and creative goods and services in a nation’s media, printing and publishing, and entertainment industries, including online), even at varying levels of development.46

IPR reforms also introduce strong incentives for domestic innovation. Sherwood, using case studies from 18 developing countries, concluded that poor provision of intellectual property rights deters local innovation and risk-taking.47 In contrast, IPR reform has been associated with increased innovative activity, as measured by domestic patent filings, albeit with some variation across countries and sectors.48 For example, Ryan, in a study of biomedical innovations and patent reform in Brazil, found that patents provided incentives for innovation investments and facilitated the functioning of technology markets.49 Park and Lippoldt also observed that the provision of adequate protection for IPRs can help to stimulate local innovation, in some cases building on the transfer of technologies that provide inputs and spillovers.50 In other words, local innovators are introduced to technologies first through the technology transfer that takes place in an environment wherein protection of IPRs is assured; then, they may build on those ideas to create an evolved product or develop alternate approaches (i.e., to innovate). Related research finds that trade in technology—through channels including imports, foreign direct investment, and technology licensing—improves the quality of developing-country innovation by increasing the pool of ideas and efficiency of innovation by encouraging the division of innovative labor and specialization.51 However, Maskus notes that **without protection from potential abuse of their newly developed technologies, foreign enterprises may be less willing to reveal technical information associated with their innovations**.52 The protection of patents and trade secrets provides necessary legal assurances for firms wishing to reveal proprietary characteristics of technologies to subsidiaries and licensees via contracts.

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The relationship between IPR rights and innovation can also be seen in studies of how the introduction of stronger IPR laws, with regard to patents, copyrights, and trademarks, affect R&D activity in an economy. Studies by Varsakelis and by Kanwar and Evenson found that **R&D to GDP ratios are positively related to the strength of patent rights**, and are conditional on other factors.53 Cavazos Cepeda et al. found a positive influence of IPRs on the level of R&D in an economy, with each 1 percent increase in the level of protection of IPRs in an economy (as measured by improvements to a country’s score in the Patent Rights Index) equating to, on average, a 0.7 percent increase in the domestic level of R&D.54 Likewise, a 1 percent increase in copyright protection was associated with a 3.3 percent increase in domestic R&D. Similarly, when trademark protection increased by 1 percent, there was an associated R&D increase of 1.4 percent. As the authors concluded, “Increases in the protection of the IPRs carried economic benefits in the form of higher inflows of FDI, and increases in the levels of both domestically conducted R&D and service imports as measured by licensing fees.”55 As Jackson summarized, regarding the relationship between IPR reform and both innovation and R&D, and FDI, “In addition to spurring domestic innovation, strong intellectual property rights can increase incentives for foreign direct investment which in turn also leads to economic growth.”56

**Internal link: Biopharmaceutical innovation is key to prevent future pandemics and bioterror attacks.**

**Marjanovic and Feijao 20** [Sonja Marjanovic Ph.D., Judge Business School, University of Cambridge. Carolina Feijao, Ph.D. in biochemistry, University of Cambridge; M.Sc. in quantitative biology, Imperial College London; B.Sc. in biology, University of Lisbon. "How to Best Enable Pharma Innovation Beyond the COVID-19 Crisis," RAND Corporation, 05-2020, accessed 8-8-2021, https://www.rand.org/pubs/perspectives/PEA407-1.html] HWIC

As key actors in the healthcare innovation landscape, pharmaceutical and life sciences companies have been called on to develop medicines, vaccines and diagnostics for pressing public health challenges. The COVID-19 crisis is one such challenge, but there are many others. For example, MERS, SARS, Ebola, Zika and avian and swine flu are also infectious diseases that represent public health threats. Infectious agents such as anthrax, smallpox and tularemia could present threats in a bioterrorism context.1 The general threat to public health that is posed by antimicrobial resistance is also well-recognised as an area in need of pharmaceutical innovation. Innovating in response to these challenges does not always align well with pharmaceutical industry commercial models, shareholder expectations and competition within the industry. However, the expertise, networks and infrastructure that industry has within its reach, as well as public expectations and the moral imperative, make pharmaceutical companies and the wider life sciences sector an indispensable partner in the search for solutions that save lives. This perspective argues for the need to establish more sustainable and scalable ways of incentivising pharmaceutical innovation in response to infectious disease threats to public health. It considers both past and current examples of efforts to mobilise pharmaceutical innovation in high commercial risk areas, including in the context of current efforts to respond to the COVID-19 pandemic. In global pandemic crises like COVID-19, the urgency and scale of the crisis – as well as the spotlight placed on pharmaceutical companies – mean that contributing to the search for effective medicines, vaccines or diagnostics is essential for socially responsible companies in the sector. 2 It is therefore unsurprising that we are seeing industry-wide efforts unfold at unprecedented scale and pace. Whereas there is always scope for more activity, industry is currently contributing in a variety of ways. Examples include pharmaceutical companies donating existing compounds to assess their utility in the fight against COVID19; screening existing compound libraries in-house or with partners to see if they can be repurposed; accelerating trials for potentially effective medicine or vaccine candidates; and in some cases rapidly accelerating in-house research and development to discover new treatments or vaccine agents and develop diagnostics tests.3,4 Pharmaceutical companies are collaborating with each other in some of these efforts and participating in global R&D partnerships (such as the Innovative Medicines Initiative effort to accelerate the development of potential therapies for COVID-19) and supporting national efforts to expand diagnosis and testing capacity and ensure affordable and ready access to potential solutions.3,5,6 The primary purpose of such innovation is to benefit patients and wider population health. Although there are also reputational benefits from involvement that can be realised across the industry, there are likely to be relatively few companies that are ‘commercial’ winners. Those who might gain substantial revenues will be under pressure not to be seen as profiting from the pandemic. In the United Kingdom for example, GSK has stated that it does not expect to profit from its COVID-19 related activities and that any gains will be invested in supporting research and long-term pandemic preparedness, as well as in developing products that would be affordable in the world’s poorest countries.7 Similarly, in the United States AbbVie has waived intellectual property rights for an existing combination product that is being tested for therapeutic potential against COVID-19, which would support affordability and allow for a supply of generics.8,9 Johnson & Johnson has stated that its potential vaccine – which is expected to begin trials – will be available on a not-for-profit basis during the pandemic.10 Pharma is mobilising substantial efforts to rise to the COVID-19 challenge at hand. However, we need to consider how pharmaceutical innovation for responding to emerging infectious diseases can best be enabled beyond the current crisis. Many public health threats (including those associated with other infectious diseases, bioterrorism agents and antimicrobial resistance) are urgently in need of pharmaceutical innovation, even if their impacts are not as visible to society as COVID-19 is in the immediate term. The pharmaceutical industry has responded to previous public health emergencies associated with infectious disease in recent times – for example those associated with Ebola and Zika outbreaks.11 However, it has done so to a lesser scale than for COVID-19 and with contributions from fewer companies. Similarly, levels of activity in response to the threat of antimicrobial resistance are still low.12 There are important policy questions as to whether – and how – industry could engage with such public health threats to an even greater extent under improved innovation conditions.

**Impact: Advanced bioweapons causes extinction, which outweighs the affirmative.**

**Millett & Snyder-Beattie ‘17**. Millett, Ph.D., Senior Research Fellow, Future of Humanity Institute, University of Oxford; and Snyder-Beattie, M.S., Director of Research, Future of Humanity Institute, University of Oxford. 08-01-2017. “Existential Risk and Cost-Effective Biosecurity,” Health Security, 15(4), PubMed

In the decades to come, advanced bioweapons could **threaten human existence**. Although the **probability** of human extinction from bioweapons **may** be low, the **expected value** of **reducing** the risk could **still** be **large**, since such risks jeopardize the existence of **all future generations**. We provide an overview of biotechnological extinction risk, make some rough initial estimates for how severe the risks might be, and compare the cost-effectiveness of reducing these extinction-level risks with existing biosecurity work. We find that reducing human extinction risk can be more cost-effective than reducing smaller-scale risks, even when using conservative estimates. This suggests that the risks are not low enough to ignore and that more ought to be done to prevent the worst-case scenarios. How worthwhile is it spending resources to study and mitigate the chance of human extinction from biological risks? The risks of such a catastrophe are presumably low, so a skeptic might argue that addressing such risks would be a waste of scarce resources. In this article, we investigate this position using a cost-effectiveness approach and ultimately conclude that the expected value of reducing these risks is large, especially since such risks jeopardize the existence of all future human lives. **Historically, disease events have been responsible for the greatest death tolls** on humanity. The 1918 flu was responsible for more than 50 million deaths,1 while smallpox killed perhaps 10 times that many in the 20th century alone.2 The Black Death was responsible for killing over 25% of the European population,3 while other pandemics, such as the plague of Justinian, are thought to have killed 25 million in the 6th century—constituting over 10% of the world's population at the time.4 It is an open question whether a future pandemic could result in outright human extinction or the irreversible collapse of civilization. A skeptic would have many good reasons to think that existential risk from disease is unlikely. Such a disease would need to spread worldwide to **remote populations**, overcome **rare genetic resistances**, and **evade detection**, cures, and **countermeasures**. Even evolution itself may work in humanity's favor: **Virulence and transmission is often a trade-off**, and so **evolutionary pressures** could push against maximally lethal wild-type pathogens.5,6 While these arguments point to a very small risk of human extinction, they **do not rule** the possibility **out** entirely. Although rare, there are recorded instances of **species going extinct due to disease**—primarily in amphibians, but also in 1 mammalian species of rat on Christmas Island.7,8 There are also **historical examples of large human populations being almost entirely wiped out** by disease, especially when multiple diseases were simultaneously introduced into a population without immunity. The most striking examples of total population collapse include **native American tribes** exposed to European diseases, such as the Massachusett (86% loss of population), Quiripi-Unquachog (95% loss of population), and the Western Abenaki (which suffered a staggering 98% loss of population).9 In the modern context, no single disease currently exists that combines the worst-case levels of transmissibility, lethality, resistance to countermeasures, and global reach. But **many diseases are proof** of principle that **each worst-case attribute can be realized independently**. For example, some diseases exhibit nearly a 100% case fatality ratio in the absence of treatment, such as rabies or septicemic plague. Other diseases have a track record of spreading to virtually every human community worldwide, such as the 1918 flu,10 and seroprevalence studies indicate that other pathogens, such as chickenpox and HSV-1, can successfully reach over 95% of a population.11,12 Under optimal virulence theory, **natural evolution** would be an **unlikely** source for pathogens with the **highest possible levels of transmissibility, virulence, and global reach**. But **advances in biotech**nology might allow the creation of diseases that **combine such traits**. Recent controversy has **already emerged** over a number of **scientific experiments** that resulted in viruses with enhanced **transmissibility**, **lethality**, and/or the ability to overcome **therapeutics**.13-17 Other experiments demonstrated that mousepox could be modified to have a 100% case fatality rate and render a vaccine ineffective.18 In addition to transmissibility and lethality, studies have shown that other disease traits, such as incubation time, environmental survival, and available vectors, could be modified as well.19-21 Although these experiments had scientific merit and were not conducted with malicious intent, their implications are still worrying. This is especially true given that there is also a **long historical track record** of**state-run bioweapon research** applying cutting-edge science and technology to design agents not previously seen in nature. The Soviet bioweapons program developed agents with traits such as enhanced virulence, resistance to therapies, greater environmental resilience, increased difficulty to diagnose or treat, and which caused unexpected disease presentations and outcomes.22 Delivery capabilities have also been subject to the cutting edge of technical development, with Canadian, US, and UK bioweapon efforts playing a critical role in developing the discipline of aerobiology.23,24 While there is no evidence of state-run bioweapons programs directly attempting to develop or deploy bioweapons that would pose an existential risk, the logic of deterrence and **m**utually **a**ssured **d**estruction could create such incentives in more unstable political environments or following a breakdown of the Biological Weapons Convention.25 The **possibility of a war** between great powers could also increase the pressure to use such weapons—during the World Wars, bioweapons were used across multiple continents, with Germany targeting animals in WWI,26 and Japan using plague to cause an epidemic in China during WWII.27

#### Now I will move onto the aff’s case.

### On-case: Inequality Contention

#### 1. Existing *compulsory licensing* exemptions are sufficient to solve, which means there is no need for the affirmative’s plan.

Bacchus, JD, 20

(James, adjunct scholar at the Cato Institute, a professor of global affairs at the University of Central Florida, An Unnecessary Proposal A WTO Waiver of Intellectual Property Rights for COVID-19 Vaccines <https://www.cato.org/sites/cato.org/files/2020-12/FTB_78.pdf>, 12-16)

What we have not heard in the waiver debate is any clear explanation from waiver advocates of why they believe that the right to compulsory licensing that they already possess will prove insufficient to ensuring access to COVID-19 vaccines. In requesting a broad waiver of IP rights to COVID-19 vaccines, India and South Africa maintained that “many countries especially developing countries may face institutional and legal difficulties when using flexibilities available” under existing WTO rules. They also noted that a “particular concern for countries with insufficient or no manufacturing capacity” is that the 2017 amendment that permits countries that produce generic medicines under compulsory license to export all of those medicines to least-developed countries that lack their own manufacturing capabilities will lead to a “cumbersome and lengthy process.”14 India and South Africa did not offer any further explanation or any evidence to support these assertions. In an effort at an explanation, two Canadian university professors contended, “The TRIPS flexibilities are important policies but they are not perfect. Rules allowing compulsory licensing apply only on a case-by-case and product-by-product basis. This slows down the ability of countries to scale up production of needed COVID-19 products.”15 But this is advocacy, not evidence. At the time, this point was purely prospective; it was a prejudgment before any COVID-19 vaccine had been given final approval or reached the market. Before such a sweeping waiver of IP rights is taken up, it should first be demonstrated that the option of compulsory licensing and other flexibilities under the current trade rules will not suffice. At this point, the developed countries that have opposed the waiver are correct. There is no evidence of the need for such a waiver. Action by the WTO should be contemplated only if, and when, the current flexibilities in WTO rules prove to be inadequate. Should that happen, any such action should be no broader than necessary to address the global medical need.

#### 2. [this is where I want you to write a smart analytic argument about something in the 1AC’s inequality contention]

#### 3. IP protections don’t cause disease spread because patent incidence is low and independently increases access- prefer empirics.

Stevens 04 [Philip Stevens, Director of Health Projects at the International Policy Network. “Diseases of poverty and the 10/90 Gap.” November 2004. <https://www.who.int/intellectualproperty/submissions/InternationalPolicyNetwork.pdf>] AL

Much debate on this issue of access has centred around the claim that patents held by pharmaceutical companies are a significant contributor to the dire health outcomes experienced by people in the poorest parts of the world. This claim is based on the premise that pharmaceutical companies use their patents to withhold drugs from poorer people in order to maximise their profits. However, **this premise is false.** A study by Amir Attaran has shown that in 65 low- and middleincome countries, where four billion people live, **patenting is rare for the 319 products** on the World Health Organisation’s Model List of Essential Medicines. Only seventeen essential medicines on the list are on patent in any of the countries, so that **overall patent incidence is low (1.4 percent)** and concentrated in larger markets. Those drugs on patent include 12 antiretrovirals and one antifungal, with most of those ARVs belonging to one company.30 Furthermore, **many companies choose not to enforce their patents** in certain lower-income countries. Of the 969 cases surveyed by Attaran where companies probably could have obtained and maintained patents for these essential medicines, they did so only 31 per cent of the time. However, intellectual property rights (IPR) are still important factor in ensuring access to essential medicines. Without IPR, it is **unlikely that sufficient incentives would have existed to develop many of the 319 products on the WHO’s essential medicines list in the first place.** This is substantiated by the fact that 90 per cent of the products on the list were originally discovered and/or developed by private companies.31

#### 4. [this is where I want you to write a smart analytic argument about something in the 1AC’s inequality contention]

#### 5. No US-China war- strong domestic incentives to prioritize stability and growth.

Asen ‘19

(Eric, StudyingPoliSci&Economics@VanderbiltUniversity, <https://nationalinterest.org/blog/skeptics/china-not-interested-war-america-54042>, April 24) BW

The strained relationship between China and the United States appears to worsen with each passing day. Tensions have risen due to China stepping up its theft of intellectual property, the Trump administration initiating a trade war with China, and the labeling of China as a threat to U.S. interests and ideals. In light of such escalation, some scholars claim that China simply cannot rise peacefully and should be met with an increase in U.S. military capabilities. Despite these troubling developments, the United States and China are not on a deliberate path to conflict, as each country has strong domestic incentives to avoid engaging in war with the other. China will try to avoid any war with the United States, as its cornerstone policy of maintaining domestic stability would otherwise be placed in jeopardy. Chinese leaders are “obsessed” with social stability, since social unrest threatens the survival of the Chinese Communist Party (CCP). The Tiananmen Square protests were a major wake-up call for the CCP, as the Party nearly collapsed due to mass social protest. Since then, many CCP leaders, including Xi Jinping, have believed that “social stability overrides all other considerations.” In order to ensure stability, China has implemented a social credit system that punishes or rewards certain behavior, transformed the nation into a surveillance state, and even created mass detention camps to “deradicalize” alleged extremists. In “both foreign and domestic policy” the CCP is forced to preemptively consider how new policy would affect social stability with the knowledge that “foreign aggression sparks domestic upheavals.” The mechanism for this is simple: a war between the United States and China would disrupt Chinese domestic stability by damaging the Chinese economy. For years, China has sought astronomical GDP growth rates, as social stability tends to rest “on the government’s ability to deliver continued growth.” This drives the social contract between the CCP and the Chinese people: “absolute loyalty” in return for economic prosperity. War is ultimately a “terrible way to grow an economy.” The costs of war are enormous, including the devastation of land, capital, and labor, and the conflict would almost certainly invite social unrest and place the CCP in great danger. The only potential economic upside of war would be from government-directed investment. Yet peacetime China already makes heavy use of this tactic. Through China’s state-capitalist system, the CCP employs preferential treatment when granting subsidies or investing in industries. A major example of this economic strategy is “Made in China 2025,” a policy to accelerate production of high-value domestic goods and services. With state-driven investment already rampant, the potential gains from war investment are limited. In addition, China is already feeling the economic repercussions of the trade war and wants to settle the dispute rather than risk domestic instability. The trade war has amplified China’s slowing economy, and if Trump were to enforce additional tariffs, it would be “catastrophic” for Chinese growth. In 2018, China’s economic growth rate hit its lowest point since 1990, and China has also lowered its 2019 economic growth target in light of its economic slowdown. Consequently, Beijing has become more “anxious for a trade deal” and is well aware that a lengthy trade war will be “especially detrimental to its own domestic economy and social stability.” An actual war with the United States would therefore only exacerbate China’s economic woes and contradict Xi Jinping’s desire to deescalate the trade war. One may argue that nationalism, the other driver of Chinese domestic stability, could eventually push China into war with the United States. Yet this is unlikely. While China’s economic slowdown does incentivize the CCP “to distract public attention from faltering GDP growth” by focusing on foreign policy, a war with the United States would have only ephemeral impact on public discontent. In the long run, China’s economy would be ravaged, and the tumult could result in a leadership change. Even reincorporating Taiwan, a major nationalist goal, is “unlikely to provide a broad and enduring balance to internal unhappiness.” War with Taiwan, too, would “plunge China into economic and political turmoil.” A war with the United States would almost certainly have less precedent than war with Taiwan and would carry even greater economic costs. Engaging in war with the United States to please nationalist hawks would doom the CCP in the long run. The United States has strong domestic incentives to avoid a war, too. For more than fifteen years, the U.S. public has almost always placed the economy as its top priority in polls. Politicians like President Donald Trump are aware. Trump has frequently touted economic performance under his administration, pushed for looser monetary policy, and negotiated a new trade agreement with Mexico and Canada. Like Xi, Trump seems eager to settle the trade war, especially since it hurts “Trump-supporting regions of the country the most.” The U.S.-Chinese economic relationship is simply too big to fail. Subsequent administrations will have the same incentives to seek cooperation with China, and voters view China more favorably when it is perceived as less of an economic threat. Shocks from a shooting war between two of the world’s two largest trading partners would devastate the U.S. economy and would thus galvanize the public into demanding political change. Since economic collaboration with China is so central to prosperity, U.S. politicians will think twice before getting into a war with China. Finally, so long as the threat of China remains abstract, people in the United States have no reason to demand war in the first place. Nations respond more intensely to local and imminent threats than to abstract threats, and for many years, the public has mainly identified China as posing abstract threats via job losses and trade deficits. So long as China avoids posing imminent national security threats, war will continue to remain unlikely, and the U.S. public will remain focused on abstract economic concerns. As in China, nationalism and national security fears aren’t urgent enough to make the public demand a showdown.

### On-case: Solvency

#### Reducing IP rights does not solve quickly enough to help the pandemic because legal battles will slow the process – experts agree.

Smith 05/05

(Laura Smith-Spark; Newsdesk Editor, CNN Digital; (05-05-21) Rich nations urged to share vaccine knowledge while WTO debates waiving patents; CNN; <https://www.cnn.com/2021/05/05/world/covid-19-vaccine-patents-wto-intl/index.html>; CKD)

But even as public pressure grows, some experts argue that handing over the IP rights for Covid-19 vaccines won't necessarily mean that more can be rapidly produced worldwide at large scale. US infectious diseases chief Anthony Fauci [told the UK's Financial Times](https://www.ft.com/content/2f41b122-5738-4707-a822-0d79276710c5) on Monday that he was not convinced that forcing companies to share their intellectual property was the most effective approach, warning that legal battles could slow the process. "Going back and forth, consuming time and lawyers in a legal argument about waivers -- that is not the endgame. People are dying around the world and we have to get vaccines into their arms in the fastest and most efficient way possible," he said.

#### [this is where I want you to write a smart analytic argument about something in the 1AC’s inequality contention]

#### 3. The WTO has already published how to make COVID vaccines, which proves the status quo solves.

Taylor 8-5-21 (Nick Taylor [Journalist specializing in the biopharma industry], Biopharma Reporter, WTO lists critical inputs for COVID-19 vaccines to address gaps in global supply, 8/5/21, <https://www.biopharma-reporter.com/Article/2021/08/05/WTO-lists-critical-inputs-for-COVID-19-vaccines?utm_source=copyright&utm_medium=OnSite&utm_campaign=copyright>) hwof

The World Trade Organization (WTO) Secretariat has published a list of critical inputs for COVID-19 vaccines as part of an effort to address gaps in global production and distribution of the products. Officials at the WTO Secretariat prepared the list to inform talks at its COVID-19 Vaccine Supply Chain and Regulatory Transparency Symposium in late June. A version was released for consultation after the event. The document lists the wide range of products that are needed to make COVID-19 vaccines and get them to the public. On the manufacturing side, the list covers the active ingredients for vaccines from AstraZeneca, Johnson & Johnson, Moderna and Pfizer-BioNTech, noting that the latter two products use “nucleoside-modified mRNA encoding the viral spike (S) glycoprotein of SARS-CoV-2.”Consumables and equipment required for production A long list of inactive ingredients is also included by the WTO Secretariat, as is a breakdown of the other ingredients such as preservatives, adjuvants and stabilizers that are used in the four vaccines.The list features details of the consumables and equipment required to make the vaccines, too. For example, the list states that single-use bioreactor bags are needed for cell culture and fermentation and microfluid and nanofluid mixers are required to produce the lipid nanoparticles that are used in the delivery of mRNA vaccines. Dry ice, vials and stoppers Finally, the list covers the products needed to get vaccines from manufacturing plants and into the arms of people. The list ranges from vials and vulcanized rubber stoppers, to dry ice for storage and adhesive bandages to put on the injection site after administration of the vaccine. The list is the product of multiple organizations. The WTO Secretariat said the Asian Development Bank, the Organization for Economic Cooperation and Development, the World Customs Organization, some COVID-19 vaccine manufacturers, researchers Chad Bown and Chris Rogers, the Coalition for Epidemic Preparedness Innovations and DHL jointly produced the list.

#### 4.[This is where I want you to write a smart analytic argument about something in the 1AC’s inequality contention]

#### 5. The aff does not solve. Focusing on vaccine equity obscures vaccine “rollout” issues

Adler 7-20-21

(David Adler is the author of The New Economics of Liquidity and Financial Frictions and co-editor of the anthology The Productivity Puzzle: Restoring Economic Dynamism, both published by the CFA Institute Research Foundation. He is also an adviser on industrial strategy at the Common Good Foundation in the United Kingdom. https://foreignpolicy.com/2021/07/20/wto-trips-waiver-vaccine-equity-distribution-covid-pandemic/)

On July 20, the World Trade Organization holds another Trade-Related Aspects of Intellectual Property Rights (TRIPS) Council meeting to consider waiving intellectual property protections for COVID-19 vaccines. But vaccinating the world will take more than just increasing supply. Vaccines need to be distributed and administered so they end up in people’s arms. Yet there is still limited global focus on this critical last mile problem. The United States is a perfect case study of the importance of rollout planning and what can go wrong. It led the world in COVID-19 vaccine development and manufacturing, accomplished by Operation Warp Speed, in record time. But vaccine rollout was another story: The United States lagged behind both Israel and the United Kingdom in getting shots into people’s arms. Now, as the United States and the world consider ways to vaccinate every country, there is every reason to believe this rollout problem will reappear on a global scale. Even if the world manufactures an adequate vaccine supply—a very big if—this doesn’t mean afflicted countries will be able to effectively administer vaccines. Given ongoing deaths from COVID-19 in countries experiencing outbreaks as well as the flourishing of new variants that could breach existing vaccines, the consequences will be deadly. The origins of this rollout problem are predominantly institutional: The U.S. government and multilateral institutions working on supplying vaccines to the world have less of a focus on getting shots into people’s arms. This is often left up to individual countries ill-equipped for this task. But there is also a domestic U.S. political problem. The U.S. government’s efforts to vaccinate the world are often driven by the agendas of activism-focused nonprofits. Activists are united in a righteous solution of “vaccine equity,” which focuses on ensuring vaccine supply is fairly distributed among all countries in the world. However, activists have not yet, at least en masse, turned their attention to the technical challenges surrounding global rollout, including the long-term planning required for distribution and actually getting shots into people’s arms. This lack of political pressure means these issues aren’t getting the attention required to effectively vaccinate the world. Some of these institutional and political fissures marked the original rollout of COVID-19 vaccines in the United States—and explain some of its initial shortcomings. Although it isn’t widely known, the rollout had two components: “distribution,” meaning getting the vaccine to a specific location, and “administration,” meaning shots in the arm. The federal government’s Operation Warp Speed oversaw the distribution of vaccines and the complex logistics involved, including the ultra-cold storage requirements for mRNA vaccines. The distribution aspect of the rollout was highly successful, with 99 percent of vaccines arriving on time and at the right temperature. You can support Foreign Policy by becoming a subscriber. SUBSCRIBE TODAY Administering shots in the arm was another story. This was primarily left up to the states. Initially, Operation Warp Speed planned to have the U.S. Defense Department administer shots in the arms, but state and local authorities complained of the militarization of vaccine administration and took over this function. For whatever the reason—lack of resources, lack of planning, poor communication from the federal government—the states had trouble administering the vaccines on time. As of Jan. 15, more than 31 million doses had been “distributed” but only around 12 million doses had been “administered.” Over time, and with bolstered support from the incoming Biden administration, rollout rapidly improved. Nonetheless, vaccine hesitancy remains a major point of resistance to more widespread immunization in the United States. These rollout problems found in the United States are amplified many times when it comes to global rollout. The Biden administration discovered this first hand when it attempted to donate 80 million doses from domestic U.S. supply to the rest of the world in June but fell well short of this target. White House press secretary Jen Psaki said, “what we found to be the biggest challenge is not actually the supply—we have plenty of doses to share with the world—but this is a herculean logistical challenge. And we’ve seen that as we’ve begun to implement.” She pointed to the distributional challenges associated with storing vaccines at the proper temperature as well as the need for needles and syringes. As Psaki’s comments show, there is more to vaccinating the world than just increasing supply. Even if there are vaccine shortages at this moment, limited vaccine supply may not be a binding constraint by year end. Serum Institute of India, the world’s largest vaccine manufacturer, has announced it will begin exporting later this year, implying India should have adequate vaccine supply by then. Pfizer/BioNTech has pledged to deliver 2 billion doses to low- and middle-income countries. AstraZeneca is continuing to scale up production. Nonetheless, the Biden administration’s signature international COVID-19 policy, the TRIPS waiver, is a supply side move—but one unlikely to lead to any actual increase in supply. This waves intellectual property protections for COVID-19 vaccines to further foreign production. The U.K. and German governments have viewed it skeptically and can block it. Also, as has been widely noted, manufacturing involves trade secrets and supply chain issues that go well beyond intellectual property (IP) rights. Less widely noted is the fact that the Johnson & Johnson, AstraZeneca, and Novavax vaccines have already been licensed to Indian manufacturers, so it is not clear to what degree IP rights are really hindering additional foreign production. Therefore, the TRIPS waiver can be seen as essentially a political or even theatrical gesture, well removed from the messy world of vaccine distribution and administration. It appealed to a domestic audience hostile to Big Pharma and an international audience of countries like India and South Africa whose industrial policies have long called for limitations on IP rights.