### 1

#### Reconciliation passes now – the delay gives Biden time to work magic in the wings, but PC and focus are key

Herb et al. 10-1 (Jeremy Herb, CNN Politics Reporter, Kevin Liptak, Reporter, Phil Mattingly, Senior White House Correspondent, Lauren Fox, CNN Congressional Correspondent, Melanie Zanona, Capitol Hill Reporter, “'It doesn't matter when': How Biden gave feuding House Democrats an off-ramp”, CNN Politics, 10-1-21, <https://www.cnn.com/2021/10/01/politics/dems-biden-infrastructure-delay/index.html)//babcii>

(CNN)President Joe Biden didn't [travel to Capitol Hill on Friday](https://www.cnn.com/2021/10/01/politics/house-vote-infrastructure-democrats/index.html) to close the deal, or to rally the troops through a final legislative gantlet. There was nothing cinematic -- or dramatic -- about the trip down Pennsylvania Avenue for the 36-year Senate veteran, who has more than once informed aides of [his unparalleled ability](http://www.cnn.com/2021/09/27/politics/biden-agenda-congress-deal-maker/index.html) to read, speak to and corral lawmakers. Instead, in remarks that lasted less than 30 minutes, Biden served a singular purpose: a presidential pressure relief valve. In a week deemed an "inflection point" by top aides, where the President was rarely seen in public as his entire domestic agenda hung in the balance, it marked a seemingly low bar to clear for success. There would be no miraculous deal to unlock the formula to move forward on the two key components Democrats are attempting to pass. The promised vote on the [$1.2 trillion infrastructure bill](https://www.cnn.com/politics/live-news/congress-infrastructure-bill-vote-10-01-21/index.html) would not materialize. But after days of intraparty warfare and feverish late-night negotiations, a reset was desperately needed -- and the best Biden could offer. In delivering an unscripted and at times unwieldy message that the infrastructure vote wasn't likely to happen -- and the top-line cost of the economic and climate package was going to have to come down -- the President made the bet that he can keep both sides of the intraparty feud on board in the critical days and weeks to follow. **White House and Democratic leaders will now launch an all-out effort to win** over the two Senate Democratic holdouts, Sens. [Joe Manchin of West Virginia](https://www.cnn.com/2021/09/30/politics/joe-manchin-budget-bill-1-5-trillion-schumer/index.html) and [Kyrsten Sinema of Arizona](https://www.cnn.com/2021/09/30/politics/kyrsten-sinema-arizona-reaction/index.html), as they shape what the multitrillion-dollar economic and social package looks like -- and how high its price tag will be. Congressional Democrats and White House officials say progress was made this week getting all sides closer to an agreement on the massive economic, climate and health care spending package that Democratic leaders intend to pair with the bipartisan $1.2 trillion infrastructure bill that's passed the Senate already. But in the House, moderate and progressive Democrats were engaged in a **slow-motion game of chicken** over the infrastructure vote, with moderates demanding a vote on the infrastructure bill this week that had been pledged by House Speaker Nancy Pelosi -- and [progressives standing firm that they would vote it down](https://www.cnn.com/2021/09/30/politics/house-infrastructure-negotiations-vote/index.html) without an agreement on the framework for the larger economic package. On Friday, Biden sought the off-ramp. It marked his most direct effort to date to cajole the House Democratic caucus at a moment when its members have grown increasingly frustrated about the amount of attention the President and his team have paid to their side of the Capitol. Though well received with several ovations, the appearance didn't serve to salve those wounds entirely -- with some saying afterward that his pep talk had actually exacerbated them. But it did deliver a critical message and a consequential moment, multiple members said: Compromise now -- or end up with nothing. It's likely too soon to say whether the debate this week is just a preamble to Democrats' enacting their historic agenda or if it's a feud that leads to legislative defeat, hobbling the President's party ahead of a tough midterm election cycle with little to show for controlling both chambers of Congress and the White House. 'Who knows what label I get' After the roughly half hour meeting with the President, Democrats described a leader who was in his element and not working to change minds as much as remind members of their shared and unified goals as a caucus. Throughout the infrastructure push, Biden has made clear to Democrats that party unity -- or, in some participants' interpretation, loyalty -- is of utmost importance with only the slimmest of majorities in the House and Senate. He tried to break down the stalemate and the tensions that have hung over the party for weeks, reminding them that he's not on one side or the other. At one point, he made a reference to his own political ideology, saying, "Who knows what label I get." To which Pelosi replied: "President," prompting loud laughter from the room. Biden also talked about how he had redone his office to have paintings hung of Lincoln and FDR -- "A deeply divided country and the biggest economic transformation," said Rep. David Cicilline of Rhode Island, "which is kind of the moment we're in." White House officials think the President accomplished what he went to do on Capitol Hill: Remind Democrats of what is at stake while relieving some of the pressure that had built up over the last several days and reiterating his commitment to passing both pieces of legislation. With that done, officials believe, negotiators have a better environment to be able to push toward a deal. "We're going to get this done," Biden told reporters as he left the meeting. "It doesn't matter when. It doesn't, whether it's in six minutes, six days or six weeks -- we're going to get it done." 'As long as we're still alive' Even before Friday, Biden had alluded in recent days to negotiations slipping beyond the week's end. With the stakes simply too high -- on both the political and policy fronts -- there are no plans to walk away. "It may not be by the end of the week," the President had responded when asked Monday how he would define success at the end of this week. "I hope it's by the end of the week." "But as long as we're still alive ...," Biden said before shifting course in his thought.

#### Attacks on Pharmaceutical Profits triggers Mod Dem Backlash – it disrupts unity.

Cohen 9-6 Joshua Cohen 9-6-2021 "Democrats’ Plans To Introduce Prescription Drug Pricing Reform Face Formidable Obstacles" <https://www.forbes.com/sites/joshuacohen/2021/09/06/democrats-plans-to-introduce-prescription-drug-pricing-reform-face-obstacles/?sh=37a269917395> (independent healthcare analyst with over 22 years of experience analyzing healthcare and pharmaceuticals.)//Elmer

There’s considerable uncertainty regarding passage with a simple majority of the 2021 massive budget reconciliation bill. Last week, Senator Joe Manchin called on Democrats to pause pushing forward the budget reconciliation bill. If Manchin winds up saying no to the bill, this would scuttle it as the Democrats can’t afford to lose a single Senator. And, there’s speculation that provisions to reduce prescription drug prices may be watered down and not incorporate international price referencing. Additionally, reduced prices derived through Medicare negotiation may not be able to be applied to those with employer-based coverage. While the progressive wing of the Democratic Party supports drug pricing reform, **several key centrist Democrats** in both the House and Senate appear to be **uncomfortable** **with** particular aspects of the budget reconciliation bill, including a potential deal-breaker, namely the potential **negative impact of drug price controls on the domestic pharmaceutical industry**, as well as long-term patient access to new drugs. A paper released in 2019 by the nonpartisan Congressional Budget Office found that the proposed legislation, H.R. 3, would reduce global revenue for new drugs by 19%, leading to 8 fewer drugs approved in the U.S. between 2020 and 2029, and 30 fewer drugs over the next decade. And, a new report from the CBO reinforces the message that drug pricing legislation under consideration in Congress could lead to fewer new drugs being developed and launched. **Intense lobbying efforts from biopharmaceutical industry groups** **are underway**, **warning of** what they deem are **harms from price controls in** the form of diminished patient **access to new innovations**. The argument, based in part on assumptions and modeling included in the CBO reports, asserts that price controls would dampen investment critical to the biopharmaceutical industry’s pipeline of drugs and biologics. **This** won’t sway most Democrats, but has been a traditional talking point in the Republican Party for decades, and **may convince some centrist Democrats to withdraw backing** of provisions **that** in their eyes **stymie pharmaceutical innovation.** If the budget reconciliation bill would fail to garner a majority, a pared down version of H.R. 3, or perhaps a new bill altogether, with Senator Wyden spearheading the effort, could eventually land in the Senate. But, a similar set of provisos would apply, as majority support in both chambers would be far from a sure thing. In brief, Democrats’ plans at both the executive and legislative branch levels to introduce prescription **drug pricing reform** **encounter challenges** which may prevent impactful modifications from taking place.

#### Sinema specifically jumps Ship.

Hancock and Lucas 20 Jay Hancock and Elizabeth Lucas 5-29-2020 "A Senator From Arizona Emerges As A Pharma Favorite" <https://khn.org/news/a-senator-from-arizona-emerges-as-a-pharma-favorite/> (Senior Correspondent, joined KHN in 2012 from The Baltimore Sun, where he wrote a column on business and finance. Previously he covered the State Department and the economics beat for The Sun and health care for The Virginian-Pilot of Norfolk and the Daily Press of Newport News. He has a bachelor’s degree from Colgate University and a master’s in journalism from Northwestern University.)//Elmer

Sen. Kyrsten **Sinema formed** a **congressional caucus to raise** “**awareness of the benefits of personalized medicine**” in February. Soon after that, employees of **pharmaceutical companies** **donated** $35,000 to her campaign committee. Amgen gave $5,000. So did Genentech and Merck. Sanofi, Pfizer and Eli Lilly all gave $2,500. Each of those companies has invested heavily in personalized medicine, which promises individually tailored drugs that can cost a patient hundreds of thousands of dollars. **Sinema** is a first-term Democrat from Arizona but has nonetheless **emerged as a pharma favorite in Congress** as the industry steers through a new political and economic landscape formed by the coronavirus. She is a **leading recipient of pharma campaign cash** even though she’s not up for reelection until 2024 and lacks major committee or subcommittee leadership posts. For the 2019-20 election cycle through March, political action committees run by employees of drug companies and their trade groups gave her $98,500 in campaign funds, Kaiser Health News’ Pharma Cash to Congress database shows. That stands out in a Congress in which a third of the members got no pharma cash for the period and half of those who did got $10,000 or less. The contributions give companies a chance to cultivate Sinema as she restocks from a brutal 2018 election victory that cost nearly $25 million. Altogether, pharma PACs have so far given $9.2 million to congressional campaign chests in this cycle, compared with $9.4 million at this point in the 2017-18 period, a sustained surge as the industry has responded to complaints about soaring prices. Sinema’s pharma haul was twice that of Sen. Susan Collins of Maine, considered one of the most vulnerable Republicans in November, and approached that of fellow Democrat Steny Hoyer, the powerful House majority leader from Maryland. It all adds up to **a bet by drug companies that** the 43-year-old **Sinema**, first elected to the Senate in 2018, **will** gain influence in coming years and **serve as an industry ally** in a party that also includes many lawmakers harshly critical of high drug prices and the companies that set them.

#### Infrastructure reform solves Existential Climate Change – it results in spill-over.

USA Today 7-20 7-20-2021 "Climate change is at 'code red' status for the planet, and inaction is no longer an option" <https://www.usatoday.com/story/opinion/todaysdebate/2021/07/20/climate-change-biden-infrastructure-bill-good-start/7877118002/> //Elmer

**Not long ago**, **climate change** for many Americans **was** like **a distant bell**. News of starving polar bears or melting glaciers was tragic and disturbing, but other worldly. Not any more. **Top climate scientists** from around the world **warned of a "code red for humanity**" in a report issued Monday that says severe, human-caused global warming is become unassailable. Proof of the findings by the United Nations' Intergovernmental Panel on Climate Change is a now a factor of daily life. Due to **intense heat waves and drought**, 107 wildfires – including the largest ever in California – are now raging across the West, consuming 2.3 million acres. Earlier this summer, hundreds of people died in unprecedented triple-digit heat in Oregon, Washington and western Canada, when a "heat dome" of enormous proportions settled over the region for days. Some victims brought by stretcher into crowded hospital wards had body temperatures so high, their nervous systems had shut down. People collapsed trying to make their way to cooling shelters. Heat-trapping greenhouse gases Scientists say the event was almost **certainly made worse and more intransigent by human-caused climate change**. They attribute it to a combination of warming Arctic temperatures and a growing accumulation of heat-trapping greenhouse gases caused by the burning of fossil fuels. The **consequences of** what mankind has done to the atmo**sphere are now inescapable**. Periods of **extreme heat** are projected to **double** in the lower 48 states by 2100. **Heat deaths** are far **outpacing every other form of weather killer** in a 30-year average. A **persistent megadrought** in America's West continues to create tinder-dry conditions that augur another devastating wildfire season. And scientists say **warming oceans** are **fueling** ever **more powerful storms**, evidenced by Elsa and the early arrival of hurricane season this year. Increasingly severe weather is causing an estimated $100 billion in damage to the United States every year. "It is honestly surreal to see your projections manifesting themselves in real time, with all the suffering that accompanies them. It is heartbreaking," said climate scientist Katharine Hayhoe. **Rising seas** from global warming Investigators are still trying to determine what led to the collapse of a Miami-area condominium that left more than 100 dead or missing. But one concerning factor is the corrosive effect on reinforced steel structures of encroaching saltwater, made worse in Florida by a foot of rising seas from global warming since the 1900s. The clock is ticking for planet Earth. While the U.N. report concludes some level of severe climate change is now unavoidable, there is still a window of time when far more catastrophic events can be mitigated. But mankind must act soon to curb the release of heat-trapping gases. Global **temperature** has **risen** nearly **2 degrees** Fahrenheit since the pre-industrial era of the late 19th century. Scientists warn that in a decade, it could surpass a **2.7**-degree increase. That's **enough** warming **to cause catastrophic climate changes**. After a brief decline in global greenhouse gas emissions during the pandemic, pollution is on the rise. Years that could have been devoted to addressing the crisis were wasted during a feckless period of inaction by the Trump administration. Congress must act Joe Biden won the presidency promising broad new policies to cut America's greenhouse gas emissions. But Congress needs to act on those ideas this year. Democrats cannot risk losing narrow control of one or both chambers of Congress in the 2022 elections to a Republican Party too long resistant to meaningful action on the climate. So what's at issue? A trillion dollar **infrastructure bill** negotiated between Biden and a group of centrist senators (including 10 Republicans) is a start. In addition to repairing bridges, roads and rails, it would **improve access** by the nation's power infrastructure **to renewable energy sources,** **cap millions of abandoned oil and gas wells spewing greenhouse gases**, **and harden structures against climate change**. It also **offers tax credits for** the **purchase of electric vehicles** and funds the construction of charging stations. (**The nation's largest source of climate pollution are gas-powered vehicles**.) Senate approval could come very soon. Much **more is needed** if the nation is going to reach Biden's necessary goal of cutting U.S. climate pollution in half from 2005 levels by 2030. His ideas worth considering include a federal clean electricity standard for utilities, federal investments and tax credits to promote renewable energy, and tens of billions of dollars in clean energy research and development, including into ways of extracting greenhouse gases from the skies. Another idea worth considering is a fully refundable carbon tax. **The vehicle** for these additional proposals **would be a second infrastructure bill**. And if Republicans balk at the cost of such vital investment, Biden is rightly proposing to pass this package through a process known as budget reconciliation, which allows bills to clear the Senate with a simple majority vote. These are drastic legislative steps. But drastic times call for them. And when Biden attends a U.N. climate conference in November, he can use American progress on climate change as a mean of persuading others to follow our lead. Further delay is not an option.

### 2

#### CP text: The World Trade Organization ought to increase intellectual property protections for medicines. The United States ought to designate intellectual property protections on medicines as adversely affecting the international transfer of technology.

#### Member states can waive IP rights if they hamper the international flow of medical technology.

WTO ’21 (World Trade Organization; 2021; “Obligations and exceptions”; World Trade Organization; Accessed: 8-30-2021; exact date not provided, but copyright was updated in 2021)

Article 8 Principles […] 2. Appropriate measures, provided that they are consistent with the provisions of this Agreement, **may be needed** to prevent the abuse of intellectual property rights by right holders or the resort to practices which unreasonably restrain trade or **adversely affect** the **international transfer of technology**. SECTION 8: CONTROL OF ANTI-COMPETITIVE PRACTICES IN CONTRACTUAL LICENCES Article 40 1. Members agree that some licensing practices or conditions pertaining to intellectual property rights which restrain competition may have **adverse effects on trade** and **may impede** the **transfer and dissemination** of technology. 2. Nothing in this Agreement **shall prevent** Members from specifying in their legislation licensing practices or conditions that may in particular cases constitute an abuse of intellectual property rights having an adverse effect on competition in the relevant market. As provided above, a Member **may adopt**, consistently with the other provisions of this Agreement, **appropriate measures** to **prevent or control** such practices, which may include for example exclusive grantback conditions, conditions preventing challenges to validity and coercive package licensing, in the light of the relevant laws and regulations of that Member. […]

#### Designating IP protections as antithetical to the global health system revitalizes info-sharing.

Youde ’16 (Jeremy; writer for World Politics Review; 4-29-2016; “Technology **Transfer** Is a **Weak Link** in the Global Health System”; World Politics Review; <https://www.worldpoliticsreview.com/articles/18639/technology-transfer-is-a-weak-link-in-the-global-health-system>; Accessed: 8-30-2021)

In mid-April, a spokesperson for the Ugandan government admitted that the country’s only functioning cancer treatment machine had broken earlier that month. The radiotherapy machine, donated by China to Uganda in 1995 and housed at Mulago Hospital in Kampala, is now considered beyond repair. While the government did acquire a second radiotherapy machine in 2013, it has not been operational because of delays in allocating 30 billion shillings—just shy of $9 million—to construct a new building to house it. The funding delay has lifted, but the machine won’t be up and running for at least six months. The government has announced plans to airlift some cancer patients to Nairobi for treatment, but that plan will only accommodate 400 of the estimated 17,000 to 33,000 cancer patients who need treatment annually in Uganda. This breakdown of technology is a human tragedy for the cancer patients from Uganda as well as elsewhere in East Africa that the radiotherapy machine helped treat. Beyond the personal level, though, the episode illustrates a larger shortcoming in global health. Total annual development assistance for health is approximately $36 billion, but that funding is overwhelmingly concentrated on specific infectious diseases. Noncommunicable diseases like cancer receive relatively little international funding—only 1.3 percent in 2015, and the dollar amount has declined since 2013. Funds to strengthen health systems, geared toward building and supporting a resilient health care system, are similarly low, making up only 7.3 percent of development assistance in 2015. Noncommunicable diseases kill more people every year than infectious diseases and accidents do, but this balance is not reflected in global health spending. ... These shortcomings also speak to larger problems in global health around issues of **technology transfers** and long-term **commitments** to keep that technology working. It’s one thing to provide necessary medical technologies in the first place; it’s another to ensure that those technologies are accessible and operational going forward. Despite the **importance** of technology transfers, questions of **long-term support** for them have received relatively little attention from the global health regime. As noncommunicable diseases like cancer cause an even-higher proportion of deaths each year, it will become all the more **imperative** that the international community address this gap in **sharing** and funding **crucial health care** technology. This does not mean that there are no efforts to facilitate technology transfers around the world. The Fogarty International Center, a part of the U.S. National Institutes of Health, has had an [Office of Technology Transfer](http://www.fic.nih.gov/News/GlobalHealthMatters/march-april-2014/Pages/technology-transfer-nih-ott.aspx) since 1989 to make medical innovations developed in the United States more widely available. The World Health Organization (WHO) also has a [Technology Transfer Initiative](http://www.who.int/phi/programme_technology_transfer/en/) to improve access to health care technologies in developing countries. These efforts are laudable, but their interpretation of technology transfer is almost entirely rooted in access to pharmaceuticals and vaccines. To be sure, that is a very important issue—but it only deals with one narrow element of technology transfer. The problems of global health technology transfers illustrated in Uganda underscore a larger issue: the need for a so-called fourth industrial revolution, what has been described as “blurring the real world with the technological world.” This idea gained prominence earlier this year when it served as the theme for the World Economic Forum in Davos. For global health, this means embracing technology to find low-cost ways to promote health, spread education, and reach communities whose access to the health care infrastructure is weak. It expands on the notion of telemedicine and eHealth to make it more encompassing. According to health care entrepreneur Jonathan Jackson, the fourth industrial revolution could change global health by encouraging a shift in focus “from healthcare to health promotion.” Moving from high-cost treatment to low-cost prevention, he has argued, will have significant and far-reaching positive economic implications for developing countries around the world. Its inspiring sense of technological optimism notwithstanding, this sort of approach cannot be the sole focus of technology transfers in global health. Prevention is indeed important, but the fact of the matter remains that people will get sick—and those sick people will need treatment. Mobile applications and electronic access to health care providers can be useful, but they cannot replace a radiotherapy machine. Understanding the root causes of noncommunicable diseases goes far beyond individual choices and intersects with the larger political, economic and social context, so we cannot assume that cybertechnology alone can stop cancer. It is also important to remember that the results of greater technological innovation and integration won’t be free. Sub-Saharan African states, on average, spend $200 per person per year on health care. Even if technology allows costs to decline, they are still likely to be out of reach for many people in most of these countries—in the same way that the purchase and maintenance of medical technologies are prohibitively expensive in these same states today. Technology in and of itself is not useful unless it can be maintained over the long term. This, then, is a weak link in the larger global health system: How do we ensure access to life-prolonging medical technologies beyond pharmaceuticals and vaccines in a sustainable way? Consider two ideas. First, development assistance for health must orient more of its resources toward treating noncommunicable diseases and strengthening health systems. These are the areas in which these technologies are likely to be used, but are not currently supported by the international system. The changing nature of health and disease will only make them even more important in the years to come. Second, longer-term funding commitments would provide a greater opportunity to incorporate medical technologies into health care systems sustainably. Machines will break down, and technologies will fail. That is inevitable. But the global health regime, from the WHO and its regional organizations like the Regional Office for Africa to major donors like the **U**nited **S**tates government and the Bill and Melinda Gates Foundation, needs to figure out how to ensure that these problems do not put **lives in peril**. Technology alone will not improve global health unless it is properly supported and funded.

#### International collaboration’s key to check future pandemics – otherwise, extinction- that’s 1AC.

### 3

#### Text – the United States ought to

#### anonymously invest $25 billion into 25 production lines dedicated solely to COVID-19 vaccines to boost global vaccine production managed by the Biomedical Advanced Research and Development Authority.

#### distribute 8 billion doses of COVID vaccines using an equitable distribution framework prioritizing developing countries in the Global South.

#### The CP solves the entirety of the case and does it faster.

Stankiewicz 21 Mike Stankiewicz 5-6-2021"Opinion: For just $25 billion, the U.S. could jump-start a project to quickly vaccinate the entire world against COVID" <https://www.marketwatch.com/story/for-just-25-billion-the-u-s-could-jump-start-a-project-to-quickly-vaccinate-the-entire-world-against-covid-11614898552> (a press officer in Public Citizen's communication's department, where he focuses on legislative policy and health-orientated advocacy)//Elmer

Despite wealthy countries such as the U.S. ramping up COVID-19 vaccination efforts, **it** still **may** **take years to vaccinate the world**, especially poorer countries, and the economic and humanitarian impacts could be devastating. But **an injection of** **just $25 billion** **into global vaccine production efforts by the U.S.** government **could save millions of lives** and help prevent economic disaster. The most up-to-date numbers paint incredibly different futures between wealthy and low-income countries. At the current rate of vaccination, analysts predict that developing countries, including almost all of Southeast Asia, may not reach meaningful vaccine coverage until 2023. Comparatively, President Joe Biden has promised that the U.S. will have enough vaccine doses to inoculate every adult within the next three months. Increased fatalities And as wealthy countries such as the U.S. are starting to see lower death, transmission and hospitalization rates, low-income countries are experiencing increased hardship and fatalities. Countries such as Hungry are being forced to tighten restrictions as infection rates increase, and deaths in Africa have spiked by 40% in the past month, according to the World Health Organization (WHO). No country can be left behind in this global pandemic, and the U.S. is in a unique position to make sure every country gets the ample amount of vaccines they need. **Public Citizen research has found that just a $25 billion investment in COVID-19 vaccine production by the U.S. government would produce enough vaccine for developing countries, potentially shaving years from the global pandemic**. Public Citizen estimates that **8 billion doses of** National Institutes of Health-**Moderna MRNA**, +1.98% vaccine can be **produced** **for** just over **$3 per dose**. To bolster production and supply the necessary 8 billion doses, it would take **$1.9 billion to fund** the necessary **25 production lines**. Another **$19 billion** would pay **for materials and labor**, and **$3 billion** would **compensate** **Moderna** **for making technology available to manufacturers** in other countries. An additional $500 million would cover costs to staff and run **a rapid-response federal program that provides technical assistance and facilitates technology transfer to manufacturers and works with the WHO’s technology hub.** In total, vaccinating the world would cost less than 1.4% the total of Biden’s $1.9 trillion COVID relief plan. But such a program also needs to be properly managed to be successful. To help facilitate these efforts, the Biden administration should also **designate** the government’s Biomedical Advanced Research and Development Authority (**BARDA**) **to lead** the world-wide **vaccine manufacturing effort**. BARDA has the **necessary experience to coordinate** **an initiative of this scale** with the WHO, building on its partnership to build pandemic flu manufacturing capacity in developing countries after the bird-flu scare of 2006. Widespread vaccines would help U.S. economy These efforts would dramatically increase access to vaccines in developing countries and speed up global vaccination by years, saving countless lives. But allowing the current vaccine supply crisis to continue is not just inhumane, it is also not in our own economic interest to do so.

### 4

#### Strong current IP guarantees causes massive Pharma innovation.

* Answers Evergreening/Me-Too Drugs

Stevens and Ezell 20 Philip Stevens and Stephen Ezell 2-3-2020 "Delinkage Debunked: Why Replacing Patents With Prizes for Drug Development Won’t Work" <https://itif.org/publications/2020/02/03/delinkage-debunked-why-replacing-patents-prizes-drug-development-wont-work> (Philip founded Geneva Network in 2015. His main research interests are the intersection of intellectual property, trade, and health policy. Formerly he was an official at the World Intellectual Property Organization (WIPO) in Geneva, where he worked in its Global Challenges Division on a range of IP and health issues. Prior to his time with WIPO, Philip worked as director of policy for International Policy Network, a UK-based think tank, as well as holding research positions with the Adam Smith Institute and Reform, both in London. He has also worked as a political risk consultant and a management consultant. He is a regular columnist in a wide range of international newspapers and has published a number of academic studies. He holds degrees from the London School of Economics and Durham University (UK).)//Elmer

The **Current System** Has **Produced a Tremendous Amount of Life-Sciences Innovation** The frontier for biomedical innovation is seemingly limitless, and the challenges remain numerous—whether it comes to diseases that afflict millions, such as cancer or malaria, or the estimated 7,000 rare diseases that afflict fewer than 200,000 patients.24 And while certainly citizens in developed and developing nations confront differing health challenges, those challenges are increasingly converging. For instance, as of this year, analysts expect that **noncommunicable** diseases such as cardiovascular disease and diabetes will account for 70 percent of natural fatalities **in developing countries**.25 Citizens of low- and middle-income countries bear 80 percent of the world’s death burden from cardiovascular disease.26 Forty-six percent of Africans over 25 suffer from hypertension, more than anywhere else in the world. Similarly, 85 percent of the disease burden of cervical cancer is borne by individuals living in low- and middle-income countries.27 To develop treatments or cures for these conditions, novel biomedical innovation **will be needed from everywhere**. Yet tremendous progress has been made in recent decades. To tackle these challenges, the global pharmaceutical industry invested over **$1.36 trillion in R&D** in the decade from 2007 to 2016—and it’s expected that annual R&D investment by the global pharmaceutical industry will reach $181 billion by 2022.28 In no small part due to that investment, **943 new active substances have been introduced** globally over the prior 25 years.29 The U.S. Food and Drug Administration (FDA) has approved more than **500 new medicines since 2000** alone. And these medicines are getting to more individuals: Global medicine use **in 2020 will reach 4.5 trillion doses**, up 24 percent from 2015.30 Moreover, there are an estimated 7,000 new medicines under development globally (about half of them in the United States), with 74 percent being potentially first in class, meaning they use a new and unique mechanism of action for treating a medical condition.31 In the United States, over 85 percent of all drugs sold are generics (only 10 percent of U.S. prescriptions are filled by brand-name drugs).32 And while some assert that biotechnology companies focus too often on “me-too” drugs that compete with other treatments already on the market, the reality is many drugs currently under development are meant to tackle some of the **world’s most intractable diseases**, **including cancer and Alzheimer’s**.33 Moreover, such arguments miss that many of the drugs developed in recent years have in fact been first of their kind. For instance, in 2014, the FDA approved **41 new medicines** (at that point, the most since 1996) many of which were first-in-class medicines.34 In that year, 28 of the 41 drugs approved were considered biologic or specialty agents, and 41 percent of medicines approved were intended to treat rare diseases.35 Yet even when a new drug isn’t first of its kind, it can still produce benefits for patients, both through **enhanced clinical efficacy** (for instance, taking the treatment as a pill rather than an injection, with a superior dosing regimen, **or better treatment** for some individuals who don’t respond well to the original drug) and by generating competition that exerts downward price pressures. For example, a patient needing a cholesterol drug has a host of statins from which to choose, which is important because some statins produce harmful side effects for some patients. Similarly, patients with osteoporosis can choose from Actonel, Boniva, or Fosomax. Or take for example Hepatitis C, which until recently was an incurable disease eventually requiring a liver transplant for many patients. In 2013, a revolutionary new treatment called Solvadi was released that boosted cure rates to 90 percent. This was followed in 2014 by an improved treatment called Harvoni, which cures the Hepatitis C variant left untouched by Solvadi. Since then, an astonishing six new treatments for the disease have received FDA approval, opening up a wide range of treatment options that take into account patients’ liver and kidney status, co-infections, potential drug interactions, previous treatment failures, and the genotype of HCV virus.36 “If you have to have Hepatitis C, now is the time to have it,” as Douglas Dieterich, a liver specialist at the Icahn School of Medicine at Mount Sinai Hospital in New York, told the Financial Times. “We have these marvellous drugs we can treat you with right now, without side effects,” he added. “And this time next year, we’ll have another round of drugs available.”37 Moreover, the financial potential of this new product category has led to multiple competing products entering the market in quick succession, in turn placing downward pressure on prices.38 As Geoffrey Dusheiko and Charles Gore write in The Lancet, “The market has done its work for HCV treatments: after competing antiviral regimens entered the market, competition and innovative price negotiations have driven costs down from the initially high list prices in developed countries.”39 As noted previously, opponents of the current market- and IP-based system contend patents enable their holders to exploit a (temporary) market monopoly by inflating prices many multiples beyond the marginal cost of production. But rather than a conventional neoclassical analysis, an analysis based on “innovation economics” finds it is exactly this “distortion” that is required for innovation to progress. As William Baumol has pointed out, “Prices above marginal costs and price discrimination become the norm rather than the exception because … without such deviations from behaviour in the perfectly competitive model, innovation outlays and other unavoidable and repeated sunk outlays cannot be recouped.”40 Or, as the U.S. Congressional Office of Technology Assessment found, “Pharmaceutical R&D is a risky investment; therefore, high financial returns are necessary **to induce companies to invest** in researching new chemical entities.”41 This is also why, in 2018, the U.S. Congressional Budget Office estimated that because of high failure rates, biopharmaceutical **companies would need to earn a 61.8 percent rate of return on their successful new drug R&D projects in order to match a 4.8 percent after-tax rate of return on their investment**s.42 Indeed, **it’s the ability to recoup fixed costs, not just marginal** costs, through mechanisms such as patent protection that lies at the heart of all innovation-based industries and indeed all innovation and related economic progress. If companies could not find a way to pay for their R&D costs, and could only charge for the costs of producing the compound, **there would be no new drugs developed**, just as there would be no new products developed in any industry. Innovating in the life sciences remains expensive, risky, difficult, and uncertain. Just 1 in 5,000 drug candidates make it all the way from discovery to market.43 A 2018 study by the Deloitte Center for Health Solutions, “Unlocking R&D productivity: Measuring the return from pharmaceutical innovation 2018,” found that “the average cost to develop an asset [an innovative life-sciences drug] including the cost of failure, has increased in six out of eight years,” and that the average cost to create a new drug has risen to $2.8 billion.44 Related research has found the development of new drugs requires years of painstaking, risky, and expensive research that, for a new pharmaceutical compound, takes an average of 11.5 to 15 years of research, development, and clinical trials, at a cost of $1.7 billion to $**3.2 billion**.45 IP rights—including patents, copyrights, and data exclusivity protections—give innovators, whether in the life sciences or other sectors, the **confidence** to undertake the risky and expensive process of innovation, secure in the knowledge they’ll be able to capture a share of the gains from their efforts. And these gains are often only a small fraction of the true value created. For instance, Yale University economist William Nordhaus estimated inventors capture just 4 percent of the total social gains from their innovations; the rest spill over to other companies and society as a whole.46 Without adequate IP protection, private investors would never find it viable to fund advanced research because lower-cost copiers would be in a position to undercut the legitimate prices (and profits) of innovators, even while still generating substantial profits on their own.47 As the report “Wealth, Health and International Trade in the 21st Century” concludes, “Conferring robust intellectual property rights is, in the pharmaceutical and other technological-development contexts, **in the global public’s long-term interests.** Without adequate mechanisms for directly and indirectly securing the private and public funding of medicines and vaccines, research and development communities across the world will lose future benefits that would far outweigh the development costs involved.”48 Put simply, the current market- and IP-based life-sciences innovation system is producing life-changing biomedical innovation. As Jack Scannell, a senior fellow at Oxford University’s Center for the Advancement of Sustainable Medical Innovation has explained, “I would guess that one can buy today, at rock bottom generic prices, a set of small-molecule drugs that has greater medical utility than the entire set available to anyone, anywhere, at any price in 1995.” He continued, “Nearly all the generic medicine chest was created by firms who invested in R&D to win future profits that they tried pretty hard to maximize; short-term financial gain building a long-term common good.”49 For example, on September 14, 2017, the FDA approved Mvasi, the first biosimilar for Roche’s Avastin, a breakthrough anticancer drug when it came out in the mid-1990s for lung, cervical, and colorectal cancer.50 In other words, a medicine to treat forms of cancer that barely existed 20 years ago is now available as a generic drug today. It’s this dynamic that enables us to imagine a situation wherein drugs to treat diseases that aren’t available anywhere at any price today (for instance, treatments for Alzheimer’s or Parkinson’s) might be available as generics in 20 years. But that will only be the case if we preserve (and improve where possible) a life-sciences innovation system that is generally working. The current system does not require wholesale replacement by a prize-based system that—notwithstanding a meaningful success here or there—has produced nowhere near a similar level of novel biomedical innovation.

#### **Reducing IP protections chills future investment – even the perception of wavering commitment scares off companies.**

Grabowski et al. ’15 (Harry; Professor Emeritus of Economics at Duke, and a specialist in the intersection of the pharmaceutical industry and government regulation of business; February 2015; “The Roles Of Patents And Research And Development Incentives In Biopharmaceutical Innovation”; Health Affairs; <https://www.healthaffairs.org/doi/10.1377/hlthaff.2014.1047>; Accessed: 8-31-2021; AU)

Patents and other forms of **intellectual property** **protection** play **essential roles** in encouraging innovation in biopharmaceuticals. As part of the “21st Century Cures” initiative, Congress is reviewing the policy mechanisms designed to accelerate the discovery, development, and delivery of new treatments. Debate continues about how best to balance patent and intellectual property incentives to encourage innovation, on the one hand, and generic utilization and price competition, on the other hand. We review the current framework for accomplishing these dual objectives and the important role of patents and regulatory exclusivity (together, the patent-based system), given the lengthy, costly, and risky biopharmaceutical research and development process. We summarize existing targeted incentives, such as for orphan drugs and neglected diseases, and we consider the pros and cons of proposed voluntary or mandatory alternatives to the patent-based system, such as prizes and government research and development contracting. We conclude that patents and regulatory exclusivity provisions are likely to remain the core approach to providing incentives for biopharmaceutical research and development. However, prizes and other voluntary supplements could play a useful role in addressing unmet needs and gaps in specific circumstances. Technological innovation is widely recognized as a key determinant of economic and public health progress. 1,2 Patents and other forms of intellectual property protection are generally thought to play essential roles in encouraging innovation in biopharmaceuticals. This is because the process of developing a new drug and bringing it to market is **long, costly, and risky**, and the costs of imitation are low. After a new drug has been approved and is being marketed, its **patents protect it** from competition from chemically identical entrants (or entrants infringing on other patents) for a period of time. **For firms** to have an **incentive** to **continue to invest** in innovative development efforts, they must have an **expectation** that they can **charge enough** during this period to **recoup** costs and make a profit. After a drug’s patent or patents expire, **generic rivals** can enter the market at **greatly reduced development cost** and prices, providing added consumer benefit but **eroding** the **innovator drug** company’s revenues. The Drug Price Competition and Patent Term Restoration Act of 1984 (commonly known as the Hatch-Waxman Act) was designed to balance innovation incentives and generic price competition for new drugs (generally small-molecule chemical drugs, with some large-molecule biologic exceptions) by extending the period of a drug’s marketing exclusivity while providing a regulatory framework for generic drug approval. This framework was later changed to encompass so-called biosimilars for large-molecule (biologic) drugs through the separate Biologics Price Competition and Innovation Act of 2009. Other measures have been enacted to provide research and development (R&D) incentives for antibiotics and drugs to treat orphan diseases and neglected tropical diseases. Discussion continues about whether current innovation incentives are optimal or even adequate, given evolving public health needs and scientific knowledge. For instance, the House Energy and Commerce Committee recently embarked on the “21st Century Cures” initiative, 3 following earlier recommendations by the President’s Council of Advisors on Science and Technology on responding to challenges in “propelling innovation in drug discovery, development, and evaluation.” 4 In this context, we discuss the importance of patents and other forms of intellectual property protection to biopharmaceutical innovation, given the unique economic characteristics of drug research and development. We also review the R&D incentives that complement patents in certain circumstances. Finally, we consider the pros and cons of selected voluntary (“opt-in”) or mandatory alternatives to the current patent- and regulatory exclusivity–based system (such as prizes or government-contracted drug development) and whether they could better achieve the dual goals of innovation incentives and price competition. The essential rationale for patent protection for biopharmaceuticals is that long-term benefits in the form of continued future innovation by pioneer or brand-name drug manufacturers outweigh the relatively short-term restrictions on imitative cost competition associated with market exclusivity. Regardless, the entry of other branded agents remains an important source of therapeutic competition during the patent term. Several economic characteristics make patents and intellectual property protection **particularly important** to **innovation incentives** for the biopharmaceutical industry. 5 The R&D process often takes more than a decade to complete, and according to a recent analysis by Joseph DiMasi and colleagues, per new drug approval (including failed attempts), it involves more than a **billion** dollars in out-of-pocket costs. 6 Only approximately one in eight drug candidates survive clinical testing. 6 As a result of the high risks of failure and the high costs, research and development must be funded by the **few successful, on-market products** (the top quintile of marketed products provide the dominant share of R&D returns). 7,8 Once a new drug’s patent term and any regulatory exclusivity provisions have expired, competing manufacturers are allowed to sell generic equivalents that require the investment of only several million dollars and that have a high likelihood of commercial success. **Absent intellectual property protections** that allow marketing exclusivity, innovative firms would be **unlikely** to make the costly and risky investments needed to bring a new drug to market. Patents confer the right to exclude competitors for a limited time within a given scope, as defined by patent claims. However, **they do not guarantee demand**, nor do they prevent competition from nonidentical drugs that treat the same diseases and fall outside the protection of the patents. New products may enter the same therapeutic class with common mechanisms of action but different molecular structures (for example, different statins) or with differing mechanisms of action (such as calcium channel blockers and angiotensin receptor blockers). 9 Joseph DiMasi and Laura Faden have found that the time between a first-in-class new drug and subsequent new drugs in the same therapeutic class has been dramatically reduced, from a median of 10.2 years in the 1970s to 2.5 years in the early 2000s. 10 Drugs in the same class compete through quality and price for preferred placement on drug formularies and physicians’ choices for patient treatment. Patents play an **essential role** in the economic “ecosystem” of **discovery and investment** that has developed since the 1980s. Hundreds of start-up firms, often backed by venture capital, have been launched, and a robust innovation market has emerged. 11 The value of these development-stage firms is largely determined by their proprietary technologies and the candidate drugs they have in development. As a result, the **strength of intellectual property protection** plays a **key role** in funding and partnership opportunities for such firms. Universities also play a key role in the R&D ecosystem because they conduct basic biomedical research supported by sponsored research grants from the National Institutes of Health (NIH) and the National Science Foundation (NSF). The Patent and Trademark Law Amendments Act of 1980 (commonly known as the Bayh-Dole Act) gave universities the right to retain title to patents and discoveries made through federally funded research. This change was designed to encourage technology transfer through industry licensing and the creation of start-up companies. Universities received only 390 patents for their discoveries in 1980, 12 compared to 4,296 in 2011, with biotechnology and pharmaceuticals being the top two technology areas (accounting for 36 percent of all university patent awards in 2012). 13

#### **R&D’s key to innovation – otherwise, future pandemics.**

Marjanovic et al. ’20 (Sonja; Ph.D. at the University of Cambridge; May 2020; “How to Best Enable Pharma Innovation Beyond the COVID-19 Crisis”; RAND; <https://www.rand.org/pubs/perspectives/PEA407-1.html>; Accessed: 8-31-2021; AU)

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.**

#### Evolving superbugs trigger extinction.

Srivatsa ’17 (Kadiyali; specialist in pediatric intensive and critical care medicine in the UK. Invented the bacterial identification tool ‘MAYA’; 1-12-2017; "Superbug Pandemics and How to Prevent Them", American Interest; https://www.the-american-interest.com/2017/01/12/superbug-pandemics-and-how-to-prevent-them/, Accessed: 8-31-2021; AU)

It is by now no secret that the human species is locked in a race of its own making with “superbugs.” Indeed, if popular science fiction is a measure of awareness, the theme has pervaded English-language literature from Michael Crichton’s 1969 Andromeda Strain all the way to Emily St. John Mandel’s 2014 Station Eleven and beyond. By a combination of massive inadvertence and what can only be called stupidity, we must now invent new and effective antibiotics faster than deadly bacteria evolve—and regrettably, they are rapidly doing so with our help. I do not exclude the possibility that bad actors might deliberately engineer deadly superbugs.1 But even if that does not happen, humanity faces an existential threat largely of its own making in the absence of malign intentions. As threats go, this one is entirely predictable. The concept of a “black swan,” Nassim Nicholas Taleb’s term for low-probability but high-impact events, has become widely known in recent years. Taleb did not invent the concept; he only gave it a catchy name to help mainly business executives who know little of statistics or probability. Many have embraced the “black swan” label the way children embrace holiday gifts, which are often bobbles of little value, except to them. But the threat of inadvertent pandemics is not a “black swan” because its probability is not low. If one likes catchy labels, it better fits the term “gray rhino,” which, explains Michele Wucker, is a high-probability, high-impact event that people manage to ignore anyway for a raft of social-psychological reasons.2 A pandemic is a quintessential gray rhino, for it is no longer a matter of if but of when it will challenge us—and of how prepared we are to deal with it when it happens. We have certainly been warned. The curse we have created was understood as a possibility from the very outset, when seventy years ago Sir Alexander Fleming, the discoverer of penicillin, predicted antibiotic resistance. When interviewed for a 2015 article, “The Most Predictable Disaster in the History of the Human Race,” Bill Gates pointed out that one of the costliest disasters of the 20th century, worse even than World War I, was the Spanish Flu pandemic of 1918-19. As the author of the article, Ezra Klein, put it: “No one can say we weren’t warned. And warned. And warned. A pandemic disease is the most predictable catastrophe in the history of the human race, if only because it has happened to the human race so many, many times before.”3 Even with effective new medicines, if we can devise them, we must contain outbreaks of bacterial disease fast, lest they get out of control. In other words, we have a social-organizational challenge before us as well as a strictly medical one. That means getting sufficient amounts of medicine into the right hands and in the right places, but it also means educating people and enabling them to communicate with each other to prevent any outbreak from spreading widely. Responsible governments and cooperative organizations have options in that regard, but even individuals can contribute something. To that end, as a medical doctor I have created a computer app that promises to be useful in that regard—of which more in a moment. But first let us review the situation, for while it has become well known to many people, there is a general resistance to acknowledging the severity and imminence of the danger. What Are the Problems? Bacteria are among the oldest living things on the planet. They are masters of survival and can be found everywhere. Billions of them live on and in every one of us, many of them helping our bodies to run smoothly and stay healthy. Most bacteria that are not helpful to us are at least harmless, but some are not. They invade our cells, spread quickly, and cause havoc that we refer to generically as disease. Millions of people used to die every year as a result of bacterial infections, until we developed antibiotics. These wonder drugs revolutionized medicine, but one can have too much of a good thing. Doctors have used antibiotics recklessly, prescribing them for just about everything, and in the process helped to create strains of bacteria that are resistant to the medicines we have. We even give antibiotics to cattle that are not sick and use them to fatten chickens. Companies large and small still mindlessly market antimicrobial products for hands and home, claiming that they kill bacteria and viruses. They do more harm than good because the low concentrations of antimicrobials that these products contain tend to kill friendly bacteria (not viruses at all), and so clear the way for the mass multiplication of surviving unfriendly bacteria. Perhaps even worse, hospitals have deployed antimicrobial products on an industrial scale for a long time now, the result being a sharp rise in iatrogenic bacterial illnesses. Overuse of antibiotics and commercial products containing them has helped superbugs to evolve. We now increasingly face microorganisms that cannot be killed by antibiotics, antifungals, antivirals, or any other chemical weapon we throw at them. Pandemics are the major risk we run as a result, but it is not the only one. Overuse of antibiotics by doctors, homemakers, and hospital managers could mean that, in the not-too-distant future, something as simple as a minor cut could again become life-threatening if it becomes infected. Few non-medical professionals are aware that antibiotics are the foundation on which nearly all of modern medicine rests. Cancer therapy, organ transplants, surgeries minor and major, and even childbirth all rely on antibiotics to prevent infections. If infections become untreatable we stand to lose most of the medical advances we have made over the past fifty years.

### 1NC- AT: Innovation

#### Minor tweaks of drugs are key to ensure adequate treatment- otherwise patients skip doses or medicines fail in hot climates – forces people to go underground to get effective new drugs which decks aff solvency

**Holman 2018** (Christopher, Professor of Law, University of Missouri-Kansas City School of Law. “Why Follow-On Pharmaceutical Innovations Should Be Eligible For Patent Protection” <https://www.ip-watch.org/2018/09/21/follow-pharmaceutical-innovations-eligible-patent-protection/> September 21, 2018)DR 21

Follow-on pharmaceutical innovation can come in the form of an extended-release formulation that permits the drug to be administered at less frequent intervals than the original formulation. Critics of secondary patents downplay the significance of extended-release formulations, claiming that they represent nothing more than a ploy to extend patent protection without providing any real benefit to patients. In fact, the availability of a drug that can be taken once a day has been shown to improve patient compliance, a significant issue with many drugs, particularly in the case of drugs taken by patients with dementia or other cognitive impairments. Extended-release formulations can also provide a more consistent dosing throughout the day, avoiding the peaks and valleys in blood levels experienced by patients forced to take an immediate-release drug multiple times a day.

Other examples of improved formulations that provide real benefits to patients are **oral**ly administrable formulations of drugs that could previously only be administered by more invasive intravenous or intramuscular **injection**, combination products that combine two or more active pharmaceutical agents in a single formulation (resulting in improved patient compliance), and a heat-stable formulation of a lifesaving drug used to treat HIV infection and AIDS (an important characteristic for use in developing countries with a hot climate).

#### That solves pricing and monopoly- the improvement might be patented but generics of the original compound become incredibly cheap.

**Holman 2016** (Christopher, Professor of Law, University of Missouri-Kansas City School of Law; J.D., University of California, Berkeley; Ph.D., University of California, Davis. “IN DEFENSE OF SECONDARY PHARMACEUTICAL PATENTS: A RESPONSE TO THE UN’S GUIDELINES FOR PHARMACEUTICAL PATENT EXAMINATION” *Indiana Law Review* 50, 2016)DR 21

Rather than the blanket presumption against patents on new formulations endorsed by the Guidelines, which would tend to deny patent protection for both minor improvements and highly significant improvements, the needs of patients would be better served if the market and the judgment of patients and healthcare providers were allowed to determine the value of a new formulation on an existing drug. If the improvement is of such significance that it justifies a substantial cost premium, then society has benefited from the development of this improved mode of drug delivery, and payment of the premium is justified, in the same way that it is by development of a therapeutically useful new active ingredient. If the improvement is nominal, then payers should refuse to pay the premium, which they can do by simply purchasing the original formulation from generic companies at a discounted price. If there are market inefficiencies that somehow induce payers to pay the premium even though the improvement is minimal, then those market inefficiencies should be addressed, rather than attempting to address it by changing the standard for patentability in a discriminatory manner that targets specific categories of inventions.

#### Quality over quantity, we have a good amount of innovations- even if theyre just 20%. Follow on also has value

### 1NC – AT: COVID heg Advantage

#### Top-Level: they can’t solve the plan isnt trips waiver

#### 1] DA Turns the Aff and the covid impact– Delta Variant proves current vaccines aren’t enough – we need new innovations.

Guarino 8-18 Ben Guarino 8-18-2021 “Vaccines show declining effectiveness against infection overall but strong protection against hospitalization amid delta variant” <https://archive.is/pvuzL#selection-747.0-750.0> (Education: University of Pennsylvania, BSE in bioengineering; New York University, MA in journalism)//Elmer

**Results** from a trio of studies, published in the CDC’s weekly report, **motivated** the **Biden** administration **to** **consider** **booster shots**. **Three studies published** Wednesday by the Centers for Disease Control and Prevention **show** that **protection against the** **coronavirus from vaccines** **declined** in the midsummer months **when** the more contagious **delta variant rose** to dominance in the United States. At the same time, protection against hospitalization was strong for weeks after vaccination, indicating the shots will generate immune fighters that stave off the worst effects of the virus and its current variations. Data from these studies persuaded the Biden administration to develop a plan for additional doses to bolster the immune systems of people vaccinated months earlier. The trio of reports, published Wednesday in the Morbidity and Mortality Weekly Report, the CDC’s scientific digest, also **reinforce** the **idea** that **vaccines** **alone will be unable to lift the nation out of the pandemic**. Masks and other precautions should be part of “a layered approach centered on vaccination,” wrote researchers from the New York State Department of Health and the University at Albany School of Public Health in their study of vaccine effectiveness across New York state. All three reports measure vaccine effectiveness, which compares the rates of infection or hospitalization among vaccinated people with the rates among people who had not been vaccinated. Until now, evaluations of vaccine effectiveness amid delta largely relied on observations from outside the United States. A recent New England Journal of Medicine study concluded the Pfizer vaccine was 88 percent effective against infections that caused symptoms in England. Others, such as **a study in Israel**, **found** **larger declines in protection against infection**. One U.S. report that has not yet gone through peer review, collecting data from Mayo Clinic Health System facilities in five states, **found** a **drop in** the **Pfizer**-BioNTech **vaccine’s** **effectiveness** **against delta infections to 42 percent**. The other mRNA vaccine, made by Moderna, was 76 percent effective. The new study from New York is the first to assess vaccine protection against coronavirus infection across the entirety of a U.S. state amid delta. The study authors found a modest drop in effectiveness: It descended from 92 percent in May to 80 percent in late July. Twenty percent of new infections and 15 percent of hospitalizations from covid-19, the disease caused by the coronavirus, were among vaccinated people. The second of the three studies published Wednesday by the CDC found effectiveness against infection declined for nursing home residents after delta emerged. It dropped from 75 percent in March through May to 53 percent in June and July. Vaccination for visitors and staff is crucial, the study authors wrote, and “additional doses of COVID-19 vaccine might be considered for nursing home and long-term care facility residents.” The third report, an analysis of patients at 21 hospitals in 18 states, found sustained protection against hospitalization. Effectiveness was steady at 86 percent, even in the midsummer months when delta outcompeted other variants of concern. For adults who do not have compromised immune systems, that effectiveness stood at 90 percent.

#### 2] Skill Disparities and Trade Secrets thump – Moderna proves IP isn’t the root cause.

Silverman 3-15 Rachel Silverman 3-15-2021 "Waiving vaccine patents won’t help inoculate poorer nations" <https://www.washingtonpost.com/outlook/2021/03/15/vaccine-coronavirus-patents-waive-global-equity/> (Rachel Silverman is a policy fellow at the Center for Global Development)//Duong

Reality is more complicated, however. Because of the technical complexity of manufacturing coronavirus vaccines, waiving intellectual-property rights, by itself, would have **little effect**. It could even backfire, with companies using the move as an excuse to disengage from global access efforts. There are more effective ways to entice — and to pressure — companies to license and share their intellectual property and the associated know-how, without broadly nullifying patents. The Moderna vaccine illustrates the limits of freeing up intellectual property. Moderna announced in October that it would **not enforce IP rights** on its coronavirus vaccine — and yet it has **taken no steps to share information** about the vaccine’s design or manufacture, citing commercial interests in the underlying technology. Five months later, production of the Moderna vaccine remains entirely under the **company’s direct control** within its owned and contracted facilities. Notably, Moderna is also the only manufacturer of a U.S.- or British-approved vaccine not yet participating in Covax, a global-aid-funded effort (including a pledged $4 billion from the United States) to purchase vaccines for use in low- and middle-income countries. It is true, however, that activist pressure — including threats to infringe upon IP rights — can encourage originators to enter into voluntary licensing arrangements. So the global movement to liberate the vaccine patents may be useful, even if some advocates make exaggerated claims about the effects of waivers on their own. We focused on covid. Now our other patients are suffering. One reason patent waivers are unlikely to help much in this case is that vaccines are harder to make than ordinary drugs. Because most drugs are simple chemical compounds, and because the composition of the compounds is easily analyzable, competent chemists can usually reverse-engineer a production process with relative ease. When a drug patent expires, therefore — or is waived — generic companies can readily enter the market and produce competitive products, lowering prices dramatically. Vaccines, in contrast, are complex biological products. Observing their contents is insufficient to allow for imitation. Instead, to produce the vaccine, manufacturers need access to the developer’s “soft” IP — the proprietary recipe, cell lines, manufacturing processes and so forth. While some of this information is confidentially submitted to regulators and might theoretically be released in an extraordinary situation (though not without legal challenge), manufacturers are at an enormous disadvantage without the originator’s cooperation to help them set up their process and kick-start production. Even with the nonconsensual release of the soft IP held by the regulator, the process of trial and error would cause long delays in a best-case scenario. Most likely, the effort would end in expensive failure. Manufacturers also need certain raw ingredients and other materials, like glass vials and filtration equipment; overwhelming demand, paired with disruptive export restrictions, has constricted the global availability of some of these items.

#### HEG

#### 1] Non-Unique Status Quo solves it – Biden cranked up Vaccine Diplomacy in the wake of China’s Failures – this also answers their China Rise U/Q

Wee and Lee 8-20 Sui-Lee Wee and Steven Lee Myers 8-20-2021 "As Chinese Vaccines Stumble, U.S. Finds New Opening in Asia" https://www.nytimes.com/2021/08/20/business/economy/china-vaccine-us-covid-diplomacy.html (Sui-Lee Wee is a China correspondent for The New York Times. She was part of the team that won the 2021 Pulitzer in public service for coverage of the coronavirus pandemic)//Elmer

SINGAPORE — The arrival of the **Chinese vaccines** was supposed to help stop the spread of the coronavirus in Southeast Asia. Instead, **countries** across the region are **quickly turning elsewhere** to look for shots. Residents in Thailand vaccinated with one dose of China’s Sinovac are now given the AstraZeneca shot three to four weeks later. In Indonesia, officials are administering the Moderna vaccine as a booster to health care workers who had received two doses of Sinovac. Malaysia’s health minister said the country would stop using Sinovac once its supply ran out. Even Cambodia, one of China’s strongest allies, has started using AstraZeneca as a booster for its frontline workers who had taken the Chinese vaccines. Few places benefited from China’s vaccine diplomacy as much as Southeast Asia, a region of more than 650 million that has struggled to secure doses from Western drugmakers. Several of these countries have recorded some of the fastest-growing number of cases in the world, underscoring the desperate need for inoculations. China, eager to build good will, stepped in, promising to provide more than 255 million doses, according to Bridge Consulting, a Beijing-based research company. Half a year in, however, that campaign has lost some of its luster. Officials in several countries have raised doubts about the efficacy of Chinese vaccines, especially against the more transmissible Delta variant. Indonesia, which was early to accept Chinese shots, was recently the epicenter of the virus. Others have complained about the conditions that accompanied Chinese donations or sales. The setback to China’s vaccine campaign has created a diplomatic opening for the United States when relations between the two countries are increasingly fraught, in part because of the coronavirus. China has criticized the American handling of the crisis at home and even claimed, with no evidence, that the pandemic originated in a military lab at Fort Detrick, Md., not in Wuhan, where the first cases emerged in late 2019. **As more countries turn away from Chinese shots**, **vaccine aid from the U**nited **S**tates **offers** an **opportunity to restore relations** **in a region that** American officials **have** mostly **ignored for years while China extended its influence**. The **Biden** administration has **dispatched** a crowd of **senior officials,** including Vice President Kamala Harris, who is scheduled to arrive on Sunday to visit Singapore and Vietnam. It has **also**, at last, **made its own vaccine pledges to Southeast Asia**, **emphasizing** that the **American contribution of** roughly **23 million shots** as of this week **comes with “no strings attached,”** an implicit reference to China. **Several countries** in the region have been **eager to receive** the **more effective, Western doses.** Although they remain far outnumbered by Chinese shots, they present an attractive alternative. China’s “early head-start advantage has lost its magic already,” said Hoang Thi Ha, a researcher with the Asean Studies center of the ISEAS-Yusof Ishak Institute in Singapore. For most of the year, many developing countries in Southeast Asia did not have much of a choice when it came to vaccines. They struggled to acquire doses, many of which were being made by richer nations that have been accused of hoarding them. China sought to fill those needs. The country’s foreign minister, Wang Yi, traveled through the region in January, promising to help fight the pandemic. In April, he declared that Southeast Asia was a priority for Beijing. About a third of the 33 million doses that China has distributed free worldwide were sent to the region, according to the figures provided by Bridge Consulting. Much of Beijing’s focus has been directed at the more populous countries, such as Indonesia and the Philippines, and its longstanding allies like Cambodia and Laos. Indonesia was China’s biggest customer in the region, buying 125 million doses from Sinovac. The Philippines obtained 25 million Sinovac shots after the president, Rodrigo Duterte, said he had turned to Xi Jinping, China’s top leader, for help. Cambodia received more than 2.2 million of China’s Sinopharm doses. It has inoculated roughly 41 percent of its population, achieving the second-highest vaccination rate in the region, after Singapore. Then, signs started emerging that the Chinese vaccines were not as effective as hoped. Indonesia found that 10 percent of its health care workers had become infected with Covid-19 as of July, despite being fully vaccinated with the Sinovac shot, according to the Indonesian Hospital Association. In July, a virologist at Chulalongkorn University in Bangkok said a study of people who had received two doses of the Sinovac vaccine showed that their level of antibodies, 70 percent, was “barely efficacious” against the Alpha variant of the coronavirus, first detected in Britain, or against the Delta variant, first detected in India. The governments in both Indonesia and Thailand decided that they had to make a switch to other vaccines, like those provided by the United States, Britain and Russia. “Now that they have more choices, they can make other decisions,” said Nadège Rolland, senior fellow at the National Bureau of Asian Research in Washington. “I don’t think it’s politically motivated. I think it’s pragmatic.” Yaowares Wasuwat, a noodle seller in Thailand’s Bangsaen Chonburi Province, said that she hoped to get the AstraZeneca vaccine for her second shot after being inoculated with Sinovac, but that she would take whatever was available. “I have nothing to lose,” she said. “The economy is so bad, we are gasping for air. It’s like dying while living, so just take whatever protection we can.” China’s early moves in the region stand in marked contrast with the United States, which was **slow to provide assistance**. The calculus **has now changed** under President Biden. Both Lloyd J. Austin III, the American secretary of defense, and Antony J. Blinken, the secretary of state, had meetings with top officials in Southeast Asia in recent weeks. They **noted** the **donations of roughly 20 million shots**. After Mr. Austin visited the Philippines, Manila restored a defense agreement that had been stuck in limbo for more than a year after Mr. Duterte threatened to terminate it. The agreement, which would continue to allow American troops and equipment to be moved in and out of the Philippines, could thwart China’s goal to push the American military out of the region.

#### 2] Non-Unique – Biden already endorsed the COVID waiver – demonstrating that he’s willing to restore American Humanitarian Leadership – no evidence assuming the distinction.

#### 3] Turn – Aff facilitates critical Biotech to China – devastates US leadership

Sasse 5-17 Ben Sasse 5-17-2021 "U.S. Can Stop the Pandemic and Counter China" <https://archive.is/NOKMj#selection-4197.0-4265.96> (Ben Sasse has a bachelor's degree in government from Harvard University, a Master of Arts in liberal studies from St. John's College and master's and doctoral degrees in American history from Yale University. He taught at the University of Texas and served as an assistant secretary in the U.S. Department of Health and Human Services.)//Elmer

Covid-19 exploded in part because the Chinese Communist Party was apathetic about other nations’ health and covered up the pandemic during its initial months by lying to and through international public-health organizations. The vaccines that will now beat Covid-19 should likewise spread rapidly world-wide because the U.S. cares for the health of our neighbors around the globe. The world should know that this virus grew deadlier because of a tyrannical system’s paranoia, and the life-saving remedy is emerging from the innovative power of democratic capitalism. Washington is late to vaccine diplomacy but not too late. The framing of every new program as a “Marshall Plan” for this or that is overused, but this is a genuine once-in-a-generation opportunity to show the world what U.S. leadership looks like. Covid-19 came from China. The most effective vaccines against it come from the United States of America. The U.S. should set a goal of vaccinating more than one billion people around the world by Thanksgiving—and without dumping intellectual property, a foolish act with perverse consequences. Consider both the idealist and realist cases for stepping into this global leadership role. This terrible virus has wrought a continuing humanitarian crisis. A second wave is devastating India: Hospitals are full, oxygen tanks are scarce, and makeshift crematoriums are struggling to keep up. As the virus sweeps through remote villages, bodies are washing up on the shores of the Ganges River. As a country dedicated to the principle that all are created equal, the U.S. won’t turn our back on these men, women and children. Now the two realist cases: First, all available data indicate the vaccines developed by the U.S. pharmaceutical industry—the result of years of research, accelerated by the public-private Operation Warp Speed—**are by far the best** in the world. But most people and nations don’t know that. Instead the Chinese Communist Party has exploited the suffering of the developing world to advance its own interests. In its usual mafioso fashion, Beijing has made delivery of vaccines contingent on the recipient nation’s breaking diplomatic ties with Taiwan, or agreeing to use Huawei—China’s tech giant/espionage agency—to provide 5G internet service. China has charged astronomical prices for garbage vaccines. The second realist case for vaccine diplomacy is the danger that the virus will mutate to evade vaccines. America’s vaccines can stop this—they’ve proved effective against all known global strains—but it’s a race against time. Unfortunately, the Biden administration wants to surrender America’s Covid-19 vaccine technology **to anyone who wants it—including China**. That is the substance of the May 5 announcement that the U.S. will enter into negotiations at the World Trade Organization to waive the Agreement on Trade-Related Aspects of International Property Rights for Covid vaccine technology. This would do little to speed the distribution of effective vaccines, but it would create **substantial disincentives to invest in innovation**. The mRNA technology at the heart of our vaccines is the result of decades of American investment and labor, and it’s a leg up on the next global health crisis. Ceding this advantage to the Chinese Communist Party all but guarantees that we will **lose the next vaccine race**, and that **Beijing will have the upper hand abroad.** China’s corrupt leadership won’t need to hack our databases; they’ll simply use our freely surrendered technological advances **to undermine us abroad**. There’s a better way. America can vaccinate a billion people around the globe. It’s going to take work and investment. The administration should make vaccine diplomacy the State Department’s top budget priority and begin working with pharmaceutical companies on cost-sharing agreements. We need to encourage public-private partnerships and facilitate overseas licensing agreements to enable American pharmaceutical companies to export vaccines without surrendering their legal rights. We need to encourage donations from America’s unused vaccine supply. Getting personal protective equipment, oxygen and ventilators into doctors’ hands abroad is saving lives every day, so we should expand exports of these and related items. Likewise, we should break open the supply-chain bottleneck that is thwarting the delivery of cargo. The developing world lacks vaccine manufacturing, storage and distribution capacities—and none of these problems are solved by an IP giveaway. A U.S. public-private program to advance vaccine diplomacy will help more people more quickly. These vaccines must be accompanied by a message that reaches from heads of state to remote villages. The State Department can spearhead an information blitz that reminds government leaders every vaccine dose taken from the Chinese Communist Party has dangers and strings attached, but America offers an immediate solution. It’s not only party leaders and heads of state who need to understand the benefits. When the U.S. fights famine, we send bags of rice with the American flag. When the U.S. fights Covid-19, every Band-Aid and bag of cotton balls needs to be stamped with Old Glory. Every person who accepts an American vaccine should know exactly where it came from. In less than a year, American physicians, scientists and pharmaceutical companies confronted an extremely potent virus, created multiple effective vaccines, and produced enough of them to inoculate the majority of our 330 million citizens. This extraordinary achievement is a testament to American innovation and to our system of free competition, targeted private-public partnership and robust legal protections. The Chinese alternative—a system of state-sponsored mismanagement, deception and coercion—has shown itself to be not only a failure, but a failure big enough to infect the globe. The message is simple: Americans are here to help. Uncle Sam, not Chairman Xi, can end Covid-19.

### 1NC – AT: India Impact

#### India Scenario -

#### 1] Non-Unique - India COVID improving.

The Economist 5-24 5-24-2021 "India's COVID-19 crisis is beginning to ease" <https://archive.is/rpQ63#selection-579.0-582.0> //Elmer

Yet even India’s faulty government numbers now give **reason for hope**. The parts of the country where counting is fairly reliable show a clear trend. The virus’s vicious **second wave** is **rolling back almost as fast as it rolled in**. In early May, India was recording some 400,000 new cases a day. This has now fallen below 250,000. The number of **daily** **new cases** **in Mumbai**, the country’s commercial capital and one of the first places to see a surge, is now **about one-seventh of its peak**. In **Delhi**, the hard-hit capital, the proportion of covid **tests** proving **positive** in April reached a frightening 36%. This has now tumbled **below 3%.** The corresponding national “positivity rate”, heavily weighted towards cities where more tests are performed, has fallen from 24% to under 12%. In the main cities at least, the **desperate fight to get** **oxygen** to gasping patients **has** been **won**. Daily demand for liquid medical oxygen (LMO), which reached some 9,000 metric tons—three times the demand during India’s first peak in September—has now begun to drop, says a government task-force. Jokers point to another indicator of improving fortunes. Leaders whose visibility faded notably as the tragedy mounted have suddenly grown less camera-shy. “You know cases are going down because...Modi has reappeared,” joked one tweet, referring to the prime minister, Narendra Modi, who very publicly appeared to choke with emotion during a televised Zoom call with doctors in his parliamentary constituency.

#### 2] Decreases likelihood of War.

Gul 20 Ayaz Gul 4-28-2020 "Kashmiri Leader: COVID-19 Lowers Chances of Pakistan-India War" <https://www.voanews.com/south-central-asia/kashmiri-leader-covid-19-lowers-chances-pakistan-india-war> (VOA reporter)//Elmer

ISLAMABAD - **Pakistan and India** are **locked in** almost **daily military clashes** across their Kashmir frontier, **but** the **president of** the **Pakistani-ruled part** of the disputed territory **says** the **coronavirus** pandemic **has** for now **diminished chances, if any**, **of** the **tensions escalating into a full-blown war**. Islamabad and New Delhi routinely accuse each other of firing the first shot that started the clashes in violation of a 2003 mutual truce across what is referred to as the Kashmir Line of Control (LoC). Critics say the increased violence in recent years, however, already has rendered the truce ineffective. The clashes have caused dozens of casualties on both sides, mostly civilians living in villages close to the LoC. “I **don’t foresee a war** in the near future,” said President Masood Khan of Azad (independent) Jammu and Kashmir (AJK), the official name Pakistan uses for the part of the divided region it administers. India controls the remaining two-thirds of the largely Muslim Himalayan region, claimed by both of the nuclear-armed rival nations. “Right now, the **world** is **preoccupied with** the **COVID**-19 **pandemic**, and nobody seriously expects India and Pakistan to go to war. And we do not know what the world would look like once this pandemic is over,” Khan told VOA in an interview at his camp office in the Pakistani capital.

#### 3] Pakistan instability were unrelated to COVID – we’ll insert the card

1AC Somos 20. [Christy Somos is a CTVNews.ca Writer) “COVID-19 has escalated armed conflict in India, Pakistan, Iraq, Libya and the Philippines, study finds,” CTV News, December 17, 2020. <https://www.ctvnews.ca/world/covid-19-has-escalated-armed-conflict-in-india-pakistan-iraq-libya-and-the-philippines-study-finds-1.5236738>] TDI

INDIA India saw a rise in armed conflict during the study period, with violent clashes in the Kashmir region between Kashmiri separatists facing off against the Indian military, as well as conflicts between Pakistan and India. “So what mostly drove the increase in conflict intensity…were basically due to two factors,” Ide said. “The first being that there is some evidence that Pakistan sponsors or supports these insurgents in Kashmir, to encourage them to increase their attacks [on Indian forces] because they perceived them to be weak and struggling with the pandemic.” The second factor, Ide explained, was that while Indian government enacted a “pretty comprehensive lockdown in Kashmir, and sealing it way from international media attention…launched more intense counter-insurgency efforts and…crack[ed] down on any pro-Pakistani sympathy expressions.” IRAQ Iraq had an increase in armed conflict, but Ide noted that the overall intensity did not change that much – a “very slight upward trend” in scale that was not linear. What did increase were attacks by ISIS in April, May, and June. “The Iraqi government was really in trouble,” he said. “They had enormous economic loss, they had to go head-to-head and use troops and funds to combat the pandemic – the international coalition supporting the government partially withdrew troops or stopped their activities.” “The Iraqi government was really in a position of weakness.” Ide said the Islamic State exploited the pandemic and the thin resources at hand to the government to expand territorial control, conquer new areas and to stage more attacks. LIBYA The civil war in Libya between the Government of National Accord’s (GNA) forces and the Libyan National Army escalated during the study period, after a ceasefire brokered in January was broken, Ide said. “As soon as international attention shifted to the pandemic…they really escalated the conflict, tried to make gains while hoping the other side is weakened because of the pandemic, hoping to score an easy military victory” Ide said. “It didn’t happen.” The UN Security Council noted in a May report that the pandemic was bolstering the 15-month conflict, citing the history of more than 850 broken ceasefire agreements and “a tide of civilian deaths” on top of a worsening outbreak. PAKISTAN **The ongoing conflict with India saw a rise in armed conflict in Pakistan** during the study period – **which were unrelated to the pandemic**, but also a rise in Taliban-affiliated groups and anti-government sentiments due to pandemic restrictions, Ide said. “There were a lot of anti-government grievances,” Ide said. “There were restrictions on religious gatherings, which religious groups did not like, and there were some negative **economic impacts which affected the local people**.” Ide said those two factors could have been exploited by the Taliban in a quest to recruit more followers. Later in the study period, a swath Pakistani government officials were struck with COVID-19, **leaving the country with a leadership crisis**, which saw an increase of attacks by Taliban groups in May.

#### 4] No escalation – their evidence only says “nuclear” in the context of a previous “ominous hint” for a convention for another conflict which disproves escalation risk AND “continue escalating” is nonsense w/o a brink scenario – we’ll insert another re-cutting.

Roblin 21. [(Sébastien Roblin holds a master’s degree in Conflict Resolution from Georgetown University and served as a university instructor for the Peace Corps in China, "If the Next India-Pakistan War Goes Nuclear, It Will Destroy the World," The National Interest, March 26, 2021. <https://nationalinterest.org/blog/reboot/if-next-india-pakistan-war-goes-nuclear-it-will-destroy-world-181134>] TDI

Here's What You Need to Remember: India and Pakistan account for over one-fifth world’s population, and therefore a significant share of economic activity. Should their major cities become irradiated ruins with their populations decimated, a tremendous disruption would surely result. Between February 26 and 27 in 2019, Indian and Pakistani warplanes launched strikes on each other’s territory and engaged in aerial combat for the first time since 1971. Pakistan **ominously** hinted **it was convening its N**ational **C**ommand **A**uthority, **the institution which can authorize a nuclear strike**. The two states, which have retained an adversarial relationship since their founding in 1947, between them deploy nuclear warheads that can be delivered by land, air and sea. However, those weapons are inferior in number and yield to the thousands of nuclear weapons possessed by Russia and the United States, which include megaton-class weapons that can wipe out a metropolis in a single blast. Some commenters have callously suggested that means a “limited regional nuclear war” would remain an Indian and Pakistani problem. People find it difficult to assess the risk of rare but catastrophic events; after all, a full-scale nuclear war has never occurred before, though it has come close to happening. Such assessments are not only shockingly callous but shortsighted. In fact, several studies have modeled the global impact of a “limited” ten-day nuclear war in which India and Pakistan each exchange fifty 15-kiloton nuclear bombs equivalent in yield to the Little Boy uranium bomb dropped on Hiroshima. Their findings concluded that spillover would in no way be “limited,” directly impacting people across the globe that would struggle to locate Kashmir on a map. And those results are merely a conservative baseline, as India and Pakistan are estimated to possess over 260 warheads. Some likely have yields exceeding 15-kilotons, which is relatively small compared to modern strategic warheads. Casualties Recurring terrorist attacks by Pakistan-sponsored militant groups over the status of India’s Muslim-majority Jammu and Kashmir state have repeatedly led to threats of a conventional military retaliation by New Delhi. Pakistan, in turn, maintains it may use nuclear weapons as a first-strike weapon to counter-balance India’s superior conventional forces. Triggers could involve the destruction of a large part of Pakistan’s military or penetration by Indian forces deep into Pakistani territory. Islamabad also claims it might authorize a strike in event of a damaging Indian blockade or political destabilization instigated by India. India’s official policy is that it will never be first to strike with nuclear weapons—but that once any nukes are used against it, New Dehli will unleash an all-out retaliation. The Little Boy bomb alone killed around 100,000 Japanese—between 30 to 40 percent of Hiroshima’s population—and destroyed 69 percent of the buildings in the city. But Pakistan and India host some of the most populous and densely populated cities on the planet, with population densities of Calcutta, Karachi and Mumbai at or exceeding 65,000 people per square mile. Thus, even low-yield bombs could cause tremendous casualties. A 2014 study estimates that the immediate effects of the bombs—the fireball, over-pressure wave, radiation burns etc.—would kill twenty million people. An earlier study estimated a hundred 15-kiloton nuclear detonations could kill twenty-six million in India and eighteen million in Pakistan—and concluded that escalating to using 100-kiloton warheads, which have greater blast radius and overpressure waves that can shatter hardened structures, would multiply death tolls four-fold. Moreover, these projected body counts omit the secondary effects of nuclear blasts. Many survivors of the initial explosion would suffer slow, lingering deaths due to radiation exposure. The collapse of healthcare, transport, sanitation, water and economic infrastructure would also claim many more lives. A nuclear blast could also trigger a deadly firestorm. For instance, a firestorm caused by the U.S. napalm bombing of Tokyo in March 1945 killed more people than the Fat Man bomb killed in Nagasaki. Refugee Outflows The civil war in Syria caused over 5.6 million refugees to flee abroad out of a population of 22 million prior to the conflict. Despite relative stability and prosperity of the European nations to which refugees fled, this outflow triggered political backlashes that have rocked virtually every major Western government. Now consider likely population movements in event of a nuclear war between India-Pakistan, which together total over 1.5 billion people. Nuclear bombings—or their even their mere potential—would likely cause many city-dwellers to flee to the countryside to lower their odds of being caught in a nuclear strike. Wealthier citizens, numbering in tens of millions, would use their resources to flee abroad. Should bombs beginning dropping, poorer citizens many begin pouring over land borders such as those with Afghanistan and Iran for Pakistan, and Nepal and Bangladesh for India. These poor states would struggle to supports tens of millions of refugees. China also borders India and Pakistan—but historically Beijing has not welcomed refugees. Some citizens may undertake risky voyages at sea on overloaded boats, setting their sights on South East Asia and the Arabian Peninsula. Thousands would surely drown. Many regional governments would turn them back, as they have refugees of conflicts in Vietnam, Cambodia and Myanmar in the past. Fallout Radioactive fallout would also be disseminated across the globe. The fallout from the Chernobyl explosion, for example, wounds its way westward from Ukraine into Western Europe, exposing 650,000 persons and contaminating 77,000 square miles. The long-term health effects of the exposure could last decades. India and Pakistan’s neighbors would be especially exposed, and most lack healthcare and infrastructure to deal with such a crisis. Nuclear Winter Studies in 2008 and 2014 found that of one hundred bombs that were fifteen-kilotons were used, it would blast five million tons of fine, sooty particles into the stratosphere, where they would spread across the globe, warping global weather patterns for the next twenty-five years. The particles would block out light from the sun, causing surface temperatures to decrease an average of 2.7 degrees Fahrenheit across the globe, or 4.5 degrees in North American and Europe. Growing seasons would be shortened by ten to forty days, and certain crops such as Canadian wheat would simply become unviable. Global agricultural yields would fall, leading to rising prices and famine. The particles may also deplete between 30 to 50 percent of the ozone layer, allowing more of the sun’s radiation to penetrate the atmosphere, causing increased sunburns and rates of cancer and killing off sensitive plant-life and marine plankton, with the spillover effect of decimating fishing yields. To be clear, these are outcomes for a “light” nuclear winter scenario, not a full slugging match between the Russian and U.S. arsenals. Global Recession Any one of the factors above would likely suffice to cause a global economic recession. All of them combined would guarantee one. India and Pakistan account for over one-fifth world’s population, and therefore a significant share of economic activity. Should their major cities become irradiated ruins with their populations decimated, a tremendous disruption would surely result. A massive decrease in consumption and production would obviously instigate a long-lasting recessionary cycle, with attendant deprivations and political destabilization slamming developed and less-developed countries alike. Taken together, these outcomes mean even a “limited” India-Pakistan nuclear war would significantly affect every person on the globe, be they a school teacher in Nebraska, a factory-worker in Shaanxi province or a fisherman in Mombasa. Unfortunately, the recent escalation between India and Pakistan is no fluke, but part of a long-simmering pattern likely to continue escalating unless New Delhi and Islamabad work together to change the nature of their relationship.

#### 5] No Indo-Pak War.

Seghal and Rajaraman 18 Rashme Sehgal and Ramamurti Rajaraman 18, he’s being interviewed, Emeritus Professor of Theoretical Physics at Jawaharlal Nehru University, "'India-Pakistan nuke war not a realistic possibilty', says leading nuclear expert Ramamurti Rajaraman", Firstpost, <https://www.firstpost.com/india/india-pakistan-nuke-war-not-a-realistic-possibilty-says-leading-nuclear-expert-ramamurti-rajaraman-3880145.html> //re-cut by Elmer

Q: The conflict between India and Pakistan has intensified in the last three years. If the situation worsens, is there a likelihood that India could launch a pre-emptive first strike against Pakistan if it feared an imminent nuclear strike? Of course, this could mean a marked reversal of our no-first use (NFU) policy. On the other hand, if India goes in for more surgical strikes, can Pakistan use a conventional attack as a pretext to attack India?

A: The conflict between India and Pakistan during the past three years has been limited to Jammu and Kashmir. These conflicts may continue and may also occasionally intensify. There may also be a lot of heated rhetoric from both sides. But I don’t think there is any realistic possibility of those conflicts developing into a full-scale war, let alone one with any serious chances of a nuclear strike by Pakistan. Notice that there has been no mainland attack by Pakistan based terrorists since the 2008 Mumbai attacks. I feel that this is ~~because Pakistan military and its Inter-Services Intelligence do appreciate the fact that the next time there is an attack of that magnitude, India would have to retaliate in a serious manner. It is true that the Pakistan Army maintains a hostile posture towards India as a matter of policy. But that is done largely for domestic consumption and for maintaining its pre-eminence in the Pakistani power structure. If push comes to shove, the leadership in both countries are too responsible to let matters go anywhere near a nuclear threshold. So, there is no question of India conducting a pre-emptive strike on Pakistan in anticipation of a nuclear attack from them. I don’t think India will reverse its NFU policy, even though some analysts, for the want of anything better to write about, keep harping on it. That would be a very unwise thing to do diplomatically.~~