### 1NC – DA

#### Dems win now – but the margins are razor thin – Texas abortion ban is going to rally dems to the polls – answers all thumpers

Behrmann & Bailey 9-9 [Savannah Behrmann, Congressional Reporter at USA TODAY. Previously, she was a News Associate at CNN. Savannah hails originally from Utah, and attended George Mason University., Phillip M. Bailey, National political correspondent, 9-9-2021, “Texas abortion law could hurt Republicans in 2022 midterm elections, experts say” USA Today, Accessed 9-11-2021, <https://www.usatoday.com/story/news/politics/2021/09/09/texas-abortion-law-may-hurt-republicans-2022-midterms-experts-say/570180001/> ww

WASHINGTON – As the United States pulled out of Afghanistan and chaos ensued, Republican lawmakers were swift to condemn President Joe Biden's handling of the withdrawal.¶ The violence that erupted in Kabul gave GOP officials an opening to attack the Democratic president, whose approach to the withdrawal was later met with disapproval in national polls. It quickly became political campaign fodder for Republicans who need a net gain of only five seats in the House and one in the Senate to recapture total control of Congress in next year's midterm elections.¶ Weeks later, conservatives were handed a victory when the Supreme Court sided with Texas Republicans in not blocking the most restrictive abortion law in the nation – in one of the United States' largest red states. But, unlike Afghanistan, it was met with a dim response from high-profile conservatives, most of whom didn't publicly celebrate the law that experts said could spell trouble for congressional Republicans when voters head to the polls next year.¶ 'Day of reckoning': GOP unified in blaming Biden for Afghanistan bombing, divided on refugees and next steps¶ Political strategists and academics pointed to a shifting narrative for people in the "middle" on abortion, and some suggested the new law may tilt too far to the right for even some in the Republican base. ¶ "Republicans have been bleeding support among suburban women throughout the Trump era," Republican pollster Whit Ayers told USA TODAY. "(Texas) makes that problem worse, not better."¶ A divided Supreme Court last week denied an effort by abortion rights groups to halt the new Texas law that bans people from having the procedure after six weeks of pregnancy. ¶ The Texas law, known as SB 8, and signed by Republican Gov. Greg Abbott in May, bans abortions when a fetal heartbeat is detected, usually at about six weeks. The law doesn't include traditional exceptions for abortion such as for rape or incest but allows women to have the procedure for "medical emergencies." ¶ 'Near-total ban': Texas doctors, women assess nation's strictest abortion law¶ The GOP base is largely religious and mostly anti-abortion. Around eight-in-ten Republican registered voters are Christian, and 63% of Republicans and those who lean toward the GOP say abortion should be illegal in all or most cases, according to Pew Research.¶ Brian Conley, professor of political science and director of the political science graduate program at Suffolk University, said that, especially following the Texas ruling and possibly others to come, the law may benefit the left because it may mobilize single-issue pro-choice voters. ¶ "It's galvanizing and solidifying as a single issue for a lot of folks because it appears as though we're on the precipice, if you will, of some type of meaningful change, some type of significant change in abortion rights in United States." ¶ Conley noted Afghanistan could have "really been a very big win for [Republicans] but then all of a sudden there's this other issue which, if you will, will probably displace discussions about Afghanistan."¶ New law may be too extreme¶ Although abortion remains one of the thornier issues in the country, surveys have shown a consistent consensus among most Americans who favor certain restrictions but oppose throwing out Roe v. Wade as a whole.¶ Asked whether the Supreme Court should “overturn” abortion or “let it stand” a month before the 2020 president contest, 62% of likely voters in a Fox News poll said the high court should let it remain.¶ Charles Bullock, a University of Georgia political science professor, said similar surveys showed the same thing.¶ A Quinnipiac University poll released during that time period found 66% of likely voters said they agreed with the 1973 decision establishing a woman’s right to terminate a pregnancy. And a Kaiser Family Foundation poll published in October 2020 showed 69% of Americans disagree with overturning Roe, including 76% of independents. ¶ Bullock said given the slim majorities controlling Congress, Republicans are pausing to calculate how the electorate will respond.¶ “Because while it may play very well in Texas, or at least in some legislative districts in Texas, (SB 8) may be a net loser nationwide,” he said.¶ If allowed to remain in force, the Texas law would be the most dramatic restriction on abortion rights in the U.S. since Roe v. Wade. Citing Roe, federal courts have shot down similar bans in other conservative states for years.¶ Pro-choice activists supporting legal access to abortion protest during a demonstration outside the US Supreme Court in Washington, D.C., in 2020.¶ But what makes the Texas law more controversial, and has rankled women's reproductive health advocates and providers – and may be difficult for Republicans to navigate in more moderate electorates – is a provision in the measure that deputizes individual citizens as the chief enforcer of the new anti-abortion rules.¶ Under that provision, private citizens can sue abortion providers and anyone involved in "aiding and abetting" abortions, including someone driving a person to an abortion clinic. A successful plaintiff could be entitled to at least $10,000 in damages, according to the law. ¶ Shana Kushner Gadarian, chair of political science at Syracuse University's Maxwell School of Citizenship and Public Affairs, said within the Republican Party the average voter is not necessarily supportive of these types of bills, "even though they're more supportive of restricting access, or moving the timeline of when women can access abortion back."¶ "This kind of very extreme ban is not super popular," she said.¶ Imani Gandy, senior editor of law and policy at Rewire.News, said it's hard to imagine the legal ramifications if the Supreme Court or lower federal bench doesn't move against that piece of the law.¶ "It really does create this sort of mercenary society where we're a nation of people who are snitching and surveilling each other," she said.¶ Some GOP pollsters say giving other citizens the right to pursue enforcement could spark privacy concerns among parts of the base that have resisted COVID-19 regulations.¶ "The enforcement mechanism is truly a bizarre and probably unconstitutional," Ayers said. "The libertarian wing of the party will be appalled by the enforcement mechanism in SB 8."¶ All the while, abortion is top-of-mind for voters. ¶ Gallup reported 47% of those polled in May, months before the Supreme Court's decision, said the issue of abortion will be one of the most important factors in voting for a candidate of a major office. Simultaneously, 24% say they will vote only for candidates who share their views on abortion. That number is significantly higher than in other years. ¶ Republicans largely silent ¶ Major Republicans and conservative organizations haven't been proactive in voicing support for the bill since it went into effect, or have shunned whether they back the law. ¶ The National Republican Senatorial Committee, the campaign arm for Senate Republicans, did not post about the new Texas law on Twitter in the days following, but posted more than 20 times on Afghanistan. The organization did not post a public statement.¶ The Republican Governor's Association has not made any statement either in the past week, but it has retweeted Abbott's messages about immigration, election security and business and infrastructure investments. ¶ Similarly, the National Republican Congressional Committee, which raises money for House Republicans, did not post about the Texas law on social media, and no public statement was found. ¶ USA TODAY reached out to the Republican party's campaign arms for comment or direction to public statements and was told none were available. ¶ Texas' Republican Sens. John Cornyn and Ted Cruz, have been mostly silent on social media regarding the law, and posted no public statements. ¶ Sen. John Cornyn R-TX speaks about border security during a press conference with Sen. Ted Cruz R-TX at the Anzalduas International Bridge in Mission, Tx on Thursday, Jan. 10, 2019. The senators accompanied president President Donald Trump on his trip to the southern border earlier in the day. (Via OlyDrop)¶ Cornyn retweeted a few posts analyzing the bill and USA TODAY was told from his office they didn't have more at the moment to add. Cruz's office did not point USA TODAY to any public statement.¶ A spokesman for Senate Minority Leader Mitch McConnell, R-Ky., told USA TODAY their office would forward any statements on the law if the GOP leader made any. But McConnell did offer a brief and reserved reaction about the law when speaking at an event in Kentucky last week.¶ “I think it was a highly technical decision,” he told reporters. “Whether it leads to a broader ruling on Roe vs. Wade is unclear at this point.”¶ House Minority Leader Kevin McCarthy, R-Calif., hadn't posted a public statement, either. The official GOP Twitter account also had not mentioned the abortion bill.¶ Sen. Bill Cassidy, R-La., said on ABC News he believes the Supreme Court will ultimately overturn the Texas law, despite its refusal to last week. ¶ "I think the Supreme Court will swat it away once it comes to them in an appropriate manner. If it is as terrible as people say it is, it will be destroyed by the Supreme Court," Cassidy said.¶ As for Democrats, they've attacked the bill with vengeance. ¶ "The Supreme Court’s cowardly, dark-of-night decision to uphold a flagrantly unconstitutional assault on women’s rights and health is staggering," said House Speaker Nancy Pelosi, D-Calif., in a statement. “SB8 delivers catastrophe to women in Texas, particularly women of color and women from low-income communities."¶ Pelosi said the House will vote later this month on a bill that would protect the right to abortion across the country by codifying Roe v. Wade.¶ Congress:Pelosi says House will vote on abortion access bill in response to Supreme Court decision on Texas law¶ The bill brings abortion into high-profile races¶ The Texas law will likely play a role in next year's battle for the Senate where there is currently a 50-50 party breakdown.¶ In the battleground state of Pennsylvania, for instance, candidates from both sides are rushing to succeed retiring Republican Sen. Pat Toomey.¶ Democratic candidate Val Arkoosh pounced on the Texas abortion law, tweeting: "Say it with me: End the filibuster. Codify Roe v. Wade. The Senate should come back and do it — now."¶ The five-person Pennsylvania GOP field, however, has been mostly quiet.¶ None of the Republican contenders responded to USA TODAY's request for comment except for Craig Snyder, a former chief of staff for the late former Sen. Arlen Specter who is running as an anti-Trump candidate.¶ Snyder, who said he supports the unborn and "autonomy" of women, said the law is "clearly unconstitutional" based on Supreme Court precedent. He said it represents a sharp departure from what most general election voters think about abortion.¶ "I think it's another victory for extremism over the views of what I think is the American majority," Snyder said.¶ In other states, Republican candidates have avoided touting Texas' law specifically while still framing the abortion fight as a weakness for Democrats.¶ One of the high-profile races in 2021 will be Virginia's gubernatorial contest between Republican Glenn Youngkin and Democrat Terry McAuliffe.¶ The Youngkin campaign fired off a press release Tuesday afternoon chastising McAuliffe for his past comments on abortion, but it made no mention of the Texas law.¶ Youngkin dodged a CNN reporter when asked three times on Tuesday if a similar 6-week ban such as the one in Texas should be made law in Virginia, only saying that he's "pro-life."¶ Youngkin campaign spokeswoman Macaulay Porter said from the start of the race he's been an anti-abortion candidate, who "believes in exceptions in the case of rape, incest and when the mother’s life is in jeopardy."¶ "Terry McAuliffe is trying to divide us and distract from his own extreme, pro-abortion position," she said in a statement. "The Texas law is not something that is here in Virginia. What is in Virginia is Terry McAuliffe’s extreme agenda, which advocates for abortion, all the way up through and including birth.”¶ The McAuliffe campaign has gone on the offensive with a series of attack ads to remind Virginians about Youngkin's anti-abortion stances. It also revived a video released by a liberal activist in July showing Youngkin telling a voter he is keeping quiet about his anti-abortion views.¶ McAuliffe said if elected to another term he will "enshrine" abortion rights into the state constitution, and fight for new protections. He also expressed confidence that left-leaning and independent voters will come out big this November as a warning shot to Republicans in 2022 about how they have overstepped.¶ "The future of this country is going to be a battle to protect and preserve woman's rights to make their own decisions about their own body," McAuliffe said.¶ Supreme Court back in the spotlight?¶ Democrats see the Texas law as a way to remind voters of the importance of the Supreme Court — and how Senate control plays into that longer game.¶ Historically, the party not in control of the White House has success in midterms, which could have a direct impact on the court because the Senate is tasked with confirming nominees. With three Donald Trump nominees on the bench, conservatives now hold a comfortable 6-3 majority. ¶ Jazmin Vargas, the national press secretary for the Democratic Senatorial Campaign Committee, said Democrats plan on highlighting the abortion ruling over the Texas law and the Supreme Court's power in the midterm elections.¶ “The freedom for women to make our own health care decisions is on the ballot in 2022 and in key Senate battleground states. Democrats will be holding Republican Senate candidates accountable for their anti-choice record and we will be reminding voters of the stakes in next year’s election – and why we must defend a Democratic Senate majority with the power to confirm or reject Supreme Court justices," she said in a statement to USA TODAY.¶ This Friday, Sept. 3, 2021, photo shows the Supreme Court in Washington. The Supreme Court's decision this past week not to interfere with the state's strict abortion law, provoked outrage from liberals and cheers from many conservatives. President Joe Biden assailed it. But the decision also astonished many that Texas could essentially outmaneuver Supreme Court precedent on women's constitutional right to abortion. (AP Photo/J. Scott Applewhite) ORG XMIT: DCSA117¶ The House Democrats' campaign arm also came out swinging on the new law. ¶ “We’re going to make clear to the American people that this type of draconian law – that targets people seeking reproductive care and places bounties on the heads of those who help them – risks becoming the norm under a Republican majority, and Democrats won’t allow that to happen," said Democratic Congressional Campaign Committee spokesperson Nebeyatt Betre.¶ But CNN political commentator Scott Jennings, a longtime Republican adviser, said Democrats and others should pump their brakes before thinking the lack of a GOP rally in the days after the Texas law took effect represents a tectonic shift in a nearly half-century old debate.¶ "Are there any voters out there who don't know that the Republican Party is the pro-life party and the Democratic Party is the abortion party? It's been a clear contour of our elections for a long time," he said.¶ Jennings said outside of Texas each conservative candidate at the Senate and gubernatorial level is making their own decision on how to handle the issue, but that the GOP isn't going to abandon its anti-abortion base. ¶ "There's an assumption by Democrats that they're going to be able to make an entire election about abortion, when you got runaway inflation, Afghanistan debacle and COVID is now re-surging," he said. ¶ Anti-abortion activists aren't fretting about Republican reticence thus far, saying that Texas legislators have inspired leaders in other Republican-controlled state legislatures to say they are looking to mimic the law.¶ "We are in the early days, so time will tell," said Kristan Hawkins, president of Students for Life of America. ¶ She said social conservative activists are inspired by the "innovative ways to protect life" that Texas Republicans used to enforce the 6-week ban and there is a growing expectation that politicians will follow through. ¶ "Empowering private citizens was a response to a legal and political class failing to do their jobs and enforce the law," Hawkins said.¶ The Supreme Court's work on abortion isn't over. The court is expected to hear a blockbuster challenge to Mississippi's ban on most abortions after 15 weeks of pregnancy.¶ That dispute, which could be argued at the court later this year and decided next summer right before the elections, is expected to address central questions about the constitutionality of abortion and restrictions on it imposed by states.¶ Ayers, the GOP pollster, said abortion will remain an "unresolvable moral issue" but added that Democratic and Republican campaigns are measuring how much Texas has tipped the political scales, even if by inches.¶ "Americans as a whole view abortion as a moral dilemma that I believe will never be fully resolved to the satisfaction of people on either extreme of the debate," he said.

#### The aff is massively unpopular – majority of voters oppose the aff – regardless of political affiliation

Schulte 5-4 [Gabriela Schulte, 5-4-2021, “Poll: Majority oppose proposal to temporarily waive intellectual property rights on COVID-19 vaccines” The Hill, Accessed 8-11-2021, <https://thehill.com/hilltv/what-americas-thinking/551797-poll-majority-oppose-proposal-to-temporarily-waive-intellectual> ww

A majority of voters oppose the proposal to temporarily waive intellectual property rights on COVID-19 vaccines, a new Hill-HarrisX poll finds.¶ The survey comes as the Biden administration faces mounting pressure to support a proposal led by India and South Africa that would waive an international intellectual property agreement that protects pharmaceutical trade secrets.¶ Backers of the move argue it would enable lower-income countries to manufacture the vaccines themselves while those opposed say it could make the vaccine less safe and damper production in existing locations.¶ Fifty-seven percent of registered voters in the May 3-4 survey said they oppose the proposal to waive intellectual property rights on COVID-19 vaccines. By contrast, 43 percent of respondents said they support the proposal. ¶ Sixty-four percent of Republican voters along with 52 percent of both Democratic and independent voters said they oppose waiving the intellectual property rights of vaccines.¶ "This is a complex issue with a remarkably sophisticated understanding by the public. The tension is as follows: On one hand you have the need to protect the intellectual property rights of the scientists and companies that brought about the fastest vaccine in history, and will likely need to produce new versions of the shot even faster to battle evolving strains," Dritan Nesho, chief researcher and CEO of HarrisX, told Hill.TV.¶ "On the other hand there’s the need to save lives, reaching global heard immunity and providing access to the vaccine as broadly and equitably as as possible," Nesho continued.¶ "Today a majority of 57 percent of U.S. voters would like to protect the intellectual property of vaccine makers, but as more and more people are vaccinated in advanced economies, voter pressure for broader and more equitable distribution will rise," Nesho added. "Already we see Democrats and independents here split on the issue of whether or not to waive IP rights to provide greater access to the vaccines."¶ President Biden is expected to weigh in on the proposal at a World Trade Organization meeting on Wednesday.¶ The most recent Hill-HarrisX poll was conducted online among 939 registered voters. It has a margin of error of 3.2 percentage points.

#### Midterm success k2 long term climate initiatives

Piotrowski et al 20 [Matt Piotrowski and Emma McMahon and Joshua McBee and Kyle Saukas, 12-14-2020, “Biden’s Climate Path Through the 2022 Midterms” Climate Advisers, <https://climateadvisers.org/blogs/bidens-climate-path-up-to-the-2022-midterms/> ww

\*Figures omitted\*

Joe Biden ran on a climate change agenda and has laid out his plans for early action, but what might the ‘medium-term’ for climate action and the 2022 midterms look like?¶ Beyond 2021¶ Although the configuration of the current Senate is not yet decided, political operatives are already looking forward to the 2022 mid-term election. If Democrats do not win both special elections in Georgia in January 2021, they will not have the majority in the Senate, which, as noted in earlier blogs, will greatly hamper the Democrats’ legislative agenda and make wide-ranging climate legislation a virtual impossibility.¶ However, they could capture the majority in 2022. U.S. Senators serve six-year terms, meaning that the same seats are up for re-election on a rotating six-year schedule. The seats up for re-election in 2022 pose better opportunities for Democratic gains than did the elections in 2018 or 2020, with three vulnerable Republican seats (see Figure 1 below).¶ It is too soon to tell what will happen in the mid-term elections, but the most recent data show Republicans are well-positioned to take back the House. Still, some Democrats are confident they can hold onto the House. If Democrats win majorities in both houses of Congress in 2022, then the second half of the Biden administration’s term could, unusually, be more productive than his first. This would give him greater opportunity to pass comprehensive climate legislation, which could include a carbon tax, major investments in green technology and infrastructure, and regulation of the energy sector. If Republicans maintain their lead in the Senate, with or without a majority in the House, it is unlikely that any of these would pass during Biden’s presidency.¶ With Congress shifting its focus to the mid-term elections in 2022, the Biden administration will still take advantage of its ability to advance climate initiatives in the executive branch. Increasing the use of clean fuels through government procurement, particularly in the military, is one major goal. The U.S. government spends approximately $500 billion per year on procurement, providing a large opportunity to develop a zero-emission transportation fleet. There will also be opportunities in rewriting agency rules and regulations (President Trump rolled back more than 100 environmental rules), increasing research and development in programs such as the Department of Energy’s Advanced Research Projects Agency-Energy, and prioritizing the climate issue in diplomacy.¶ At the state and local level, Republicans performed better than expected in this year’s election, gaining seats in state legislatures, giving them the advantage in the redistricting process next year. Whichever party has the ability to redraw districts, which is done every 10 years, has the power to increase the number of districts in their favor. This dynamic may help Republicans retake the U.S. House of Representatives and hold onto the majority for some time as they did from 2010-18. In the map below, the Republicans hold both the legislatures and the governorships of the states in red.¶ These state-level legislatures and governorships could set the political map for a decade to come in Republicans’ favor. This could lead to more state-level opposition to President Biden’s executive actions. The recently failed attempt by Texas’ Attorney General to sue swing states whose electoral votes secured Biden’s victory that was supported by the Attorney Generals of 17 other states is an early-warning sign of state vs. federal animosity. Additionally, these state wins for Republicans could influence voting laws to favor Republicans to be elected at the Federal level, further frustrating Biden and future Democrats’ efforts to pursue ambitious climate legislation.

#### Extinction.

Kareiva 18 [Peter,Ph.D. in ecology and applied mathematics from Cornell University, director of the Institute of the Environment and Sustainability at UCLA, Pritzker Distinguished Professor in Environment & Sustainability at UCLA, et al., September 2018, “Existential risk due to ecosystem collapse: Nature strikes back,” Futures, Vol. 102, p. 39-50

In summary, six of the nine proposed planetary boundaries (phosphorous, nitrogen, biodiversity, land use, atmospheric aerosol loading, and chemical pollution) are unlikely to be associated with existential risks. They all correspond to a degraded environment, but in our assessment do not represent existential risks. However, the three remaining boundaries (climate change, global freshwater cycle, and ocean acidification) do pose existential risks. This is because of intrinsic positive feedback loops, substantial lag times between system change and experiencing the consequences of that change, and the fact these different boundaries interact with one another in ways that yield surprises. In addition, climate, freshwater, and ocean acidification are all directly connected to the provision of food and water, and shortages of food and water can create conflict and social unrest. Climate change has a long history of disrupting civilizations and sometimes precipitating the collapse of cultures or mass emigrations (McMichael, 2017). For example, the 12th century drought in the North American Southwest is held responsible for the collapse of the Anasazi pueblo culture. More recently, the infamous potato famine of 1846–1849 and the large migration of Irish to the U.S. can be traced to a combination of factors, one of which was climate. Specifically, 1846 was an unusually warm and moist year in Ireland, providing the climatic conditions favorable to the fungus that caused the potato blight. As is so often the case, poor government had a role as well—as the British government forbade the import of grains from outside Britain (imports that could have helped to redress the ravaged potato yields). Climate change intersects with freshwater resources because it is expected to exacerbate drought and water scarcity, as well as flooding. Climate change can even impair water quality because it is associated with heavy rains that overwhelm sewage treatment facilities, or because it results in higher concentrations of pollutants in groundwater as a result of enhanced evaporation and reduced groundwater recharge. Ample clean water is not a luxury—it is essential for human survival. Consequently, cities, regions and nations that lack clean freshwater are vulnerable to social disruption and disease. Finally, ocean acidification is linked to climate change because it is driven by CO2 emissions just as global warming is. With close to 20% of the world’s protein coming from oceans (FAO, 2016), the potential for severe impacts due to acidification is obvious. Less obvious, but perhaps more insidious, is the interaction between climate change and the loss of oyster and coral reefs due to acidification. Acidification is known to interfere with oyster reef building and coral reefs. Climate change also increases storm frequency and severity. Coral reefs and oyster reefs provide protection from storm surge because they reduce wave energy (Spalding et al., 2014). If these reefs are lost due to acidification at the same time as storms become more severe and sea level rises, coastal communities will be exposed to unprecedented storm surge—and may be ravaged by recurrent storms. A key feature of the risk associated with climate change is that mean annual temperature and mean annual rainfall are not the variables of interest. Rather it is extreme episodic events that place nations and entire regions of the world at risk. These extreme events are by definition “rare” (once every hundred years), and changes in their likelihood are challenging to detect because of their rarity, but are exactly the manifestations of climate change that we must get better at anticipating (Diffenbaugh et al., 2017). Society will have a hard time responding to shorter intervals between rare extreme events because in the lifespan of an individual human, a person might experience as few as two or three extreme events. How likely is it that you would notice a change in the interval between events that are separated by decades, especially given that the interval is not regular but varies stochastically? A concrete example of this dilemma can be found in the past and expected future changes in storm-related flooding of New York City. The highly disruptive flooding of New York City associated with Hurricane Sandy represented a flood height that occurred once every 500 years in the 18th century, and that occurs now once every 25 years, but is expected to occur once every 5 years by 2050 (Garner et al., 2017). This change in frequency of extreme floods has profound implications for the measures New York City should take to protect its infrastructure and its population, yet because of the stochastic nature of such events, this shift in flood frequency is an elevated risk that will go unnoticed by most people. 4. The combination of positive feedback loops and societal inertia is fertile ground for global environmental catastrophes. Humans are remarkably ingenious, and have adapted to crises throughout their history. Our doom has been repeatedly predicted, only to be averted by innovation (Ridley, 2011). However, the many stories of human ingenuity successfully addressing existential risks such as global famine or extreme air pollution represent environmental challenges that are largely linear, have immediate consequences, and operate without positive feedbacks. For example, the fact that food is in short supply does not increase the rate at which humans consume food—thereby increasing the shortage. Similarly, massive air pollution episodes such as the London fog of 1952 that killed 12,000 people did not make future air pollution events more likely. In fact it was just the opposite—the London fog sent such a clear message that Britain quickly enacted pollution control measures (Stradling, 2016). Food shortages, air pollution, water pollution, etc. send immediate signals to society of harm, which then trigger a negative feedback of society seeking to reduce the harm. In contrast, today’s great environmental crisis of climate change may cause some harm but there are generally long time delays between rising CO2 concentrations and damage to humans. The consequence of these delays are an absence of urgency; thus although 70% of Americans believe global warming is happening, only 40% think it will harm them (http://climatecommunication.yale.edu/visualizations-data/ycom-us-2016/). Secondly, unlike past environmental challenges, the Earth’s climate system is rife with positive feedback loops. In particular, as CO2 increases and the climate warms, that very warming can cause more CO2 release which further increases global warming, and then more CO2, and so on. Table 2 summarizes the best documented positive feedback loops for the Earth’s climate system. These feedbacks can be neatly categorized into carbon cycle, biogeochemical, biogeophysical, cloud, ice-albedo, and water vapor feedbacks. As important as it is to understand these feedbacks individually, it is even more essential to study the interactive nature of these feedbacks. Modeling studies show that when interactions among feedback loops are included, uncertainty increases dramatically and there is a heightened potential for perturbations to be magnified (e.g., Cox, Betts, Jones, Spall, & Totterdell, 2000; Hajima, Tachiiri, Ito, & Kawamiya, 2014; Knutti & Rugenstein, 2015; Rosenfeld, Sherwood, Wood, & Donner, 2014). This produces a wide range of future scenarios. Positive feedbacks in the carbon cycle involves the enhancement of future carbon contributions to the atmosphere due to some initial increase in atmospheric CO2. This happens because as CO2 accumulates, it reduces the efficiency in which oceans and terrestrial ecosystems sequester carbon, which in return feeds back to exacerbate climate change (Friedlingstein et al., 2001). Warming can also increase the rate at which organic matter decays and carbon is released into the atmosphere, thereby causing more warming (Melillo et al., 2017). Increases in food shortages and lack of water is also of major concern when biogeophysical feedback mechanisms perpetuate drought conditions. The underlying mechanism here is that losses in vegetation increases the surface albedo, which suppresses rainfall, and thus enhances future vegetation loss and more suppression of rainfall—thereby initiating or prolonging a drought (Chamey, Stone, & Quirk, 1975). To top it off, overgrazing depletes the soil, leading to augmented vegetation loss (Anderies, Janssen, & Walker, 2002). Climate change often also increases the risk of forest fires, as a result of higher temperatures and persistent drought conditions. The expectation is that forest fires will become more frequent and severe with climate warming and drought (Scholze, Knorr, Arnell, & Prentice, 2006), a trend for which we have already seen evidence (Allen et al., 2010). Tragically, the increased severity and risk of Southern California wildfires recently predicted by climate scientists (Jin et al., 2015), was realized in December 2017, with the largest fire in the history of California (the “Thomas fire” that burned 282,000 acres, https://www.vox.com/2017/12/27/16822180/thomas-fire-california-largest-wildfire). This catastrophic fire embodies the sorts of positive feedbacks and interacting factors that could catch humanity off-guard and produce a true apocalyptic event. Record-breaking rains produced an extraordinary flush of new vegetation, that then dried out as record heat waves and dry conditions took hold, coupled with stronger than normal winds, and ignition. Of course the record-fire released CO2 into the atmosphere, thereby contributing to future warming. Out of all types of feedbacks, water vapor and the ice-albedo feedbacks are the most clearly understood mechanisms. Losses in reflective snow and ice cover drive up surface temperatures, leading to even more melting of snow and ice cover—this is known as the ice-albedo feedback (Curry, Schramm, & Ebert, 1995). As snow and ice continue to melt at a more rapid pace, millions of people may be displaced by flooding risks as a consequence of sea level rise near coastal communities (Biermann & Boas, 2010; Myers, 2002; Nicholls et al., 2011). The water vapor feedback operates when warmer atmospheric conditions strengthen the saturation vapor pressure, which creates a warming effect given water vapor’s strong greenhouse gas properties (Manabe & Wetherald, 1967). Global warming tends to increase cloud formation because warmer temperatures lead to more evaporation of water into the atmosphere, and warmer temperature also allows the atmosphere to hold more water. The key question is whether this increase in clouds associated with global warming will result in a positive feedback loop (more warming) or a negative feedback loop (less warming). For decades, scientists have sought to answer this question and understand the net role clouds play in future climate projections (Schneider et al., 2017). Clouds are complex because they both have a cooling (reflecting incoming solar radiation) and warming (absorbing incoming solar radiation) effect (Lashof, DeAngelo, Saleska, & Harte, 1997). The type of cloud, altitude, and optical properties combine to determine how these countervailing effects balance out. Although still under debate, it appears that in most circumstances the cloud feedback is likely positive (Boucher et al., 2013). For example, models and observations show that increasing greenhouse gas concentrations reduces the low-level cloud fraction in the Northeast Pacific at decadal time scales. This then has a positive feedback effect and enhances climate warming since less solar radiation is reflected by the atmosphere (Clement, Burgman, & Norris, 2009). The key lesson from the long list of potentially positive feedbacks and their interactions is that runaway climate change, and runaway perturbations have to be taken as a serious possibility. Table 2 is just a snapshot of the type of feedbacks that have been identified (see Supplementary material for a more thorough explanation of positive feedback loops). However, this list is not exhaustive and the possibility of undiscovered positive feedbacks portends even greater existential risks. The many environmental crises humankind has previously averted (famine, ozone depletion, London fog, water pollution, etc.) were averted because of political will based on solid scientific understanding. We cannot count on complete scientific understanding when it comes to positive feedback loops and climate change.

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#### Innovation high now, but continued investments are crucial to meet the demands

Furstenthal et al 20 [(Laura Furstenthal serves healthcare clients globally as well as not-for-profit organizations, governments, and Nobel laureates, guiding innovation in strategy, organization, research and development, commercialization, and operations), et al. “Healthcare Innovation: Building on Gains Made through the Crisis.” McKinsey & Company, McKinsey & Company, 12 Nov. 2020, www.mckinsey.com/industries/pharmaceuticals-and-medical-products/our-insights/healthcare-innovation-building-on-gains-made-through-the-crisis. Accessed 6 Aug. 2021.] PW

Leaders should consider the lessons and achievements of the COVID-19 crisis in forging new innovation aspirations—and the mechanisms needed to execute them. Medicine is a living science that prides itself on continual discovery. In recent years, healthcare innovators have brought us artificial-intelligence algorithms that arguably read chest X-rays as well as or better than radiologists, inexpensive genomic sequencing that can guide personalized cancer treatments, and vast improvements in population health management through big data and analytics, to name just a few examples. While the COVID-19 pandemic has placed unparalleled demands on modern healthcare systems, the industry’s response has vividly demonstrated its resilience and ability to bring innovations to market quickly. But the crisis is likely far from over and the sector’s innovation capabilities must continue to rise to the challenges presented both by COVID-19 and the economic fallout from its spread. While many industries are facing unprecedented disruption, medicine and healthcare are uniquely affected given the nature of this crisis. For example, pharmaceutical companies racing to develop vaccines must also manage complex supply chains, new models for engagement with healthcare professionals, a largely remote workforce, and disruption to many clinical trials. Similarly, hospitals are caring for COVID-19 patients with evolving protocols while maintaining continuity of care for others, often against the backdrop of vulnerable staff, supply and equipment shortages, and, for some, accelerating financial headwinds. While the COVID-19 pandemic has placed unparalleled demands on modern healthcare systems, the industry’s response has vividly demonstrated its resilience and ability to bring innovations to market quickly. The effects of the pandemic on the industry continue to be profound. The shifts in consumer behavior, an [acceleration of established trends](https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/the-great-acceleration), and the likely deep and lasting economic impact will potentially affect healthcare companies no less—and quite possibly more—than those in other sectors. Around the world, more than [90 percent of executives](https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/innovation-in-a-crisis-why-it-is-more-critical-than-ever) we polled believe COVID-19 will fundamentally change their businesses, and 85 percent predict lasting changes in customers’ preferences. Among healthcare leaders, two-thirds expect this period to be the most challenging in their careers.1 To meet both the humanitarian challenge and the obligation to their stakeholders, leaders of healthcare organizations need to meet the innovation imperative. History tells us that organizations that invest in innovation during a crisis [outperform their peers in the recovery](https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/the-great-acceleration) (exhibit). What’s more, a crisis can create an urgency that rallies collaborative effort, breaks through organizational silos, and overcomes institutional inertia. Exhibit During the course of this year, the healthcare industry has produced inspiring examples of innovation in products, services, processes, and business and delivery models, often in partnership with other sectors. For example, Sheba Medical Center in Israel is working with TytoCare to keep COVID-19 patients in their homes by supplying them with special stethoscopes that both listen to their hearts and transmit images of their lungs to a care team that can intervene as appropriate.2 In the United States, Zipline, which specializes in delivering medical supplies to remote areas, quickly formed a partnership with Novant Health in North Carolina to distribute supplies to hospitals via drones.3 The adoption of telehealth has exploded, from 11 percent of consumers using it in 2019 to [46 percent in April 2020](https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/telehealth-a-quarter-trillion-dollar-post-covid-19-reality), and well more than half of healthcare providers polled indicate higher comfort with this care-delivery method than before. Given the speed of recent changes, it is likely that parts of the healthcare ecosystem will operate in different ways in the coming years. To keep pace with the industry’s evolution, healthcare leaders should consider assessing their organizations’ readiness to innovate at scale and whether the needed capabilities are in place. Our past research shows that successful innovation in large organizations stems from a commitment to eight principles and practices: aspire, choose, discover, evolve, accelerate, scale, extend, and mobilize. These [eight essentials of innovation](https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/the-eight-essentials-of-innovation), when applied as a group, enable businesses to innovate more successfully and [outperform their peers](https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/the-innovation-commitment). Here is how healthcare players can consider applying them to their unique context at this extraordinary time.

#### The plan sets a horrible precedent and discourages innovation where we need it the most

Heidt 5-10 [Amanda Heidt “Biden Administration Backs Vaccine Intellectual Property Waiver” Published: The Scientist, May 10, 2021] [https://www.the-scientist.com/news-opinion/biden-administration-backs-vaccine-intellectual-property-waiver-68751] [Heidt: Masters in Science Communication from UCSC, staff writer for The Scientist] || SM

In a sharp reversal of past policy, President Biden last week (May 5) came out in favor of a World Trade Organization proposal that would waive certain intellectual property protections around COVID-19 vaccines. The move, meant to boost the production of vaccines and address issues of inequity in their distribution, would reveal proprietary information held by companies designing the shots, although some proponents wonder whether the waiver is enough.

“This is a global health crisis, and the extraordinary circumstances of the COVID-19 pandemic call for extraordinary measures,” Katherine Tai, the US trade representative, says in a statement. “The Administration believes strongly in intellectual property protections, but in service of ending this pandemic, supports the waiver of those protections for COVID-19 vaccines.”

The proposal at the center of the argument was submitted to the World Trade Organization (WTO) last fall by India and South Africa, two countries currently beset by aggressive SARS-CoV-2 variants. India alone is reporting roughly 300,000 new infections each day, a tally that accounts for roughly half of the world’s new cases, according to The New York Times.

Both countries requested a waiver that would exempt WTO member countries from enforcing certain laws related to patents and industry trade secrets that are covered under the organization’s Trade-Related Aspects of Intellectual Property Rights (TRIPS) agreement. If approved unanimously, the waiver would give countries and companies access to vaccine ingredients and manufacturing processes, allowing drug companies worldwide to make generic versions of COVID-19 vaccines for distribution in developing countries that currently do not have access.

Anthony Fauci, President Biden’s chief medical adviser, also came out in support of the waiver, although the consensus among the President’s advisers was split, according to the Times. “I always respect the needs of the companies to protect their interests to keep them in business, but we can’t do it completely at the expense of not allowing vaccine that’s lifesaving to get to the people that need it,” Fauci tells the newspaper, adding: “You can’t have people throughout the world dying because they don’t have access to a product that rich people have access to.”

The White House’s decision to support the proposal angered pharmaceutical companies and prompted statements from other WTO member countries, the Associated Press reports. While the US had been a holdout under former President Donald Trump, other countries had also been lukewarm. In response to the US announcement last week, German chancellor Angela Merkel voiced her opposition through a government spokesperson, who stated that the ruling would cause “severe complications” for the production of vaccines.

Companies behind the world’s vaccines, such as Moderna and Pfizer, have already spoken out, with both announcing plans to increase their vaccine production in an effort to show that worldwide distribution can be done without the release of trade secrets. Moderna had also previously announced that it would not enforce its patents pertaining to COVID-19 research while the pandemic is ongoing.

Pharmaceutical patents and trade secrets are heavily guarded, and opponents to the measure in the US say that making these details public would hurt the bottom line of companies and undermine American competitiveness, all while doing nothing to expand the global supply of vaccines.

Geoffrey Porges, an investment analyst for the bank SVB Leerink, tells the Times that this ruling would set “a terrible, terrible precedent” and make companies think twice before developing products that could be usurped by the government. “It would be intensively counterproductive, in the extreme, because what it would say to the industry is: ‘Don’t work on anything that we really care about, because if you do, we’re just going to take it away from you.’”

Stephen Ubl, the CEO of the lobbying group PhRMA, says in a statement that the proposal “flies in the face of President Biden’s stated policy of building up American infrastructure and creating jobs by handing over American innovations to countries looking to undermine our leadership in biomedical discovery.”

#### Inevitable rapidly mutating pandemics – medical innovation key to solve

Sachs 14 [Professor of Sustainable Development, Health Policy and Management @ Columbia University [Jeffrey D. Sachs (Director of the Earth Institute @ Columbia University and Special adviser to the United Nations Secretary-General on the Millennium Development Goals) “Important lessons from Ebola outbreak,” Business World Online, August 17, 2014, <http://tinyurl.com/kjgvyro> ]

Ebola **is the latest of many** recent **epidemics**, also **including** AIDS, SARS, H1N1 **flu, H7N9 flu**, and others. AIDS is the deadliest of these killers, claiming nearly 36 million lives since 1981. Of course, even larger **and more** sudden epidemics are possible, such as the 1918 influenza during World War I, which claimed 50-100 million lives (far more than the war itself). And, though the 2003 SARS outbreak was contained, causing fewer than 1,000 deaths, the disease was on the verge of deeply disrupting several East Asian economies including China’s. **There are four crucial facts to understand about** Ebola and the other **epidemics**. First, **most emerging infectious diseases** are zoonoses, meaning that they **start in animal populations**, sometimes **with a genetic mutation that enables the jump to humans**. Ebola may have been transmitted from bats; HIV/AIDS emerged from chimpanzees; SARS most likely came from civets traded in animal markets in southern China; and influenza strains such as H1N1 and H7N9 arose from genetic re-combinations of viruses among wild and farm animals. New zoonotic diseases are inevitable as humanity pushes into new ecosystems (such as formerly remote forest regions); t**he** food industry creates **more** conditions for genetic recombination; and climate change scrambles natural habitats **and species interactions**. Second, **once a new infectious disease appears, its** spread through airlines, ships, megacities, and trade in animal products is likely to be extremely rapid. **These epidemic diseases are new markers of globalization, revealing** through their chain of death how **vulnerable the world has become** from the pervasive movement of people and goods. Third, the poor are **the first to suffer and** the worst affected. **The** rural **poor live closest to the infected animals that first transmit the disease**. They often hunt and eat bushmeat, leaving them vulnerable to infection. **Poor**, often illiterate, **individuals are generally unaware of how infectious diseases** -- especially unfamiliar diseases -- are transmitted, making them much more likely to become infected and to infect others. Moreover, given poor nutrition and lack of **access to basic** health services, their weakened **immune** systems are **easily** overcome by infections **that better nourished** and treated individuals **can survive**. And “de-medicalized” conditions -- with few if any professional health workers to ensure an appropriate public-health response to an epidemic (such as isolation of infected individuals, tracing of contacts, surveillance, and so forth) -- make initial outbreaks more severe. Finally, **the required** medical responses, including diagnostic tools and effective medications and vaccines, inevitably lag behind the emerging diseases. In any event, such tools must be continually replenished. This requires cutting-edge biotech**nology, immunology, and** ultimately **bioengineering** to create **large-scale** industrial responses (such as millions of doses of vaccines or medicines in the case of large epidemics). The AIDS crisis, for example, called forth tens of billions of dollars for research and development -- and similarly substantial commitments by the pharmaceutical industry -- to produce lifesaving antiretroviral drugs at global scale. Yet each breakthrough **inevitably** leads to **the** pathogen’s mutation, rendering previous treatments less effective. There is no ultimate victory, only a constant arms race **between humanity and disease-causing agents**.

#### Disease is a non-linear, existential risk---encompasses AND outweighs other threats

Pamlin & Armstrong 15, Dennis Pamlin, Executive Project Manager Global Risks, Global Challenges Foundation, and Stuart Armstrong, James Martin Research Fellow, Future of Humanity Institute, Oxford Martin School, University of Oxford, February 2015, “Global Challenges: 12 Risks that threaten human civilization: The case for a new risk category,” Global Challenges Foundation, p.30-93, https://api.globalchallenges.org/static/wp-content/uploads/12-Risks-with-infinite-impact.pdf

4 Global A pandemic (from Greek πᾶν, pan, “all”, and δῆμος demos, “people”) is an epidemic of infectious disease that has spread through human populations across a large region; for instance several continents, or even worldwide. Here only worldwide events are included. A widespread endemic disease that is stable in terms of how many people become sick from it is not a pandemic. 260 84 Global Challenges – Twelve risks that threaten human civilisation – The case for a new category of risks 3.1 Current risks 3.1.4.1 Expected impact disaggregation 3.1.4.2 Probability Influenza subtypes266 Infectious diseases have been one of the greatest causes of mortality in history. Unlike many other global challenges pandemics have happened recently, as we can see where reasonably good data exist. Plotting historic epidemic fatalities on a log scale reveals that these tend to follow a power law with a small exponent: many plagues have been found to follow a power law with exponent 0.26.261 These kinds of power laws are heavy-tailed262 to a significant degree.263 In consequence most of the fatalities are accounted for by the top few events.264 If this law holds for future pandemics as well,265 then the majority of people who will die from epidemics will likely die from the single largest pandemic. Most epidemic fatalities follow a power law, with some extreme events – such as the Black Death and Spanish Flu – being even more deadly.267 There are other grounds for suspecting that such a highimpact epidemic will have a greater probability than usually assumed. All the features of an extremely devastating disease already exist in nature: essentially incurable (Ebola268), nearly always fatal (rabies269), extremely infectious (common cold270), and long incubation periods (HIV271). If a pathogen were to emerge that somehow combined these features (and influenza has demonstrated antigenic shift, the ability to combine features from different viruses272), its death toll would be extreme. Many relevant features of the world have changed considerably, making past comparisons problematic. The modern world has better sanitation and medical research, as well as national and supra-national institutions dedicated to combating diseases. Private insurers are also interested in modelling pandemic risks.273 Set against this is the fact that modern transport and dense human population allow infections to spread much more rapidly274, and there is the potential for urban slums to serve as breeding grounds for disease.275 Unlike events such as nuclear wars, pandemics would not damage the world’s infrastructure, and initial survivors would likely be resistant to the infection. And there would probably be survivors, if only in isolated locations. Hence the risk of a civilisation collapse would come from the ripple effect of the fatalities and the policy responses. These would include political and agricultural disruption as well as economic dislocation and damage to the world’s trade network (including the food trade). Extinction risk is only possible if the aftermath of the epidemic fragments and diminishes human society to the extent that recovery becomes impossible277 before humanity succumbs to other risks (such as climate change or further pandemics). Five important factors in estimating the probabilities and impacts of the challenge: 1. What the true probability distribution for pandemics is, especially at the tail. 2. The capacity of modern international health systems to deal with an extreme pandemic. 3. How fast medical research can proceed in an emergency. 4. How mobility of goods and people, as well as population density, will affect pandemic transmission. 5. Whether humans can develop novel and effective anti-pandemic solutions.

### 1NC – CP

#### Text: The member nations of the world trade organization should reform their price control polices for Covid-19 Vaccines

#### The counterplan solves COVID vaccine access, countries are trying now but WTO solidarity is key

Karim 20 [Safura Abdool Karim “COVID-19 vaccine affordability and accessibility” Published: The Lancet, Volume 396, Issue 10246, p 238, July 25, 2020] [https://doi.org/10.1016/S0140-6736(20)31540-3] [Karim: SAMRC Centre for Health Economics and Decision Science, Wits School of Public Health, University of Witwatersrand, Johannesburg 2050, South Africa] || SM

The need to ensure the affordability of any future COVID-19 vaccine is gaining increasing attention. Although there is support for bulk purchasing, making vaccines affordable is fraught with difficulties, particularly for the so-called missing middle countries that are not eligible for aid from Gavi, The Vaccine Alliance or other aid but lack the resources to produce their own vaccines or afford patent-protected drugs.

For these countries, **price controls**—regulations that would cap or set prices—**provide an effective approach to vaccine affordability and thus accessibility**. This has led to the adoption of price controls in Chile and some other low-income and middle-income countries (LMICs). **However, if only LMICs impose price controls**, vaccine manufacturers might opt to not sell or supply adequate quantities, prioritising high-profit markets instead.

Although price controls only apply to domestic producers, they provide leverage for LMIC governments to negotiate lower prices. Since many of the COVID-19 vaccine developers are in the USA, **a US price control would have a big impact**. These price controls could enable LMIC governments to purchase the vaccine, **ensuring faster access** for all those who need it and not just for those who can afford it.

**However**, the US Government currently prioritises profits, stating “the priority is to get vaccines and therapeutics. Price controls won't get us there”. **This stance will hinder efforts to control the pandemic**, both within the USA and globally. Multiple approaches, including price controls, are needed to ensure an effective vaccine is widely affordable.

### 1NC – CP

#### The Islamic Republic of Pakistan should:

* Eliminate its nuclear arsenal
* Submit a request to rejoin the Republic of India

#### The Republic of India should:

* Accept Pakistan’s request to rejoin the nation.
* Establish a secular government and strictly enforce a standard of anti religious extremism
* Repeal any legislation that is not in accordance with the aforementioned standard of secularism
* Initially require equal representation of previous Pakistani and Indian officials
* Build in anti-terror countermeasures and establish a nuclear regulatory body for addressing nuclear terrorism that issues binding recommendation on security reforms

#### Reunite solves

Katju 17 – Justice Markandey Katju is former Judge, Supreme Court of India and former Chairman, Press Council of India. (Markandey, “India And Pakistan Must Reunite For Their Mutual Good,” 11/04/17, <https://www.huffingtonpost.in/markandey-katju/india-and-pakistan-must-reunite-for-their-mutual-good_a_22033158/>, *HuffPost*//al)

Indian Prime Minister Atal Bihari Vajpayee's acclaimed Lahore bus visit and the Lahore Declaration in February 1999 was followed by the Kargil War in May the same year. Similarly, Prime Minister Modi's Lahore visit, with all its bonhomie, hoopla and fanfare was followed by the attack by militants on the Pathankot Air Force base and later on the Indian consulate in Mazhar-e-Sharif. There are many people who want improvement of relations between India and Pakistan. They say that if France and Germany can live as good neighbours after long years of animosity, why cannot we? In my opinion such people are living in a fool's paradise, and they forget certain basic facts. The very purpose of creating Pakistan was that there should be no peace but enmity and hostility. There can never be good relations between India and Pakistan because once that happens, the very raison d'être of Pakistan will disappear. Pakistan was created by the British as a theological state on the basis of the bogus two-nation theory—that Hindus and Muslims must comprise two separate nations, so that they may keep fighting each other. Thereby, two aims of the British were achieved: 1. Our subcontinent remains weak, and does not emerge as a modern industrial giant or a rival to the West, like China—even though we have all the potential with our huge pool of engineers, technicians, scientists, and immense raw materials. 2. India (of which Pakistan is really a part) keeps spending billions of dollars on arms purchases from Western manufacturers—money which could and should have been spent on the welfare of our people to reduce poverty, unemployment, malnourishment, lack of healthcare, etc. So all this talk of "improving" relations between India and Pakistan is humbug and cant. There can never be good relations between India and Pakistan because once that happens, the very raison d'être of Pakistan will disappear. How was Pakistan created? For this we have to delve into history. Up to 1857, there were few communal problems in India. Most communal riots and animosity began after 1857. No doubt, even before 1857, there were differences between Hindus and Muslims, but they would help each other like brothers and sisters. Hindus used to participate in Eid celebrations, and Muslims in Holi and Diwali. The Muslim rulers like the Mughals, Nawab of Awadh and Murshidabad, Tipu Sultan, etc were totally secular; they organised Ramlilas, participated in Holi, Diwali, etc. Ghalib's fond letters to his Hindu friends like Munshi Shiv Narain Aram, Har Gopal Tofta, etc attest to the affection between Hindus and Muslims at that time. In 1857, the "Great Mutiny" broke out, in which the Hindus and Muslims jointly fought against the British. This shocked the British government so much that after suppressing the Mutiny, they decided to start the policy of divide and rule (see online "History in the Service of Imperialism" by B.N. Pande, in which letters from the Secretary of State for India in London to the British Viceroy in Delhi, asking him to divide Hindus and Muslims are quoted). All communalism started after 1857, artificially engineered by the British authorities. The British collector would secretly call the Hindu Pandit, pay him money, and tell him to speak against Muslims, and similarly he would secretly call the Maulvi, pay him money, and tell him to speak against Hindus. This communal poison was injected into our body politic year after year and decade after decade. [The British] divided us so that we may keep fighting each other and remain backward and weak, and not emerge as a modern, powerful industrial state... In 1909, the "Minto-Morley Reforms" introduced separate electorates for Hindus and Muslims. The idea was propagated that Hindi is the language of Hindus, while Urdu of Muslims (although Urdu was the common language of all educated people, whether Hindu, Muslim or Sikh in large parts of India up to 1947). The RSS and Hindu Mahasabha were created by the British to spread hatred of Muslims, and the Muslim League was created by them to spread hatred of Hindus (the Congress party was also created by the British through their agent A.O.Hume, and its leadership later taken over by their agent Gandhi, who—in my opinion—ensured that the genuine independence struggle initiated by Bhagat Singh, Surya Sen, etc was diverted to a harmless non violent direction so as not to harm British interests). The Aligarh Muslim University and Benaras Hindu University were set up to further this communal divide. Our history books were distorted and falsified by the British and their agents to create animosity and hatred between Hindus and Muslims. Thus, Tipu Sultan, who was a thoroughly secular ruler, who used to give annual grants to 156 Hindu temples, was depicted as a bigot and oppressor of Hindus (refer again to History in the Service of Imperialism"). All this vicious propaganda resulted in the partition of 1947, which created a fake, artificial theocratic nation called Pakistan (see my article "The Truth About Pakistan"). Nation states arose in Europe around the 16th century because of the rise of modern industry. Modern industry, unlike the feudal handicrafts industry, requires a big market for its goods and a large area from where it can get raw materials. The creation of a state based on religion destroys the very basis of a nation, because it cuts off industries from markets and raw materials. We were befooled by the British into thinking that we are enemies, but how much longer must we remain befooled? British imperialism created India as a big administrative unit. The British policy was to prohibit the growth of heavy industry in India; otherwise, the Indian industry, with its cheap labour, would have become a powerful rival to British industry. When the British left India, they divided us so that we may keep fighting each other and remain backward and weak, and not emerge as a modern, powerful industrial state (for which we have now all the potential), and instead remain a market for their arms industries. This was the real reason for creating Pakistan. I submit that Pakistan was doomed from its very inception; firstly, because there is such tremendous diversity in our subcontinent that only secularism can work here, and secondly, because a modern nation cannot be based on religion (because this will cut it off from its markets and raw materials). If this theory, that religion can be the basis of a nation, is accepted then logically England should be partitioned into at least about eight states. The majority in England are Anglican Protestant Christians, but there are many Scottish Presbyterians and other kinds of Protestants, Catholics, Hindus, Muslims, Jews, etc. Similarly, France has a sizeable Muslim population (descendants of North African Arabs belonging to the former French colonies in North Africa) and Germany has many Turks. The French and German Muslims, and people of other religions too, should then be given separate states (if the two-nation theory is accepted as valid). I am confident... India and Pakistan (and Bangladesh) will reunite under a strong, secular government which does not tolerate religious extremism, whether Hindu or Muslim, and crushes with it with an iron hand. Anyone can see that this will create chaos. Hardly any country can survive if this theory is accepted because in almost every country there are people of different religions. And in the Indian subcontinent secularism is all the more vital in view of the tremendous diversity here (because the Indian subcontinent is broadly a country of immigrants, as I have pointed out in my article "What is India?" and in this speech. We can see the result of creating a theocratic state (Pakistan) in which chaos and religious extremism is prevailing so that many people cannot lead normal lives. Apart from the minorities (Hindus, Christians, Sikhs, etc), Ahmadis, Shias, etc are also persecuted, and intolerance and terrorism is the order of the day. In India, too, certain vested interests thrive on communalism. So secularism is the only policy which is suitable to our subcontinent. I am confident that with the passage of time people, both in India and Pakistan, will realise the truth in what I am saying, and India and Pakistan (and Bangladesh) will reunite under a strong, secular government which does not tolerate religious extremism, whether Hindu or Muslim, and crushes with it with an iron hand. Secularism does not mean that one cannot practice religion. It means that religion is a private affair, unconnected with the state—which will have no religion. What is Pakistan? It is Punjab, Sindh, Baluchistan and NWFP. All these were part of India since Mughal times. When I meet Pakistanis, we speak in Hindustani, we look like each other, share the same culture, and feel no difference between ourselves. We were befooled by the British into thinking that we are enemies, but how much longer must we remain befooled? How much longer must blood flow in religious violence in Quetta, Karachi, Gujarat, Kashmir etc.? How much longer must our poor people pay to buy billions of dollars of foreign arms to fight each other? Indian reunification is an idea whose time has come. This idea must be spread by all patriotic people in the subcontinent, and elsewhere. Those who oppose the idea of reunification say it is only a pipe dream. But when Mazzini proposed unification of Italy his idea too was initially regarded as a pipe dream, but this dream became a reality later under Cavour and Garibaldi. Germany was united by Bismarck. Many people say that we were divided in 1947, and much water has flowed under the bridge since then. But Germany was united in 1990 after being divided for 45 years. Vietnam was united in 1975 after being divided for 30 years. China has not yet recognised Taiwan, though separated from it since 1945. Italy was united in 1861. Many people say that we cannot unite because there is too much religious extremism on both sides. I submit that this extremism is artificially created, and will subside and disappear once we are reunited under a strong secular government which, while upholding religious freedom, does not tolerate religious extremism, bigotry or fanaticism, and crushes it with an iron hand. Most people want to live in peace and harmony.

# Case

### 1AR – No

#### No 1ar theory –

#### 1] Time skew – Forces me to answer the shell, which distracts from substance – substantive clash is k2 education and 1ar theory distracts from it.

#### 2] Judge intervention – I only have 1 speech to answer it and no 3NR which means that the judge has to intervene and decide if my answers were good enough after taking into account to 2ars lies.

#### 3] Reciprocity – I only have once chance to respond after it is introduced while they have two chances

#### 4] Persuasive spin in the 2ar appeals to judges more ows on judge psychology bc they will always win that debate

#### 5] DTA Solves – they can indict the arguments that are abusive and I have strategic options to respond

### 1nc – impact

#### Nuclear war doesn’t cause extinction – takes millions of warheads, explosions don’t hit every part of the planet, and expert consensus proves

Turchin 2014, Alexei Turchin is an expert of global catastrophes and a Reasearch Fellow in Foundation "Science for longer life". Nick Bostrom and Michael Anissimov also helped Turchin with his paper. Nick Bostrom is a Professor of Philosophy at Oxford University, the Director of the Future of Humanity Institute, and the Director of the Programme on the Impacts of Future Technology. Michael Anissimov is a writer for Popular Mechanics, Popular Science, and other popular news outlets. (“Risks of human extinction in the XXI century”, http://www.scribd.com/doc/6250354/Risks-of-human-extinction-in-the-XXI-century, 2014) Kerwin

There is a large quantity of research on nuclear weapons and the consequences of nuclear conflict. Here we can offer the reader only a short and incomplete review of the basic conclusions considered exclusively from the point of view of whether nuclear conflict might lead to complete human extinction. I will notice that the considerable part of the information on the nuclear weapon is still classified, and so suggested conclusions cannot be absolutely credible. A classic example of threat to human civilization and to the existence of mankind is threat of nuclear war. Usually it is said about nuclear war, that it will result in ((destruction of all terrestrial life». However, this statement is a complete exaggeration. The nuclear weapon has three ways in which it could cause global destruction: direct strike of all area of the Earth, radioactive contamination of the entire Earth, and the effects of “nuclear winter Further we will show, that though each of these effects can lead in special circumstances to human extinction, the typical nuclear war, which is the most likely disaster, will not result in full human extinction (though hundreds of millions or even a couple billion may die in the aftermath). Classical nuclear war does not assume attack to all places of residing of people, but only on the opponent and its allies and so cannot lead to the extinction of mankind by the direct damage effects of the nuclear weapon. However, it is possible to consider a highly hypothetical situation when the nuclear attack is put in all places of residing of people. We will estimate, what quantity of warheads is necessary to destroy all people without an exception in case of nuclear attacks in regular space intervals and simultaneously on all surface of the Earth. Destruction of all people on a land would need not less (and it is considerably more) than 100 000 warheads of a megaton class. (If to consider, that one warhead cover the area in 1000 sq. km which is probably overestimated. The guaranteed destruction will demand much bigger number of warheads as even around explosion epicenter in Hiroshima were survived - in 500 meters from an explosion point.) At the same time, huge sites of a land are uninhabited. It is intelligent to assume, that 100 000 warheads will put people on a side survival though will not destroy all the people, as there are ships, planes, the casual survived and underground refuges. The guaranteed destruction of all people, probably, will demand millions warheads. It is necessary to notice, that on peak of cold war leading powers possessed quantity of warheads of an order 100 000, and the saved up stocks of plutonium (2000 tons, though it is not “weapon” grade plutonium, that is, pure plutonium-239 on isotope structure; however, the tests conducted in the USA have shown, that not weapon plutonium can also be used for nuclear explosions, but with a smaller exit of energy) allow to make several hundreds thousand warheads. At the same time, any scenario of nuclear war does not assume uniform blow on all area of a planet. On the other hand, it is theoretically possible to create such quantity of bombs and delivery systems, to strike to all planet area. Other researchers also come to similar conclusions - that nuclear war in itself cannot lead to human extinction. Besides, there are no publications which would specify in risks of full human extinction as a result of direct influence of nuclear explosions of usual capacity (instead of the subsequent effects in the form of radioactive contamination and nuclear winter.)

### AT – IPR Slowed Vax Dev

#### IPR was key to getting the incentive to develop the Covid VAX – there is no evidence that it hindered its development

Noonan 20[Kevin E. Noonan PhD, is partner at McDonnell Boehnen Hulbert & Berghoff LLP and chair of the firm’s Biotechnology & Pharmaceuticals Practice Group., 11-6-2020, “Protecting Intellectual Property for COVID-19 Innovations” PharmTech <https://www.pharmtech.com/view/protecting-intellectual-property-for-covid-19-innovations> ww

The current COVID-19 pandemic is the most serious worldwide infectious event since the influenza pandemic of 1918. So far, the number of infections and deaths has not reached levels seen during the “Spanish flu” pandemic. However, modern travel and global trade (and new factors such as social media, whether for good or ill) have increased risks, and awareness of those risks, throughout the world.¶ The economic and social consequences of the COVID-19 pandemic are also much more serious today than they were a century ago. Although some naysayers might disagree, the economy is global, and disruptions in one country or one part of the world tend to affect some or all others. Equally, the pandemic has created a need for research into better ways of detecting infections, preventing them by vaccines, and treating them more effectively. The adage that “an ounce of prevention is worth a pound of cure” applies critically to the COVID-19 pandemic.¶ Throughout most of the world, and particularly in the United States, patents provide incentives for the development of medicines, including vaccines, and protect the developers’ investments of time and resources. The severity of the COVID pandemic, and the concomitant need for both treatments and vaccines, has increased the need for the US patent system to respond to the disruptions created by the pandemic.¶ Some have voiced concerns that intellectual property (IP) protection for COVID-19 vaccines and therapies would inhibit their development or availability. Advocates for IP protection for COVID-19 vaccines and therapies counter that IP protection will be vital to the development of innovative treatments, tests and vaccines. They also point out that the federal government is empowered to prevent any inhibition of vaccine and treatment availability.¶ This article will examine actions taken by the US Patent and Trademark Office (USPTO) to facilitate patent procurement for IP related to COVID-19, and focus on the pros, cons, and considerations of IP protection for treatments, vaccines, tests and other technology. As with any subject of significant public interest and concern, opinions may differ, but public spiritedness should prevail, as it has so far in the face of the dangers posed by the SARS-CoV-2 virus.¶ COVID patent procurement¶ Throughout spring 2020, the USPTO announced a number of programs and revisions to existing rules to reduce the negative effects of the SARS-CoV-2 virus on the US population.¶ In mid-March, the Office issued an announcement that the pandemic qualified as an “extraordinary situation” under PTO Rules in Parts 1 and 2 of Title 37 of the Code of Federal Regulations; Patents, Trademarks, and Copyrights (37 CFR 1.183 and 37 CFR 2.146) (1) and that the Office would waive petition fees related to delays in an applicant’s or party’s timely response that resulted in abandonment or termination of a proceeding, provided that the applicant could attest that the delay was caused by COVID. These waivers were permitted with regard to USPTO rules but did not extend to legal timeline requirements.¶ Two weeks later, after President Trump declared a national emergency caused by COVID-19, the Office extended deadlines for submissions that would require the payment of certain fees, moving them from March 27 to April 30, under provisions of the Coronavirus Aid, Relief, and Economic Security (CARES) Act. These extensions also applied to deadlines in the Patent Trial and Appeal Board (PTAB) as well as in the Examination Division. Shortly thereafter, the Office suspended requirements for an original signature in certain types of correspondence to the USPTO.¶ On April 28, 2020, the Office extended deadlines until May 31, 2020 or June 1, 2020 (depending on the deadline). On May 27, 2020, it extended them again, this time until July 1, 2020 for small and micro-entities only, a category that includes individual inventors, universities, and small businesses with fewer than 50 employees.Finally, on June 29, 2020, the Office pushed deadlines back yet again, giving small and micro-entities until September 30, 2020 to comply.¶ In May, the USPTO also launched a Prioritized Examination Pilot Program that would permit an applicant who qualified for small (or micro) entity status to apply for existing “fast track” examination programs (which reach a patentability determination within six months) without paying the increased fees usually required for such filings for COVID-related applications.¶ COVID enforcement and licensing¶ The potential for intellectual property issues or disputes to inhibit development or distribution of COVID-19 vaccines or treatment have been voiced in some quarters. A number of critics believe that IP issues or disputes would inhibit development or distribution of COVID vaccines or treatments (2). Some have called for individuals or organizations that develop COVID-19 treatments, tests, vaccines, or technology to voluntarily (or under duress) refrain from asserting IP rights. For example, in spring 2020, several universities and companies in the high-tech sector proposed the “Open COVID Pledge,” to “make our intellectual property available free of charge for use in ending the COVID-19 pandemic and minimizing the impact of the disease.”¶ So far, this pledge and other efforts to prevent IP protection for COVID technology have failed to gain traction. In fact, Pfizer CEO Albert Bourla called the pledge and similar proposals “nonsense” and “dangerous,” tantamount to saying ‘If you have a discovery, we are going to take your [intellectual property].’ (3)¶ Bouria’s response has been echoed widely by pharmaceutical industry executives, government leaders, and politicians who understand the cost and challenge entailed by drug development. As Jon Soderstrom, managing director of Yale University’s Office of Cooperative Research noted, “The system is working. Dozens of companies and universities are now investigating COVID-19 vaccines, and many more are researching treatments. If we strip away intellectual property rights, the system will break down, and we’ll find ourselves farther from ending our global health crisis…” (4).¶ Experts questioned the idea that IP would pose a barrier to vaccine development. In fact, Francis Gurry, former director general of the World Intellectual Property Organization(WIPO) noted that the main barriers to a vaccine were scientific and technical, that no vaccine has been identified, and that there was no evidence that IP protection was a barrier to vaccine development (5).¶ In fact, those in favor of IP protection for COVID-19 vaccines, treatments, tests and technologies argue that IP protection laws should be strengthened to provide incentives for innovation and investment in products such as vaccines which are, by definition, unpredictable, risky, and expensive to develop. Jan Fischer, former Prime Minister of the Czech Republic stated that, if a COVID-19 vaccine is produced, “robust IP laws” should be given some credit (6). Leaders from the International Chamber of Commerce (ICC) also voiced support for strong IP protection, which, they noted, already protects the public from counterfeit and adulterated drugs and from stockpiling medicines in developing countries (7).¶ Fueling concerns about vulnerabilities for IP protection for COVID-19 technology is the fact that the federal government is empowered to either “march-in” to license any patents or intellectual property by universities under the Bayh-Dole Act (8), or to invoke compulsory licensing provisions enacted during the Second World War (9).¶ There is a some recent precedent for these worries. The government took the latter course shortly after the September 11, 2001 attacks, when it was feared that weaponized anthrax had been sent members of Congress. Once it received signals that Bayer might not be able or willing to provide adequate supplies of the anthrax treatment, ciproflaxin (10), the government threatened the company with just this type of intervention.¶ In a move that may have been intended to forestall government intervention by march-in rights or otherwise, several universities—including Stanford, Harvard, and Massachusetts Institute of Technology, and 14 other research institutions—introduced the COVID-19 Technology Development Framework, which permits “nonexclusive, royalty-free licensing of intellectual property rights for available COVID-19 related technologies during the pandemic and for a short time after it ends” (11).¶ The group’s concerns may have been premature, but legitimate concerns remain. Attorneys General from more than 30 states (Alaska, Arizona, Connecticut, Delaware, Hawaii, Idaho, Illinois, Iowa, Kansas, Maine, Maryland, Massachusetts, Michigan, Minnesota, Nebraska, Nevada, New Mexico, New York, North Carolina, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, South Dakota, Utah, Vermont, Virginia, and Washington, as well as the District of Columbia and Guam) have petitioned the federal government to exercise its Bayh-Dole “march-in” rights to permit third party manufacturers to make Gilead Sciences’ COVID therapeutic drug, remdesivir (approved by FDA on Oct. 22, 2020 [12]), arguing that the cost is too high and supplies inadequate.¶ Spearheaded by California Attorney General XavIer Becerra and Louisiana Attorney General Jeff Landry, the letter,sent to Health and Human Services Secretary Alex M. Azar, National Institutes of Health Director Francis S. Collins, and FDA Commissioner Stephen Hahn, cites news sources to support its claims of high prices and short supplies of the therapy (13).¶ As an alternative to federal exercise of march-in rights, the letter proposes that the government delegate this authority to the states (while not providing any statutory authority for this move). Its allegations of exorbitant pricing were based on news reports about an academic economic study (14) and supported by allegations regarding government funding (again, limited to news reports [15,16]).¶ In response to this letter, Gilead maintained that supplies of remdesivir are adequate, and that the company is investing more than $1 billion to increase manufacturing capacity for the treatment. The company also argued that following the attorneys generals’ proposals would have no impact on either supplies or prices, since it would take six to 12 months for generic competitors to produce more doses than Gilead is proposing to be able to market.(17)¶ Nothing has come of the attorneys generals’ proposals so far, and indications are that nothing is likely to come of it. At this point, several companies are actively developing vaccines (including Moderna, Pfizer, and BioNTech) or treatments (Regeneron). Vaccine costs of $20 to $40 per dose have been proposed, at least during the pandemic.¶ In addition to the successful development of a safe vaccine, much bigger barriers to widespread (if not universal) vaccination are the manufacturing, distribution, financing, and infrastructure required to support these efforts. While it seems the world has been consumed by this virus forever, the pandemic has been raging for only nine months in the US so far, and for less than a year globally.The efforts being applied globally to develop vaccines, treatments, and better tests and technology in response to COVID-19 have been impressive. We can hope that, ultimately, these efforts will prove to be successful.¶ Intellectual property protection has a role to play in these efforts. Past experience and recent developments suggest that protecting IP for vaccines, therapies, and technologies to fight COVID-19 will have a positive impact, and advance the cause of eradicating, or at least treating, and preventing this disease.

### Solvency – Not Patents

#### Waivers don’t solve – the issue is in lack of materials. Moderna literally tried the aff

Tabarrok 21

Alex Tabarrok (Bartley J. Madden Chair in Economics at the Mercatus Center and am a professor of economics at George Mason University). “Patents are Not the Problem!” Marginal Revolution. 6 May 2021. JDN. https://marginalrevolution.com/marginal revolution/2021/05/ip‐is‐not‐the‐constraint.html [Brackets in original] || cut SM

Patents are not the problem. All of the vaccine manufacturers are trying to increase supply as quickly as possible. Billions of doses are being produced–more than ever before in the history of the world. Licenses are widely available. AstraZeneca have licensed their vaccine for production with manufactures around the world, including in India, Brazil, Mexico, Argentina, China and South Africa. J&J’s vaccine has been licensed for production by multiple firms in the United States as well as with firms in Spain, South Africa and France. Sputnik has been licensed for production by firms in India, China, South Korea, Brazil and pending EMA approval with firms in Germany and France. Sinopharm has been licensed in the UAE, Egypt and Bangladesh. Novavax has licensed its vaccine for production in South Korea, India, and Japan and it is desperate to find other licensees but technology transfer isn’t easy and there are limited supplies of raw materials:

Virtually overnight, [Novavax] set up a network of outside manufacturers more ambitious than one outside executive said he’s ever seen, but they struggled at times to transfer their technology there amid pandemic travel restrictions. They were kicked out of one factory by the same government that’s bankrolled their effort. Competing with larger competitors, they’ve found themselves short on raw materials as diverse as Chilean tree bark and bioreactor bags. They signed a deal with India’s Serum Institute to produce many of their COVAX doses but now face the realistic chance that even when Serum gets to full capacity — and they are behind — India’s government, dealing with the world’s worst active outbreak, won’t let the shots leave the country.

Plastic bags are a bigger bottleneck than patents. The US embargo on vaccine supplies to India was precisely that the Biden administration used the DPA to prioritize things like bioreactor bags and filters to US suppliers and that meant that India’s Serum Institute was having trouble getting its production lines ready for Novavax. CureVac, another potential mRNA vaccine, is also finding it difficult to find supplies due to US restrictions (which means supplies are short everywhere). As Derek Lowe said:

Abolishing patents will not provide more shaker bags or more Chilean tree bark, nor provide more of the key filtration materials needed for production. These processes have a lot of potential choke points and rate‐limiting steps in them, and there is no wand that will wave that complexity away.

Technology transfer has been difficult for AstraZeneca–which is one reason they have had production difficulties–and their vaccine uses relatively well understood technology. The mRNA technology is new and has never before been used to produce at scale. Pfizer and Moderna had to build factories and distribution systems from scratch. There are no mRNA factories idling on the sidelines. If there were, Moderna or Pfizer would be happy to license since they are producing in their own factories 24 hours a day, seven days a week (monopolies restrict supply, remember?). Why do you think China hasn’t yet produced an mRNA vaccine? Hint: it isn’t fear about violating IP. Moreover, even Moderna and Pfizer don’t yet fully understand their production technology, they are learning by doing every single day. Moderna has said that they won’t enforce their patents during the pandemic but no one has stepped up to produce because no one else can.

### Solvency – Root Cause - Rutschman

#### Covid waivers fail – they arent able to address the root of vaccine scarcity, the just disclose the recipe not the process of making the vaccine.

Rutschman and Barnes-weise 5-5 [Ana Santos Rutschman, *Assistant Professor of Law at Saint Louis University School of Law*, Julia Barnes-Weise, Executive Director of the Global Healthcare Innovation Alliance Accelerator., 5-5-2021, “The COVID-19 Vaccine Patent Waiver: The Wrong Tool for the Right Goal” Harvard Law Petrie-Flom Center, Accessed 8-14-2021, <https://blog.petrieflom.law.harvard.edu/2021/05/05/covid-vaccine-patent-waiver/> ww

As the toll of COVID-19 continues to increase in many countries in the Global South, there has been a renewed push to address the problem of vaccine scarcity through a waiver of patent rights. Calls for waivers have been recurring throughout the pandemic, from formal proposals introduced in 2020 by some of the larger developing economies (India and South Africa), to op-eds in mainstream media, and editorials in scientific publications, such as Nature. This push gained momentum in early May 2021, just before the meeting of the World Trade Organization’s General Council.¶ Waiver proposals have attracted the support of prominent names in public health. Dr. Tedros Adhanom Ghebreyesus, the Director-General of the World Health Organization, endorsed patent waivers as a tool to address the current vaccine scarcity problem in an article titled Waive Covid Vaccine Patents to Put World on “War Footing.” Others — including, most recently, Dr. Anthony Fauci — have been critical of waiver proposals.¶ In this piece, we explain the mechanics of patent waivers and argue that waivers alone are the wrong policy tool in the context of the COVID-19 pandemic. We agree with supporters of the waivers in their ultimate goal — that of scaling up the manufacturing of COVID-19 vaccines, and then distributing them according to more equitable models than the ones adopted thus far. However, we doubt that the particular types of goods at stake here can be easily replicated and produced in substantially larger quantities simply through a waiver of intellectual property rights.¶ Vaccines and Intellectual Property: The Informational Function of Patents¶ Intellectual property rights, and especially patent rights, are governmental grants embedded into national legal systems across the world for utilitarian reasons: longstanding intellectual property theory and policy rests on the idea that the prospect of obtaining a patent will incentivize players in research and development (R&D) to invest in areas that might be otherwise underfunded. While a vast body of research demonstrates that this utilitarian approach is not universally applicable to all types of goods (and especially to certain types of health goods), it remains the main driver of modern patent regimes.¶ In exchange for getting this particular type of intellectual property rights, patentees disclose critical information about the invention covered by the patent. On the one hand, a patent gives the patentee lead time on the market for a relatively lengthy period of time (formally 20 years, in practice less than that, especially for products like vaccines that must undergo review and approval by drug regulators). On the other hand, by requiring that the patent applicant share information about the invention that is subsequently published by the patent office, the patent system promotes the flow of scientific and technical information that can be used by other innovators in the field.¶ It is well known by now that existing COVID-19 vaccines — including the ones that represent the application of a new type of vaccine technology, mRNA vaccines — are covered by multiple layers of patent rights. Proponents of a patent waiver for COVID-19 vaccine emphasize the problems created by the exclusivity created by intellectual property rights, and they are correct in their diagnosis.¶ Having adopted a legal regime that grants patent rights to any inventions meeting the substantive criteria set forth in international and national patent laws (a threshold that many of the current patent applications on COVID-19 will, in all likelihood, clear), we now face the logical consequences of such a regime: absent some kind of intervention, vaccine patent holders have the ability to refuse licensing their technology to others, even against a backdrop of vaccine scarcity.¶ A waiver is thus portrayed as a mechanism to overcome this exclusionary ability that traditionally inheres to a patent: in light of the tragic proportions of our shared public health problem, let us do away with the exclusionary right for a certain period of time and other companies will be able to 1) replicate existing vaccines and 2) manufacture at scale so that considerably more doses of vaccine will start flowing towards populations in the Global South.¶ These two propositions would be accurate if the information disclosed in patents were enough to increase the supply of COVID-19 vaccines. Unfortunately, it is not.¶ A Mismatch Problem: The Informational Limitations of Patents¶ Patents cover both processes and products. In the case of vaccines, the former category includes methods of vaccine production, while the latter covers a myriad of vaccine components, from antigens (substances used to elicit a reaction from the immune system), to inactive ingredients, such as adjuvants (substances that help enhance the immune response, like oil-in-water emulsions) and stabilizers (substances that help maintain the potency of the vaccine, like sugars), to the vaccine delivery mechanism.¶ In order to understand the practical limitations of a waiver of intellectual property rights when a vaccine is involved, it may be useful to think of patents as informational mechanisms akin to the information and tools needed to turn a recipe into an edible product. One or more patents will provide a recipe for a process or a component needed to produce a vaccine. But, just as with a culinary recipe, the informational power of a patent does not cover any tips or instructions that have not been memorialized in writing, nor does it provide any access to the raw materials needed to put a vaccine together. Waivers, therefore, temporarily remove exclusionary rights, but do not address two fundamental sources of the current vaccine scarcity problem.¶ First, we are still left with a significant informational problem: as many commentators have remarked, knowledge disclosed through patents alone is often insufficient for a third party to actually be able to replicate a vaccine.¶ From a scientific perspective, vaccines are biological products, and, as such, their relative complexity makes them highly dependent on specific manufacturing processes and practices, many of which are not disclosed in a patent — think of it as the unwritten tips or instructions for a particular recipe. Some of this information may be kept secret by a company for competitive reasons; in these cases, lifting patent rights will not result in increased informational disclosure, unless the patent holders themselves are willing to collaborate. A waiver thus solves the exclusivity problem, but not the information problem that undergirds competition in vaccine manufacturing. To revisit the analogy introduced above, a waiver allows third parties to freely use the recipe. It does not, however, provide all the information that may be needed to manufacture the desired good, nor does it provide manufacturers with the tacit knowledge that only the original manufacturer possesses and is not disclosed elsewhere.¶ Second, even if all types of legal restrictions on the use of vaccine technology were lifted — or had never existed in the first place — there is simply not enough infrastructure (manufacturing facilities and equipment) nor raw materials (the components needed to manufacture and deliver vaccines) to produce and distribute COVID-19 vaccines as predicted under current waiver proposals. We have long faced a global vaccine manufacturing problem that will not be fully resolved during the current pandemic. In the case of vaccines that need to be kept at ultra-cold temperatures, these problems intensify.¶ One of us (Barnes-Weise) has been involved in the contractual negotiations for the development, manufacturing and transfer of technology related to COVID-19 vaccines. In addition to the informational gaps described above, COVID-19 vaccine manufacturers are most concerned about how well the recipients of the technology transfer will understand and be able to implement such knowledge in making vaccines of the necessary quality. Shortages do not merely affect materials necessary to manufacture vaccines and facilities adequate to manufacture the vaccines; they also affect the availability of personnel qualified to instruct the licensee and recipient of this information. Sending an employee of this caliber out of the original manufacturing site to a partner site risks reducing the capacity of the first site. And remote instruction, necessitated by the pandemic, has its own shortcomings.¶ In relation to the patents on the vaccines themselves, most of the concerns that the vaccine manufacturers express are around the protection of their vaccine platforms for the purposes of making future or non-COVID-19 vaccines. Moderna shared information about its patents in summer 2020. The manufacturers, as evidenced by the number of licenses to manufacture granted to date, are eager to find partners with the capabilities to expand production. It is not to their benefit to produce an inadequate supply of a highly sought-after vaccine. However, even willingness to transfer patented vaccine technology has faced numerous practical hurdles to date: 1) infrastructural limitations; 2) scarcity of raw materials; 3) concerns about licensees having the ability to actually manufacture effective vaccines in light of the infrastructural and product scarcity, even in situations in which there might be no informational gaps.¶ A patent waiver would not address any of the practical concerns currently at the root of tech transfer negotiations involving COVID-19 vaccine technology. Compounding these problems is the fact that, should a waiver be issued, there is no legal mechanism that can compel the transfer of certain types of know-how or trade secrets should a company be unwilling to license its intellectual property — which, again, at this point in the pandemic, is not a problem we have observed.¶ Finally, it is important to keep in mind that a waiver would be temporary: supporters of current waiver proposals should consider what will happen once demand for vaccines begins diminishing and fewer manufacturers remain on the market. Moreover, they should consider the legal and practical uncertainty that a waiver would introduce, as it is unclear how technology transfer between companies would cease (or continue) once the waiver expires.¶ Vaccines and the Long-Term Intellectual Property Game: Why Waivers Are Not the Right Tool¶ Countries in the Global South have had to implement intellectual property regimes that largely codify the commercial interests of the Global North. It is in their best interest to use all legal and policy mechanisms available to minimize the skewed allocative effects produced by the current patent culture — especially when patent rights cover goods that are critically needed for public health reasons.¶ In the past, some of these countries have used legal tools in highly effective ways. The TRIPS Agreement — the main legal international intellectual property framework, now implemented by virtually all countries — allows for the compulsory licensing of patented products in situations that include public health crises such as a pandemic or epidemic. Compulsory licensing does not extinguish or suspend patent rights, but rather consists in the governmental granting of licenses to third parties against the wishes of the patent holder. The licensee is then able to use the patent-protected technology against the payment of a royalty.¶ Many countries in the Global South issued compulsory licenses throughout the first decade of the twenty-first century on drugs needed for the treatment of HIV/AIDS. Just to list a few examples, Malaysia issued a compulsory license in 2004 for HIV/AIDS drugs patented by the pharmaceutical companies GlaxoSmithKline and Bristol-Myers Squibb; Thailand issued a compulsory license in 2007 for an HIV/AIDS drug patented by Abbot. Several other lower-income countries resorted to this mechanism, succeeding in having these drugs produced and sold in their markets at low cost. Brazil famously and wisely used the threat of compulsory licensing as a bargaining tool when negotiating the price of an HIV/AIDS patented by Merck.¶ The critical difference between the compulsory licensing dynamics in the context of HIV/AIDS and the present situation is that compulsory licensing helped solve the problem faced by populations in these countries: critical drugs were being provided at unaffordable prices; compulsory licenses dislodged exclusivity problems; and third parties were able to manufacture the relevant drugs once a license was issued, bringing prices down.¶ Unlike vaccines, the drugs at stake then were much less difficult to replicate, and third parties availing themselves of a compulsory license faced no significant knowledge deficit. Moreover, there was sufficient production capacity and the necessary raw materials for these drugs to be produced and distributed. Compulsory licensing was thus the right tool for this particular public health problem.¶ By contrast, a waiver of COVID-19 vaccine patents is the wrong legal and policy tool because it does not address the lack of knowledge sharing nor the shortage of raw materials and manufacturing capacity. Furthermore, the use of a waiver is politically fraught — as was the use of compulsory licenses in the context of HIV/AIDS. We submit that battles of the political economy are best fought when prevailing on the use of a legal tool that actually solves the underlying practical problems. For the reasons stated above, that is not the case with waivers.¶ It can be appealing to see a patent waiver as an attractive short-term solution. Yet, even the short-term needs are too intense and the challenges too complex for waivers to fully address the infrastructural and knowledge gaps, as well as the additional problem of inequitable distribution of existing vaccines.¶ We Have Contractual and Infrastructural Problems, Not an Intellectual Property Problem¶ We agree that it is accurate to say that we have an intellectual property problem if talking about the patent system at a more fundamental level — as the main legal regime designed to encourage investment in biopharmaceutical R&D. Most vaccines needed for the prevention or response to epidemics and pandemic fare poorly under predominantly market-driven R&D funding models, as one of us (Rutschman) has discussed in other venues. In this specific sense, we may question the excessive reliance on current legal regimes designed to spur innovation, which subject vaccine R&D to the same utilitarian principles that apply to vastly different types of goods.¶ However, in a more immediate sense — and in the context of the COVID-19 pandemic — the real problems are infrastructural and contractual. It is imperative that we address the current limitations on vaccine production capacity ahead of future pandemics — a problem that several countries have already turned to by investing or planning to invest in the construction of infrastructure for vaccine manufacturing.¶ It is also imperative that, against the current backdrop of vaccine scarcity, we address the allocation problems that the world has experienced so far, which have resulted in most available doses being given to populations in the Global North. We regard this as a contractual problem: currently, there is no legal mechanism that prevents two parties — a country and a vaccine manufacturer — from subjecting negotiations involving pandemic vaccines to the same bargaining and contractual dynamics that govern the production and allocation of most other commodifiable goods.¶ Setting aside cases of voluntarism, there are no enforceable legal requirements compelling higher-income countries able to appropriate large amounts of vaccine doses to share them with other countries. This is a problem worth deep discussion ahead of the next pandemic.¶ But it also the area in which immediate policy efforts are presently best deployed. Instead of advocating for a waiver, countries in the Global South, international organizations, activists, commentators and other interested parties should concentrate their efforts on mitigating the unbridled effects of existing contractual frameworks by nudging governments in the Global North to adopt more equitable approaches to the global sharing of vaccine doses. And this is also an area in which the United States, with its regained commitment to international cooperation, should have started to lead by example earlier in the pandemic.

### Solvency – Root Cause – Garde

#### Waiving IPR is just symbolic – the aff alone cannot solve bc it does nothing about the root cause of vaccine shortages

Garde et al 5-6 [Damian Garde, National Biotech Reporter Damian covers biotech, is a co-writer of The Readout newsletter, and a co-host of "The Readout LOUD" podcast. , Helen Branswell , Senior Writer, Infectious Disease, Helen covers issues broadly related to infectious diseases, including outbreaks, preparedness, research, and vaccine development., and Matthew Herper, Senior Writer, Medicine, Editorial Director of Events Matthew covers medical innovation, 5-6-2021 , “Waiver of patent rights on Covid-19 vaccines, in near term, may be more symbolic than substantive” STAT, Accessed 8-14-2021, <https://www.statnews.com/2021/05/06/waiver-of-patent-rights-on-covid-19-vaccines-in-near-term-may-be-more-symbolic-than-substantive/> ww

The U.S.’s stunning endorsement of a proposal to waive Covid-19 vaccine patents has won plaudits for President Biden and roiled the global pharmaceutical industry. But, at least in the short term, it’s likely to be more of a symbolic milestone than a turning point in the pandemic.¶ For months, proponents of the proposal have argued that the need to waive intellectual property protections was urgent given the growth of Covid cases in low- and middle-income countries, which have been largely left without the huge shipments of vaccine already purchased by wealthy countries. But patents alone don’t magically produce vaccines. ¶ Experts suggested the earliest the world could expect to see additional capacity flowing from the waiver — if it’s approved at the World Trade Organization — would be in 2022.¶ Prashant Yadav, a supply chain expert and senior fellow at the Center for Global Development, said the biggest barrier to increasing the global vaccine supply is a lack of raw materials and facilities that manufacture the billions of doses the world needs. Temporarily suspending some intellectual property, as the U.S. proposes to do, would have little effect on those problems, he said.¶ “My take is: By itself, it will not get us much benefit in increased manufacturing capacity,” Yadav said. “But as part of a larger package, it can.”¶ That larger package would include wealthy nations like the U.S. mounting an Operation Warp Speed-style effort to invest in manufacturing in low-income countries, he said, using their vast financial resources to actually produce vaccine doses rather than solely targeting patents.¶ Lawrence Gostin, director of the O’Neill Institute for National and Global Health Law at Georgetown Law, said the waiver is necessary but hardly sufficient. It will likely take months of international infighting before the proposal would take effect, he said, months during which would-be manufacturers would not have the right to start producing vaccines. ¶ “We’re not talking about any immediate help for India or Latin America or other countries going through an enormous spread of the virus,” Gostin said. “While they’re going to be negotiating the text, the virus will be mutating.”¶ Even James Love, director of the nonprofit Knowledge Ecology International and a longtime advocate of intellectual property reform, acknowledges a patent waiver would be a valuable first step, not a panacea. The fairly narrow proposal would mostly allow countries to issue compulsory licenses, essentially allowing third-party manufacturers to make and sell other companies’ patented products, while also helping free up some information about how that manufacturing is done. But that, at least, could provide a financial incentive for those third parties to invest in vaccine production.¶ “In our experience, when the legal barriers disappear and there’s a market, capacity increases faster than you would think,” he said.¶ In October, Moderna vowed not to enforce its Covid-19-related patents for the duration of the pandemic, opening the door for manufacturers that might want to copy its vaccine. But to date, it’s unclear whether anyone has, despite the vaccine’s demonstrated efficacy and the worldwide demand for doses.¶ That underscores the drug industry’s case that patents are just one facet of the complex process of producing vaccines.¶ “There are currently no generic vaccines primarily because there are hundreds of process steps involved in the manufacturing of vaccines, and thousands of check points for testing to assure the quality and consistency of manufacturing. One may transfer the IP, but the transfer of skills is not that simple,” said Norman Baylor, who formerly headed the Food and Drug Administration’s Office of Vaccines Research and Review, and who is now president of Biologics Consulting.¶ While there are factories around the world that can reliably produce generic Lipitor, vaccines like the ones from Pfizer and Moderna — using messenger RNA technology — require skilled expertise that even existing manufacturers are having trouble sourcing.¶ “In such a setting, imagining that someone will have staff who can create a new site or refurbish or reconfigure an existing site to make mRNA [vaccine] is highly, highly unlikely,” Yadav said. ¶ There are already huge constraints on some of the raw materials and equipment used to make vaccines. Pfizer, for instance, had to appeal to the Biden administration to use the Defense Production Act to help it cut the line for in-demand materials necessary for manufacturing.¶ Rajeev Venkayya, head of Takeda Vaccines — which is not producing its own Covid vaccine but is helping to make vaccine for Novavax — said supply shortages are impacting not just Covid vaccine production but the manufacture of other vaccines and biological products as well. ¶ “This is an industry-wide … looming crisis that will not at all be solved by more tech transfers,” Venkayya said.¶ He suggested many of the people advocating for this move are viewing the issue through the prism of drug development, where lifting intellectual property restrictions can lead to an influx of successful generic manufacturing.¶ “I think in this area there is an unrecognized gap in understanding of the complexities of vaccine manufacturing by many of the ‘experts’ that are discussing it,” said Venkayya, who stressed that while he believes they have good intentions, “nearly all of the people who are providing views on the value of removing patent protections have zero experience in vaccine development and manufacturing.”¶ As Michelle McMurry-Heath, CEO of the trade group BIO, put it in a statement, “handing needy countries a recipe book without the ingredients, safeguards, and sizable workforce needed will not help people waiting for the vaccine.”

### Alt Causes – Generic

#### Alt causes, and inefficient WHO infrastructure means the plan alone cant solve

Zarocostas 5-22 [John Zarocostas, 5-22-2021, “What next for a COVID-19 intellectual property waiver?” The Lancet, Accessed 8-14-2021, <https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(21)01151-X/fulltext> ww

The USA has backed a waiver for intellectual property related to COVID-19 vaccines. What happens next? John Zarocostas reports from Geneva.¶ The “monumental” shift by the Biden administration, breaking with decades of bipartisan policy and declaring on May 5 it would support negotiations at the World Trade Organization (WTO) on waiving intellectual property protections for COVID-19 vaccines, has been welcomed as a step in the right direction to address the massive shortages and inequities in supplies. However, experts say that there is a long way to go before a waiver is adopted, and much work remains to improve manufacturing capacity.¶ In the face of glaring shortages and rapid transmission of SARS-CoV-2, on Oct 2, 2020, India and South Africa proposed a temporary waiver of the WTO's Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) that would permit countries to suspend intellectual property protections for COVID-19 medical products—including vaccines, medicines, diagnostics, personal protective equipment, and ventilators—for the duration of the pandemic. The aim is to speed up access to affordable medical products for the prevention, containment, or treatment of COVID-19. It also includes a “peace clause” that the measures taken shall not be subject to a WTO dispute settlement challenge.¶ Such a step had been envisaged by the WTO. A 2013 WTO publication on the history and future of the global trade body had insightfully concluded, “The logic of patents can be harder to defend in the face of a public health crisis, especially when there are few efficacious drugs and these remain within the patent term, that can lead to calls for the breaking or easing of patents.” Ngozi Okonjo-Iweala, WTO director-general, on May 5, told WTO delegates: “The issue of equitable access to vaccines, diagnostics, and therapeutics is both the moral and economic issue of our time.”¶ However, the proposal has been mired in disagreement. Until the surprise policy U-turn, the USA, along with the EU, Australia, Brazil, Canada, Japan, Norway, Singapore, Switzerland, Taiwan, and the UK, had opposed the joint proposal, which now has 62 co-sponsors and is supported by more than 100 of the WTO's 164 members. The WTO works by consensus, but if this cannot be reached, a decision to grant the exceptional waiver would need to be adopted by three-quarters of members. With the USA changing tack, there has been hope that the other opposing countries would follow. “In the relations among nations, political commitments matter, especially when made by the world's largest economy”, Alan Wolff, distinguished visiting fellow at the Washington DC-based Peterson Institute for International Economics, and until recently, WTO deputy director-general, told The Lancet.¶ Following the Biden administration's support for a waiver, China and Russia, both proactive in vaccine diplomacy, have also publicly announced they support talks on a waiver at the WTO, increasing the pressure on the EU and others. But it is unclear how other opponents will proceed. Ellen 't Hoen, director of Medicines Law and Policy, told The Lancet “We have not heard a coherent response from the EU—Angela Merkel (German Chancellor) has been a consistent ‘no’. But some of the EU countries want to support the waiver.” On May 7, Merkel told EU leaders that she does not believe that patent waivers are the solution and stressed that calling patents into question “is not the way that will lead us to more and better vaccines”. The EU, which normally has a joint position on WTO issues, has said it is ready to discuss how to ramp up supplies of vaccines and other medical products.¶ Aside from Germany, senior WTO diplomats expect Switzerland, South Korea, and Japan—all countries with influential pharmaceutical industries—to try to resist a waiver, especially if the scope is not narrowed to just vaccines, and could try to drag talks out.¶ Arthur Appleton, an adjunct professor at Johns Hopkins University, told The Lancet “it may be difficult to secure a consensus for a waiver among the 164 WTO members given divergent views on the breadth of the proposed waiver”. The proponents of the waiver have announced they will put forward a revised proposal, which is expected to be tabled in May and to be discussed in the lead-up to a TRIPS Council meeting slated for June 8. Geneva-based diplomats told The Lancet the revised text will keep “the broader perspective” and the scope will be the same, but clarified further, include flexible language, and address the period during which it will apply. The USA supports talks on waiving intellectual property protections only for COVID-19 vaccines, whereas the India–South Africa proposal included waivers for all COVID-19 health technologies. Germán Velásquez, special adviser on policy and health at the South Centre, Geneva, is more sceptical and told The Lancet he thinks “the US will try to delay the issue and try to weaken the text”.¶ “It is important these negotiations at the TRIPS Council move fast and result in a text that countries can easily implement in their national legislation. WHO strongly recommends that the waiver also apply to diagnostics, therapeutics, and other tools to prevent, diagnose, and treat COVID-19”, Mariângela Simão, WHO Assistant-Director General for Access to Health Products, told The Lancet.¶ Intellectual property industry consultants and health diplomats say the waiver will not solve the immediate problem of the huge shortfall in vaccine production aggravated by vaccine nationalism, hoarding of supplies, and poor sharing or donation of COVID-19 vaccines.¶ “Even if a waiver is approved, there may still be bottlenecks related to production capacity, distribution, and the production of raw materials and equipment used to manufacture package and transport vaccines”, said Appleton. “Of course, just the threat of a waiver may help drive down the cost of vaccines, therapeutics, and diagnostic tools, and result in increased access in the developing world. The threat may also lead to voluntary licensing agreements on terms favourable to developing countries.”¶ Thomas Cueni, director-general of the International Federation of Pharmaceutical Manufacturers and Associations, told The Lancet that “The waiver would also put into question the framework that gives companies the trust to sign contracts with other manufacturers they voluntarily collaborate with. The waiver is at best a distraction, at worst it will disrupt the supply chain and divert scarce resources.”¶ No coercion was needed, Cueni noted, to encourage the setting up of more than 280 partnerships and collaborations among vaccine manufacturers worldwide. “As a result COVID-19 vaccine production capacity has been scaled up in a matter of months from zero to 1·7 billion in April, and it is anticipated that 11·6 billion COVID-19 vaccine doses will be produced by the end of 2021.”¶ For technologies, such as medicines, 't Hoen has noted, an intellectual property waiver would be sufficient to allow generic production. However, for vaccines, in addition to the intellectual property “you need additional technology transfer or access to materials such as cell lines. Some of those may be in the public domain. But if not the original company or research institute would have to provide this”.¶ Velásquez says that expanding idle capacity in some developing economies could take 6–9 months. A study by McKinsey, the management consultancy, estimated that technology transfer times for injectable vaccines range from 18 to more than 30 months.¶ A spokesperson for Gavi, the Vaccine Alliance, while welcoming the decision by the USA, told The Lancet that “Gavi urges now that in the interest of global equitable access, the US supports manufacturers to transfer not only intellectual property but also know-how in a bid to boost global production.”¶ “Now that intellectual property issues are potentially being addressed, it is even more important that we engage in knowledge sharing and technology transfer”, said Simão. “The complex process of vaccine production can be accelerated if relevant technologies and know-how are transferred to as many qualified manufacturers as possible. WHO urges the member states and current manufacturers to actively collaborate with WHO to share their know-how, data, and technologies through the WHO COVID-19 Technology Access Pool (C-TAP) and the mRNA technology transfer hub”. C-TAP is a mechanism established by WHO last June that enables the voluntary licensing of technologies in a transparent and non-exclusive way by providing a platform for developers to share intellectual property and data including trade secrets and know-how. However, to date no pharmaceutical companies have signed up.¶ Marie-Paule Kieny, research director at Inserm in Paris, told The Lancet “WHO has been trying to help build or leverage vaccine manufacturing capacity in developing countries, and there is certainly capacity in some developing countries such as Bangladesh, Argentina, and other developing nations. But patents are not the only issue. Indeed, there are no patents in most developing countries which would hinder the production of mRNA vaccines”.¶ “Companies have so far not been willing to collaborate with C-TAP and as a result a year is lost in expanding vaccine manufacturing capacity”, said 't Hoen. “I hope that the waiver discussions and the US's support for it will give a boost to C-TAP. Whatever the manufacturing initiative, it is obvious that we need a global mechanism for sharing of vaccine technologies.”¶ James Love, Director of Knowledge Ecology International, said that he thinks C-TAP needs to be rebooted if it is to remain relevant. “For C-TAP to become relevant, it needs to have a high profile leader whose only job is to make it work, and who can push industry and governments to engage. C-TAP needs to hold at least biweekly press conferences, and explain what is going right, and why things are not going right.”

### Alt Causes – Supplies

#### Lack of supply for raw materials is an alt cause

Burger & Nebehay 5-6 [Ludwig Burger, Stephanie Nebehay, 5-6-2021, “Drugmakers say Biden misguided over vaccine patent waiver” Reuters, Accessed 8-15-2021, <https://www.reuters.com/business/healthcare-pharmaceuticals/pharmaceutical-association-says-biden-move-covid-19-vaccine-patent-wrong-answer-2021-05-05/> ww

GENEVA, May 6 (Reuters) - Drugmakers on Thursday said U.S. President Joe Biden's support for waiving patents of COVID-19 vaccines could disrupt a fragile supply chain and that rich countries should instead share more generously with the developing world.¶ Biden on Wednesday threw his support behind waiving intellectual property rights for COVID-19 vaccines, angering research-based pharmaceutical companies. read more¶ If adopted by the World Trade Organisation, the proposal would invite new manufacturers that lack essential know-how and oversight from the inventors to crowd out established contractors, the International Federation of Pharmaceutical Manufacturers and Associations (IFPMA) said.¶ "I have heard many (vaccine makers) talking about 'our resources are stretched, our technicians are stretched'," IFPMA Director General Thomas Cueni told Reuters. He warned of a possible free for all if "sort of rogue companies" were allowed to become involved.¶ Vaccine developers echoed his comments that waiving intellectual property rights was not a solution.¶ "Patents are not the limiting factor for the production or supply of our vaccine. They would not increase the global production and supply of vaccine doses in the short and middle term," said Germany's BioNTech, which aims to supply up 3 billion doses together with Pfizer (PFE.N) this year. read more¶ BioNTech said it took more than a decade to develop its vaccines manufacturing process and replicating it required experienced personnel and a meticulous technology transfer, among several other factors beyond patents.¶ Another German company CureVac (5CV.DE), which hopes to release trial results on its messenger ribonucleic acid (mRNA) vaccine as early as this month, said patents were not to blame for supply bottlenecks.¶ "Since mRNA technology has emerged as the key technology in the fight against COVID-19, the world now needs the same raw materials in unfathomable amounts. The biggest problem is how to coordinate this," a spokeswoman said.¶ IFPMA's Cueni said the real bottlenecks were trade barriers, in particular the U.S. Defense Production Act (DPA).¶ The DPA is a decades-old U.S. law that prioritised procurement orders related to U.S. national defence, but it has been widely used in non-military crises, such as natural disasters.¶ Cueni said the way to kickstart low-income countries' vaccination campaigns was for rich countries to donate vaccine, rather than widen eligibility to young and healthy people at home.¶ Moderna (MRNA.O), which on Thursday reported quarterly results, said waiving intellectual property rights would not help to increase supply of its vaccines in 2021 and 2022.¶ The U.S. drugmaker said last year it would not enforce its vaccine patents. CureVac said on Thursday it would also not enforce its patents during the pandemic and that it knew of no other developer that would.¶ Italy's ReiThera which is in late-stage tests on an experimental COVID-19 vaccine, was also critical of patent waivers.¶ "There is proprietary know-how that has to be transferred by the owner. And then there is the problem with process materials, which at the moment have delivery times of almost a year," ReiThera's chief of technology Stefano Colloca said.¶ In contrast to the industry reaction, the GAVI vaccine alliance, which co-leads the COVAX dose-sharing programme with the WHO and faces major supply constraints, welcomed Biden's support for waiving intellectual property rights. read more