## 2N

#### Condo is good---my interp is that I get 1

#### 1] Strat skew---condo key to 2NR strat because it allows the neg to check back aff’s infinite prep---neg could never win because the aff would just dump offense on a single neg layer for 4 minutes. Strat skew takes out time skew---its about how you use your time, not how much time you have. Takes out clash---without NC reactivity debate would not be possible, so it links to education and fairness.

#### 2] Ground---condo lets the neg test the aff from multiple perspectives without having to go for every one of them in the 2NR, key to generating offense against the aff since I wouldn’t have enough time to defend them otherwise.

#### 3] Topic education---promotes unique plan based offense and encourages more innovative arguments---debaters are risk-averse and without condo they’d just read comfortable strategies.

#### 4] Critical thinking---condo forces strategic 1ar choices--- without condo aff debaters can regurgitate blocks without thinking about time allocation---hard debate is good debate otherwise debate becomes oratory.

DTA – its just one CP

Reasonability

## OV

**The member states of the WTO ought to**

* **offer generous payment per immunization in [-------] and subsidies to oversee distribution to local pharmaceutical companies**
* **make rewards conditional upon speed and inoculation efficacy**
* **create IPTK banks to bypass trade secrets and encourage public-private collaboration**

**The CP solves more of the aff than they’d like to admit – it creates incentivizes that encourage pharma companies to distribute and oversee allocation of vaccines in [----] and fosters collaboration with local governments.**

### 1NC Ev

#### 1NC Karan – pharma companies don’t wanna give up trade secrets, give financial incentives to make pharma companies share them / expand vaccine access

#### 1NC Crager – biggest block to IPTK banks is lack of collaboration – cp solves

### Solvency

#### Solves internals of the aff – [Write out]

#### Planks

#### ] payment per immunization creates financial incentive for pharma companies to ramp up existing production and expand available manufacturing in the developing world

#### ] making rewards conditional upon results i.e., inoculation and delivery times discourages fraud

#### ] intellectual property tech know-how banks or IPTK banks strengthen vaccine manufacturers in developing countries – MNCs closely collaborate with governments in the global south

#### Use sufficiency framing – even if we don’t solve all the case, we solve enough that the net benefit outweighs any tiny solvency deficits

### Perm: Do Both

#### 1] Winning the DA/CT obviates the perm and proves the counterplan is still an opportunity cost to the aff

#### 2] It’s mutually exclusive – the counterplan fiats the creation of IPTK banks – key word being intellectual property – we can’t get rid of intellectual property and create intellectual property banks at the same time

### OV – TRIPS Waiver

#### Biotech industry is strong right now and is on track to continue if IP laws remain the same. TRIPS incentivizes pharma innovation because it allows companies to recoup from R&D. Waiver undermines innovation. This decks the innovation that can mitigate future pandemics and bioterror, leading to extinction from artificially enhanced bugs.

## Off

### OFF

#### Interpretation: Topical Affirmatives must defend the reduction of intellectual property protections for all medicines

#### Violation: they say “essential”

#### The upward entailment test and adverb test determine the genericity of a bare plural

Leslie and Lerner 16 [Sarah-Jane Leslie, Ph.D., Princeton, 2007. Dean of the Graduate School and Class of 1943 Professor of Philosophy. Served as the vice dean for faculty development in the Office of the Dean of the Faculty, director of the Program in Linguistics, and founding director of the Program in Cognitive Science at Princeton University. Adam Lerner, PhD Philosophy, Postgraduate Research Associate, Princeton 2018. From 2018, Assistant Professor/Faculty Fellow in the Center for Bioethics at New York University. Member of the [Princeton Social Neuroscience Lab](http://psnlab.princeton.edu/).] “Generic Generalizations.” Stanford Encyclopedia of Philosophy. April 24, 2016. <https://plato.stanford.edu/entries/generics/> TG

1. Generics and Logical Form

In English, generics can be expressed using a variety of syntactic forms: bare plurals (e.g., “tigers are striped”), indefinite singulars (e.g., “a tiger is striped”), and definite singulars (“the tiger is striped”). However, none of these syntactic forms is dedicated to expressing generic claims; each can also be used to express existential and/or specific claims. Further, some generics express what appear to be generalizations over individuals (e.g., “tigers are striped”), while others appear to predicate properties directly of the kind (e.g., “dodos are extinct”). These facts and others give rise to a number of questions concerning the logical forms of generic statements.

1.1 Isolating the Generic Interpretation

Consider the following pairs of sentences:

(1)a.Tigers are striped.

b.Tigers are on the front lawn.

(2)a.A tiger is striped.

b.A tiger is on the front lawn.

(3)a.The tiger is striped.

b.The tiger is on the front lawn.

The sentence pairs above are prima facie syntactically parallel—both are subject-predicate sentences whose subjects consist of the same common noun coupled with the same, or no, article. However, the interpretation of first sentence of each pair is intuitively quite different from the interpretation of the second sentence in the pair. In the second sentences, we are talking about some particular tigers: a group of tigers in ([1b](https://plato.stanford.edu/entries/generics/#ex1b)), some individual tiger in ([2b](https://plato.stanford.edu/entries/generics/#ex2b)), and some unique salient or familiar tiger in ([3b](https://plato.stanford.edu/entries/generics/#ex3b))—a beloved pet, perhaps. In the first sentences, however, we are saying something general. There is/are no particular tiger or tigers that we are talking about.

The second sentences of the pairs receive what is called an existential interpretation. The hallmark of the existential interpretation of a sentence containing a bare plural or an indefinite singular is that it may be paraphrased with “some” with little or no change in meaning; hence the terminology “existential reading”. The application of the term “existential interpretation” is perhaps less appropriate when applied to the definite singular, but it is intended there to cover interpretation of the definite singular as referring to a unique contextually salient/familiar particular individual, not to a kind.

There are some tests that are helpful in distinguishing these two readings. For example, the existential interpretation is upward entailing, meaning that the statement will always remain true if we replace the subject term with a more inclusive term. Consider our examples above. In ([1b](https://plato.stanford.edu/entries/generics/#ex1b)), we can replace “tiger” with “animal” salva veritate, but in ([1a](https://plato.stanford.edu/entries/generics/#ex1a)) we cannot. If “tigers are on the lawn” is true, then “animals are on the lawn” must be true. However, “tigers are striped” is true, yet “animals are striped” is false. ([1a](https://plato.stanford.edu/entries/generics/#ex1a)) does not entail that animals are striped, but ([1b](https://plato.stanford.edu/entries/generics/#ex1b)) entails that animals are on the front lawn (Lawler 1973; Laca 1990; Krifka et al. 1995).

Another test concerns whether we can insert an adverb of quantification with minimal change of meaning (Krifka et al. 1995). For example, inserting “usually” in the sentences in ([1a](https://plato.stanford.edu/entries/generics/#ex1a)) (e.g., “tigers are usually striped”) produces only a small change in meaning, while inserting “usually” in ([1b](https://plato.stanford.edu/entries/generics/#ex1b)) dramatically alters the meaning of the sentence (e.g., “tigers are usually on the front lawn”). (For generics such as “mosquitoes carry malaria”, the adverb “sometimes” is perhaps better used than “usually” to mark off the generic reading.)

#### It’s applicable to “Medicines” – adding “generally” to the res doesn’t substantially change its meaning because the res never specified further

#### Vote negative

#### 1] limits & ground– the aff can specify any type of medicine, there’s hundreds, it’s uniquely bad because there’s no term of art like “substantial” in the res which explodes limits. Different affs bracket out different DAs and specific frontlines beat neg generics every time – that sidelines clash and pushes to the margins of the topic

#### 2] TVA – read whole res or specify states without medicines - everyone has generic impact defense on various regions and there are only so many legitimate scenarios but medicine prep is constrained by topic duration

#### Competing interps – you can’t be reasonably topical – it’s a binary question

#### No RVIs – T’s a stock issue, not a reason you should win

#### Reject the team – anything else servers out of plan text which is a voter because it moots the NC

## Off

### 1AC---Util---Phil

#### Pain and pleasure are intrinsically valuable – to justify beyond that runs into moral incoherence.

Moen 16 [Ole Martin Moen, Research Fellow in Philosophy at University of Oslo “An Argument for Hedonism” Journal of Value Inquiry (Springer), 50 (2) 2016: 267–281] SJDI // RCT by JPark

Let us start by observing, empirically, that a widely shared judgment about intrinsic value and disvalue is that pleasure is intrinsically valuable and pain is intrinsically disvaluable. On virtually any proposed list of intrinsic values and disvalues (we will look at some of them below), pleasure is included among the intrinsic values and pain among the intrinsic disvalues. This inclusion makes intuitive sense, moreover, for there is something undeniably good about the way pleasure feels and something undeniably bad about the way pain feels, and neither the goodness of pleasure nor the badness of pain seems to be exhausted by the further effects that these experiences might have. “Pleasure” and “pain” are here understood inclusively, as encompassing anything hedonically positive and anything hedonically negative.2 The special value statuses of pleasure and pain are manifested in how we treat these experiences in our everyday reasoning about values. If you tell me that you are heading for the convenience store, I might ask: “What for?” This is a reasonable question, for when you go to the convenience store you usually do so, not merely for the sake of going to the convenience store, but for the sake of achieving something further that you deem to be valuable. You might answer, for example: “To buy soda.” This answer makes sense, for soda is a nice thing and you can get it at the convenience store. I might further inquire, however: “What is buying the soda good for?” This further question can also be a reasonable one, for it need not be obvious why you want the soda. You might answer: “Well, I want it for the pleasure of drinking it.” If I then proceed by asking “But what is the pleasure of drinking the soda good for?” the discussion is likely to reach an awkward end. The reason is that the pleasure is not good for anything further; it is simply that for which going to the convenience store and buying the soda is good.3 As Aristotle observes: “We never ask [a man] what his end is in being pleased, because we assume that pleasure is choice worthy in itself.”4 Presumably, a similar story can be told in the case of pains, for if someone says “This is painful!” we never respond by asking: “And why is that a problem?” We take for granted that if something is painful, we have a sufficient explanation of why it is bad. If we are onto something in our everyday reasoning about values, it seems that pleasure and pain are both places where we reach the end of the line in matters of value.

#### Thus the standard is maximizing expecting well being.

#### 1] Actor specificity

#### ---A] Aggregation – every policy benefits some and harms others so governments have to help the majority.

#### 2] Util is a lexical pre-requisite to any other framework: Threats to bodily security and life preclude the ability for moral actors to effectively utilize and act upon other moral theories since they are in a constant state of crisis – that inhibits the ideal moral conditions which other theories presuppose.

#### 3] Only consequentialism explains degrees of wrongness—if I break a promise to meet up for lunch, that is not as bad as breaking a promise to take a dying person to the hospital. Only the consequences of breaking the promise explain why the second one is much worse than the first. Intuitions outweigh—they’re the foundational basis for any argument because humans philosophize – we’d reject a fw that justified murder even if it was “logical”.

#### 4] Use epistemic modesty – that’s multiplying the probability of a framework being true by its general contention impact –

#### ---A] It maximizes the probability of achieving net most moral value—beating a framework acts as mitigation to their impacts but the strength of that mitigation is contingent

#### ---B] Topic education—disincentivizes debaters from going all in for framework which means we get the ideal balance between topic ed and phil ed—it’s important to talk about contention-level offense because we only have the topic for two months.

#### 5] And, extinction comes first under any moral framework:

#### ---A] It precludes the possibility of any kind of moral value – we can’t confer value onto anything if we’re not alive.

#### ---B] Contestation on the framework debate proves ethical uncertainty – uncertainty means we prioritize preventing extinction because that preserves our ability to find moral value in the future, regardless of what framework seems more correct now.

## Off

#### Counterplan: The member states of the World Trade Organization ought to

* **offer generous payment per immunization in LMICs and subsidies to oversee distribution of essential medicines to local pharmaceutical companies**
* **make rewards conditional upon speed and inoculation efficacy**

#### Subsidized reward mechanisms harness market demand

**Karan et al 4/2**, Abraar Karan is an internal medicine physician at the Brigham and Women’s Hospital/Harvard Medical School and a columnist at The BMJ. He previously worked on the covid-19 response in Massachusetts state. The views expressed here are his own and do not represent those of his employers, Thomas Pogge is a professor and director of the Global Justice Program at Yale University. He co-founded Incentives for Global Health, a team effort toward creating the Health Impact Fund , 4-2-2021, "Solving global vaccine inequity requires new incentives for pharmaceutical companies,", The British Medical Journal <https://blogs.bmj.com/bmj/2021/04/02/solving-global-vaccine-inequity-requires-new-incentives-for-pharmaceutical-companies/> ]AAli

Scientists have been successful in bringing several highly effective covid-19 vaccines to market in record time. But manufacturing scale-up is slow—with a few companies holding the “know-how,” but unenthusiastic about licensing this to others. Current trends predict that 90% of people in 67 low income countries will not be vaccinated this year and that most poorer populations will not gain herd immunity even in 2022. This delay will facilitate the emergence of new disease strains that may endanger even those already vaccinated. More importantly, millions of people in poor countries will needlessly die, particularly those who are at higher risk of mortality, such as those who are older and immunocompromised. To speed up manufacturing, some 119 developing countries have called for a temporary suspension of intellectual property rights related to covid-19 to allow manufacturers worldwide to produce and sell approved vaccines without the patentee’s permission. Patentees and the affluent countries representing them have opposed such a waiver: it would undermine incentives to innovate against future pandemics, they say, and it would not help much because patentees would not share crucial technologies and know-how with manufacturers who had not paid them for a license to produce and sell (as was the case with Moderna, which liberalized its intellectual property, but little else). And there is a further problem: even with generic manufacturers in the driver’s seat, the world’s poorest populations are still very poor, and thus would still be served last, if ever. Ultimately, waiving global policy agreements like TRIPS is a stopgap measure; the system needs more fundamental change. The urgent needs of the world’s poorest people must be subsidized into effective market demand. This might be done through a massive increase in funding for the existing COVAX facility, which is currently projected to provide two billion doses per year, at best only around 20% of global vaccine needs. COVAX could then offer a generous payment per immunization to pharma companies, featuring a declining premium for early delivery and payment adjustment with regard to quality (for example, how much protection an immunization affords, for how long, against which variants). Such a pay for performance scheme would give firms with approved vaccines a financial incentive to ramp up production for fast delivery. To this end, they would, competing with one another, seek to engage and expand available manufacturing capacity while fully supporting contracted manufacturers. Supplies produced would be directed to where they can be most effective in suppressing the pandemic, without consideration for the poverty or affluence of the various populations. Even if such an initiative were to raise cost by a factor of 10—from the $6 billion COVAX currently has to $60 billion— this would still be a tiny fraction of the economic harm this pandemic has caused and might yet cause in the future. The US alone has just allocated $1.9 trillion to avert some of the economic damage it has sustained from covid-19. An extra $54 billion, spread over many countries, is a small price to pay for bringing this pandemic under control at least two years sooner. A key lesson of covid-19 is that the great benefits the pharmaceutical sector has to offer must fully include the world’s poorest people. This is a firm command of justice and, at least with communicable diseases, an imperative of prudence as well. We must place advanced pharmaceuticals within reach of poor communities and must ensure that the diseases concentrated among them are lucrative targets of pharmaceutical research and development. To achieve global pharmaceutical equity in a sustainable way, we should create a complementary reward mechanism, additional to patent monopolies, that is designed to pay for better health outcomes. This mechanism can be but is not limited to the Health Impact Fund (a system one of us, TP, co-founded), which gives innovators the option to have any of their new pharmaceuticals rewarded according to the health gains achieved with it, on condition that it is sold at the variable cost of supplying it. Here “health gains” would be understood to cover not merely the therapeutic improvements that users experience, but also wider societal benefits, such as reduced infections among non-users. Moreover, pharmaceutical companies would be incentivized to effectively oversee and coordinate the delivery of therapeutics to end users, whether that be through national health systems or public-private partnerships. As an immediate example, such a system could effectively benefit latecomers to vaccine rollouts, given that there is an immense market potential remaining in low and middle income countries, which is largely uninteresting to early comers like Moderna and Pfizer whose supply has already been sold to high income countries. With the Health Impact Fund in place, the global pharmaceutical sector would be much better prepared to respond effectively to future pandemics, and would have been for past ones too (we wrote about this in the context of the Ebola and Zika viruses previously). Furthermore, it would be able to profitably unleash its skills upon the enormously harmful diseases associated with poverty, including the 20 WHO listed neglected tropical diseases, which affect over a billion people, as well as tuberculosis, malaria, hepatitis, and pneumonia, which together kill millions of people each year. We can and must tackle these diseases. The investment for doing so would pay for itself many times over.

#### Their own evidence says that this is a good idea [reading green] Subhan ‘06

[Subhan, Junaid. “Scrutinized: the TRIPS agreement and public health.” McGill journal of medicine : MJM : an international forum for the advancement of medical sciences by students vol. 9,2 (2006): 152-9.]kitkat [recut AB]

Patents can be applied to a wide variety of technologies; from the most complex and sophisticated piece of computer software to the most mundane hinge, nut or bolt. Even within the pharmaceutical industry, products under patent vary greatly. With this immense variance, should a patent on a drug for AIDS be treated in the same way as a patent on a drug for erectile dysfunction or high cholesterol? A **wide array of drugs are developed and manufactured by pharmaceutical companies and the TRIPS agreement must differentiate between patents for Viagra and patents for Efavirenz.** It is reasonable to demand full 20-year intellectual property protection for “chemical toys” (17) but when it comes to life-saving essential medications certain concessions in favour of the promotion of public health must be made. **The term “essential medication” should be defined under the TRIPS agreement, not in reference to a list of diseases, as has been proposed in the past (18), but rather as a general description of what constitutes the difference between an essential and a non-essential drug.** Possible criteria for inclusion into such a category would be: availability of alternative treatment, severity of the disease the medication is aimed at treating, and the capacity of the patent-holder to adequately supply markets that demand the patented product. For separate definitions to be beneficial though, separate provisions should be made where appropriate. Ideally, two separate sets of patent legislation would exist in parallel; one applying to medications deemed essential and another applying to non-essential medications. By creating separate categories of drugs, the TRIPS Agreement can more properly balance intellectual property protection of drugs with their purpose of healing as many of the ill as possible. Such a system can encourage innovation by increasing the potential rewards of a successful discovery of a non-essential medication. Simultaneously, access to essential medications by patients in developing areas can be improved by placing fewer protections on the intellectual property behind these medications. There is, however, **one glaring problem with this recommendation; creating a two-tiered system of intellectual property protection, where one set of drugs is given stronger protection than the other, will likely drive research investment into the more strongly protected class of drugs. The solution to this is surprisingly simple: because two classes of drugs are established, additional rewards that do not interfere with access can be implemented in the class of drugs that is less protected.** For example, patents on essential medications could be restricted to process patents alone; in exchange, duration on a process patent could be extended beyond twenty years. Because two separate categories of drugs are defined, product patents would be maintained on all patentable goods other than essential medications, including non-essential drugs. In effect, **creating separate categories of intellectual property protection for disparate classes of drugs allows for customized protection that can both promote innovation and uphold the fundamental human rights of those in need of essential medications**.

## Off

### TRIPs Waiver

#### Biotech is the new frontier; America is ahead but China is dangerously close

Gupta 6/11 [Gaurav Gupta, Biotech Investor, Founder of Ascendant BioCapital, a life science investment firm based in New York. Previously, Gaurav worked at OrbiMed Advisors, and served as a resident in neurological surgery at Columbia University Medical Center. He has co-authored over a dozen articles in peer-reviewed journals, filed a patent on a device for use in spine surgery, and edited a book on the technical and ethical implications of using tissue engineered products in the operating room. Dr. Gupta obtained his M.D. from the Stanford University School of Medicine, where he was a Paul and Daisy Soros Fellow, and B.S. and M.S.E. in biomedical engineering from Johns Hopkins University, where he was a Charles R. Westgate Scholar.) “As Washington Ties Pharma’s Hands, China Is Leaping Ahead” Barron’s Magazine: Commentary, China., 6/11/2021] RM

There should be no doubt that we are living at the dawn of a golden age of biomedical innovation. The American scientific engine that produced Covid-19 vaccines in record time was fueled by a convergence of advances in genomics, biomarkers, data science, and manufacturing years in the making. The first Food and Drug Administration approvals of a host of new product formats—oligonucleotide, bispecific, oncolytic virus, CAR-T, and lentivirus/AAV—all took place within the last decade. These represent an unprecedented expansion of the armamentarium that physicians have at their disposal to treat and cure disease. In the last few years, [47% of all new medicines](https://www.efpia.eu/media/554521/efpia_pharmafigures_2020_web.pdf) were invented by U.S. biopharma companies, with [homegrown startups](https://www.cbo.gov/publication/57126) driving the majority of innovation. The bulk of the remainder were developed by foreign companies specifically for the U.S. market.

An indirect benefit of these trends is that most novel therapeutics undergo clinical development and early commercial launch here in the U.S. The rest of the world understands that the American patient has earlier and broader access to groundbreaking therapies via these mechanisms. Indeed, the past decade is filled with examples of medical “firsts” for American patients: the first cure for Hepatitis C, the first gene therapy for blindness, the first immunotherapy for cancer. Future rewards will be greater still if we preserve our current system of incentivizing and protecting innovation.

The remarkable innovation capacity of our biopharmaceutical industry ought to be a source of national pride. Yet while “Made in America” is the global standard for medicines in development today, misguided policy risks ceding our scientific prowess to other countries in the future. This is particularly true in the case of China, where biotechnology has become a strategic pillar for the health of its people and economy.

From 2016 to 2020, the market capitalization of all Chinese biopharma companies increased exponentially from [$1 billion to over $200 billion](https://www.bloomberg.com/news/articles/2021-03-01/xi-mobilizes-china-for-tech-revolution-to-cut-dependence-on-west). China saw over [$28 billion](https://www.bioworld.com/articles/506978-china-sees-five-year-highs-in-life-sciences-investments-and-partnering) invested in its life sciences sector in 2020, double the previous year’s amount. Returns on China’s investment are already arriving. The FDA approved a drug developed in China for the first time ever in 2019. While China’s innovation capacity currently remains behind America’s, my experiences as a biopharma professional make it clear they are doing everything they can to catch up and catch up fast.

In fact, when I speak to Chinese biotechnology executives, they boast that they can run clinical trials faster than their U.S. counterparts. The danger of misguided policies that disincentivize pharmaceutical innovation in the U.S. is effectively driving that same innovation to China. If we close off the market in the U.S. at the same time that China is opening its market to innovative new products, then we will see companies choose to first launch impactful novel medicines in China, based on clinical trials conducted in China. Because the FDA rarely accepts data generated entirely outside the U.S., this relocation of research capacity will negatively affect Americans’ access to cutting-edge therapies.

The biotechnology field is advancing rapidly. Promising technologies such as targeted protein degradation and gene editing are perhaps not far from being developed into impactful medicines, and the U.S. risks these technologies being mastered by Chinese companies.

It is widely held that allowing China to gain an asymmetric edge in critical technologies such as AI or quantum computing could destabilize the geopolitical balance of power. The same is true of biotechnology. Chinese scientists were the first to edit the genomes of human embryos, in [contravention](https://www.sciencemag.org/news/2019/12/chinese-scientist-who-produced-genetically-altered-babies-sentenced-3-years-jail) of international standards, and the U.S. national security community believes China is [pushing ahead](https://www.nbcnews.com/politics/national-security/china-has-done-human-testing-create-biologically-enhanced-super-soldiers-n1249914) with experimental concepts for biological and cognitive enhancement of soldiers and civilians. American policy should be focused on protecting, rather than undermining, the global dominance of our biotechnology industry.

#### TRIPs waiver undermines the innovation ecosystem

**Pitts 5/21** [Peter J. Pitts, a former associate commissioner of the FDA, is president of the Center for Medicine in the Public Interest. Robert Popovian is the chief science policy officer of the Global Healthy Living Foundation and a senior health policy fellow at the Progressive Policy Institute. Wayne Winegarden, Ph.D., directs the Center for Medical Economics and Innovation at the Pacific Research Institute. 5-5-2021, PRI Center for Medical Economics And Innovation “Waiving Covid-19 Vaccine Patents Is a Bad Idea and Sets a Dangerous Precedent”, 5-21-2021, <https://medecon.org/waiving-covid-19-vaccine-patents-is-a-bad-idea-and-sets-a-dangerous-precedent/> ]//AAli

Nor is such a process going to produce faster results. Historically, under compulsory rather than voluntary licensing arrangements, it has taken even legitimate generic manufacturers years to receive the formulas, work out logistical challenges, and scale up production. In one case of compulsory licensing, it took over four years to bring a generic AIDS drug to Rwanda. The World Health Organization regularly publishes a list of “essential” medications, the vast majority of which patent protections have long expired. Any generic manufacturer can therefore set itself up producing them. Yet the WHO reports that availability of these medicines in many parts of the developing world remains spotty, at best. The quality of many of these essential medicines is also questionable. Yet none of the drugs on the WHO list are in the same universe of complexity as the Covid-19 vaccines. The patent system is not the problem here. But, some ask, why should private companies enjoy the property rights to innovation driven by government funding? This question likewise misses the mark. In a study of 478 drugs less than 10 percent had a public-sector patent associated with it. While providing no gain, compulsory licensing promises lots of pain. Shunting aside patent and intellectual property rights sends a dangerous signal to innovative biopharmaceutical companies and their investors. Biopharmaceutical research is risky. It costs almost $3 billion, on average, to bring a single medicine to pharmacy shelves. Biotech investors take these risks because of strong patent protection like those in the United States. Scientists in America now develop over half of all new drugs worldwide. It’s important to understand the current advocacy for a “temporary” IP waiver. A small but vocal and influential public health policy cohort believes that IP protections are the most significant cause of global healthcare disparities. Their philosophies repeat and reinforce many misconceptions about the problem of improving global access to medicines. The reality is that, in order to save the world, we must all work together as partners. A free-market healthcare paradigm for drug development, although far from perfect, works. A well-appointed armamentarium of Covid-19 diagnostic tools, therapeutics, and vaccines – all invented in under one year, speaks to the power of today’s innovation ecosystem. That ecosystem is built on IP protections. Right now, under voluntary licensing, global production capacity for Covid vaccines and treatments is expanding and accelerating. A move to nullify IP will not result in a single resident of the developing world getting vaccinated one minute sooner.

#### The plan recapitulates IP to China, destroying competitive advantages

WSJ 5/6 [Wall Street Journal Editorial Board, WSJ Opinion Philosophy: “We speak for free markets and free people, the principles, if you will, marked in the watershed year of 1776 by Thomas Jefferson's Declaration of Independence and Adam Smith's “Wealth of Nations.” So over the past century and into the next, the Journal stands for free trade and sound money; against confiscatory taxation and the ukases of kings and other collectivists; and for individual autonomy against dictators, bullies and even the tempers of momentary majorities.” Edited by Paul A. Gigot and Daniel Henninger, “Biden’s Vaccine IP Debacle: His patent heist is a blow to the Covid fight and U.S. biotech.” The WSJ Opinion: Review and Outlook, May 6, 2021] RM

We’ve already criticized President Biden’s bewildering decision Wednesday to endorse a patent waiver for Covid vaccines and therapies. But upon more reflection this may be the single worst presidential economic decision since Nixon’s wage-and-price controls.

In one fell swoop he has destroyed tens of billions of dollars in U.S. intellectual property, set a destructive precedent that will reduce pharmaceutical investment, and surrendered America’s advantage in biotech, a key growth industry of the future. Handed an American triumph of innovation and a great soft-power opportunity, Mr. Biden throws it all away.

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India and South Africa have been pushing to suspend patents at the World Trade Organization for months. They claim that waiving IP protections for Covid vaccines and therapies is necessary to expand global access, but their motivation is patently self-interested.

Both are large producers of generic drugs, though they have less expertise and capacity to make complex biologics like mRNA vaccines. They want to force Western pharmaceutical companies to hand over IP free of charge so they can produce and export vaccines and therapies for profit. Their strategy has been to shame Western leaders into surrendering with the help of Democrats in the U.S.

But suspending IP isn’t necessary to expand supply and will impede safe vaccine production. The global vaccine supply is already increasing rapidly thanks to licensing agreements the vaccine makers have made with manufacturers around the world.

Pfizer and BioNTech this week said they aimed to deliver three billion doses this year, up from last summer’s 1.2 billion estimate. Moderna increased its supply forecast for this year to between 800 million and a billion from 600 million. AstraZeneca says it has built a supply network with 25 manufacturing organizations in 15 countries to produce three billion doses this year.

AstraZeneca and Novavax have leaned heavily on manufacturers in India to produce billions of doses reserved for lower-income countries. But India has restricted vaccine exports to supply its own population. IP simply isn’t restraining vaccine production.

Busting patents also won’t speed up production, since it would take months for these countries to set up new facilities. Competition will increase for scarce ingredients, and less efficient manufacturers with little expertise would make it harder for licensed partners to produce vaccines.

There’s also the problem of safety. Johnson & Johnson has experienced quality problems at an Emergent plant making its vaccines, and that’s in Baltimore. Imagine the potential problems with unlicensed producers in, say, Malaysia or Brazil. If vaccines made there have complications, confidence in licensed vaccines could plummet too. And who would Pfizer and Moderna sue to get their reputations back?

The economic self-damage is also hard to fathom. The U.S. currently has a competitive advantage in biotech and biologics manufacturing, which could be a growing export industry. Waiving IP protections for Covid vaccines and medicines will give away America’s crown pharmaceutical jewels and make the U.S. and world more reliant on India and China for pharmaceuticals.

Moderna has been working on mRNA vaccines for a decade. Covid represents its first success. Ditto for Novavax, which has been at it for three decades. Small biotech companies in the U.S. have been studying how to create vaccines using nasal sprays, pills and patches.

Thanks to Mr. Biden, all this could become the property of foreign governments. Licensing agreements allow developers to share their IP while maintaining quality control. Breaking patents and forcing tech transfers will enable China and low-income countries to manufacture U.S. biotech products on their own.

China’s current crop of vaccines are far less effective than those in the West, but soon Beijing might be able to purvey Pfizer knock-offs. The U.S. has spent years deploring China’s theft of American IP, and now the Biden Administration may voluntarily let China could reap profits from decades of American innovation.

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Instead of handing over American IP to the world, Mr. Biden could negotiate bilateral vaccine agreements and export excess U.S. supply. If Mr. Biden wants to increase global supply safely, the U.S. could spend more to help the companies produce more for export. Then the jobs would go to Americans. We thought this was the point of the production deal Mr. Biden negotiated between J&J and Merck.

Alas, this President seems to be paying more attention these days to Elizabeth Warren, Bernie Sanders, Alexandria Ocasio-Cortez and Nancy Pelosi. They think vaccines and new drugs can be conjured by government as a public good with no incentive for risk-taking or profit. This really is destructive socialism.

Mr. Biden ought to listen to Angela Merkel. Pfizer’s partner BioNTech is a German firm, and the German Chancellor said Thursday that she opposes the WTO heist: “The protection of intellectual property is a source of innovation and it must remain so in the future.”

At least IP is safe in Germany. Mr. Biden has sent a signal around the world that nobody’s intellectual property is safe in America.

#### China will leapfrog the US through biotech primacy

Cumbers 20 [John Cumbers, “I am the founder and CEO of SynBioBeta, the leading community of innovators, investors, engineers, and thinkers who share a passion for using synthetic biology to build a better, more sustainable universe. I publish the weekly SynBioBeta Digest, host the SynBioBeta Podcast, and wrote “What’s Your Biostrategy?”, the first book to anticipate how synthetic biology is going to disrupt virtually every industry in the world. I also founded BetaSpace, a space settlement innovation network and community of visionaries, technologists, and investors accelerating the industries needed to sustain human life here and off-planet. I’ve been involved with multiple startups, I am an operating partner and investor at the hard tech investment fund Data Collective, and I'm a former bioengineer at NASA. I earned my PhD in Molecular Biology, Cell Biology, and Biochemistry from Brown University and am originally from the UK.”) “China’s Plan To Beat The U.S. In The Trillion-Dollar Global Bioeconomy” Forbes, 2/3/2020] RM

The report, entitled “Safeguarding the Bioeconomy,” looks at how research and innovation in the life sciences is driving rapid growth in agriculture, biomedical science, information science and computing, energy, and other sectors of the U.S. economy. This economic activity—collectively referred to as the bioeconomy—presents many opportunities to create jobs, improve the quality of life, and continue to drive the U.S. economy as a whole. The report says that while the U.S. has been a leader in advancements in the biological sciences, other countries are actively investing in and expanding their capabilities in this area—and the U.S.’s lead is beginning to slip. Four reasons everyone should care about the U.S. bioeconomy It might be easy for some to dismiss the report out of hand as a bunch of alarmist professors lobbying for more research money. But when you consider all the ways that biotechnology powers the economy and impacts our daily lives, it becomes clear that this is about something more: The economy: at $1 trillion in value, the U.S. bioeconomy represents hundreds of thousands of quality, high-paying jobs for Americans. Health & medicine: innovators in the bioeconomy are making next-generation therapies for cancer and diabetes, tackling emerging diseases like Coronavirus, and even increasing human longevity. Food & farming: biotechnology is not only making agriculture more sustainable, it’s also bringing to market new and improved crops that are more nutritious, more affordable, and more delicious. The environment: humanity’s health and well-being depend on our ability to stop and reverse climate change, and we can’t do it without biological solutions that treat carbon not as a waste product, but as the starting point for chemicals and materials that today use petroleum. Considering all this, it doesn’t seem like an overstatement when the report authors say that U.S. competitiveness in the bioeconomy is key to maintaining the economic health and security of the country. The very real risks to the U.S. bioeconomy There are many things that can go wrong, causing the U.S. to lose its current edge in the global bioeconomy. Some of these are economic risks, and others present serious national security risks. All of them are related to a failure of our government to act now. Here’s a sampling of the risks to U.S. leadership at the frontiers of tech and bio: Insufficient government R&D investment. Money for basic research and development builds the foundations of the bioeconomy. We learn, achieve new results, and create new applications. Investments that help develop enabling tools, technologies, and standards have the potential to maintain the U.S. bioeconomy competitive in a global bioeconomy. Ineffective or inefficient regulations. Regulatory uncertainty stifles creative new approaches that may have unknown paths, long delays, or that might be prohibited by later changes. Inadequate workforce. The U.S.’s K-12 education system may not prepare students to study STEM subjects at the university and postgraduate level, hindering the quality of workers. A skilled workforce gives U.S. companies the best talent to choose from, and it also encourages international firms to establish research and production facilities here. Ineffective or inefficient intellectual property protections. Uncertainty over what is patentable could discourage innovators who are considering whether and how to bring their innovations to market. Patent eligibility is also important to venture capitalists and private equity investors when considering whether to invest in biotechnology companies. Cybersecurity. As biological engineering depends more and more on massive datasets, the emerging bioeconomy now exists at the intersection of information science and biotechnological science. The bioeconomy’s growing reliance on software, networking, and computer hardware tools yields the same cyber vulnerabilities present in any other sector, including hacking, sabotage, breached privacy, or theft of intellectual property. Biosafety and biosecurity risks. The tools of today’s bioeconomy are enabling new capabilities that can generate concerns regarding traditional biothreats. These can include the accidental or intentional creation or release of dangerous or lethal pathogens. Such biothreats can harm humans, animals, plants, agriculture, the environment, and materials. Risks from climate change. Food and feed crops, biofuels crops, and crops used with bio-based fermentation products are susceptible to temperature and water stresses, as well as insects and pathogens that migrate with changing weather patterns. China: the biotech elephant in the room I’ve written previously written how the Chinese government is already making substantial investments in its bioeconomy. Here are three scary statistics, courtesy of Greg B. Scott of the ChinaBio Group: China is out-investing the U.S. China’s private investors poured $14.4 billion into its bioeconomy in 2019. That compares to the United States’ more meager investment of $10.4 billion. China is building a bigger bioeconomy workforce. China graduates about 8-10 million students each year. In the U.S., that number is closer to 400,000. Many Chinese students graduating from U.S. institutions stay here, but they are increasingly returning home to start highly innovative companies. China is investing in itself. Historically, China has invested heavily in foreign companies, tech, and debt. Now we’re seeing an uptick in China-to-China investments—the country no longer needs to look abroad to find plenty of good biotech opportunities. Chinese investments have led to centers of excellence in the regional technology hub of Shenzhen, including the Institute of Synthetic Biology at the Shenzhen Institute of Advanced Sciences (SIAT) and BGI Genomics. Shenzhen will compete for technological and economic leadership with U.S. regional biotech powerhouses such as San Francisco/Silicon Valley and Boston/Cambridge in the years to come. Many of China’s long-standing challenges—environment, food, water, waste management, and rapid innovation to retain its global manufacturing competitiveness—are areas where synthetic biology is seen as a key technology for the future. In other words, synthetic biology is not just an academic pursuit for China. Rather, its leaders are thinking proactively about how biological engineering can be used to address the country’s strategic national interests—while U.S. leadership stands idly by. What do we do? So what can U.S. policymakers do to protect the U.S. bioeconomy and ensure continued technological and economic leadership in biology for the next twenty years? Straight from the top. China has made clear its ambition to become a global tech superpower, with President Xi Jinping calling science and technology one of the main battlefronts of the economy. The U.S. administration needs to step up its game, too. President Trump recently declared January 2020 to be National Biotechnology Month, citing “boundless possibilities for economic growth, national security, healthcare, manufacturing, and agriculture.” That’s the right sentiment—now we need real action. New legislation. Late last year, the U.S. House of Representatives passed the Engineering Biology Research and Development Act of 2019, which would direct the Office of Science and Technology Policy (OSTP) to implement a national research strategy for engineering biology. The explicit goal: maintain U.S. science, technology, and economic leadership in synthetic biology. The bill now resides in the Senate and awaits committee action. Legislative leadership is now needed to give this bill the appropriations necessary to give it real teeth, and then put it squarely on the President’s desk. Investing for returns. The Human Genome Project is said to have returned $141 for every dollar invested by taxpayers. While “Big Science” yields tremendous benefits for everyone, it doesn’t happen without federal funding. In 2019, politically courageous Republicans and Democrats came together to produce a 2020 final spending bill that is kind to science, in essence ignoring President Trump’s proposed cuts and instead giving increases to each of the NIH, NSF, NASA, and DOE’s Office of Science. But the U.S. isn’t even in the top ten for R&D spending as a percentage of GDP, while China continues to close in on the U.S., meaning that the U.S. is no longer the uncontested global leader in science. Leading the global bioeconomy: Have some courage There are many things the U.S. could do to protect the American bioeconomy. But above all else, policymakers need to come together and demonstrate the kind of courage and vision needed to be a world leader. Science and technology know no partisan lines. Everybody wants healthy lives, clean water, and good jobs. Federal initiative and assistance are needed to bring these benefits to everyone living in the U.S.. Today, the American synthetic biology industry may be unprepared for the global competition it will face, lacking initiative and leadership at the highest levels of government. But this could change quickly. If a country like the U.S. makes engineering biology a national priority, anything is possible in the new bioeconomy.

#### Heg solves arms races, land grabs, rogue states, and great power war

Brands 18 [Hal, Henry Kissinger Distinguished Professor at Johns Hopkins University's School of Advanced International Studies and a senior fellow at the Center for Strategic and Budgetary Assessments." American Grand Strategy in the Age of Trump." Page 129-133]

Since World War II, the United States has had a military second to none. Since the Cold War, America has committed to having overwhelming military primacy. The idea, as George W. Bush declared in 2002, that America must possess “strengths beyond challenge” has featured in every major U.S. strategy document for a quarter century; it has also been reflected in concrete terms.6

From the early 1990s, for example, the United States consistently accounted for around 35 to 45 percent of world defense spending and maintained peerless global power-projection capabilities.7 Perhaps more important, U.S. primacy was also unrivaled in key overseas strategic regions—Europe, East Asia, the Middle East. From thrashing Saddam Hussein’s million-man Iraqi military during Operation Desert Storm, to deploying—with impunity—two carrier strike groups off Taiwan during the China-Taiwan crisis of 1995– 96, Washington has been able to project military power superior to anything a regional rival could employ even on its own geopolitical doorstep.

This military dominance has constituted the hard-power backbone of an ambitious global strategy. After the Cold War, U.S. policymakers committed to averting a return to the unstable multipolarity of earlier eras, and to perpetuating the more favorable unipolar order. They committed to building on the successes of the postwar era by further advancing liberal political values and an open international economy, and to suppressing international scourges such as rogue states, nuclear proliferation, and catastrophic terrorism. And because they recognized that military force remained the ultima ratio regum, they understood the centrality of military preponderance.

Washington would need the military power necessary to underwrite worldwide alliance commitments. It would have to preserve substantial overmatch versus any potential great-power rival. It must be able to answer the sharpest challenges to the international system, such as Saddam’s invasion of Kuwait in 1990 or jihadist extremism after 9/11. Finally, because prevailing global norms generally reflect hard-power realities, America would need the superiority to assure that its own values remained ascendant. It was impolitic to say that U.S. strategy and the international order required “strengths beyond challenge,” but it was not at all inaccurate.

American primacy, moreover, was eminently affordable. At the height of the Cold War, the United States spent over 12 percent of GDP on defense. Since the mid-1990s, the number has usually been between 3 and 4 percent.8 In a historically favorable international environment, Washington could enjoy primacy—and its geopolitical fruits—on the cheap.

Yet U.S. strategy also heeded, at least until recently, the fact that there was a limit to how cheaply that primacy could be had. The American military did shrink significantly during the 1990s, but U.S. officials understood that if Washington cut back too far, its primacy would erode to a point where it ceased to deliver its geopolitical benefits. Alliances would lose credibility; the stability of key regions would be eroded; rivals would be emboldened; international crises would go unaddressed. American primacy was thus like a reasonably priced insurance policy. It required nontrivial expenditures, but protected against far costlier outcomes.9 Washington paid its insurance premiums for two decades after the Cold War. But more recently American primacy and strategic solvency have been imperiled.

THE DARKENING HORIZON For most of the post–Cold War era, the international system was— by historical standards—remarkably benign. Dangers existed, and as the terrorist attacks of September 11, 2001, demonstrated, they could manifest with horrific effect. But for two decades after the Soviet collapse, the world was characterized by remarkably low levels of great-power competition, high levels of security in key theaters such as Europe and East Asia, and the comparative weakness of those “rogue” actors—Iran, Iraq, North Korea, al-Qaeda—who most aggressively challenged American power. During the 1990s, some observers even spoke of a “strategic pause,” the idea being that the end of the Cold War had afforded the United States a respite from normal levels of geopolitical danger and competition. Now, however, the strategic horizon is darkening, due to four factors.

First, great-power military competition is back. The world’s two leading authoritarian powers—China and Russia—are seeking regional hegemony, contesting global norms such as nonaggression and freedom of navigation, and developing the military punch to underwrite these ambitions. Notwithstanding severe economic and demographic problems, Russia has conducted a major military modernization emphasizing nuclear weapons, high-end conventional capabilities, and rapid-deployment and special operations forces— and utilized many of these capabilities in conflicts in Ukraine and Syria.10 China, meanwhile, has carried out a buildup of historic proportions, with constant-dollar defense outlays rising from US$26 billion in 1995 to US$226 billion in 2016.11 Ominously, these expenditures have funded development of power-projection and antiaccess/area denial (A2/AD) tools necessary to threaten China’s neighbors and complicate U.S. intervention on their behalf. Washington has grown accustomed to having a generational military lead; Russian and Chinese modernization efforts are now creating a far more competitive environment.

## Case

### FW

#### 1] Util takes out HR because the only reason that protecting human rights is good is that they prevent people from undergoing pain. Autonomy is also only good because then people can go for pleasure and avoid pain.

#### 2] No link on the syllogism, the jump from the Forst to Ahmadiani card, going from human rights being the basis of political orders to the fact that private companies must respect them, has no connection

#### 3] Topic lit: Literature is always going to support util because the impacts of the topic are things like warming, war, pandemics, etc. which are easiest to resolve with util

#### 4] Solvency: turn: using HR fw for solvency is flawed because it is extremely subjective what does and doesn’t constitute human rights meaning

#### 5] Specific link chains are good because they narrow down and issue and make it more concrete than some amorphous ideal like human rights. Also turn- people are more receptive to things like human rights because they can personally relate so err on the side of util because it focuses on quantifiable and weighable impacts

### Adv

#### 1] The medicines in question won’t be present at all AND companies will only be incentivized to invest in non-essential drugs leading to a decrease in the drugs that the aff wants so human rights suffer even more

#### 2] DA turns case because of innovation leading to war, which is worse for human rights

#### 3] Alt cause and no solvency: Waiving IPR does nothing; bottleneck is the real problem, takes out all their cards

Stephen **Ezell 3/9** https://itif.org/publications/2021/03/09/trips-waiver-covid-19-ip-rights-wouldnt-help-vaccine-access(Stephen Ezell is vice president, global innovation policy, at the Information Technology and Innovation Foundation (ITIF). He focuses on science and technology policy, international competitiveness, trade, manufacturing, and services issues.) [AB]

**In the face of a COVID-19 pandemic that has caused** [**2.6 million fatalities**](https://news.google.com/covid19/map?hl=en-US&mid=%2Fm%2F02j71&gl=US&ceid=US%3Aen) **worldwide, life-sciences companies have raced to bring forward a wide range of life-saving innovations,** including novel diagnostic tests like Lumira DX’s that can detect the virus within minutes; therapeutics such as Gilead’s remdesivir; and highly effective vaccines such as those from Moderna, Pfizer, and Johnson & Johnson. In fact, over 600 novel COVID-19 treatments are [under development](https://www.fda.gov/drugs/coronavirus-covid-19-drugs/coronavirus-treatment-acceleration-program-ctap), including 130 vaccines in global clinical trials and 176 in pre-clinical trials. **Yet, amidst this unprecedented pace of innovation, some 90 developing nations, led by India and South Africa, have petitioned the World Trade Organization’s Trade-Related Aspects of Intellectual Property Rights (TRIPS) Council calling for a** [**waiver**](https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/IP/C/W669.pdf&Open=True) **to suspend all intellectual property rights (IPR) associated with COVID-19 innovations, again asserting the false narrative that IP rights inhibit access to medicines.** The waiver petition itself suggests the various fallacies underlying the request. First, the waiver (initially submitted on October 2, 2020) acknowledges that, “To date, there is no vaccine or medicine to effectively prevent or treat COVID-19.” **This admission immediately confirms that intellectual property rights are not and have never been the challenge in the COVID-19 pandemic.** Rather, the challenge initially was the very lack of intellectual property; we had to, and did, discover and invent the scientific and technical knowledge necessary to understand the operation of the virus and how to defeat it with novel vaccines and therapeutics. Much of this involved new-to-the world technologies, such as novel mRNA-based vaccines. Far from being an inhibitor of this process, the robust intellectual property regimes in place in many nations contributed to a body of biomedical knowledge and technologies that provided a crucial platform for the innovation of COVID-19 solutions. Second, the [waiver](https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/IP/C/W669.pdf&Open=True) petition vaguely references “several reports about intellectual property rights hindering or potentially hindering timely provisioning of affordable medical products to the patients.” The [first](https://www.bloomberg.com/news/articles/2020-03-20/world-war-ii-style-production-may-carry-legal-risks-for-patriots) of two cited instances pertained to Labrador Diagnostic LLC, a patent-licensing firm which—although it did file a suit against a French firm, bioMerieux SA, developing coronavirus tests, in order to ensure that its IP was not infringed—has actually committed to offering its patents royalty-free to any company developing coronavirus tests. The second instance referenced Kentucky Governor Andy Beshear’s [call](https://www.courier-journal.com/story/news/2020/04/03/beshear-calls-3-m-release-patent-n-95-respirator-amid-pandemic/5112729002/) for 3M to release a patent on N95 respirators. But that was it; on those two incredibly thin reeds, with nary any serious evidence whatsoever that IP rights were inhibiting access to COVID-19 treatments—let alone the fact that no COVID-19 vaccines existed at the time—the petitioners took the radical step to call for a suspension of all IPR rights pertinent to COVID-19 technologies throughout the duration of the pandemic. And while petitioners made this call on the alleged grounds of ensuring sufficient access to needed vaccines and therapeutics, their call for the suspension of every facet of IP rights on every conceivable COVID-19 related technology—even such as for copyrights and industrial designs—betrays the reality that the petitioners’ core goal isn’t really about access, but about undermining the global intellectual property rights system. To be sure, the developed world needs to be fully committed to ensuring that the world’s citizens receive the COVID-19 vaccines and therapeutics they need. But this can be accomplished through structures such as licensing and product development partnerships, without requiring an abrogation of intellectual property rights. For instance, in February 2021, the Biden administration announced it would [contribute](https://www.npr.org/2021/02/18/969145224/biden-to-announce-4-billion-for-global-covid-19-vaccine-effort) up to $4 billion to COVAX, a vaccine alliance seeking to distribute COVID-19 vaccines to 92 low- and middle-income countries. COVAX aims to deliver at least 2 billion vaccine doses by the end of 2021, covering at least 20 percent of the most vulnerable citizens in poor- and middle-income countries. I**nnovative life-sciences companies have entered into a number of licensing agreements to facilitate dramatically expanded manufacturing of COVID-19 vaccines and therapeutics. For instance, Gilead Sciences has licensed its therapeutic remdesivir royalty-free to** [**nine generic drug manufacturers**](https://www.gilead.com/purpose/advancing-global-health/covid-19/voluntary-licensing-agreements-for-remdesivir)**, in Egypt, India, and Pakistan. AstraZeneca reached a licensing and technology transfer agreement enabling** [**India’s Serum Institute**](https://www.astrazeneca.com/media-centre/articles/2020/astrazeneca-takes-next-steps-towards-broad-and-equitable-access-to-oxford-universitys-potential-covid-19-vaccine.html) **to manufacture one billion vaccine doses for low- and middle-income countries. The Serum Institute has further** [**entered into manufacturing licenses**](https://geneva-network.com/research/why-intellectual-property-rights-matter-for-covid-19/) **with a number of developers of yet to be approved COVID-19 vaccines, as have several other Indian vaccine manufacturers.** Johnson and Johnson has announced plans to allocate up to [500 million vaccine doses](https://www.jnj.com/latest-news/johnson-johnson-signs-communique-on-expanded-global-access-for-covid-19-vaccines) to lower-income countries, with delivery starting by mid-2021. Companies like Johnson & Johnson are making the vast majority of these vaccine doses available on a not-for-profit basis. **Thus, the fundamental problem isn’t high prices due to IP rights; it’s dramatically scaling up manufacturing capacity. It takes** [**60 to 110 days**](https://www.cbsnews.com/news/covid-vaccine-johnson-and-johnson-factory/) **to produce one batch of COVID-19 vaccine.** When Serum Institute CEO Adam Poonawalla [was asked](https://www.theguardian.com/global-development/2021/feb/14/we-took-a-huge-risk-the-indian-firm-making-more-covid-jabs-than-anyone) if vaccine rollout was slowed because vaccine patentholders were licensing too few manufacturers to make them, he responded, **“No. There are enough manufacturers, it just takes time to scale up. And by the way, I have been blown away by the cooperation between the public and private sectors in the last year, in developing these vaccines.” Poonawalla actually cited the lack of global regulatory harmonization as a far greater cause of delays in the vaccine rollout. Even Médecins Sans Frontières’ Rose Scourze acknowledged (in a January 20, 2021 *BBC* interview) that suspending patent rights “wouldn’t produce millions of more vaccines.”** Instead of forcing the disclosure of IP, policymakers should encourage the use of voluntary licensing agreements to expand production of the needed COVID-19 vaccines and therapeutics. One reason this critically matters is to ensure consistency and safety in the production of these treatments. The mRNA-based vaccines developed by Moderna and Pfizer are [incredibly complex biologic products](https://itif.org/publications/2021/01/28/covid-19-vaccines-are-even-bigger-story-you-think) that require specialized experience, expertise, and equipment to manufacture. For example, mRNA vaccines require a complicated technique known as “bioprocess” that requires specialty bioreactors to first manufacture DNA that codes for the desired mRNA sequence, and then uses a second bioprocess to create billions of identical mRNA segments. These are then wrapped in a nanolipid wrapper using yet another very specialized fluidics and mixing process, and for which there are only three facilities in the world that can execute the step of creating the liquid capsule around the RNA. Instead of simply being forced to divulge their IP or see it be compulsorily licensed to other manufacturers, in light of the extreme complexity of manufacturing COVID-19 vaccines and therapeutics, companies should have the right to evaluate potential license partners and ensure that they can meet the production standards required to safely and reliably produce COVID-19 vaccines or treatments before entering into license arrangements with them. **Indeed, this is critical for it would be disastrous if defective vaccines or therapeutics were produced at facilities not properly equipped to produce such complex treatments. As Phil Stevens and Mark Schultz** [**have written**](https://geneva-network.com/research/why-intellectual-property-rights-matter-for-covid-19/)**, there’s simply no evidence that invalidating IP rights would achieve more than the licensing agreements currently being forged between innovators and reputable vaccine manufacturers in countries such as India and Brazil.** Instead of rolling back intellectual property rights, policymakers in developed and developing nations alike should focus on mechanisms to scale up production of vaccines and make them affordably available to citizens in developing countries. But to achieve that, there is simply no compelling reason for a blanket suspension of the intellectual property rights associated with COVID-19 products and technologies. For this reason, the Biden administration should continue the previous administration’s stance of opposing the waiver at the WTO TRIPS council, where deliberations resume on March 10, and reject [calls from some in Congress](https://news.bloomberglaw.com/health-law-and-business/democratic-lawmaker-pushes-biden-to-back-vaccine-patent-waiver) to endorse the proposed TRIPS waiver.

#### 4] Uq overwhelms the link, pharma is already so big that this won’t solve anything and they’ll continue high prices