## T States

#### Interp and violation: "The member nations" denotes the totality of member nations in the WTO. The aff may not defend a subset of WTO member nations ought to reduce IP protections for medicines.

Sharvy 80 [Richard Sharvy, philosopher. "A More General Theory of Definite Descriptions on JSTOR," The Philosophical Review, Vol. 89, No. 4, Oct. 1980, accessed 8-22-2021, https://www.jstor.org/stable/2184738] HWIC

3. Definite Plural Descriptions. Phrases like 'the sheep in New Zealand' and 'the people in Auckland' are also ordinary and common definite descriptions, and they do denote. But because their contained predicates are plural predicates like 'are people in Auckland', which apply to more than one object, such expressions are not subject to a Russellian analysis. There is no such thing as (ax \* x are people in Auckland), since a number of distinct items satisfy the predicate-the men in Auckland are people in Auckland, and so are the women in Auckland and the children in Auckland. The definite plural description 'the people in Auckland' designates the sum or totality of all the people in Auckland. This is the sum of all that to which the predicate 'are people in Auckland' applies: the sum of all the items such as the women in Auckland, the children in Auckland, etc., that satisfy the plural predicate 'are people in Auckland'. What sort of entity is the denotation of a definite plural description such as 'the children in Auckland'? A first attempt might be to say that such expressions denote sets or classes. Then a sum of such items would be the union of such classes. Russell would insist on calling the people in Auckland a "class as many" (1903, pp. 68-72, 76-77). But if the predicate 'are people in Auckland' is taken to apply to x just if x is a set of people in Auckland,5 then the definite plural description 'the people in Auckland' refers to the union of these sets: U {x: x is a set of people in Auckland). So let us first consider set-theoretic union as a candidate for the sort of sum needed here in the analysis of definite plural descriptions. This might seem more complicated than '{x: x is a person in Auckland)', which refers to the same class. But the former expression has the advantage of preserving the predicate as a plural predicate, as it appeared in the original definite plural description. A standard definition of union is U a = {x: (ay) (x ecy .y E a)) (cf. Quine 1963, p. 53). In my notation this would be written: Ua = {x:xe(Qy yEa)) -the x's that are a member of some member of a. Quine observes 5I do not say 'nonempty' simply because it would be redundant: no class of people is empty. I do include the singletons, so that {Sharvy} are people in Auckland. This might seem odd. However, the instances or instantiations of 'all men are mortal' include sentences like 'Sharvy is mortal' along with sentences like 'the men in Auckland are mortal'; thus, the plural does include the singular. Notice that 'all men are mortal' should be symbolized '(x) (x are men D x are mortal)'; logic students are generally wrongly taught to write '(x) (x is a man D x is mortal)', which is more properly a symbolization of 'every man is mortal', which has the singular subject 'every man'. 616 This content downloaded from 92.63.104.30 on Sat, 28 Jun 2014 13:35:30 PM All use subject to JSTOR Terms and Conditions DEFINITE DESCRIPTIONS that if everything is a class, this definition implies that the union U {x} of a singleton is its member x; this effect is preserved for an apparent nonclass by identifying it with its own unit class. So with this convention, if G applies to exactly one object, then U {x: Gx} = ( 7x . Gx ). So the Russellian definite singular description again emerges, here as a species of definite plural description.6 This would occur with, e.g., 'the men in this room' if there were exactly one man in the room. Notice also that plural predicates, like mass predicates, are cumulative: any sum of parts which are cats are cats. So 'G(the G)' holds for any instantiated plural predicate when 'the G' is defined as such a sum: the men in Auckland are men in Auckland, the poor are poor, etc. The analysis of definite plural description as union is not entirely satisfactory. One reason is that it explicitly uses the mechanism of class abstraction and the membership relation in a way that requires that such definite plural descriptions do denote classes. Now there is no problem about what 'the people in Auckland' denotes: it denotes the people in Auckland. Whether the people in Auckland are a set or class is an ontological question that should be discussed elsewhere. (Indeed, ontological questions generally should be independent of a theory of descriptions: we should be able to explain phrases like 'the first symphony of Beethoven' without discussing the ontological nature of symphonies.) My aim here is simply to explain plural definite descriptions like 'the people in Auckland' in a way that remains neutral on that ontological question by avoiding explicitly settheoretic notions. Another reason to turn away from the above analysis of 'the C as 'U {x: Gx}' is that it lacks generality. It lets in too much 6 I thank W. V. Quine for calling my attention to this passage. 'one object' means 'one class'. Consider the predicate 'are men and women in this room', and suppose the room contains just one man, m, and one woman, w. Then only one object, {m,w} satisfies that predicate, and U {a: a are men and women in this room) = U {{m,w}} = {m,w} = (7a a are men and women in this room). See note 8 also. Consider the definite description 'the square root of 2'. This is ordinarily used to refer to the positive square root of 2. My theory explains this; if real numbers are defined in the usual way as lower cuts of rationals (cf. Russell 1903, ch. 33), the positive root is the union of the negative and positive roots. 617 This content downloaded from 92.63.104.30 on Sat, 28 Jun 2014 13:35:30 PM All use subject to JSTOR Terms and Conditions RICHARD SHARVY when applied to a singular definite description whose contained predicate applies to more than one object: 'the author of PM' would denote {Whitehead, Russell). This was Frege's convention (?1 1), but it is clearly artificial; 'the author of PM' should fail to denote. And finally, 'U {x: Gx)' just doesn't look enough like the analysis given earlier of definite mass descriptions. Mass terms and plural terms are alike in numerous ways, and it would be nice if their uses in forming definite descriptions had analyses that reflected this similarity. Specifically, we should express summation without using the membership relation e, which has no analogue in the semantics of mass terms. The solution is to observe that there is a part of relation available: the men in Auckland are part of the people in Auckland. (This relation looks very much like the relation of being a nonempty subset of.) Writing it as '<', we may then define 'the G' for plural predicates as (4) above: sm G that all G are part of. The requirement in (4) that x satisfy G is useful for distinguishing the definite plural description 'the authors of PM' from the definite singular description 'the author of PM'. The former denotes Whitehead and Russell, as it should.7 Without the requirementhat x satisfy G, using (1) or simply union, so would the latter. But although Whitehead and Russell are authors of PM, they are not an author of PM. That requirement also leads to the intuitively correct results for expressions like 'the Wilmington Ten' and 'the five men in this room'. If there are only four men in this toom, the description 'the five men in this room' fails to denote because the predicate 'are five men in this room' applies to nothing. If there are six men in this room, then that description also fails to denote-not because that predicate applies to more than one item (i.e., to every part of the six containing just five men), but because it fails to apply to their sum. A word of caution about part is needed here. I am taking it in what I think is its plain and ordinary sense. However, Goodman, Quine, and other writers on the theory of parts (mereology) have used it in an extended sense which is not appropriate here. 7 But it does not denote Whitehead, and it does not denote Russell. The property of being denoted by an expression is not dissective. I may refer to something without referring to each of its parts. 618 This content downloaded from 92.63.104.30 on Sat, 28 Jun 2014 13:35:30 PM All use subject to JSTOR Terms and Conditions DEFINITE DESCRIPTIONS The difference is that these writers combine mereology with a kind of materialism. (An exception is Foradori.) Thus Quine writes, "there are parts of water, sugar, and furniture too small to count as water, sugar, furniture" (1960, p. 99). Here, by 'parts of furniture' he means something like 'spatiotemporally determined parts of the material constituting the world's furniture'; by 'parts of water' he means 'spatiotemporally determined parts of the world's water'. However, in the ordinary sense of 'part', the parts of water are hydrogen and oxygen. In the ordinary sense of part, shrimp is a part of shrimp salad. Here, the words 'shrimp' and 'shrimp salad' refer to types or kinds, and not to the world's shrimp and the world's shrimp salad. Indeed, the world's shrimp is not part of the world's shrimp salad. Now, my furniture is part of the world's furniture, and the chair in my billiard room is part of my furniture. But is a leg of that chair part of my furniture? I doubt it. In a distinguishable sense of 'part', a leg of my chair is a part of that chair and a part of my furniture. In the plural of that same sense, the legs are parts of my furniture. But those legs are not part of my furniture. The matter of the legs is part of the matter of the furniture; also, the chairs in my billiard room are part of my furniture. But the legs of the chairs are not part of the furniture. The men in Auckland are part of the men and women in Auckland, but the arms of the men in Auckland are not part of the men and women in Auckland. The explanation is not that the arms fail to satisfy the contained predicate 'are men and women in Auckland', for the men in Auckland also fail to be men and women in Auckland. Rather, the explanation is that x are part of y in this ordinary sense just if x are some ofy. Notice the difference between 'some' and 'some of. It's true that some of the men and women in Auckland are men, but false that some men and women in Auckland are men. It's true that some of the whiskey-and-water inmy glass is water, but false that some whiskey-and-water inmy glass is water. 'part of' and 'some of' seem to be synonymous here; examples like these occur with mass and plural predicates that are not dissective. The legs of my chair are not part of my furniture, because 619 This content downloaded from 92.63.104.30 on Sat, 28 Jun 2014 13:35:30 PM All use subject to JSTOR Terms and Conditions RICHARD SHARVY it's false that they are some of my furniture. Given our understanding of 'part' then, being furniture and being men in Auckland are dissective properties; it is compounds like 'are men and women' that fail to be dissective. So only articles of furniture count as part of my furniture. It is a totally distinct feature of Goodman's system that causes his notion of 'part' to be broader than mine, so that, e.g., the chair legs are also part of my furniture. That feature is a sort of materialism. The set of my tables # the set of my table tops and legs; but the matter of my tables = the matter of my tops and legs. If we remove this materialism from mereology, we have a purer theory of part and whole, and consequently of sum. The mereological sum, then, of my articles of furniture is my furniture, and not the matter of my furniture. With this ordinary and intended sense of 'part', then, the expressions 'the counties of Utah' and 'the townships of Utah' will have distinct denotations, as they should. Without the distinction made above, they might appear to collapse into the same object, since the territory occupied by the counties is identical to that occupied by the townships; (px) (x is territory of (b.y) (y are counties, etc.) ) = etc. What sort of entity is denoted by the definite plural description 'the men in Auckland'? This question contains the mistaken implication that this phrase denotes a single entity. But the phrase 'the men in Auckland' obviously denotes the men in Auckland. One might ask, "What sort of entities are those?" But the answer is easy: they are entities that eat, drink, sleep, and are numerous. The error to avoid is an insistence on the singular. 'the men in Auckland' is not a singular term-it is a plural term. This should hardly need to be said. But some writers have gone astray by failing to see that plurals are plural, and so insisting that they must denote something singular. For example, Richard E. Grandy says that in the sentence 'Lions are widespread', " 'lions' must be a singular [sic] term denoting the class of lions" (p. 297). Given this, it will follow that a certain class is widespread (which does not seem as odd to me as it might to many). But what seems odd is that Grandy claims that it does not follow from his statement that any class is widespread; apparently 620 This content downloaded from 92.63.104.30 on Sat, 28 Jun 2014 13:35:30 PM All use subject to JSTOR Terms and Conditions DEFINITE DESCRIPTIONS he prefers to give up the indiscernibility of identicals rather than the dogma that classes are "abstract." Now the words 'set' and 'class' have uses as dummy nominal measure words whose only function is the syntactic one of turning a plural into an apparent singular: the rational numbers are countable -- the set of rational numbers is countable. But no semantic consequences follow from such a use of the words 'set' and 'class'. The rational numbers are the set of rational numbers; the set of rational numbers is the rational numbers. The people in this room weigh 1000 kilograms; the set of people in this room weighs 1000 kg. The men in this room are not abstract; the set of men in this room is not abstract. We can avoid Grandy's contortions simply by taking the plural seriously as a plural, and abandoning the fetish for the singular that pervades contemporary decadent Western ontology. Along these same lines we can affirm that (i) 'the world's lions are widespread' and (ii) 'the world's lions are mammalian' do have the same logical form. In particular, the form of (ii) is 'Ml' and not '(x)(Lx D Mx)'; this is clear for (i). Question: how, then, does (ii), along with 'Aslan is a lion' imply 'Aslan is mammalian'? Answer: the implication is not a formal one at all, but depends on the fact that 'are mammalian' is dissective; 'are widespread' is not dissective. This situation is quite familiar: 'Ben weighs less than 60 kg' and 'Ben's nose is part of Ben' imply 'Ben's nose weighs less than 60 kg'. But again, the implication is not formal-it is not due to the logical form of these statements (this is easily seen by putting 'more' for 'less'). Rather, the implication holds because 'weighs less than 60 kg' is dissective. 4. Conclusion. For any given predicate G there is an appropriate part of or some of relation ? on the extension of G.8 Notice that 8The structure <{x: Gx},?) is often a mereology, i.e., a model of the so-called calculus of individuals. But it may fail to be a mereology. Idefine a quasi-mereology to be any structure (S, ?) where ? partially orders S (reflexive, transitive, antisymmetric), and where the <-least upper bound of a is a member of S for every nonempty subset a of S. One interesting type of quasi-mereology results from taking the algebraic direct product of two 621 This content downloaded from 92.63.104.30 on Sat, 28 Jun 2014 13:35:30 PM All use subject to JSTOR Terms and Conditions RICHARD SHARVY for most singular count predicates, < is just the identity relation: for 'is a shoe I own' < is the identity relation, for the extension of that predicate contains no two objects of which either is part of the other. Regardless of how many shoes I own, x - y only if x = y, for every x and y in that domain. In all such cases, '( px Gx )' defined as (4) comes out as desired, designating the gold in Zurich or the men in Auckland; and if I own just one shoe, '( pxS x is a shoe I own)' designates it, but otherwise that description fails. The analysis of 'the G' as (4) is therefore a general theory of definite descriptions, of which definite mass descriptions, definite plural descriptions, and Russellian definite singular count descriptions are species.9 full mereologies. (This description of the situation is due to Mark Nixon.) For example, (M, ) X <W. 5), where M is the set of sets of men and W is the set of sets of women, is isomorphic to (MW, 5), where MW is the set of sets of men and women, i.e., of sets containing at least one man and one woman. (MW, C ) is simply the corresponding quasi-mereology of the predicate 'are men and women'; this predicate is satisfied by the people in Auckland (they are men and women), but not by the men in Auckland. The structure fails to be a mereology because it is not properly closed under subtraction: there are sets a, b, each of which are men and women, and where a - b is not null yet fails to be men and women; a - b might just be men. However, we can combine the mereologies (M, C) and <W, 5) so that a mereology results. Add the null element to each, take the direct product, and then remove the null element: ((M U {4}, 5) X (W U {4}, 5))- ((4,4), 5). This is isomorphic to the mereology corresponding to the predicate 'are adults', i.e., to the set of nonempty subsets of the set of all men and women, under subset: V(P(U (M U W)) - {4}, C). 9 We have an account of the generic 'the' along these same lines. The New Zealand Flag is a New Zealand flag to which every New Zealand flag bears a certain relation ?. This seems a little more natural if we add the syllables 'akes' or 'icipates' to the word 'part' in reading '<' here: the New Zealand Flag is that New Zealand flag in which every New Zealand flag participates. The fact that it participates in itself does not lead to a "third man" regress, because participation in, as a variant of the part of relation, is not used to explain predication; predication remains primary. Of course, nothing in my discussion requires that there be such an entity (nor does anything here count against it). My theory is quite neutral. If there is such an entity, '( px x is a New Zealand flag)' picks it out. If there is no such entity, but merely a number of flags none of which bears ? to anything but itself, then ? is coextensive with the identity relation on those flags, and the situation is the same as for 'my shoe'. John Bacon, however, claims 622 This content downloaded from 92.63.104.30 on Sat, 28 Jun 2014 13:35:30 PM All use subject to JSTOR Terms and Conditions DEFINITE DESCRIPTIONS With this analysis and some thought about examples of definite mass descriptions and definite plural descriptions, we see that the primary use of 'the' is not to indicate uniqueness. Rather, it is to indicate totality; implication of uniqueness is a side effect.

#### Semantic tests determine whether statements are generic or existential –

**Leslie and Lerner 16** [Sarah-Jane Leslie (Ph.D., Princeton, 2007) is the dean of the Graduate School and Class of 1943 Professor of Philosophy. She has previously 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. She is also affiliated faculty in the Department of Psychology, the University Center for Human Values, the Program in Gender and Sexuality Studies, and the Kahneman-Treisman Center for Behavioral Science and Public Policy], and Adam Lerner, Ph.D, Postgraduate Research Associate in the Department of Philosophy at Princeton University, 4-24-2016, accessed 9-4-2021, "Generic Generalizations (Stanford Encyclopedia of Philosophy)," <https://plato.stanford.edu/entries/generics/>] HWIC

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.)

#### The resolution is generic: 1] "nations ought to reduce IPP for medicines" doesn't imply political bodies ought to b/c there might not be an obligation for terrorist groups or the UN 2] "nations generally ought to reduce IPP for medicines" doesn't substantially change the meaning

**1] Semantics outweigh:**

**A] Topicality is a constitutive rule of the activity and a basic aff burden, they agreed to debate the topic when they came to the tournament**

**B] Jurisdiction -- you can’t vote affirmative if they haven’t affirmed**

**C] It’s the only stasis point we know before the round so it controls the internal link to engagement, and there’s no way to use ground if debaters aren’t prepared to defend it.**

**2] Limits:**

**A] Quantitative – there are over 22k affs accounting for combinations of countries, exploded by "reduce" not implying complete elimination and "medicines" allowing specification – unlimited topics incentivize obscure affs that negs won’t have prep on – limits are key to reciprocal prep burden**

**B] Qualitative – they take away generic turns like WTO bad and functionally jettison "WTO" from the topic, which shifts away from the core topic lit of the WTO as an institution – also means there is no universal DA to spec affs**

**3] TVA solves – read the aff as advantage – most authors advocate for a change in WTO policy or TRIPS**

**4] No PICs offense – potential neg abuse doesn’t justify aff abuse because that would permit infinite 1AC abuse**

**D] Paradigm Issues –**

**1] T is DTD – A] their abusive advocacy skewed the debate from the start B] DTA is incoherent because we indict their advocacy**

**2] Comes before 1AR theory -- A] If we had to be abusive it’s because it was impossible to engage their aff B] T outweighs on scope because their abuse affected every speech that came after the 1AC C] Topic norms outweigh on urgency – we only have a few months to set them**

**3] Use competing interps on T – A] topicality is a yes/no question, you can’t be reasonably topical B] only our interp sets norms -- reasonability is arbitrary and invites judge intervention C] reasonability causes a race to the bottom of questionable argumentation**

**4] No RVIs – A] Forcing the 1NC to go all in on the shell kills substance education and neg strat B] discourages checking real abuse C] Encourages baiting – outweighs because if the shell is frivolous, they can beat it quickly**

## T Vaccines

#### A. Interpretation: medicine refers to treatments and cures only. Affirmatives must not reduce other medical IP protections.

**B. Violation: vaccines are medical interventions, not medicines**

Elbe 10 [Stefan Elbe, director of the Centre for Global Health Policy and a professor of international relations at the University of Sussex. "Security and Global Health," ISBN 0745643744, accessed 8-10-2021, https://www.wiley.com/en-ee/Security+and+Global+Health-p-9780745643731] HWIC

Yet here too we must be careful not to overlook other types of medical intervention simultaneously pursued by the 'social' arm of modern medicine at the population level. Vaccines in particular continue to be particularly important medical interventions that repeatedly surface in a variety of different health security delib- erations. Strictly speaking, vaccines are not medicines because they consist of small concentrations of disease-causing microbes (or their derivatives) used to enhance a person's immuno-response to a future infection. As a public health measure, vaccines have therefore also been largely sidelined in the existing medicalization literature. Yet, generally speaking, vaccines too can be considered as medical inter- ventions. That is certainly how the World Health Organization views them, pointing out that 'vaccines are among the most important medical interventions for reducing illness and deaths' available today (WHO 2009a). Whereas pills and other therapies mark the tools of clinical medicine, vaccines play a crucial part in the arsenal of 'social' medicine and public health. Developing and rolling out of new vaccines against a range of current (and future) diseases therefore represents further evidence of how the rise of health security is also encouraging security to be practised through the introduction of new medical interventions in society.

**Vaccines are different from medicines in the context of intellectual property**

Garrison 04 [Christopher Garrison, Consultant Legal Advisor to WHO. "Intellectual Property Rights and Vaccines in Developing countries," 04-13-2004, accessed 9-2-2021, https://www.who.int/intellectualproperty/events/en/Background\_paper.pdf?ua=1] HWIC

In the last few years, there has been a substantial debate about how intellectual property impacts medicines and in particular how the TRIPS Agreement impacts access to medicines in the developing world. Vaccines are different from medicines in a number of important respects however (at least from the small molecule ‘pill’ medicines if not the newer ‘biotech’ medicines). The issues raised in the access to medicines debate may therefore apply to a greater or lesser extent for vaccines, depending on these differences. This section examines a few of the different forms of intellectual property rights that are relevant in the context of vaccines and outlines the impact of some of the differences between vaccines and medicines.

#### C. Reasons to prefer

#### 1. Limits -- allowing any patented medical intervention includes testing and screening methods, surgery, contact tracing software etc. which takes away generics like innovation bc that applies to pharmaceutical development not distribution of preventative measures which explodes neg prep burden

#### 2. Precision -- we cite the WHO which proves common usage -- they add a whole new caselist based on social medicine which kills predictability -- that's k2 pre-tournament prep and deep clash around the core topic controversy. Reject counter-interps without a positive vision of the topic -- otherwise they can always shift the goalposts

## Innovation DA

**Pharma profits are up from COVID vaccines in particular, patent waivers threaten this**

**Buchholz 5-17-21**

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

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

**Strong IP protection spurs innovation by encouraging risk-taking and incentivizing knowledge sharing -- prefer statistical analysis of multiple studies**

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

IPRs Strengthen Innovation

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

IPR reforms also introduce strong incentives for domestic innovation. Sherwood, using case studies from 18 developing countries, concluded that poor provision of intellectual property rights deters local innovation and risk-taking.47 In contrast, IPR reform has been associated with increased innovative activity, as measured by domestic patent filings, albeit with some variation across countries and sectors.48 For example, Ryan, in a study of biomedical innovations and patent reform in Brazil, found that patents provided incentives for innovation investments and facilitated the functioning of technology markets.49 Park and Lippoldt also observed that the provision of adequate protection for IPRs can help to stimulate local innovation, in some cases building on the transfer of technologies that provide inputs and spillovers.50 In other words, local innovators are introduced to technologies first through the technology transfer that takes place in an environment wherein protection of IPRs is assured; then, they may build on those ideas to create an evolved product or develop alternate approaches (i.e., to innovate). Related research finds that trade in technology—through channels including imports, foreign direct investment, and technology licensing—improves the quality of developing-country innovation by increasing the pool of ideas and efficiency of innovation by encouraging the division of innovative labor and specialization.51 However, Maskus notes that without protection from potential abuse of their newly developed technologies, foreign enterprises may be less willing to reveal technical information associated with their innovations.52 The protection of patents and trade secrets provides necessary legal assurances for firms wishing to reveal proprietary characteristics of technologies to subsidiaries and licensees via contracts. Counties with stronger IP protection have more creative outputs (in terms of intangible assets and creative goods and services in a nation’s media, printing and publishing, and entertainment industries, including online), even at varying levels of development. The relationship between IPR rights and innovation can also be seen in studies of how the introduction of stronger IPR laws, with regard to patents, copyrights, and trademarks, affect R&D activity in an economy. Studies by Varsakelis and by Kanwar and Evenson found that R&D to GDP ratios are positively related to the strength of patent rights, and are conditional on other factors.53 Cavazos Cepeda et al. found a positive influence of IPRs on the level of R&D in an economy, with each 1 percent increase in the level of protection of IPRs in an economy (as measured by improvements to a country’s score in the Patent Rights Index) equating to, on average, a 0.7 percent increase in the domestic level of R&D.54 Likewise, a 1 percent increase in copyright protection was associated with a 3.3 percent increase in domestic R&D. Similarly, when trademark protection increased by 1 percent, there was an associated R&D increase of 1.4 percent. As the authors concluded, “Increases in the protection of the IPRs carried economic benefits in the form of higher inflows of FDI, and increases in the levels of both domestically conducted R&D and service imports as measured by licensing fees.”55 As Jackson summarized, regarding the relationship between IPR reform and both innovation and R&D, and FDI, “In addition to spurring domestic innovation, strong intellectual property rights can increase incentives for foreign direct investment which in turn also leads to economic growth.”56

**Biopharmaceutical innovation is key to prevent future pandemics and bioterror**

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

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

**That causes extinction, which outweighs.**

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

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

## Distribution CP

#### Text: The People’s Republic of China should offer Chinese developed vaccines and medical technology related to COVID-19 to the world for free.

#### The CP massively ramps up Chinese “vaccine diplomacy” which solves the case

Juecheng and Yuwei 8-13-21

(Zhao and Hu, https://www.globaltimes.cn/page/202108/1231387.shtml)

One of China’s most valued contributions to the global fair accessibility to COVID-19 vaccines is to enable more developing countries to hone their ability to produce vaccines by themselves, Zha Daojiong, professor of International Political Economy from Peking University, who closely studies the global vaccine equitable allocation framework, told the Global Times in a recent exclusive interview. Sharing his insights on widely discussed “vaccine nationalism,” “wavering vaccine intellectual property,” and “COVAX operation challenges,” Zha believes that China is advocating negotiations among countries on equitable global distribution of vaccines from a humanitarian, and global perspective. China has vowed to make efforts to provide the world with 2 billion doses of COVID-19 vaccines this year and donate $100 million to COVAX to promote global vaccine provision. This commitment comes amid the rampaging Delta variant, which is bringing more challenges for developing countries to access vaccines and combat the pandemic while the West continues to drag its heels in fulfilling its promises. The promise was made at the first meeting of a forum on international cooperation on COVID-19 vaccines held on August 5. Zha suggested that the forum, alongside the Initiative for Belt and Road Partnership on COVID-19 Vaccine Cooperation, reflect China’s efforts to support long-term cooperation in the vaccine industry globally. However, some Western media have labeled China and Russia as the pioneers of the global "vaccine diplomacy" campaign. The choice of vaccines by countries has become the epitome of global geopolitics.   Foreign comments on China using "vaccine diplomacy" in a narrow geopolitical sense reflect the real competition among COVID-19 vaccine providers, Zha told the Global Times. Due to China’s mature vaccine technologies, longer shelf life and lower requirement for storage and transportation, Chinese made vaccines are a more preferable choice for many developing countries with relatively weak vaccination infrastructure . This has been reflected in the approval of Chinese vaccines in more than 100 countries. But the phenomenon of “vaccine nationalism” was never absent in the decision by governments to choose vaccines, Zha suggested. “For example, some countries and regions would include geopolitical factors in choosing vaccines. These countries would reject certain vaccines. Moreover, some media outlets refuse to accept the fact that the professional assessment of vaccine efficacy is also a scientific process. Instead, they made comments on potential vaccines based on their geopolitical interests. This is also a kind of “vaccine nationalism”. Voices blaming “vaccine nationalism” have long been present in developed countries. For instance, Zha recalled how, during the H1N1 pandemic of 2009 which affected more than 200 countries and regions for more than a year, certain developed countries bought out entire stocks of vaccines against H1N1 once they were developed. Though some of those countries had promised to donate vaccines to others after they met their vaccination needs, the virus had long disappeared before their donations were made. Therefore, many in other nations lost the opportunity of a timely vaccination. Providing assistance from one country to another in the field of infectious or non-infectious diseases is often referred to as "health diplomacy." Some international public health research literature support "health diplomacy" because cooperation in this field is conducive to the improvement of political, economic and diplomatic relations, Zha said. China has taken important steps to close the global vaccine gap, including the acceleration of large-scale production, boosting fair distribution, and licensing local production in more countries.

#### Successful vaccine diplomacy is key to overall Chinese Soft Power

Huang, PhD, 3-11-21

(YANZHONG HUANG is Senior Fellow for Global Health at the Council on Foreign Relations, a Professor at Seton Hall University’s School of Diplomacy and International Relations, and Director of the school’s Center for Global Health Studies. https://www.foreignaffairs.com/articles/china/2021-03-11/vaccine-diplomacy-paying-china )

Vaccines have had a place in diplomacy since the Cold War era. The country that can manufacture and distribute lifesaving injections to others less fortunate sees a return on its investment in the form of soft power: prestige, goodwill, perhaps a degree of indebtedness, even awe. Today the country moving fastest toward consolidating these gains may be China, under President Xi Jinping, who proclaimed last May that Chinese-made vaccines against COVID-19 would become a “global public good.” Since that time, top officials have promised many developing countries priority access to Chinese vaccines, and the Chinese Foreign Ministry has announced that the country is providing free vaccines to 69 countries and commercially exporting them to 28 more. China’s competitors worry that where Beijing’s inoculations go, its influence will follow. But the field of COVID-19 vaccination is still a largely uncharted one and scattered with barriers, whether logistical, scientific, psychological, or geopolitical. China’s path through this labyrinth is neither obvious nor assured. The country faces stiffening competition from Russia and India. Now the United States, too, has entered the global stakes for equitable distribution of safe and effective vaccines. China has yet to prove that it can fulfill the role it has taken on or win the trust of those it has offered to aid. CHINA'S STAKE The Chinese government dislikes the term “vaccine diplomacy.” The implication that China would distribute vaccine doses in order to broaden its global political influence is a “sinister” one, according to the official Xinhua News Agency. Rather, the Chinese government contends that “in promoting cooperation in combating the pandemic, China does not seek any geopolitical goals or have any economic interest considerations, and it has never attached any political strings.” Xi has further stressed that by distributing necessary goods in a crisis, China is merely acting as a responsible great power should. In this regard, China may seek to succeed with vaccines where it failed with masks: last spring, quality-control issues and clumsy propaganda tarnished the country’s efforts to supply medical products to the developed world. Now China is looking to showcase its global health leadership to lower- and middle-income countries, where it is distributing vaccines. But Beijing surely has additional foreign policy objectives in mind. China began its vaccine development projects early last spring, and state media made quite clear that through them, China hoped to demonstrate its technological prowess and the superiority of its authoritarian model of governance. “We are not lagging behind the United States as far as the technology is concerned,” a Chinese virologist told the state-backed Global Times. Another scientist highlighted China’s “system advantages”: “The United States is no match for China in terms of concentrating power to accomplish big things.” Indeed, unlike in the United States, vaccine development in China was a highly state-driven process. The Chinese government simultaneously pushed several technological approaches, including inactivated vaccines, mRNA vaccines, and adenovirus vector vaccines. It mobilized at least 22 institutes and firms to work on 17 vaccine development projects. And until last summer, China was leading the global race in vaccine development. It developed a vaccine (Ad5-nCoV) as early as February 2020, started Phase 1 clinical trials on March 16, and published results of the trials in late May. General Chen Wei, the face of China’s vaccine development operation, celebrated such achievements as “an embodiment of our country’s S&T progress, an embodiment of China’s great-power image and responsibility, and, even more, a contribution to humankind.” Behind such lofty goals lie commercial objectives, too. Health-related development assistance has long offered Chinese pharmaceutical companies a low-cost means of expanding their market share in the developing world. In March 2020, President Xi explicitly linked the shipment of medical supplies overseas to the “Health Silk Road,” now an important component of the Belt and Road Initiative. Xiaofeng Liang, a former deputy director of the Chinese Center for Disease Control and Prevention, has publicly called for prioritizing BRI countries for access to Chinese vaccines. But the opportunity hardly ends there. Prior to the COVID-19 pandemic, few Chinese pharmaceutical companies had received World Health Organization prequalification to supply medical products to international organizations and donor funds. In 2019, China’s share in the value of UN-procured medical products was only 1.9 percent, compared with 21.9 percent for India. Chinese media lamented that of the 155 WHO-prequalified vaccines, only four were from China, compared with 44 from India. Indeed, Indian pharmaceutical firms produced more than 60 percent of the vaccines sold worldwide. The huge global demand for COVID-19 vaccines and “vaccine nationalism” in wealthy nations have created a great opportunity for China to break into a market that Indian and Western pharmaceutical firms have long dominated. If the vaccine were priced at $10 per dose with a 40 percent net profit margin, even a 15 percent share of the vaccine market in lower- and middle-income countries would generate total sales of $10.8 billion and a profit of $4.32 billion for the Chinese economy. In reality, Chinese vaccines are often priced higher than $10.

**Chinese leadership solves extinction.**

Shen **Yamei 18**, Deputy Director and Associate Research Fellow of Department for American Studies, China Institute of International Studies, 1-9-2018, "Probing into the “Chinese Solution” for the Transformation of Global Governance," CAIFC, http://www.caifc.org.cn/en/content.aspx?id=4491

As the world is in a period of great development, transformation and adjustment, the international power comparison is undergoing profound changes, global governance is reshuffling and traditional governance concepts and models are confronted with challenges. The international community is expecting China to play a bigger role in global governance, which has given birth to the Chinese solution. A. To Lead the Transformation of the Global Governance System. **The “shortcomings” of the existing global governance system are prominent, which can hardly ensure global development. First, the traditional dominant forces are seriously imbalanced**. The US and Europe that used to dominate the global governance system have been beset with structural problems, with their economic development stalling, social contradictions intensifying, populism and secessionism rising, and states trapped in internal strife and differentiation. These countries have not fully reformed and adjusted themselves well, but rather pointed their fingers at globalization and resorted to retreat for self-insurance or were busy with their own affairs without any wish or ability to participate in global governance, which has encouraged the growth of “anti-globalization” trend into an interference factor to global governance. Second, the global governance mechanism is relatively lagging behind. Over the years of development, the strength of emerging economies has increased dramatically, which has substantially upset the international power structure, as the developing countries as a whole have made 80 percent of the contributions to global economic growth. These countries have expressed their appeal for new governance and begun policy coordination among themselves, which has initiated the transition of global governance form “Western governance” to “East-West joint governance”, but **the traditional governance mechanisms such as the World Bank, IMF and G7 failed to reflect the demand of the new pattern, in addition to their lack of representation and inclusiveness.** Third, the global governance rules are developing in a fragmented way, with governance deficits existing in some key areas. With the diversification and in-depth integration of international interests, the domain of global governance has continued to expand, with actors multiplying by folds and action intentions becoming complicated. As relevant efforts are usually temporary and limited to specific partners or issues, global governance driven by requests of “diversified governance” lacks systematic and comprehensive solutions. Since the beginning of this year, there have been risks of running into an acephalous state **in such key areas as global economic governance and climate change**. **Such emerging issues as nuclear security and international terrorism have suffered injustice because of power politics**. **The governance areas in deficit, such as cyber security, polar region and oceans, have “reversely forced” certain countries and organizations to respond hastily**. All of these have made the global governance system trapped in a dilemma and call urgently for a clear direction of advancement. B. To Innovate and Perfect the International Order. Currently, whether the developing countries or the Western countries of Europe and the US are greatly discontent with the existing international order as well as their appeals and motivation for changing the order are unprecedentedly strong. The US is the major creator and beneficiary of the existing hegemonic order, but it is now doubtful that it has gained much less than lost from the existing order, faced with the difficulties of global economic transformation and obsessed with economic despair and political dejection. Although the developing countries as represented by China acknowledge the positive role played by the post-war international order in safeguarding peace, boosting prosperity and promoting globalization, they criticize the existing order for lack of inclusiveness in politics and equality in economy, as well as double standard in security, believing it has failed to reflect the multi-polarization trend of the world and is an exclusive “circle club”. Therefore, there is much room for improvement. For China, to lead the transformation of the global governance system and international order not only supports the efforts of the developing countries to uphold multilateralism rather than unilateralism, advocate the rule of law rather than the law of the jungle and practice democracy rather than power politics in international relations, but also is an important subject concerning whether China could gain the discourse power and development space corresponding to its own strength and interests in the process of innovating and perfecting the framework of international order. C. To Promote Integration of the Eastern and Western Civilizations. Dialog among civilizations, which is the popular foundation for any country’s diplomatic proposals, runs like a trickle moistening things silently. Nevertheless, in the existing international system guided by the “Western-Centrism”, the Western civilization has always had the self-righteous superiority, conflicting with the interests and mentality of other countries and having failed to find the path to co-existing peacefully and harmoniously with other civilizations. **So to speak, many problems of today, including the growing gap in economic development between the developed and developing countries against the background of globalization, the Middle East trapped in chaos and disorder, the failure of Russia and Turkey to “integrate into the West”, etc., can be directly attributed to lack of exchanges, communication and integration among civilizations.** Since the 18th National Congress of CPC, Xi Jinping has raised the concept of “Chinese Dream” that reflects both Chinese values and China’s pursuit, re-introducing to the world the idea of “all living creatures grow together without harming one another and ways run parallel without interfering with one another”, which is the highest ideal in Chinese traditional culture, and striving to shape China into a force that counter-balance the Western civilization. He has also made solemn commitment that “we respect the diversity of civilizations …… cannot be puffed up with pride and depreciate other civilizations and nations”; “facing the people deeply trapped in misery and wars, we should have not only compassion and sympathy, but also responsibility and action …… do whatever we can to extend assistance to those people caught in predicament”, etc. China will rebalance the international pattern from a more inclusive civilization perspective and with more far-sighted strategic mindset, or at least correct the bisected or predominated world order so as to promote the parallel development of the Eastern and Western civilizations through mutual learning, integration and encouragement. D. To Pass on China’s Confidence. Only a short while ago, some Western countries had called for “China’s responsibility” and made it an inhibition to “regulate” China’s development orientation. Today, China has become a source of stability in an international situation full of uncertainties. Over the past 5 years, China has made outstanding contributions to the recovery of world economy under relatively great pressure of its own economic downturn. Encouraged by the “four confidences”, the whole of the Chinese society has burst out innovation vitality and produced innovation achievements, making people have more sense of gain and more optimistic about the national development prospect. It is the heroism of the ordinary Chinese to overcome difficulties and realize the ideal destiny that best explains China’s confidence. When this confidence is passed on in the field of diplomacy, it is expressed as: first, China’s posture is seen as more forging ahead and courageous to undertake responsibilities ---- proactively shaping the international agendas rather than passively accepting them; having clear-cut attitudes on international disputes rather than being equivocal; and extending international cooperation to comprehensive and dimensional development rather than based on the theory of “economy only”. In sum, China will actively seek understanding and support from other countries rather than imposing its will on others with clear-cut Chinese characteristics, Chinese style and Chinese manner. Second, China’s discourse is featured as a combination of inflexibility and yielding as well as magnanimous ---- combining the internationally recognized diplomatic principles with the excellent Chinese cultural traditions through digesting the Chinese and foreign humanistic classics assisted with philosophical speculations to make “China Brand, Chinese Voice and China’s Image get more and more recognized”. Third, the Chinese solution is more practical and intimate to people as well as emphasizes inclusive cooperation, as China is full of confidence to break the monopoly of the Western model on global development, “offering mankind a Chinese solution to explore a better social system”, and “providing a brand new option for the nations and peoples who are hoping both to speed up development and maintain independence”. II.Path Searching of the “Chinese Solution” for Global Governance Over the past years’ efforts, China has the ability to transform itself from “grasping the opportunity” for development to “creating opportunity” and “sharing opportunity” for common development, hoping to pass on the longing of the Chinese people for a better life to the people of other countries and promoting the development of the global governance system toward a more just and rational end. It has become the major power’s conscious commitment of China to lead the transformation of the global governance system in a profound way. A. To Construct the Theoretical System for Global Governance. The theoretical system of global governance has been the focus of the party central committee’s diplomatic theory innovation since the 18th National Congress of CPC as well as an important component of the theory of socialism with Chinese characteristics for a new era, which is not only the sublimation of China’s interaction with the world from “absorbing and learning” to “cooperation and mutual learning”, but also the cause why so many developing countries have turned from “learning from the West” to “exploring for treasures in the East”. In the past 5 years, the party central committee, based on precise interpretation of the world pattern today and serious reflection on the future development of mankind, has made a sincere call to the world for promoting the development of global governance system toward a more just and rational end, and proposed a series of new concepts and new strategies including engaging in major power diplomacy with Chinese characteristics, creating the human community with common destiny, promoting the construction of new international relationship rooted in the principle of cooperation and win-win, enriching the strategic thinking of peaceful development, sticking to the correct benefit view, formulating the partnership network the world over, advancing the global economic governance in a way of mutual consultation, joint construction and co-sharing, advocating the joint, comprehensive, cooperative and sustainable security concept, and launching the grand “Belt and Road” initiative. The Chinese solution composed of these contents, not only fundamentally different from the old roads of industrial revolution and colonial expansion in history, but also different from the market-driven neo-liberalism model currently advocated by Western countries and international organizations, stands at the height of the world and even mankind, seeking for global common development and having widened the road for the developing countries to modernization, which is widely welcomed by the international community. B. To Supplement and Perfect the Global Governance System. Currently, the international political practice in global governance is mostly problem-driven without creating a set of relatively independent, centralized and integral power structures, resulting in the existing global governance systemcharacterized as both extensive and unbalanced. China has been engaged in reform and innovation, while maintaining and constructing the existing systems, producing some thinking and method with Chinese characteristics. First, China sees the UN as a mirror that reflects the status quo of global governance, which should act as the leader of global governance, and actively safeguards the global governance system with the UN at the core. Second, China is actively promoting the transforming process of such recently emerged international mechanisms as G20, BRICS and SCO, perfecting them through practice, and boosting Asia-Pacific regional cooperation and the development of economic globalization. China is also promoting the construction of regional security mechanism through the Six-Party Talks on Korean Peninsula nuclear issue, Boao Forum for Asia, CICA and multilateral security dialog mechanisms led by ASEAN so as to lay the foundation for the future regional security framework. Third, China has initiated the establishment of AIIB and the New Development Bank of BRICS, creating a precedent for developing countries to set up multilateral financial institutions. The core of the new relationship between China and them lies in “boosting rather than controlling” and “public rather than private”, which is much different from the management and operation model of the World Bank, manifesting the increasing global governance ability of China and the developing countries as well as exerting pressure on the international economic and financial institution to speed up reforms. **Thus, in leading the transformation of the global governance system, China has not overthrown the existing systems and started all over again, but been engaged in innovating and perfecting; China has proactively undertaken international responsibilities, but has to do everything in its power and act according to its ability.** C. To Reform the Global Governance Rules. Many of the problems facing global governance today are deeply rooted in such a cause that the dominant power of the existing governance system has taken it as the tool to realize its own national interests first and a platform to pursue its political goals. Since the beginning of this year, the US has for several times requested the World Bank, IMF and G20 to make efforts to mitigate the so-called global imbalance, abandoned its commitment to support trade openness, cut down investment projects to the middle-income countries, and deleted commitment to support the efforts to deal with climate change financially, which has made the international systems accessories of the US domestic economic agendas, dealing a heavy blow to the global governance system. On the contrary, the interests and agendas of China, as a major power of the world, are open to the whole world, and China in the future “will provide the world with broader market, more sufficient capital, more abundant goods and more precious opportunities for cooperation”, while having the ability to make the world listen to its voice more attentively. With regard to the subject of global governance, China has advocated that what global governance system is better cannot be decided upon by any single country, as the destiny of the world should be in the hands of the people of all countries. In principle, all the parties should stick to the principle of mutual consultation, joint construction and co-sharing, resolve disputes through dialog and differences through consultation. Regarding the critical areas, opening to the outer world does not mean building one’s own backyard, but building the spring garden for co-sharing; the “Belt and Road” initiative is not China’s solo, but a chorus participated in by all countries concerned. **China has also proposed international public security views on nuclear security, maritime cooperation and cyber space order, calling for efforts to make the global village into a “grand stage for seeking common development” rather than a “wrestling arena”; we cannot “set up a stage here, while pulling away a prop there”, but “complement each other to put on a grand show”**. From the orientation of reforms, efforts should be made to better safeguard and expand the legitimate interests of the developing countries and increase the influence of the emerging economies on global governance. Over the past 5 years, China has attached importance to full court diplomacy, gradually coming to the center stage of international politics and proactively establishing principles for global governance. By hosting such important events as IAELM, CICA Summit, G20 Summit, the Belt and Road International Cooperation Forum and BRICS Summit, China has used theseplatforms to elaborate the Asia-Pacific Dream for the first time to the world, expressing China’s views on Asian security and global economic governance, discussing with the countries concerned with the Belt and Road about the synergy of their future development strategies and setting off the “BRICS plus” capacity expansion mechanism, in which China not only contributes its solution and shows its style, but also participates in the shaping of international principles through practice. On promoting the resolution of hot international issues, China abides by the norms governing international relations based on the purposes and principles of the UN Charter, and insists on justice, playing a constructive role as a responsible major power in actively promoting the political accommodation in Afghanistan, mediating the Djibouti-Eritrea dispute, promoting peace talks in the Middle East, devoting itself to the peaceful resolution of the South China Sea dispute through negotiations. In addition, China’s responsibility and quick response to international crises have gained widespread praises, as seen in such cases as assisting Africa in its fight against the Ebola epidemic, sending emergency fresh water to the capital of Maldives and buying rice from Cambodia to help relieve its financial squeeze, which has shown the simple feelings of the Chinese people to share the same breath and fate with the people of other countries. D. To Support the Increase of the Developing Countries’ Voice. The developing countries, especially the emerging powers, are not only the important participants of the globalization process, but also the important direction to which the international power system is transferring. With the accelerating shift of global economic center to emerging markets and developing economies, the will and ability of the developing countries to participate in global governance have been correspondingly strengthened. As the biggest developing country and fast growing major power, China has the same appeal and proposal for governance as other developing countries and already began policy coordination with them, as China should comply with historical tide and continue to support the increase of the developing countries’ voice in the global governance system. To this end, China has pursued the policy of “dialog but not confrontation, partnership but not alliance”, attaching importance to the construction of new type of major power relationship and global partnership network, while making a series proposals in the practice of global governance that could represent the legitimate interests of the developing countries and be conducive to safeguarding global justice, including supporting an open, inclusive, universal, balanced and win-win economic globalization; promoting the reforms on share and voting mechanism of IMF to increase the voting rights and representation of the emerging market economies; financing the infrastructure construction and industrial upgrading of other developing countries through various bilateral or regional funds; and helping other developing countries to respond to such challenges as famine, refugees, climate change and public hygiene by debt forgiveness and assistance.

## Safety DA

#### Covid-19 vaccines are safe and effective right now.

Moline ‘21

(Heidi L. Moline, MD; Michael Whitaker, MPH; Li Deng, PhD; Julia C. Rhodes, PhD; Jennifer Milucky, MSPH; Huong Pham, MPH; Kadam Patel, MPH; Onika Anglin, MPH; Arthur Reingold, MD Shua J. Chai, MD; Nisha B. Alden, MPH; Breanna Kawasaki, “Effectiveness of COVID-19 Vaccines in Preventing Hospitalization Among Adults Aged ≥65 Years” <https://www.cdc.gov/mmwr/volumes/70/wr/mm7032e3.htm> , August 13)

Clinical trials of COVID-19 vaccines currently authorized for emergency use in the United States (Pfizer-BioNTech, Moderna, and Janssen [Johnson & Johnson]) indicate that these vaccines have high efficacy against symptomatic disease, including moderate to severe illness (1–3). In addition to clinical trials, real-world assessments of COVID-19 vaccine effectiveness are critical in guiding vaccine policy and building vaccine confidence, particularly among populations at higher risk for more severe illness from COVID-19, including older adults. To determine the real-world effectiveness of the three currently authorized COVID-19 vaccines among persons aged ≥65 years during February 1–April 30, 2021, data on 7,280 patients from the COVID-19–Associated Hospitalization Surveillance Network (COVID-NET) were analyzed with vaccination coverage data from state immunization information systems (IISs) for the COVID-NET catchment area (approximately 4.8 million persons). Among adults aged 65–74 years, effectiveness of full vaccination in preventing COVID-19–associated hospitalization was 96% (95% confidence interval [CI] = 94%–98%) for Pfizer-BioNTech, 96% (95% CI = 95%–98%) for Moderna, and 84% (95% CI = 64%–93%) for Janssen vaccine products. Effectiveness of full vaccination in preventing COVID-19–associated hospitalization among adults aged ≥75 years was 91% (95% CI = 87%–94%) for Pfizer-BioNTech, 96% (95% CI = 93%–98%) for Moderna, and 85% (95% CI = 72%–92%) for Janssen vaccine products. COVID-19 vaccines currently authorized in the United States are highly effective in preventing COVID-19–associated hospitalizations in older adults. In light of real-world data demonstrating high effectiveness of COVID-19 vaccines among older adults, efforts to increase vaccination coverage in this age group are critical to reducing the risk for COVID-19–related hospitalization. COVID-NET includes data on laboratory-confirmed COVID-19–associated hospitalizations in 99 U.S. counties in 14 states, representing approximately 10% of the U.S. population.† COVID-NET cases were hospitalizations that occurred in residents of a designated COVID-NET catchment area who were admitted within 14 days of a positive SARS-CoV-2 test result. COVID-NET program personnel collected information on COVID-19 vaccination status (vaccine product received, number of doses, and administration dates) from state IISs for all sampled COVID-NET cases.§ Some sites expanded collection of information on vaccination status to all reported COVID-NET cases, not only sampled cases, which were included for analysis if all cases in a single month had vaccination status available. Data from 13 sites were included for analysis; one site (Iowa) does not have access to the state IIS and cannot collect vaccination data.¶ Population-level vaccination coverage was determined using deidentified person-level COVID-19 vaccination data reported to CDC by jurisdictions, pharmacies, and federal entities through the IISs,\*\* Vaccine Administration Management System,†† or direct data submission.§§ The study was restricted to adults aged ≥65 years and included the period February 1–April 30, 2021. The Janssen vaccine was authorized for use during the study period beginning March 15, 2021.¶¶ Patients were classified as 1) unvaccinated (no IIS record of vaccination), 2) partially vaccinated (1 dose of Moderna or Pfizer-BioNTech received ≥14 days before hospitalization or 2 doses, with the second dose received <14 days before hospitalization), or 3) fully vaccinated (receipt of both doses of Moderna or Pfizer-BioNTech with second dose received ≥14 days before hospitalization or receipt of a single dose of Janssen ≥14 days before hospitalization). Patients with only 1 dose of any COVID-19 vaccine received <14 days before hospitalization were excluded. Daily county-level coverage data for adults aged 65–74 and ≥75 years in the COVID-NET catchment area were estimated using population denominators from the U.S. Census Bureau; vaccination status was classified as described for hospitalized cases.\*\*\* For vaccine records missing county of residence, county of vaccine administration was used. To estimate vaccine effectiveness and corresponding 95% CIs, methods were adapted based on previously published literature (4). Poisson regression was used to compare case counts by vaccination status (outcome) and the proportion of the population vaccinated and unvaccinated (offset).††† Data were stratified by age group because of the potential for confounding by age, and adjusted for COVID-NET site, time (number of weeks since the start of the study period as a categorical covariate), and monthly site-specific sampling frequency.§§§ Vaccine effectiveness was calculated as one minus the exponent of the estimated coefficient of the exposure (vaccination status) variable. For estimating effectiveness of full vaccination, partially vaccinated persons were excluded; for estimating effectiveness of partial vaccination, fully vaccinated persons were excluded. Vaccine product–specific estimates excluded persons who had received other COVID-19 vaccines. To account for the interval between infection and hospitalization, sensitivity analyses were conducted using a reference date 1 week and 2 weeks before admission, rather than admission date, for classification of vaccination status for cases (i.e., adding 7 and 14 days, respectively between last vaccine dose and hospital admission date); the same adjustment was included for population vaccination coverage. Statistical analyses were conducted using SAS software (version 9.4; SAS Institute). This activity was reviewed by CDC and was conducted consistent with applicable federal law and CDC policy.¶¶¶ During February 1–April 30, 2021, among 7,280 eligible COVID-NET patients, 5,451 (75%) were unvaccinated, 867 (12%) were partially vaccinated, and 394 (5%) were fully vaccinated; 568 (8%) who received a single vaccine dose <14 days before hospitalization were excluded from the analysis (Table). Vaccination coverage in the population increased rapidly during this period among persons aged ≥65 years and varied by age and vaccine product (Figure 1). Among adults aged ≥65 years in the COVID-NET catchment area, full vaccination coverage from any of the three authorized vaccines ranged from 0.7% on February 1, 2021, to 72% on April 30, 2021. Effectiveness of full vaccination in preventing hospitalization among adults aged 65–74 years was estimated at 96% (95% CI = 94%–98%) for Pfizer-BioNTech, 96% (95% CI = 95%–98%) for Moderna, and 84% (95% CI = 64%–93%) for Janssen vaccine products. Among adults aged ≥75 years, effectiveness of full vaccination was 91% (95% CI = 87%–94%) for Pfizer-BioNTech, 96% (95% CI = 93%–98%) for Moderna, and 85% (95% CI = 72%–92%) for Janssen vaccine products (Figure 2). Effectiveness of partial vaccination among adults aged 65–74 years was 84% (95% CI = 76%–89%) for Pfizer-BioNTech and 91% (95% CI = 87%–93%) for Moderna vaccine products. Among those aged ≥75 years, effectiveness of partial vaccination was 66% (95% CI = 48%–77%) for Pfizer-BioNTech and 82% (95% CI = 76%–86%) for Moderna vaccine products. Sensitivity analyses accounting for interval between infection and hospitalization did not yield notably different vaccine effectiveness estimates, with point estimates varying by <1% for Pfizer-BioNTech and Moderna vaccine models. Point estimates for Janssen COVID-19 vaccine models varied by <10%, with few cases eligible for inclusion and wide CIs.

#### But, waiving patent rights does not guarantee vaccine safety

Smith Spark ‘21

(Laura,- Former Senior Broadcast Journalist for the BBC, and Newsweek editor of CNN,,“Right Countries Urged to Share Vaccine Knowledge as WTO Debates Waving Patents” <https://www.cnn.com/2021/05/05/world/covid-19-vaccine-patents-wto-intl/index.html>, May 05)

If the proposed waiver were to be approved, then **technological know-how** must be transferred to new production sites as well as the intellectual property rights, Rockwell said. Countries must also ensure that they have a strict but transparent regulatory infrastructure in place, he added. The proposed waiver has previously been obstructed by a ["small number" of wealthier nations](https://www.msf.org/countries-obstructing-covid-19-patent-waiver-must-allow-negotiations), according to Doctors Without Borders. When it was blocked at the WTO in March, aid organization [Oxfam](https://reliefweb.int/report/world/oxfam-response-wto-trips-waiver-covid-19-vaccines-being-blocked-again-rich-countries) slammed the decision as a "massive missed opportunity" to speed up worldwide vaccine production, and accused rich countries of "siding with a handful of pharmaceutical corporations in protecting their monopolies against the needs of the majority of developing countries who are struggling to administer a single dose."**Gross Failure of Leadership** Rights group Amnesty International and the People's Vaccine Alliance urged G7 leaders Wednesday to listen to their people and ensure vaccine knowledge is shared. "G7 governments have clear human rights obligations to put the lives of millions of people across the world ahead of the interests of the pharmaceutical companies that they have funded," said Steve Cockburn, head of economic and social justice at Amnesty International, [in a news release](https://www.amnesty.org/en/latest/news/2021/05/an-average-of-7-in-10-across-g7-countries-think-their-governments-should-force-big-pharma-to-share-vaccine-know-how/). "It would be a gross failure of leadership to continue blocking the sharing of life-saving technologies, and would only serve to prolong the immense pain and suffering caused by this pandemic." Wednesday's WTO meeting comes a day after the chief of Pfizer said the company was expecting approximately $26 billion in revenue from its Covid-19 vaccine in 2021.More than 300 public health experts [signed a letter](https://www.publichealth.columbia.edu/sites/default/files/trips_sign_on_letter_4-30-21.pdf) Friday arguing that the United States should join an effort to force vaccine makers to waive intellectual property rights to coronavirus vaccines and treatments so more countries can start making them. The group, led by Columbia University professors Terry McGovern and Chelsea Clinton, said the so-called TRIPS waiver would allow local manufacture of vaccines, treatments and diagnostics. "Allowing countries to manufacture locally will speed access to vaccines and treatment, prevent unnecessary deaths, and facilitate a stronger, faster economic recovery," they wrote. "Until vaccines, testing, and treatments are accessible to everyone everywhere we risk recurring new variants, drug resistance, and greater loss of life and suffering at home and globally." That appeal came a fortnight after more than 170 former world leaders and Nobel laureates, including former UK Prime Minister Gordon Brown, former President of Liberia Ellen Johnson Sirleaf and former French President François Hollande sent an [open letter to the White House](https://peoplesvaccinealliance.medium.com/open-letter-former-heads-of-state-and-nobel-laureates-call-on-president-biden-to-waive-e0589edd5704) urging President Joe Biden to support the temporary waiver on IP rights for Covid-19 vaccines at the WTO. **Legal Battles** But even as public pressure grows, some experts argue that handing over the IP rights for Covid-19 vaccines won't necessarily mean that more can be rapidly produced worldwide at large scale. US infectious diseases chief Anthony Fauci [told the UK's Financial Times](https://www.ft.com/content/2f41b122-5738-4707-a822-0d79276710c5) on Monday that he was not convinced that forcing companies to share their intellectual property was the most effective approach, warning that legal battles could slow the process."Going back and forth, consuming time and lawyers in a legal argument about waivers -- that is not the endgame. People are dying around the world and we have to get vaccines into their arms in the fastest and most efficient way possible," he said. Thomas Bollyky, director of the Global Health Program at the Council on Foreign Relations, told CNN on Friday that what's really needed to scale up global manufacturing of vaccines is technology transfer. "It's not just a matter of intellectual property. It's also the **transfer of know-how,**" he said. "I **don't think there's clear evidence** that a waiver of an intellectual property is going to be the best way for that technology transfer to occur."Waiving patents will not work in the same way for vaccines as it has for drugs, Bollyky said. For HIV drugs, for example, manufacturers were more or less able to reverse engineer them without much help from the original developer. It's **very different for vaccines**, where it's really a **biological process** as much as a product. It's hard to scale up manufacturing in this process for the original company, let alone another manufacturer trying to figure this out without assistance," he said. "**It requires a lot of knowledge that's not part of the IP."** The deal between AstraZeneca and the Serum Institute of India is a successful example of such technology transfer, Bollyky said, where the licensing of IP happened voluntarily. "The question is what can we do to facilitate more deals like the one between AstraZeneca and the Serum Institute of India to have this transfer," he said.

#### The plan leads to uncontrolled use of patented technologies, which turns vaccine access, and causes dangerous health consequences.

Crosby and Diamond ‘21

(Daniel Crosby JD@Washington University of Law, Evan Diamond JD@Harvard Law School M.S. Biochemistry@UPenn, Isabel Fernandez de la Cuesta JD@Complutense University Madrid, Jamieson Greer JD@University of Virginia Law School, Jeffery Telep JD@University of Florida, Brian White JD@University of Virginia, “Group of Nearly 60 WTO Members Seek Unprecedented Waiver from WTO Intellectual Property Protection for Covid-related Medical Projects” <https://www.jdsupra.com/legalnews/group-of-nearly-60-wto-members-seek-2523821/>, March 05)

Waiver risks uncontrolled use of patented technologies, without improving vaccine access.Pharmaceutical companies can provide, and have provided, licenses to distribute or scale-up production of COVID-19 vaccines and therapies at reduced cost. Such license agreements allow for expanded access in low- and middle-income countries, while also setting reasonable parameters

so that patents and other IP rights are used to address the specific medical needs of the COVID-19 pandemic at hand, and not for other purposes. License agreements also allow for orderly technology transfer, including of unpatented “trade secret” information and other critical “know-how,” that may be essential to efficiently producing and scaling-up safe and effective versions of technologically complex vaccines and biologic drug products. Under the present TRIPS waiver proposal, however, member countries could try to exploit an extraordinarily broad scope of IP and copy patented technologies so long as they are “in relation to prevention, containment or treatment of COVID-19.” For example, under an expansive reading of the proposed waiver language, a member country could try to produce patented pharmaceutical compounds that have other indicated uses predating COVID-19, if such compounds had later been studied or experimentally used for potential symptomatic relief or antiviral activity in COVID-19 patients. The same risks may be faced by manufacturers of patented materials or devices that have multiple uses predating COVID-19, but also may be used as “personal protective equipment” or components thereof, or in other measures arguably relating to COVID-19 “prevention” or “containment.”At the same time, it is unclear how the proposed TRIPS waiver could provide the technology transfer and know-how critical for making the complex molecules and formulations constituting the various COVID-19 vaccines. Vaccine manufacture undertaken by an unauthorized party without the proper processes and controls could result in a different product that is potentially ineffective or results in unwanted health consequences. And even if an unauthorized manufacturer could overcome those substantial hurdles to reverse-engineer and scale up a safe and effective vaccine copy, it would likely take substantial time and a series of failures to do so. Notably, several of the original COVID-19 vaccine developers have recently faced low product yield and other manufacturing challenges during pre-commercial scale-up efforts and the initial months of commercial production.

## Case

### UV

#### Yes 1AR theory but its drop the arg--key to get back to substance which we only have 2 months to talk about and the 1AR is long enough for both, get good

#### Yes 2NR theory on new 1AR arguments--otherwise debate devolves to the state of nature where everyone reads severance perms

#### Doesn’t come first--its not necessarily more abuse just because it takes longer and 1ar theory is a 7-6 time skew too

#### Patents don’t hinder innovation--this card just rags on pharma companies for only innovating when they get money--big pharma being immoral means they ARE motivated by money, not that they innovate without it

### Advantage

#### TL -- their only impact scenario is about future pandemics, there’s no reason in the 1AC why COVID waivers solve that--only new innovation can

**No solvency and reject "empirical" claims -- vaccines require complex infrastructure to manufacture, not just patents**

**Hotez 5/10** [Peter J. Hotez, Maria Elena Bottazzi, and Prashant Yadav. "Producing a Vaccine Requires More Than a Patent," Foreign Affairs, 5-10-2021, accessed 8-8-2021, https://www.foreignaffairs.com/articles/united-states/2021-05-10/producing-vaccine-requires-more-patent] HWIC

On May 5, President Joe Biden announced that the United States would support an international bid to waive intellectual property rights to vaccines for the duration of the coronavirus pandemic, thereby ostensibly allowing other countries to ramp up production even of the sophisticated technology behind the Pfizer-BioNTech and Moderna vaccines against COVID-19. Many in the global health community and developing world welcomed the decision as a victory for greater equity in vaccine distribution, in which middle- and low-income countries are lagging far behind wealthy ones. But the jubilation may be premature. The drive for intellectual property waivers originates in part from the world’s experience fighting the last war, against HIV/AIDS. Patent pools, intellectual property waivers, and other liberalizing mechanisms were urgent in assuring equity of access to lifesaving drugs during that epidemic. But these tools are better suited to medicines and other pharmaceuticals than to vaccines. Producing vaccines—particularly those as technologically complex as the messenger RNA (mRNA) inoculations against COVID-19—requires not only patents but an entire infrastructure that cannot be transferred overnight. The sharing of patents is an important and welcome development for the long term, but it may not even be the most pressing first step. JUST OPEN THE SPIGOT At the turn of the millennium, multinational pharmaceutical companies were charging $10,000 per patient for a daily drug regimen that could keep those infected with HIV/AIDS alive. Those in low- and middle-income countries in Africa and elsewhere could access this cocktail only under limited circumstances. Then, in 2001, the Indian drug manufacturer Cipla Limited began producing versions of a triple antiretroviral drug cocktail for a mere $350. Cipla, in collaboration with Médecins Sans Frontières (Doctors Without Borders), helped usher in a new era of global access to essential medicines—one that justified relaxing or even ignoring international patents and other property rights to produce and distribute an important and lifesaving drug as a generic. Since that time, global health advocacy organizations have found increasingly sophisticated ways to work with multinationals in ensuring access to essential medicines for low- and middle-income countries. In the 2010s, the global health initiative Unitaid helped create a Medicines Patent Pool, in which pharmaceutical companies from all over the world offered antiretroviral drug licenses, thereby creating a path for developing generic versions so long as the patent holders received royalties. The mechanism supplied voluntary licenses to new producers even while protecting the legal rights of the drugs’ original manufacturers. Companies such as Gilead, for example, have supplied voluntary licenses for their antivirals directly to generic manufacturers, allowing for tiered pricing across countries. Barely any COVID-19 vaccines have been administered in the African continent or in low- or middle-income countries in Asia and Latin America. Global health professionals have understandably sought to ascertain whether a similar approach could help make the distribution of COVID-19 vaccines less lopsided. More than one billion vaccine doses have now been administered—but overwhelmingly to people living in just a few countries. More than half have been administered in the United States (250 million) and China (290 million) alone, followed by India (160 million), the United Kingdom (51 million), and Germany (32 million). In contrast, for all practical purposes, barely any COVID-19 vaccines have been [administered](https://www.nytimes.com/interactive/2021/world/covid-vaccinations-tracker.html) in the African continent or in low- or middle-income countries in Asia and Latin America. Global health advocates have responded to this inequity by seeking to apply the lessons they learned from antiretroviral drugs and demanding patent pools or other intellectual property waivers for COVID-19 vaccines. In March 2021, Médecins Sans Frontières organized protests at the World Trade Organization (WTO) headquarters in Geneva, unfurling a banner that read, “No COVID Monopolies—Wealthy Countries Stop Blocking TRIPS Waiver,” referring to the organization’s Agreement on Trade-Related Aspects of Intellectual Property Rights. The assumption underlying such demands is that intellectual property is a crucial barrier blocking vaccine developers, especially in low- and middle-income countries, from producing COVID-19 vaccines to scale—particularly the high-performing mRNA vaccines that Pfizer-BioNTech and Moderna currently produce. These vaccines elicit more than 90 percent protective immunity against both symptomatic illness and documented infection, including asymptomatic infection, with COVID-19. They are successfully driving the recovery of the United States, Israel, and other nations. But so far, mRNA vaccines are mostly invisible to Africa, Latin America, and low- and middle-income countries in other regions. The hope of those pushing for TRIPS waivers and patent pools is that these will unleash the technology to make the recovery global. IT TAKES A WHOLE ECOSYSTEM Intellectual property sharing may be helpful in the long term. But producing complicated biologics, especially innovative ones such as mRNA or adenovirus-vectored vaccines, is not solely a matter of patent access. Small-molecule antiviral drugs are comparatively straightforward: the multistep chemical processes through which they are synthesized are often fully detailed in published patents or scientific papers. Chemists and formulation experts can often synthesize and scale up production just from knowing the drug structure. But vaccines are different. Producing and manufacturing lipid-encased mRNA molecules, recombinant adenoviruses, or even the proteins or whole inactivated viruses used in older-generation vaccines requires a far higher level of sophistication than is needed for producing small-molecule drugs. Moreover, vaccine production must meet stringent requirements for quality control, quality assurance, and regulatory oversight. The **effective transfer of such complex technology requires a receiving ecosystem that can take years, sometimes decades, to build**. Countries seeking to ramp up vaccine production will need to train staff scientists and technicians. They will also need scientific administrators versed not only in basic research and development but also in detailed record keeping, including specific documentation practices such as batch production records. Moreover, they will need strong quality control systems and regulatory guardrails. Building such an infrastructure requires intensive training and often considerable financial investment and risk. It also takes time—by some estimates, vaccine development requires at least 11 years, and even then the probability that such efforts will result in bringing a vaccine to market is less than ten percent. Consider that the COVID-19 vaccines were themselves the outcome of decades of research and development. Few nations are prepared to take such risks. Only a handful of low- or middle-income countries currently have the capacity to produce new vaccines. Only a handful of low- or middle-income countries currently have the capacity to produce new vaccines. The most notable and largest is India, which currently makes the adenovirus-vectored vaccines developed by Janssen and by Oxford and AstraZeneca, as well as an older-technology recombinant protein vaccine and a whole inactivated virus vaccine. Manufacturers in Brazil, Cuba, and some Southeast Asian countries have experience producing childhood vaccines and may be able to develop the capacity to make COVID-19 vaccines as well. Other possibilities may develop elsewhere, including in the Middle East and Africa. But in the near term, such manufacturers will require financing, access to very large amounts of raw materials and supplies (possibly including relaxation of export controls), and some technical expertise in manufacturing and quality control if they are to produce the existing vaccines against COVID-19. Vaccinating India alone will require almost two billion doses, and more than 12 billion doses will be required to vaccinate the world. The emergence of new variants and the need for booster doses may increase demand even further. Whether mRNA vaccine technology can be scaled to produce billions of doses in 2021, or even by early 2022, remains entirely unknown, but the goal is worth pursuing. To this end, some kind of patent relaxation may be necessary, but far from sufficient. Would-be producers will need technical know-how, regulatory controls, and components that are currently in very short supply, such as nucleotides and lipids.