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#### 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.

## 2

**Pharma profits are up from COVID vaccines, 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.

#### Weakening IP discourage mRNA research into curing cancer

Spiegel 10-4-21

(Andrew Spiegel, Esquire is the executive director of the Global Colon Cancer Association. https://www.thecentersquare.com/national/op-ed-how-the-covid-ip-waiver-could-sabotage-crucial-cancer-research/article\_a177e6d0-2517-11ec-8327-3f88179d2343.html)

President Joe Biden craves a cure for cancer. In a speech to Congress this spring, he vowed to "end cancer as we know it." And as vice president, he helped start the Cancer Moonshot initiative. Yet by giving his backing to a global waiver of intellectual property (IP) rights for COVID-19 vaccines, President Biden may have endangered millions of Americans living with cancer. The Biden administration has said that it would join a World Trade Organization move to suspend IP safeguards for the vaccines. Its intentions are no doubt sincere, founded in the belief that a waiver will help rid the world of COVID-19. Yet the setting aside of IP protections has consequences that the administration seems to have overlooked. If adopted, the waiver won't galvanize the supply of vaccines bound for the developing world – certainly not in the immediate term. What it will do is threaten scientific innovation that could lead to cures for cancer and other diseases. I'll explain why. Technically, the waiver supported by the United States would only apply to IP on COVID-19 vaccines. So what has this got to do with cancer? There are two consequences. First, intellectual property underpins scientists' incentives to make discoveries. Without proprietary "armor" to protect research, rivals could blithely – and lawfully – use scientists' know-how, data, or manufacturing processes. Second, waiving IP on underlying vaccine technology has ramifications for drug innovation. Since the same technologies are used for potential treatments for other diseases, vaccine-makers would have to give up IP on those projects too. Consider the Pfizer-BioNTech and Moderna vaccines. They use "mRNA" to promote an immune response to COVID-19, a technology that took decades to develop. With the successful rollout of mRNA COVID-19 vaccines, researchers in the United States and Germany now hope they can use mRNA to fight other viruses. Moderna has active trials for mRNA vaccines for Zika, HIV, and the flu. Cancer doctors and patients pray that mRNA is the key to a cure. Moderna, in fact, has two mRNA vaccine candidates for cancer. Researchers hope that mRNA could instruct the body to combat cancerous tumors like it fights a virus. With the IP waiver, Moderna's mRNA technology could end up with rivals, leaving the company with greatly diminished incentives – and greatly diminished investment dollars – to continue with mRNA clinical trials, including ones for cancer. Advanced drug innovation could come to a halt. What investor would fund biotech startups if copycats can swoop in? This scenario is made especially distressing by the fact that the upsides of the IP waiver are negligible. Manufacturers need specialized facilities and hundreds of ingredients to make vaccines. Vaccine-makers have struck licensing deals to scale up production. Every facility on earth that can safely produce effective vaccines is already doing so. Getting rid of IP won't make the scale-up go any faster. It could, however, unleash millions of shoddy copycats and event counterfeit vaccine doses.

#### Contagious cancer is a serious possibility and threatens the existence of our species

Johnson 16 – George Johnson, columnist and science journalist for the New York Times, M.A. in Journalism and Public Affairs, American University (“Scientists Ponder the Prospect of Contagious Cancer,” *New York Times*, February 22nd, https://www.nytimes.com/2016/02/23/science/scientists-ponder-the-prospect-of-contagious-cancer.html?mcubz=0)

For all its peculiar horror, cancer comes with a saving grace. If nothing else can stop a tumor’s mad evolution, the cancer ultimately dies with its host. Everything the malignant cells have learned about outwitting the patient’s defenses — and those of the oncologists — is erased. The next case of cancer, in another victim, must start anew. Imagine if instead, cancer cells had the ability to press on to another body. A cancer like that would have the power to metastasize not just from organ to organ, but from person to person, evolving deadly new skills along the way. While there is no sign of an imminent threat, several recent papers suggest that the eventual emergence of a contagious human cancer is in the realm of medical possibility. This would not be a disease, like cervical cancer, that is set off by the spread of viruses, but rather one in which cancer cells actually travel from one person to another and thrive in their new location. So far this is known to have happened only under the most unusual circumstances. A 19-year-old laboratory worker who pricked herself with a syringe of colon cancer cells developed a tumor in her hand. A surgeon acquired a cancer from his patient after accidentally cutting himself during an operation. There are also cases of malignant cells being transferred from one person to another through an organ transplant or from a woman to her fetus. On each of these occasions, the malignancy went no further. The only known cancers that continue to move from body to body, evading the immune system, have been found in other animals. In laboratory experiments, for instance, cancer cells have been transferred by mosquitoes from one hamster to another. And so far, three kinds of contagious cancers have been discovered in the wild — in dogs, Tasmanian devils and, most recently, in soft shell clams. The oldest known example is a cancer that spreads between dogs during sexual intercourse — not as a side effect of a viral or bacterial infection, but rather through direct conveyance of cancer cells. The state of the research is described in a review, “The Cancer Which Survived,” published last year by Andrea Strakova and Elizabeth P. Murchison of the University of Cambridge. The condition, canine transmissible venereal tumor disease, is believed to have sprung into existence 11,000 years ago — as a single cell in a single dog — and has been circulating ever since. (Why did this happen in dogs and not, say, cats? Perhaps because of what the authors demurely call the dogs’ “long-lasting coital tie” — the half an hour or so that a male and female are locked in intercourse, tearing genital tissues and providing the cancer cells with a leisurely crossing.) Normally a cancer evolves in a single body over the course of years or decades, accumulating the mutations that drive it to power. But to have survived for millenniums, researchers have proposed, canine cancer cells may have developed mechanisms — like those in healthy cells — to repair and stabilize their own malignant genomes. Early on, cancer cells typically flourish by disabling DNA repair and ramping up the mutational frenzy. Somewhere along the way, the age-old canine cells may have reinvented the device to extend their own longevity. There is also speculation that this cancer may have learned to somehow modify canine sexual behavior in ways that promote the disease’s spread and survival. The second kind of contagious cancer was discovered in the mid-1990s in Tasmanian devils, which spread malignant cells as they try to tear off one another’s faces. Though it may be hard to sympathize, devil facial tumor disease threatens the creatures with extinction. With so few examples, transmissible cancer has been easy to dismiss as an aberration. But in December, scientists at the Universities of Tasmania and Cambridge reported in Proceedings of the National Academy of Sciences that Tasmanian devils are passing around another kind of cancer — genetically distinct from the first. It’s weird enough that one such cancer would arise in the species. What are the chances that there would be two? One theory is that the animals are unusually vulnerable. Driven so close to extinction — by climate change, perhaps, or human predators — the species is lacking in genetic diversity. The cells of another devil injected through a vicious wound may seem so familiar that they are ignored by the recipient’s immune system. If some of the cells carry the mutations for the facial cancer, they might be free to flourish and develop into a new tumor. But the scientists also proposed a more disturbing explanation: that the emergence of contagious cancer may not be so rare after all. “The possibility,” they wrote, “warrants further investigation of the risk that such diseases could arise in humans.” Cancer has probably existed ever since our first multicellular ancestors appeared on Earth hundreds of millions of years ago. The life spans of even the longest-lived animals may be just too brief for cancers to easily evolve the ability to leap to another body. Otherwise, contagious cancer would be everywhere.

## Case

#### The WTO is a useless organization—any impacts triggered by its collapse should have already happened.

Okonjo-Iweala, 20

Ngozi Okonjo-Iweala, nonresident distinguished fellow with the Africa Growth Initiative in the Global Economy and Development program at Brookings, economist and international development expert with over 30 years of experience, director-general of the WTO, 6-22-2020, "Reviving the WTO," Brookings, https://www.brookings.edu/opinions/reviving-the-wto/

The World Trade Organization is in the news mostly for the wrong reasons nowadays. Many people regard it as an ineffective policeman of an outdated rulebook that is unsuited for the challenges of the twenty-first-century global economy. And WTO members generally agree that the organization urgently needs reforming in order to remain relevant. Recent months have brought further challenges. The WTO’s appellate body, which adjudicates trade disputes among member countries, effectively [ceased functioning](https://www.project-syndicate.org/commentary/world-trade-organization-revive-appellate-body-by-shang-jin-wei-and-xinding-yu-2019-12) last December amid disagreements regarding the appointment of new judges to the panel. And in May 2020, Director-General Roberto Azevêdo [announced](https://www.nytimes.com/2020/05/14/business/wto-chief-roberto-azevedo.html) that he would step down at the end of August, a year before his current term was due to end. Whoever Azevêdo’s successor is will face a major challenge. Since its establishment in 1995, the WTO has failed to conclude a single trade-negotiation round of global trade talks, thus missing an opportunity to deliver mutual benefits for its members. The Doha Development Round, which began in November 2001, was supposed to be concluded by January 2005. Fifteen years later, WTO members are still debating whether the Doha process should continue. Some think it has been overtaken by events, while others want to pursue further negotiations. The WTO has so far delivered disappointingly few other notable agreements as well, apart from the [Trade Facilitation Agreement](https://www.wto.org/english/tratop_e/tradfa_e/tradfa_e.htm), which entered into force in February 2017, and the 2015 [decision](https://www.wto.org/english/thewto_e/minist_e/mc10_e/briefing_notes_e/brief_agriculture_e.htm) to eliminate all forms of agricultural export subsidies. Meanwhile, some of its members have worked together on a raft of much broader regional trade deals that cover pressing issues such as the digital economy, investment, competition, the environment, and climate change. The Doha Development Round, which was intended to modernize the WTO’s rulebook, covers very few of these topics. And even some of the organization’s existing rules can easily be circumvented, thereby upsetting the balance of rights and obligations among members. During the current COVID-19 crisis, for example, some countries have imposed questionable export controls on medical supplies and food products in order to mitigate shortages.

#### The plan gets circumvented through prioritization of bilateral trade agreements with those who respect the spirit of IP.

Durand and Milberg, 18

[Cédric, Associate Prof. Political Economy @ U-Geneva, member @ Paris Nord Economics Center; and William, Dean @ The New School for Social Research: “Intellectual Monopoly in Global Value Chains,” published in 2018, https://hal.archives-ouvertes.fr/hal-01850438]//AD

The contention over IPRs exemplified by the dispute between the US and China, reflects the heightened sensitivity of the US and other high-income economies to IPRs in an era where their governments and businesses consider innovation as their main competitive advantage. The US today is the leader of the movement toward stricter international IP norms, in contrast to its position in earlier periods (Peng, Ahlstrom, Carraher, & Shi, 2017). It is the most active complainant at the WTO under the TRIPS agreement but, as illustrated by the recent actions of the Trump administration, TRIPS is not enough (Sell, 2010). The US seeks other ways to extend internationally the standard of IP protection found in U.S. law and in particular to apply existing IP protection to digital media (Akhtar & Ferguson, 2011, p. 25). In order to circumvent the flexibility in the WTO TRIPS Agreement, and the reluctance of developing countries at the WTO to raise WTO standards of IP protection (Helfer, 2004), developed economies have relied increasingly on bilateral and regional preferential trade agreements (PTAs) to accomplish the objective of securing intellectual property related economic advantages (Abbott, 2006; Shadlen, 2008). The international intellectual property policymaking arena has grown ever more complex with overlapping transnational norms. For example, the 33 pages of the chapter dedicated to IPRs in the US-CAFTA agreement details the treaties and conventions that the parties shall ratify, which defines precisely and extensively the scope of IPRs concerned (copyrights, performance, patents, communication, trademarks, plants, microorganisms, industrial design, geographical indication, name domains…). Additionally, it describes enforcement mechanisms to be implemented in national legislation and considers supplementary protection of intellectual property under the investment chapter (CAFTA, 2004). IP provisions included in Japanese and EU international trade agreements are more general but they also provide supplementary coverage and additional obligations (Liberti, 2010). Moreover, investment treaties and chapters dedicated to investment protection in trade agreements open additional routes for IP protection, which can exercise a powerful chilling effect on government actions via the exposure to the risk of costly investor-state arbitration disputes (Ho, 2015, 2016; Kasolowsky & Leikin, 2017). The DESTA database (Dür et al., 2014) allows us to track this qualitative evolution in bilateral and regional trade agreements. IP provisions of trade agreements were nonexistent before the North American Free Trade Agreement (NAFTA) was signed in 1992. They became a standard feature of trade agreements in the 2000s. Figure 6 shows the number of PTAs signed each year and of those, the ones which included IPRs. It also shows the percentage of PTAs with an IP provision. By 2016, every PTA signed included an IP provision.

#### Focus on vaccine equity obscures vaccine “rollout” issues

Adler 7-20-21

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

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

#### Co2 emissions stop an impending ice age

Doyle 16 (Alister, formerly a Knight Science Journalism Fellow at MIT, environmental correspondent for Reuters since 2004 where he covers climate science and the UN, “Global Warming Could Stave Off Next Ice Age For 100,000 Years”, http://www.reuters.com/article/us-climatechange-iceage-idUSKCN0UR2G320160113)

OSLO — Global warming is likely to disrupt a natural cycle of ice ages and contribute to delaying the onset of the next big freeze until about 100,000 years from now, scientists said on Wednesday. In the past million years, the world has had about 10 ice ages before swinging back to warmer conditions like the present. In the last ice age that ended 12,000 years ago, ice sheets blanketed what is now Canada, northern Europe and Siberia. In a new explanation for the long-lasting plunges in global temperatures that cause ice ages, scientists pointed to a combination of long-term shifts in the Earth's orbit around the sun, together with levels of carbon dioxide in the atmosphere. They said the planet seemed naturally on track to escape an ice age for the next 50,000 years, an unusually long period of warmth, according to the study led by the Potsdam Institute for Climate Impact Research. But rising man-made greenhouse gas emissions since the Industrial Revolution began in the 18th century could mean the balmy period will last for 100,000 years, they wrote in the journal Nature. The findings suggest human influences "will make the initiation of the next ice age impossible over a time period comparable to the duration of previous glacial cycles," they wrote. "Humans have the power to change the climate on geological timescales," lead author Andrey Ganopolski told Reuters.

#### Extinction – we’re on the brink now – timeframe is fast

Duke 15 (Selwyn, New American, citing S. Fred Singer, professor emeritus at the University of Virginia and a founding director of the Science & Environmental Policy Project, “Climate Change: Is a Deadly Ice Age on the Horizon?”, http://www.thenewamerican.com/tech/environment/item/21177-climate-change-is-a-deadly-ice-age-on-the-horizon)

The last ice age ended approximately 12,000 years ago, and since then we’ve been enjoying a pleasantly warm “interglacial period.” But given that an interglacial may last only 12,000 years, we’re confronted with a scary prospect: Another ice age may be nigh. And this could have devastating effects on mankind. So says atmospheric and space physics expert S. Fred Singer, professor emeritus at the University of Virginia and a founding director of the Science & Environmental Policy Project. While he has never been worried about global warming — emphasizing that climate alarmists’ predictions have been consistently wrong — he writes at American Thinker today that he has “recently become quite concerned about ice ages and the dangers they pose to humans on our planet — and indeed to most of terrestrial ecology.” In fact, he’s so concerned that he proposes we try to mitigate any cooling that may occur. Professor Singer cites a manuscript written by a co-author of his, Dennis Avery, which documents the historic causes of civilizational collapse. Its conclusion, Singer reports, is that “cold periods and droughts appear to be the main dangers to agriculturally based societies in all regions of the world.” Of course, this is just common sense. Plants don’t grow very well in deserts or during Northeast winters. But what if it were winter year 'round? The effects would be striking. As Singer tells us, there have been nearly 20 major glaciations “in the past two to three million years. The coolings are quite severe: the most recent one, ending only about 12,000 years ago, covered much of North America and Europe with miles-thick continental ice sheets and led to the disappearance of (barely) surviving bands of Neanderthalers; they were displaced by the more adaptable Homo Sapiens.” While Singer says that most experts believe the next glacial period lies just on the horizon, the exact timing is unknown; one scientist claims it may be delayed by another 40,000 years. It’s more than just major ice ages that imperil us, however. As Singer also informs, “There are two kinds of ice ages; they are fundamentally different…: (i) Major (Milankovich-style) glaciations occur on a 100,000-year time-scale and are controlled astronomically. (ii) “Little” ice ages were discovered in ice cores; they have been occurring on an approx. 1000-1500-yr cycle and are likely controlled by the Sun. The current cycle’s cooling phase may be imminent.” And while such a period may be called “little,” its effects are anything but. Describing the consequences of the last such age, occurring between 1400 and 1830 A.D., Singer writes, “The Norse settlements were abandoned; indeed, Scandinavia was hardest hit. Climatology pioneer Hubert Lamb documents crop failures, starvation, and disease in Europe, together with ice fairs on the frozen Thames.” Further illustrating the dangers of global cooling, some researchers believe that an earlier period of cold and dry weather might have contributed to one of history’s major events: the Western Roman Empire’s fall. As the Daily Need wrote in 2011 citing a study published in the journal Science, “Climate variability, with other factors, brought about a period of agricultural instability that affected both the Romans and militant migrant populations to the northeast — the ‘barbarians.’ These migrants then fought their way south, toward the warmer Mediterranean weather — and toward an already weakened Rome.”

#### No great power competition or war – numerous factors.

Mazarr, PhD, ‘19

(Michael J., PublicPolicy@Maryland, Prof&MASecurityStudies@Gtown, SeniorAnalyst@RAND, https://www.foreignaffairs.com/articles/2019-05-29/not-great-power-competition, May 29) BW

The current structure of the international system is not fundamentally multipolar. It does show growing signs of multipolarity, in the reduced degrees of U.S. predominance and as several regional powers have become more assertive. Yet it also retains many elements of the post–Cold War period of unipolarity. Washington remains the predominant power for many reasons: its overall military superiority, its leading role in so many international organizations, its formidable set of treaty allies, and its ownership of the world’s dominant reserve currency are chief among them. At the same time, the emerging system has important elements of bipolarity: the United States and China are clearly first among equals, and their rivalry is likely to play a disproportionate role in shaping the course of world politics. Today’s world thus reflects a complex mixture of unipolar, bipolar, and multipolar elements that does not match the classic vision of a colliding set of roughly equivalent great powers. Moreover, when states compete today, they do so mediated by institutions, rules, and norms that differ starkly from the conditions during most periods of true great-power competition. Most major powers today are firmly established industrial democracies that want stability and prosperity and harbor no meaningful territorial ambitions. A dense network of organizations, treaties, informal processes, and many other constraints regulates their relations. The postwar order, although imperfect, has produced the most highly institutionalized and norm-bound international system in history. Critically, this order is not imposed on an unruly set of troublemakers—it reflects deeply embedded economic preferences for peace, stability, and prosperity. The resulting relations between most leading powers look very little like the typical pattern during classical eras of great-power competition. Japan, for example, does not fear India. (Indeed, they are collaborating to balance Chinese power.) The European Union does not fear Brazil, which does not fear Mexico. Many of the world’s most powerful states belong in military alliances and political unions with one another; even those that do not are collaborating extensively in areas such as trade, information security, climate, and global development. The security problems of the emerging era come not from a set of mutually suspicious great powers but from a handful of partly revisionist states, led by Russia and China, unsatisfied with their status in the international system. The way those states express that dissatisfaction, moreover, differs significantly from the classic predominance of political-military forms of great-power competition. Because of the nuclear revolution, victorious wars of conquest are simply not a realistic option. No modern Russian Napoleon could imagine seizing the whole of Europe, because to do so would be to court nuclear annihilation. Beyond the effect of nuclear weapons, several factors—including the role of democracy, prosperity, and economic interdependence—have ushered in an age when military adventurism is strikingly rare. Today’s versions of rivalry and competition almost always play out in the economic, political, cultural, and informational spheres—not on the battlefield. This is not to say military power plays no role in current competitions. It surely does, as a means of coercion and a backdrop to other efforts. But this is a vastly different role than military power played, for example, for France, the Habsburg dynasty, Japan, or Prussia in the eighteenth and nineteenth centuries. Anyone seeking evidence need look no further than defense-spending levels of most major powers today, which have remained stubbornly low. The strategy of the United States’ leading rival—China—is therefore to advance its interests primarily through economic, geopolitical, and informational means. Military power certainly backs up some of China’s ambitions, such as in the South China Sea and in its belligerent posture toward Taiwan. But China’s activities today pale in comparison with earlier forms of great-power military aggression, which often involved existential threats to homelands—Germany’s fleet threatening the United Kingdom’s survival before World War I, Napoleonic France invading its neighbors, and the like. Whatever China’s objectives are today, they will not be served by a direct attack on other great powers.