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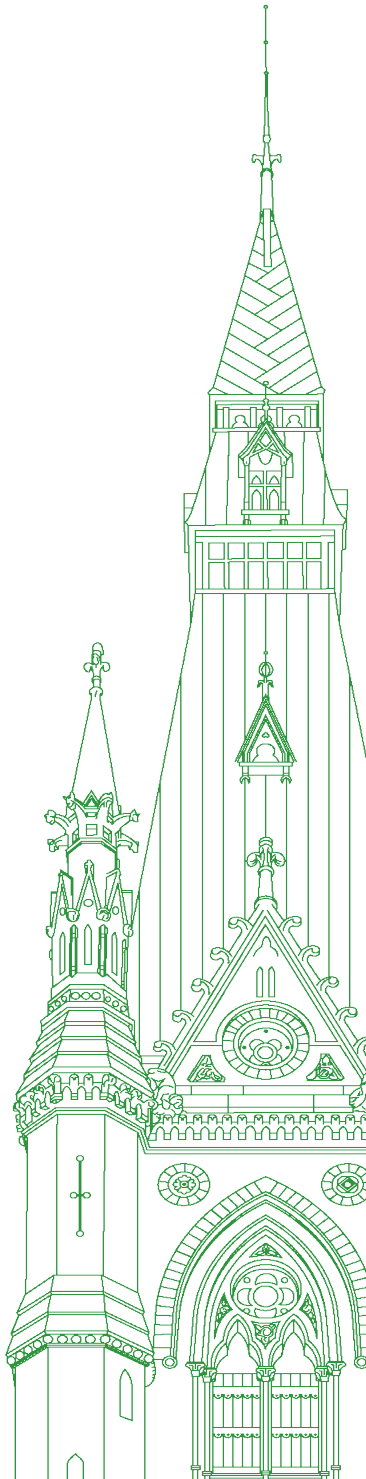

Chair: Mr. Ron McKinnon

Standing Committee on Health

Monday, March 8, 2021

● (1105)

[*English*]

The Vice-Chair (Hon. Michelle Rempel Garner (Calgary Nose Hill, CPC)): I call this meeting to order.

I note that everyone has the right to speak in their own official language. With regard to all the normal housekeeping things the chair normally says, I don't have a script.

Mr. Clerk, I will turn it to you to start witness presentations.

The Clerk of the Committee (Mr. Jean-François Pagé): Dr. Fisman will be first, for up to six minutes.

The Vice-Chair (Hon. Michelle Rempel Garner): Thank you.

Dr. Fisman, please go ahead.

Dr. David Fisman (Professor of Epidemiology, University of Toronto, As an Individual): Thank you so much.

Honourable members of the committee, I'm pleased to speak to you today. It's been approximately one year since I last appeared before you, and it has been a year like no other. While we have had many surprises, perhaps most surprising to me is the degree to which this pandemic has met our pre-pandemic expectations of the origins and course of such an event.

As predicted, a virulent pandemic emerged at the human-animal interface when an animal virus crossed the species barrier. Our fear is focused on a pathogen that combines virulents and transmissibility, and SARS-CoV-2 has done that par excellence. The contours of this pandemic, both in terms of timing and societal disagreement around masks, business and school closures, also directly echoed the 1918-19 influenza pandemic.

I'm sure that many of you, like me, wish that we were further along in vaccinating all Canadians against SARS-CoV-2. As with the control of the pandemic itself, Canada is neither at the front nor the back of the pack. We are getting there. Long-term care facilities across the country are largely vaccinated, and that has led to a marked reduction in daily deaths from SARS-CoV-2. However, as a friend recently remarked, Canada doesn't have a “let's finish in the middle of the pack” program for the Olympics. We have an own the podium program. We have the smarts, and the resources to be at the front of the pack.

Better performance in a crisis like this depends on strong systems, which unfortunately can't be created overnight. As they say, it's hard to build the airplane when you're trying to land it. Public health funding in Canada may be a victim of its own success. When public health systems are functioning well, they are silent, but they allow other sectors of our economy to thrive.

Unfortunately, the conditions that created our current pandemic will not disappear when this is over. Environmental degradation, climate change, illicit trade in wildlife, and risky laboratory work are all likely to continue, making a recurrence of a similar event fairly likely. As such, I'd like to look forward rather than backward, and talk about what we might build out of this experience in order to protect Canadians in the event of a future severe pandemic, with a focus on vaccination.

Vaccines are the door out of the current crisis for the simple reason that it isn't the virus that creates a pandemic, but rather widespread susceptibility to a new virus. Vaccines remove that vulnerability. The frustrations related to COVID-19 reflect weaknesses in two major areas, neither of which appeared overnight, and neither of which can be resolved with a snap of the fingers.

First, vaccination data systems across the country are weak or non-existent. Second, while we have a rich history of vaccine-related innovation in Canada, the path from innovation to commercialization seems to be a challenging one, and our ability to manufacture vaccines in Canada is limited.

In discussions with colleagues, it has emerged that notwithstanding spending around half a billion dollars annually on vaccines, we lack national or even well-functioning provincial appointment systems, vaccine registries and adverse event surveillance systems. We even lack common terminology across provinces to create such systems. These systems are now being built perforce during a national crisis. They need to be strengthened, integrated and maintained when the pandemic is over, both because they'll allow us to immunize more efficiently and effectively in peacetime, and also because they'll be a key strategic asset when the next pandemic occurs.

Similarly, delays in acquisition of vaccine supply underscore the importance of building strong manufacturing capacity for vaccines here in Canada. The era of vaccine companies as university-owned entities or Crown corporations like Connaught is long gone, but we have tremendous innovation in the vaccine space in Canada.

The Pfizer-BioNTech mRNA vaccine may represent a new paradigm for partnerships between smaller companies and global vaccine manufacturers, and could provide a pathway for Canadian innovators too. I'm also delighted to see that we will soon be manufacturing the Novavax COVID-19 vaccine here in Canada.

A key advantage of partnering with global firms relates to the global nature of communicable diseases. For example, it's important for companies to trial vaccines in other countries where novel SARS-CoV-2 variants are emerging.

In closing, this pandemic has made it clear that strong public health systems and vaccines are strategic assets that need to be actively maintained for the protection of Canadians, just as we would maintain a strong and competent military. As with the military, we don't want to be strong so we can get into fights, we want strength so we can protect ourselves from threats like SARS-CoV-2 that are likely to continue to emerge in the years ahead.

The Vice-Chair (Hon. Michelle Rempel Garner): Thank you, Dr. Fisman.

Dr. Weiss, you're up next.

● (1110)

Dr. Karl Weiss (Full Clinical Professor, Faculty of Medicine, Department of Microbiology, Infectious Diseases and Immunology, Université de Montréal, As an Individual): Thank you for inviting me, honourable members of Parliament. I'm very happy to be in front of you this morning.

I don't have a formal presentation to give you this morning but I gave a few slides to the clerk. I'm sure he will be able to send you my presentation where you will have some data to cover what I will say.

Talking after my colleague Dr. David Fisman, whom I know well, I completely agree on many different topics and I want to underline a few important points.

I would summarize that Canadians did very well throughout this crisis. I think we have to be very proud of ourselves because if you look at all the G7 countries in terms of rates and mortality we're probably better than many others except Japan, but Japan is a very specific case. If you compare us to the United Kingdom, France, Italy, Germany and the United States, we did very well as Canadians. People were very disciplined throughout the crisis in general.

In terms of our global response as a country we didn't do that well. This is where we have a few challenges for the future, and these types of challenges will happen again. We're in a world where emerging infectious diseases will be on the menu for the next century. We travel more, and we have many ecological issues in deforestation, which is a big thing for emerging infectious diseases, because you have these viruses stuck in the middle of the Amazon jungle. Until you start destroying the forests you won't be able to see them.

We can travel around the world like never before. We're a country where one of its health.... This population comes from all over the world. Because of this, we're travelling all over the world. I think it challenges us in the future that we should have a system in place to be able to limit the impact of these emerging conditions.

There are a few things here.

The strength of our system is that we have federal and provincial levels. This is also a weakness of our system because we had a lot of bickering between the different provinces and the federal government in terms of who is responsible for what.

Personally, not as a physician, but as a Canadian, in the future I would expect my federal government to step in very quickly and use all its power to try to contain a pandemic like this. For example, we had great military forces that were deployed to a certain point. We had the experience of having our armed forces in Quebec, but having the potential and the availability of our soldiers helping the Canadian population with logistics whenever possible would have been great. I think there are examples around the world in immunization where the army played a very important role in logistics.

Closing the border was also a big thing. I understand from a political standpoint it was very difficult. It was probably the biggest challenge we had as a nation since the last world war. From that perspective for all of us who were born after 1945, and even for the others who were probably children during the Second World War, there hasn't been any challenge as big as this one in our lifetime. It's extremely difficult to go from an ordinary life to an extraordinary life very quickly.

From that perspective, having in place all the measures to be able to close the border quickly and to implement certain rules quickly in isolating people, quarantines, etc., will be very important.

The biggest challenge, and it's our only way to get out of this, is the reindustrialization of the Canadian economy, which is mostly for medical equipment. We had to struggle for masks, ventilators and tests, very simple things. We're testing hundreds of thousands of people every day in this country, but you have to realize that all the equipment needed for the tests is very difficult to get. Much of it is coming from abroad; sometimes you need a plastic pipe head, which was not available in this country, and we had to compete with the rest of the world to get them.

● (1115)

I think that strategically a country like ours should be able to muster this in the future and make sure we won't be caught a second time without an industrial base to be able to do this.

The second thing which is really important, and I think I will—

The Vice-Chair (Hon. Michelle Rempel Garner): Dr. Weiss, I'm just going to let you know you have about 45 seconds left.

Dr. Karl Weiss: There is a second thing that is very important for me. I will just emphasize what David just said: it's really the vaccine capability of this country. We lost part of our capability. We just have to rebuild it and regain it. I think that will be very important for the future not just for infectious conditions, but also because mRNA vaccines will be used for cancer at one point, and this is why it's important.

Thank you very much.

The Vice-Chair (Hon. Michelle Rempel Garner): Thank you so much.

Just as an FYI for colleagues, per Dr. Weiss's comments, he has presented some slides to the clerk. They haven't been translated yet, and it's my understanding that they will be translated and then circulated in both official languages.

I notice that Ms. Ravon has joined us. I'm very much looking forward to your testimony on International Women's Day. You have an inadvertent female chair at the moment. With that, six minutes go to you.

Ms. Lauren Ravon (Executive Director, Oxfam Canada): Fantastic. Thank you very much. Happy International Women's Day to you all.

Thank you for the invitation to appear on behalf of the People's Vaccine Alliance. As you may know, Oxfam is one of the founding members of this growing movement of health and humanitarian organizations, past and present world leaders, health experts and economists. We're calling for a COVID-19 vaccine to be made available for all people in all countries and free of charge.

We know that COVID-19 knows no borders and has impacted everyone's life. Canadians from coast to coast to coast are hurting. But we also know that the pandemic has hit certain groups harder than others. Here in Canada, Black, indigenous and racialized women, women with disabilities, and immigrant women have been hardest hit by the virus. In many cities, they have the highest infection rates. This is because so many of these women are frontline health care workers or work in what we now recognize as essential jobs. This is why Oxfam has labelled the coronavirus the “inequality” virus, to emphasize just how much COVID-19 is deepening and exacerbating existing inequalities.

The pandemic has demanded interventions on a scale and scope not seen in decades. Canada has invested unprecedented levels of resources to provide a safety net for people here in Canada, but it has also offered significant support to help developing countries weather this storm. This includes close to $940 million to support equitable access to COVID-19 tests, treatments and vaccines through the WHO access to COVID-19 tools accelerator. This funding also includes $325 million for the COVAX advance market commitment stream, which aims to help vaccinate 20% of people in 92 low- and middle-income countries, especially the most at-risk groups.

Unfortunately, at current trends, nine out of 10 people in low-income countries will miss out on a COVID-19 vaccine this year. Estimates show that poorer countries will not have widespread vaccination programs in place until 2024. We need to do better. The longer the virus is around, the more likely it is to mutate, making current immunization efforts ineffective.

The WHO initiatives that Canada is supporting are important. Unfortunately, they do not tackle the global problem of vaccine shortages. They are also undermined by wealthy countries cutting bilateral supply deals that drive up prices and limit supplies. Our best chance of us all staying safe is to ensure that COVID-19 vaccines are available for us all as a global common good. This will only be possible if we change the way in which vaccines are produced and distributed. Pharmaceutical companies need to allow COVID-19 vaccines to be produced as widely as possible by sharing vaccine technology free from intellectual property rights. We need to maximize production so that enough doses are available for the world to achieve herd immunity.

What's fantastic is that Canada can help end the scramble for vaccines. Canada became co-chair of the COVAX advance market commitment engagement group this past January. In her role as co-chair, Minister Gould can strengthen COVAX by pushing for increased transparency and inviting developing countries and civil society representatives to decision-making spaces. Canada should refrain from procuring vaccines from COVAX at this time. For many low-income countries, COVAX may be their one and only chance of receiving vaccines this year.

Ghana and Ivory Coast received their first vaccine shipments this past week through COVAX. This is worth celebrating as a first step to ensuring that their health care workers have the protection they need to do their jobs safely. Unfortunately, close to 80 other countries have yet to receive a single dose.

The world needs more vaccines, and fast. This week Canada has the opportunity to change the course of the pandemic. A waiver on trade-related aspects of intellectual property rights, otherwise known as TRIPS, is being brought to a vote at the World Trade Organization. Spearheaded by South Africa and India, and supported by more than 100 countries, this waiver would be a game-changer for increasing vaccine supplies, as it would allow countries with the manufacturing capacity to make COVID-19 vaccines.

We hope to see Canada vote in favour. This pandemic has shown us how interconnected we all are and how vital it is to have international co-operation and solidarity. By voting in favour of the TRIPS waiver at the WTO this week, Canada can help stop the pandemic in its tracks.

Thank you on behalf of Oxfam and the People's Vaccine Alliance for the opportunity to appear today.

● (1120)

The Vice-Chair (Hon. Michelle Rempel Garner): Thank you for your time and your work.

With that, I will turn to Ms. Demarais, our last witness in this panel.

Ms. Demarais, you have six minutes.

Ms. Agathe Demarais (Global Forecasting Director, The Economist Intelligence Unit Limited): Thank you very much.

Honourable members of the committee, I'm very pleased and honoured to be here today. My name is Agathe Demarais. I'm the global forecasting director at The Economist Intelligence Unit.

In January, we published a study presenting our forecasts for global coronavirus vaccination timelines around the world. I think this is the study that Lauren Ravon mentioned in her testimony. These projections presented the time when each country around the world can expect to have vaccinated 60% to 70% of its population.

There are three main conclusions that I'll present now before digging a little further into the data. The first conclusion is that vaccination will take a lot of time. Vaccinating the majority of the world's population will take until at least late 2022, and for many countries, the timelines will stretch until 2024 if vaccination happens at all.

The second conclusion is that production is the main bottleneck around the world. We studied seven criteria to make our timelines, and production was always the one that made timelines slip.

The third conclusion is that this poses two main risks. The first risk is for the global economic recovery because some countries will recover faster than others as they will have vaccinated faster than others. The second risk is obviously that while not every one is vaccinated, new variants of the coronavirus pandemic can emerge and could take us back to square one.

First, why did we do this study and what was our methodology? Until recently, the main variable for political and economic forecasts that we do at the EIU was the course of the pandemic. That's not the case anymore. Now it's all about global vaccination timelines.

What was our methodology? Briefly, we took seven factors into account. The first one was production. As I mentioned, it's the main bottleneck because 15% of the world's population have pre-booked around half of the supply of coronavirus vaccines that will be produced this year.

The second factor was supply deals.

The third factor was logistics with a special focus on two issues. The first issue was transportation, which is going to be very tricky because normally vaccines are shipped via passenger planes but there's no travel anymore because of travel restrictions. The second issue was the cold chain, because some countries do not have the required cold chain to use some of the vaccines that require ultra-low temperatures.

The fourth factor was the availability of health care personnel to administer the vaccines. This is going to be a bottleneck in some countries, for instance, in Asia.

The fifth factor was financing. It is crucial for many poorer countries.

The sixth factor was vaccine hesitancy, which is especially acute in some countries like France, Japan and Argentina.

Finally, there were some local factors because some countries simply do not want to vaccinate. This is the case in Tanzania, for instance.

The second thing that I wanted to mention is the main takeaways from our study. We mapped four different categories of countries. The first category is the fastest countries with timelines stretching into late 2021, so late this year. We have exceptionally fast countries such as Israel, the United Kingdom, Serbia and the Gulf countries, and other very fast countries in the EU, the U.S., Switzerland, Hong Kong and Singapore, for instance.

The second category of countries have timelines stretching into mid-2022. This is still very good by global standards. These are other OECD advanced countries such as Australia, Japan and South Korea, or middle-income countries that have production capacity such as Brazil, Russia and Mexico.

The third category of countries is where we found most middle-income countries, and India and China, with timelines stretching into late 2022.

Why are India and China taking until late 2022? It's because of the sheer size of their population, which is going to present a big challenge, and also because these countries are exporting vaccines in large quantities so they will find tensions between supplying their domestic markets and supplying exports.

Finally, the fourth and last category, where the majority of the world's population finds itself, is timelines stretching into 2023 and beyond, if vaccination even takes place. This is the rest of the world, mainly low-income countries. It includes most countries that will depend on COVAX, which will cover only 20% of the population of eligible countries with timelines that are non-binding and subject to change. There's a real risk in these countries that vaccination will not take place, because in some of these developing countries, governments could find that vaccination could be too costly or too difficult.

Finally, what does that mean for the global economic recovery, which is something that we forecast at the EIU? It will start from the third quarter of 2021, so the third quarter of this year, because that's the time when the U.S., Europe and many of the OECD countries will have vaccinated the bulk of their populations. China is the engine of global growth but vaccination timelines can stretch further because the pandemic is under control in China and so there is no real rush to vaccinate, which is quite different from the situation in many western countries.

● (1125)

That being said, the global economy will recover to pre-coronavirus GDP levels only in late 2021, so it will take time, and this forecast masks wide disparities. It's artificially boosted by China, where we forecast that growth will boom this year. For the U.S. and the EU, we will see a recovery to pre-coronavirus levels only in 2022 and in Japan in 2023. In emerging countries, timelines will be much slower for recovery, which reflects the slow vaccination timelines that we've just discussed and the lack of fiscal space to launch stimulus plans.

This poses two main risks, finally, for global economic recovery. The first one is that global vaccination timelines could slip even further, which would delay the recovery. The second one is, as I've mentioned, that, while not everyone is vaccinated, we could see new variants emerge that could prove resistant to vaccines.

Thank you very much for your attention and for having me today.

The Vice-Chair (Hon. Michelle Rempel Garner): Thank you very much to the witnesses.

I believe our chair has figured out how to get into the meeting.

The Chair (Mr. Ron McKinnon (Coquitlam—Port Coquitlam, Lib.)): Yes, I believe so.

Thank you, Ms. Rempel Garner.

The Vice-Chair (Hon. Michelle Rempel Garner): Chair, I will pass it over to you on this International Women's Day, which seems apropos.

It will be Mr. Maguire from the Conservatives for six minutes.

The Chair: Thank you, indeed.

Congratulations to everyone on this International Women's Day.

Please, Mr. Maguire, go ahead for six minutes.

Mr. Larry Maguire (Brandon—Souris, CPC): Thank you, Chairs.

I want to thank the witnesses for their presentations today, which were most relevant and interesting to the situation that's facing us here right now.

To Ms. Demarais, you've done this huge study, and we have an awful lot of.... You're talking there about recoveries in 2021 for China, 2022 for the U.S. and 2023 and beyond for the emerging countries.

With regard to the forecast of the pandemic's long-term impacts on things more relevant, probably in Canada but probably relevant to other areas of the world as well, is commercial real estate. Do you know how the pandemic has so far impacted some of these commercial real estate markets around the world? I'm looking at a very relevant question to follow that up with.

Ms. Agathe Demarais: Mr. Chair, I would like to reply that, yes indeed, the pandemic has had an impact on commercial real estate. I'm afraid I haven't prepared anything on the subject today, so I would be hard pressed to give a definitive answer. I apologize about that.

Mr. Larry Maguire: That's fine. I guess I'm looking at major concerns about working people, people working from home and the impact of that on the economy. I don't know if you have anything in that regard.

You're looking at some pretty different timelines in different areas of the world as far as the economic recovery goes, but the change in people being able to work at home, is that something that you can comment on? How that will impact the real estate market is basically what I'm looking at, whether it's commercial or even households and the changing of home values.

● (1130)

Ms. Agathe Demarais: To answer your question, I think that the question is about the future of cities. I would phrase it that way, with commercial real estate, perhaps with some offices, downsizing space. I think this is a possibility, but at the same time, we can see that things could go in any direction. We could see that people would want to go back to the office. It's certainly the case in some countries; it varies country by country. In other countries, we've seen people who have fled cities try to work remotely from other locations, so it's going to be a case-by-case situation.

In terms of the timelines for recovery, as you've mentioned, we're looking at early 2022 for the U.S. and Europe to go back to pre-coronavirus GDP levels, so it's going to take time. Canada is in the same timeline.

I would say that, so far, it's a bit too early to make definitive forecasts about the future of work. It's a very open debate, I would say, but it's something that we'll certainly monitor very precisely.

Mr. Larry Maguire: To you and Ms. Ravon as well, in regard to the number of vaccines getting out to people, you were saying that production is always one of the seven criteria and one of the very key issues that allows timelines to slip. Can you comment further on the impact? Even if a country like Canada, with as small a population as we have, gets completely vaccinated, if these other areas of the world aren't vaccinated until 2023 or 2024—and I noted you said emerging countries if at all—this virus is still very alive and well across the rest of the world. How do we deal with that? What's the best way to deal with the impact of that?

Ms. Lauren Ravon: That's a great question, and I think there are two parts to the answer.

One is just on the medical side of things. We know that the disease is mutating, that the longer we wait to vaccinate everyone, the more we all are at risk in terms of the changing variants making us less safe here in Canada. Even if we do get vaccinated, if the world is slow to vaccinate the entire population, we are at risk.

Then perhaps even more importantly, as long as the global economy doesn't recover, our economy won't recover. Things like travel will remain disrupted; global supply chains will remain disrupted; and also, perhaps most importantly, the global fight against poverty will continue to go backwards. We are losing ground day by day.

Mr. Larry Maguire: Ms. Demarais.

Ms. Agathe Demarais: I think the main risk, in addition to what Ms. Ravon has said, is that a number of emerging countries could well lose de facto motivation to vaccinate if they find that it is too costly or too tricky or if production remains a big bottleneck. I think this is the main risk.

Mr. Larry Maguire: How should Canada best deal with this?

Ms. Agathe Demarais: I do not believe that it is my place to make recommendations to Canada. I think that our study was to look at global vaccination timelines.

Mr. Larry Maguire: For a country like Canada, then.... We're connected to the United States. We're so close here. We're part of a major continent in the world. Do you have anything in regard to...? I don't mean a recommendation—

Ms. Lauren Ravon: I'd be happy to jump in.

Mr. Larry Maguire: Yes, go ahead, then, Ms. Ravon.

Ms. Lauren Ravon: I think there are two things.

I think what we're already doing, supporting COVAX to get vaccinations out and quickly, is a great first step. The second step, as I mentioned, is waiving intellectual property rights, because right now time is of the essence. We just need to ramp up production. There is no other way around it, and until we open up intellectual property rights on these vaccines, we won't be able to ramp up production to get people vaccinated.

Mr. Larry Maguire: Okay.

Ms. Demarais, the pandemic has caused many countries all over the world to run deficits. We know that it's costing our economies and our treasuries hundreds of millions of dollars each day.

What are your predictions with regard to inflation and currency devaluations becoming a problem soon, if not already, here?

Ms. Agathe Demarais: Our forecast is that the main risk to the global economy—obviously there is the coronavirus pandemic and everything related to vaccines—is having a spike in inflation. It's not our baseline scenario, but if inflation were to spike because of a spike in global demand once the global economy recovers, that would be a definite risk because it would make repaying debt very tricky. At the moment that's not our baseline forecast, but it's certainly something that is worth monitoring.

The Chair: Thank you, Mr. Maguire. I believe that's your time.

Mr. Van Bynen, please go ahead for six minutes.

● (1135)

Mr. Tony Van Bynen (Newmarket—Aurora, Lib.): Thank you, Mr. Chair.

I want to start by thanking our witnesses for joining us today. I also want to wish everyone a happy International Women's Day.

Dr. Fisman, I share with you the view that we need to learn from this situation and we need to start thinking about what we should be doing, working forward. You're based in Ontario and you've been working with the provincial governments on the vaccine rollout. Can you talk about the work that provincial governments need to do, from your perspective, in order to ensure a rapid and efficient vaccine rollout?

Dr. David Fisman: Just to be clear, I don't have a role on the Ontario vaccine task force at all. I am on the science table in Ontario and the modelling table, and I can give you my perspective more as someone who is looking at data rather than designing new systems.

Mr. Tony Van Bynen: Please do.

Dr. David Fisman: I can also possibly make a comment as a physician.

I think, to my mind, we're doing some good stuff. The marvellous observation over the last month or so is we've had long-term care facilities in Ontario serve as a major source of death during this pandemic and the Pfizer vaccine and then the Moderna vaccine have basically shut that down. Our science table has a brief that came out today looking at the impact of these vaccines in long-term care and it's nothing short of spectacular.

If there's a major failing that I see in Ontario that's holding us back, and I think we are starting to fail to keep up with vaccine supply as it comes into the province, we have about 8,000 or 9,000 family doctors in this province who vaccinate a few million Ontarians against influenza every flu season. I'm aware of the logistical issues with the mRNA vaccines, but we're starting to get into vaccines that don't have the same extreme cold requirements for storage. I think family doctors know how to do this. They know their patients. They know how to prioritize and how to get folks vaccinated.

I think there are some infection control concerns in terms of individual people's offices and not all doctors feel comfortable having a large crowd of folks pass through at this time. But I do think that as we try to do something new, we have to use the tools that we already have in our tool box. We do have this group of individuals who are very, very good at vaccinations who have been underutilized to date, so I hope that changes.

The thing I'm proudest of in terms of the Ontario science table, and it's brought me along a little bit.... We see this every year with the influenza vaccines. Usually the dilemma with vaccinations is that the vaccines are least good at protecting the individuals you most want them to protect. Most deaths from influenza each year occur in individuals over age 65, for whom traditional influenza vaccines—we have some better ones now—arguably have not worked at all in that demographic. We've directly tried to protect individuals with vaccines that are very unlikely to work in that age group, whereas we could probably protect them more effectively by going for the herd, as the flu vaccines work in younger people.

We don't actually have that dilemma with COVID vaccines, because the mRNA vaccines in particular are so potent that we can directly protect individuals over age 80, over age 70, individuals with underlying medical issues, by directly vaccinating them. To some extent, this decision has been a bit of a no-brainer in terms of who you vaccinate first. It's older people, and I think you see that in other countries.

The modification to that which has come out of our science table is this observation that about 90% of all of our COVID cases come from 10% of our postal codes in Ontario. Those have been overwhelmingly postal codes that are more densely populated urban areas, lots of people of colour, lots of new Canadians, lots of folks involved in essential work. What came out of the science table, and I think the province is now following this, is an attempt to sort of front-load, in addition to prioritizing older people and folks with underlying medical conditions, vaccinations in some of these zip codes that have been really the hardest hit, to try to get some of those herd effects as well.

I think it's a neat piece of nuance. I realize it raises equity concerns in other areas where people have said, “Hey, what about us over here? We're vulnerable, too.” These are hard decisions with a scarce resource, and I think they did pretty well with that.

● (1140)

Mr. Tony Van Bynen: Yes, a lot of these decisions are data-based. Dr. Fisman, I'm hoping you can expand on the tools that are available to the provinces and territories, such as testing, contact tracing, public health measures, that would get us through this crisis, and the importance of data and how data can help lead the decisions that we need to effectively counter the effects of this pandemic.

Dr. David Fisman: Right. Increasingly, I think, public health has become a data-focused discipline. I mean that how we understand processes, how we see them, really depends on the data we have. It's unfortunate, I think, that in my province, Ontario, we have a bit of a track record where we've sunk billions of dollars into data systems and famously have had very little to show for that. I think that is sort of a caution to us if we say, “Let's just throw a bunch of money at this and build some good data systems.”

We have needs on a bunch of different fronts. In terms of public health surveillance systems, we could really use some upgrades that make surveillance systems interactive, to have a kind of crosstalk across the country, a shared vocabulary, and relatively user-friendly data systems and data systems that are actually linked into.... As you know, we have national health care in Canada. It would be great if we could actually have interactivity between our public health data system and our health care data system.

On the subject of vaccines in particular, because that's what I've been thinking about in heading into this meeting, we are really patchy, and to date we have very little that has been constructed. As far as I know, the only province in Canada—and I hope I'm right about this—that has an adult vaccine registry is Prince Edward Island. I think that's it. We really don't know.

As I mentioned in my remarks, we spend half a billion dollars annually on vaccines, but we actually have no means of tracking who got them or of linking back to health records so that we could look to see whether if you're vaccinated you're less likely to be hospitalized and so forth. We're really struggling in terms of appointment systems. We don't have a good national, nimble system to monitor vaccine adverse effects, which is a really big issue with brand new vaccines.

The Chair: Dr. Fisman, I'm going to have to cut you off right there.

Dr. David Fisman: Sure. Sorry.

The Chair: Thank you very much for that excellent information.

[*Translation*]

We'll now turn to Mr. Thériault.

Mr. Thériault, you have the floor for six minutes.

Mr. Luc Thériault (Montcalm, BQ): Thank you, Mr. Chair.

I want to thank the witnesses for taking the time to come and give us their presentations, which are very enlightening and relevant.

We're dealing with a global pandemic. The presentations given by Ms. Demarais and Ms. Ravon speak for themselves.

Professor Fisman and Professor Weiss, you are scientists. You spoke about the need to establish a more centrally coordinated approach. However, shouldn't this have been done on a global basis in the first place?

The vaccine protectionism that we're facing has led to a vaccine race. The findings of Doctors Without Borders, Ms. Ravon and Ms. Demarais show that this global pandemic is forcing us to review our methods. Variants will continue to pose a threat and may take us back to square one. This is a long-standing issue in third world countries, two-thirds of which are excluded.

Professor Weiss and Professor Fisman, I want to hear your thoughts on this.

Dr. Karl Weiss: Mr. Thériault, I'll answer you as best I can.

First, we're dealing with a virus that will persist. In other words, because the coronavirus has a non-human reservoir, it won't necessarily be eradicated. We'll probably have to live with the virus for a long time. This is different from smallpox, which was eradicated in 1977 through global vaccination.

We'll also be facing a situation where we'll need to administer flu-like vaccines on a regular basis. It's possible that we'll need to vaccinate people every year or two, worldwide, to protect them from new variants.

You must also understand that the variants aren't necessarily unexpected. The variants are a way for the virus to adapt to humans and to improve itself, so to speak. A variant isn't necessarily worse. We don't see all the failed variants. It's a bit like a cake. We don't see all the failed recipes, only the successful ones. This is somewhat the case with variants, which show the adaptability of the virus.

Obviously, the World Health Organization, like many large organizations, dropped the ball somewhat. The World Health Organization is subject to all sorts of political pressure. At first, the information on the extent of the pandemic wasn't very clear and straightforward, including the information on what happened in China. Later on, we learned a bit about the extent of the pandemic. From a purely technical perspective, we received information about the sequence of the virus from Australia, where a laboratory isolated the virus using people who had come from China. We can't rely too much on international organizations to show complete transparency, since the states that make up these organizations aren't transparent.

In Canada and Quebec, we must protect ourselves so that we have the pieces in place to protect our population as best we can under the circumstances. Of course, we can work with other countries. We must do so when we don't have the capacity to produce vaccines, for example.

For Canada, we must have a strong detection system. For example, we have a very good system of provincial laboratories. We also have, in Winnipeg, a national laboratory whose capabilities are world-renowned. However, in Canada, we must develop some sort of external warning and monitoring system to quickly identify threats and implement measures to counter them.

We're told that we must build the plane as we fly. I think that everyone agrees that, at the start of the pandemic, we were caught off guard on all fronts when it came to implementing measures to deal with the virus effectively.

We could discuss this matter at length. Let's just say that we'll need Canadian vaccine development and production capacity to meet the needs of the entire population. On a practical level, we're in a global competition. Both states and the European Union, which is a group of states, want to keep vaccines for themselves. China and India also manufacture their own vaccines.

In addition, there are geostrategic considerations involved in this situation, such as giving vaccines to poor countries when the vaccines are likely being used as a bargaining chip.

In Canada, where we have the expertise, we certainly have no choice but to produce these vaccines. We could do so together with other countries.

● (1145)

Mr. Luc Thériault: It's about rebuilding our production capacity with our experts, which we were unable to do at the start of the pandemic.

You have been very critical of AstraZeneca. In terms of the use of vaccines, do you advocate for a differentiated vaccination by age group?

Are you still as critical of AstraZeneca, when studies continue to come out and change with regard to vaccine effectiveness?

Dr. Karl Weiss: I've been critical because our current data shows that the AstraZeneca vaccine is potentially less effective than the other two vaccines, which are messenger RNA vaccines. That's the protection data.

The AstraZeneca vaccine isn't a bad vaccine. However, you must know that it has been much less widely used than the other vaccines. One issue right now is the perceived safety of the vaccine by some segments of the Canadian population.

We know that messenger RNA vaccines have been given to over 80 million people. We haven't seen many safety issues. That's one way to encourage vaccination.

There have been many technical issues with the AstraZeneca vaccine. We've heard that it isn't as effective in people over the age of 65. That's true. The vaccine is also less effective against the South African variant. This has been shown in studies.

I don't want to go into too much technical detail. If we didn't have any alternatives to the AstraZeneca vaccine, I would be the first to say that I'm willing to receive it. I wouldn't have any particular issue with receiving the vaccine. However, given that other vaccines seem better and more effective, if I had a choice of vaccine, I would opt for the more effective one.

The best example is Israel, which has vaccinated over 80% of its population with the same vaccine and has seen a significant decrease in severe cases, especially among seniors.

● (1150)

The Chair: Thank you, Dr. Weiss.

Thank you, Mr. Thériault.

[*English*]

We will now go to Mr. Davies.

I will give you a little bit of extra time also.

Mr. Don Davies (Vancouver Kingsway, NDP): Thank you, Mr. Chair.

Thank you to the witnesses for being here.

Ms. Ravon, Oxfam Canada is on record as saying that "Canada should use its leadership to encourage G7 countries to stop supporting pharmaceutical corporations monopolies on COVID-19 vaccines." Oxfam has stated that "Breaking up the monopolies of the big pharmaceutical companies is the quickest, fairest and most effective way of boosting vaccine production so that countries are not forced to compete [for scarce and limited] doses."

There's an important vote coming up this Wednesday at the WTO. Has the Government of Canada indicated whether it will support the proposed temporary IP waiver at the upcoming WTO council on trade-related aspects of intellectual property rights?

Ms. Lauren Ravon: I obviously can't speak for the Government of Canada. All I can say is that we're hoping to see Canada take a strong stand to support the waiver of the TRIPS. This is because ultimately it's a matter of scale. We need to be producing vaccines everywhere we can, in every country we can, in every lab that can produce them. At this moment in time, if we're dependent on some pharmaceutical countries, then vaccination could be delayed for three or four years, or even, as Madame Demarais said, some countries could simply decide to forego vaccination.

If you look at some of the vaccines today, it costs almost $40 for a two-dose vaccine. Poor countries are not going to be able to pay that for their entire population, so we're hoping that Canada will say yes to a temporary waiver.

Mr. Don Davies: Thank you.

Offhand, do you have any idea, Ms. Ravon—or maybe even you, Madame Demarais—generally what percentage of the investment that produced COVID vaccines was publicly financed?

Ms. Lauren Ravon: My understanding is that up to 80% of research and development expenses were publicly financed, but I can turn to Madame Demarais.... I think that is usually the case.

We need to understand that these are not normal circumstances. These are extraordinary circumstances. That's why we need to take extraordinary measures.

Ms. Agathe Demarais: My understanding is that these vary greatly vaccine by vaccine, so it's hard to make an average, but I've heard the figure of 80% for some vaccines in some countries.

Mr. Don Davies: Thank you.

Ms. Ravon, we've talked about COVAX, and I would say it's now infamous that Canada is securing 1.9 million doses of AstraZeneca vaccine from the COVAX program this June. Recent news, by my math, shows that the Government of Canada now claims to have secured delivery of 117.9 million vaccine doses by the end of September, which is enough to vaccinate every single Canadian three times over.

Is it justifiable for Canada to be taking 1.9 million doses from the COVAX program, given those numbers and given what you have told us about the lack of doses in the developing world?

Ms. Lauren Ravon: To be clear, we think that Canada should not be taking doses from COVAX. That being said, we think there's a bigger problem of production.

Even if we didn't take those million-plus doses, we still don't solve the problem for the world. There's no way, even once we're vaccinated in Canada, that we can go fast enough to vaccinate everyone else with the doses available now. That's why our focus today is on ramping up production and opening up intellectual property rights, so that developing countries that have the capacity to produce are doing it.

The problem with the current system is that someone like me, a young woman who's perfectly healthy, will be vaccinated before a health care worker in a developing country who is on the front lines of the disease.

That's why we need to shift things around. It's not a bidding war—who pays the most to get the vaccine—but that the vaccines are distributed according to need and vulnerability. That's not how things are working today, and there's an easy answer to this around intellectual property rights.

● (1155)

Mr. Don Davies: Thank you.

Madame Demarais, last week the European Union blocked a shipment of the AstraZeneca vaccine destined for Australia after the drug manufacturer failed to meet its EU contract commitments. According to Reuters, the EU is also planning to extend this export authorization scheme for COVID-19 vaccines to the end of June.

You were quoted in a BBC article, Madame Demarais, as saying, "As long as the European market doesn't have enough vaccines, I think that big imports to Canada are going to remain off the cards." Do you expect that future vaccine deliveries to Canada may be disrupted by EU export controls?

Ms. Agathe Demarais: The only thing this highlights is the production issue that Ms. Ravon just mentioned. I think it's unprecedented for everybody around the world to want to have a vaccine at the same time, so this is really making production an issue, and it's really going to be difficult this year to produce enough vaccines for everyone.

Then there's a political issue. Obviously, a number of countries are prioritizing vaccinating their domestic population first because they are under intense political pressure to do so, especially in western countries. In the European Union, all the debates in all the newspapers at the moment are all about whether the vaccine rollout is fast enough. In this situation, it's very hard to imagine that the European Union will allow large quantities of vaccines to be exported abroad in the coming months. As you mentioned, Italy has blocked some shipments of AstraZeneca vaccines to Australia, so it's not impossible to imagine that this could happen again.

Again, this really highlights two issues. The first one is production. There is a need to ramp up production to be able to vaccinate everyone this year. That's not going to be possible. The second one is that this has become a very political topic.

Mr. Don Davies: To all witnesses, it seems that a very clear theme is coming up. We're allowing a handful of private, multinational corporations in the world to control the production of a vaccine that is needed by seven billion people around the world.

Given that most of the development of the vaccine was financed publicly rather than through risk capital, does anybody disagree that we should be temporarily changing the way that we protect intellectual property so that every country can produce vaccines by making the technology and the intellectual property globally and publicly accessible? Does anybody think that's a bad idea?

Dr. David Fisman: I'll be the contrarian. I think it's a difficult challenge. I don't think it's a good or bad idea. I think the reason it's a challenge is that one can see arguing this in the short term very much in favour of trying to just expand global vaccine supply as fast as possible. I understand that and I think we've had precedent for that with HIV drugs previously where drugs have been, I believe, manufactured in India even while on patent, in violation of patents, because it was an emergency. I think there's precedent.

That said, I'm going to go out on a bit of a limb here. These vaccine multinationals are massive companies—you see that manifested in such names as GlaxoSmithKline and Sanofi Pasteur. There's been this sort of merger mania for about 30 years in the vaccine industry, which has resulted in these very large players. A lot of those players are actually filling an important global role. When it comes to manufacturing vaccines, this is not 1910 in Toronto, where you bought a stable and you harvested serum from horses. The quality issues, the potential liability issues and the fact that it costs about a billion bucks a vaccine to bring a vaccine to market make this a challenging business and sort of push it towards very large players. There are advantages to that.

The Chair: Doctor, could you wrap up, please?

Dr. David Fisman: Sure.

I think what you want to do is to try to increase supply rapidly without making this an unattractive area for companies in which to work in future. I'd love it if we could circle back around to what our future challenges are going to be, because COVID is going to be done at some point. We're going to get through this whether we vaccinate or don't vaccinate against pandemics. We have a whole list of pathogens that can do exactly the same thing that COVID has done, and we need vaccines against those pathogens too, which is a problem because it's hard to make these things when we're in the middle of a pandemic. If we're making them in the middle of a pandemic, we're too late.

● (1200)

The Chair: Thank you, doctor, and thank you, Mr. Davies.

That brings us to the end of this panel and of the questions.

I'd like to thank all the witnesses for sharing your time and expertise with us today. Thank you for your great answers.

We will suspend and bring in the next panel.

We are suspended.

● (1200)

_____(Pause)_____

● (1200)

The Chair: I call this meeting back to order.

We are resuming meeting number 23 of the House of Commons Standing Committee on Health. We are meeting today to study the emergency situation facing Canadians in light of the second wave of the COVID-19 pandemic.

I'd like to welcome the witnesses.

For this panel, we have Dr. Ève Dubé, researcher, Research Center, Université Laval; and Dr. Nathalie Grandvaux, professor, Université de Montréal. From Pfizer Canada we have Mr. Pinnow, president.

We will start with witness statements.

Dr. Dubé, please go ahead for six minutes.

Dr. Ève Dubé (Researcher, Research Center, Université Laval, As an Individual): Thank you.

I guess I am here as a medical anthropologist working on vaccine acceptance.

I'd like to emphasize that at this time our vaccine supply does not meet vaccine demand and that the work we're doing in Quebec looking at vaccine intentions indicates that most Canadians are willing to be vaccinated.

We can see vaccine acceptance in a continuum ranging from a very tiny minority of people who are strongly opposed to vaccination—it's fewer than 2%—to the vast majority of people who are willing to be vaccinated.

In the middle are the vaccine hesitant, the movable middle. Those groups are a bit more concerned about vaccine and maybe more reluctant to get their vaccination, and that's the group among whom we're seeing the most public health gains in ensuring confidence and acceptance.

Our regular surveys conducted in Quebec are similar to those done elsewhere in Canada. They indicate that three out of four people are willing to be vaccinated, but of course between an intention and actual behaviour there's a gap, and we need to ensure that barriers to vaccine acceptance are understood and well addressed.

These could be grouped in three main categories.

First is complacency. Depending where you live in Canada, if there are no COVID cases around you, you might be less willing to get the vaccination.

The second one is confidence. It's the level of trust that people have in the public health authority and the government to make good decisions concerning vaccination and to ensure that information is available to make an informed decision about vaccine.

The last one is convenience. It's something we tend to overlook, but the ease of getting access to a vaccination, of making an appointment, of being reminded that it's your turn to be vaccinated, is also important.

Thank you.

● (1205)

The Chair: Thank you, doctor.

Dr. Grandvaux, please go ahead for six minutes.

Dr. Nathalie Grandvaux (Professor, Faculty of Medecine, As an Individual): Thank you.

Good afternoon, Mr. Chair, members of the committee and fellow witnesses.

First of all, let me thank you for the opportunity to appear before you today.

Just to present myself a little bit, I am a full professor in biochemistry and molecular medicine at Université de Montréal, and I am also the director of the research laboratory on host-virus interaction at the Centre de recherche du CHUM, also in Montreal.

In that matter, I have been studying the mechanisms of human defence against respiratory viruses for 15 years now. Since April 2020, I have also been the co-director of the Québec COVID - Pandemic Network, which promotes research collaboration to accelerate discoveries and their applications.

At this point in the pandemic, I believe Canada faces several critical challenges for the immunization strategy to be successful. There would be plenty to discuss, but in the interest of time, I will only focus on two essential elements for which I see major inconsistencies these days, and for which I would like to propose avenues of improvement.

First of all, I would like to underline the work of the COVID-19 task force, with their recommendation of a diversified portfolio of vaccines. This was, in my opinion, an informed choice considering the impossibility of knowing a priori the success of each of these vaccines, and also because of our lack of production capacity. Likewise, the logistics for bringing vaccine doses to the provinces and territories is efficient, and I think this should be emphasized.

However, we now have four vaccines authorized by PHAC, and this is amazing. A major problem, however, is the confusion of messages regarding their use, as Canada, in my opinion, does not speak with a single, strong voice. PHAC authorizes vaccines based on the clinical trial data, and the NACI subsequently adjusts the recommendations for their use based on real-life data as it becomes available.

It goes without saying that the different messages emitted by these two organizations lately induce a major confusion that is incomprehensible for the majority of the population. This is without taking into account the additional confusion induced by the different opinions of the provincial advisory committees.

We are living in an exceptional crisis situation, but in the way our organizations operate, in my opinion, they have not been adjusting accordingly. NACI and PHAC should collaborate more closely and should unite their voices to deliver a single, clear and cohesive message. It is important to understand that inconsistent messages will likely lead to a loss of confidence in the population in the vaccination campaign and one cannot risk losing the adhesion of the population to immunization with the safe and effective vaccines that we have. I therefore urge the government to review the mandates of NACI and PHAC to include collaboration to reach a consensus to update the policies.

The most important problem, in my opinion, is undoubtedly that NACI's recommendations are not always based on scientific evidence, but in some cases on assumptions and expert opinions. This is particularly striking and worrisome with respect to the changing recommendation for the administration of mRNA vaccines.

These vaccines have been evaluated in clinical trials with two doses and should be administered after three or four weeks. There is currently no data demonstrating the consequences of postponing the second dose. NACI now recommends delaying the second dose for up to four months and, by the way, Canada is the only country to recommend this long delay. But there is absolutely no data to support this decision, and to do so without scientific evidence is equivalent to conducting a clinical trial without properly following up the participants and having their consent.

For the sake of transparency, the Government of Canada should make NACI's discussions public so that the actual data that was discussed to support the decisions and the outcome of the committee members' votes are known. The government should also require that all evidence taken into account in making the decision be made public at the time of the recommendation, not weeks later. We currently have no evidence regarding the consequences of delaying the second dose.

Finally, real-world data from the U.K. shows a differential response of individuals after the first dose of the Pfizer-BioNTech vaccine, depending on their age. From biological measurements carried out in the U.K., either from Dr. Gupta's laboratory or the REACT-2 study, some evidence shows that the first dose induces a good antibody response for people under the age of 69 years, but it is very different for the population over 69, reaching up to only 35% of people over 80 who will develop an antibody response, while all the people after the second dose develop an antibody response. There are therefore serious concerns about the extent of immunization of people over 70 years of age who are currently receiving only one dose in Canada.

● (1210)

I totally understand that the recommendations are made under the principle of equity in the context of limited supplies of vaccine doses. However, this recommendation may ultimately jeopardize the outcome of the vaccination campaign for the world population if expert opinions are wrong. The only good response to this situation is to do everything possible to make sure we get doses as quickly as possible, and to eliminate the propagation using sanitary measures during these times.

In conclusion, my take-home message is that Canadian policy on vaccine administration should evolve in real time, but only based on emerging scientific data. Of importance is that if the data is not available from countries that are leading the mass vaccination, Canada should consider mandating research to generate this data to support evidence-based decisions.

I thank you, and I will answer your questions

[*Translation*]

in English or French.

[*English*]

The Chair: Thank you, Doctor.

Mr. Pinnow, please go ahead for six minutes.

Mr. Cole Pinnow (President, Pfizer Canada Inc.): Thank you, Mr. Chair and members of the committee.

Bonjour. My name is Cole Pinnow, and I'm the president of Pfizer Canada.

It has been one year since this pandemic was declared. Since then, Pfizer-BioNTech successfully developed a safe and efficacious vaccine for the prevention of COVID-19 in record time, using a novel technology platform. To do that, Pfizer invested more than $2 billion at risk. We planned for success and scaled up a very complex supply chain. It requires more than 280 components, coming from 86 different suppliers, based in 19 different countries. We also established a highly innovative delivery system for a product requiring ultra-cold storage, and have shipped directly to hundreds of administration sites in Canada.

As we gather here three months after Gisèle Lévesque became the first Canadian to be vaccinated, I'd like to remind you about a small but important part of the effort it took to bring the first vaccine to Canadians as soon as science would allow.

In August we became the fourth country to complete an advance purchase agreement for the vaccine. We secured up to 76 million doses, while many other countries were also looking to lock in supply commitments. In September Health Canada introduced a rolling submission process that allowed us to file our vaccine data as soon as it became available. We initiated our application in October, and by mid-November we had made sufficient progress that a regulatory decision in December became a possibility. It wasn't until this time that we realized the need to accelerate both the initial delivery schedule and the provinces' readiness to administer the vaccine. This was not an easy task. Pfizer, PSPC, PHAC and the provinces all worked very hard to find a viable path forward so Canada could be ready.

As a result we became the second major country in the world to receive the vaccine when it arrived on December 14. This was almost two months earlier than originally anticipated. It's a tremendous accomplishment by so many, and we are very proud of this milestone achievement. Following the initial rollout, deliveries were temporarily reduced for three weeks as we worked on scaling up our Belgian manufacturing facility. It is important to note that this was a deliberate decision. We purposely chose to slow down production to make improvements that helped to increase our global annual capacity from 1.3 billion to two billion doses. Retooling our Belgian facility was the right thing to do: more vaccines produced, more countries receiving them and more people immunized.

Canadians benefited from these improvements as well. The complexity of both the scale-up of our manufacturing facility and our global supply chain is why we insisted that our contractual obligations for delivery be on a quarterly basis. This is not unique to Canada; Pfizer's delivery commitments around the world are on a quarterly basis.

We understand that Canadians want to know when they will be protected against the virus. We have gone above and beyond our original contractual obligations in two important ways to provide as much certainty as possible.

First, we share a rolling, weekly forecast as soon as we have confidence in its reliability. Today the public knows what to minimally expect from now through the middle of April.

Second, we are constantly working to accelerate our delivery. Canadians will now receive 12.75 million doses earlier than our original contract requirement. To date, we have supplied over 2.5 million doses, and have never missed a weekly delivery forecast. We remain confident that we will continue to be successful in delivering our forecasts going forward. By the end of this month we will have supplied 5.5 million doses. In Q2 we will have supplied 12.8 million doses, and in Q3 it will be 21.7 million. By the end of September, we will have provided Canadians with 40 million doses.

While we are optimistic about what this will mean as we emerge from this pandemic, we also need to reflect on how we can be better prepared for the next one. There are best practices and lessons to be learned. We have a unique opportunity to look back at Canada's pre-pandemic situation with clarity and work together to improve the life sciences sector in this great country.

Canadians have a new-found appreciation for the value of a resilient local biopharmaceutical industry. Past efforts to foster the life sciences sector had been undermined by detrimental policies of federal governments for more than a decade. If Canada wants to change course and succeed, it must put a stop to one-way consultations and engage in real dialogue with our industry. We stand ready to have this much-needed conversation and contribute to Canada's future.

● (1215)

As I end my remarks, I would like to reiterate that what has been accomplished so far is extraordinary. I express my sincere thanks to the 46,000 clinical trial participants, the hundreds of investigators, and the thousands of Pfizer and BioNTech scientists, clinicians and manufacturing professionals, many of whom have worked day and night. knowing that every moment matters.

[*Translation*]

Thank you.

[*English*]

I look forward to your questions.

The Chair: Thank you, Mr. Pinnow.

We'll start our questions at this point with Ms. Rempel Garner.

Please go ahead, Ms. Rempel Garner, for six minutes.

Hon. Michelle Rempel Garner (Calgary Nose Hill, CPC): Thank you. I'll be directing my questions to Mr. Pinnow.

Mr. Pinnow, I do have six minutes, so if you could be brief in your remarks, that would be wonderful.

Do you endorse your COVID vaccine as fully effective if the second dose is delayed up to four months?

Mr. Cole Pinnow: All the research to date on our vaccine has been done with two doses that have a schedule of 21 days. The recommendation that's been put in place by NACI, as highlighted earlier, in Canada is the only one in the world that is recommending an extended dose delivery.

Hon. Michelle Rempel Garner: Thank you. I'll take that as a no.

I'm looking at an article that was published in The Lancet by a group of researchers from the University of Nottingham at the end of February. It's regarding your vaccine, particularly decisions related to extended dosing. This article argues that the clinical data, as well as real-life observational data based on evidence from Israel, did not support delaying the second dose of your vaccine past the recommended three-week interval.

Do you agree with this finding?

Mr. Cole Pinnow: The data that we've seen from a real-world evidence perspective that has been used to make arguments to extend the dose schedule has been with regard to much younger populations. The fact is that we don't have any data after two months to know what the impact of one dose will be.

Hon. Michelle Rempel Garner: This article also states that, "Sub-optimal vaccination will create selective pressure facilitating the emergence of vaccine-resistant variants, which could result in a persisting pandemic." This, of course, is in the context of a delayed dosing schedule.

Has your company conducted any research, or would it agree with the finding that an incomplete vaccination or a significantly delayed dosing schedule could potentially lead to the creation of vaccine-resistant variants?

Mr. Cole Pinnow: All of the research that we're doing today on variants—and again I'm happy to go into detail, if you'd like, on that subject—is with patients who have received two doses 21 days apart.

Hon. Michelle Rempel Garner: Did NACI consult your company prior to issuing its guidance to recommend delaying the second dose by four months?

Mr. Cole Pinnow: I'm not aware if it has.

Hon. Michelle Rempel Garner: So, it didn't contact you.

Mr. Cole Pinnow: Not as far as I'm aware.

Hon. Michelle Rempel Garner: Oh, okay. I didn't expect that. That's frightening.

Dr. Grandvaux has suggested that the decision to delay the dosing by four months is based on assumptions and opinion and not data. In fact, Canada's chief science officer has characterized this decision as a.... I believe, the words she used were "population [based] experiment", that it's a clinical trial without consent.

Would you agree with that characterization?

● (1220)

Mr. Cole Pinnow: I really believe that it's in Canadians' best interests to support whatever national program for vaccination has been determined by the government, but I do agree that differences between different health agencies—and I point to the product monograph that has been agreed to with Health Canada, which assigns a 21-day dose, versus the NACI recommendation, which is now four months—create concern, confusion and potential hesitancy from certain people within Canada.

Hon. Michelle Rempel Garner: Have you relayed these concerns to NACI?

Mr. Cole Pinnow: We understand that it is other health professionals' authority to determine what the dose schedule is.

Hon. Michelle Rempel Garner: Okay.

Were there any other requests for data or information for your company from NACI or any of the members of NACI prior to making this recommendation?

Mr. Cole Pinnow: I can't comment any further on that.

Hon. Michelle Rempel Garner: Okay.

It's my understanding that another miracle is about to occur from your company. You guys are on top of vaccine boosters addressing potential variants. That's impressive.

Are you in negotiation with the Canadian government for contracts on any potential boosters for variants?

Mr. Cole Pinnow: We have provided a status update on the development program that we're working on, so we have had conversations about that, but we have not formally begun discussions on boosters as of yet.

Hon. Michelle Rempel Garner: Has any other country around the world begun conversations or established contracts for boosters with Pfizer?

Mr. Cole Pinnow: Canada is on par with the rest of the world in discussing the status of both boosters and variants as we continue to evaluate the situation that could be emerging in the future.

Hon. Michelle Rempel Garner: Can you update our status on the progress of clinical trials on your vaccine for persons under the age of 18? When will that be completed?

Mr. Cole Pinnow: We are now completing a study on adolescents between the ages of 12 and 16. We anticipate having that data filed here in a couple of months. We will then initiate a program for children aged 5 to 11. We are also currently conducting clinical studies, including here in Canada, for pregnant women. Those three studies are under way.

The Chair: We go now to Mr. Fisher, for six minutes.

Mr. Darren Fisher (Dartmouth—Cole Harbour, Lib.): Thank you, Mr. Chair, and thank you to all the witnesses today who are here sharing their level of expertise.

Mr. Pinnow, there was a suggestion that Canada wasn't engaged early enough, and that we didn't get a good enough deal with your company. Could you take a few moments to elaborate on how early in the process we engaged with your company? Could you also tell us about the comprehensive contract that Canada has with Pfizer that led you to actually beating your total dose target for this month?

Mr. Cole Pinnow: Mr. Chair, I'll respond to the first question, and then ask the member to clarify the second question.

As I stated in my opening remarks, when we first identified the opportunity to bring a vaccine to market, we did work collaboratively with the Canadian government. We issued a five-point letter outlining what Pfizer's commitment was to pursue multiple levels of response to this pandemic.

Part of the challenge that we had, if we're comparing to other countries, is that the rolling submission process was not in place until September. Therefore, when we finalized our initial contract with the government in August, we anticipated a timeline that very much looked like Australia.

Australia received approval through its normal regulatory review process in late January, and initiated its first vaccinations of Pfizer's vaccine in that country in early February. It wasn't until mid-November that we identified a pathway that would allow us to bring this product to Canadians in December. Ever since then, we have been working to accelerate delivery to this country.

● (1225)

Mr. Darren Fisher: You kind of touched on the second question there, Mr. Pinnow. When there was a bit of a bump in the road, as we called it, with the number of vaccines coming in, you did some work at your Belgium plant to enable your company to increase capacity.

Can you tell me where you went? Did that double capacity or quadruple it?

Mr. Cole Pinnow: We went from 1.3 billion doses on a global basis to 2 billion doses in the months of January and February, concurrent to us making changes to the Belgium facility.

Mr. Darren Fisher: Dr. Dubé, I noticed that you are an expert in the socio-cultural impacts of vaccination. We talk a lot about vaccine hesitancy, and the importance of ensuring that people understand that the vaccines that are in Canada, the vaccines that are in the world, are safe and effective vaccines.

Can you give us some advice on what we should be doing to ensure that people feel confident in taking these vaccines?

Dr. Ève Dubé: The Government of Canada is already doing a lot of work through the vaccine task force with many campaigns. What we face at the moment is an infodemic, an epidemic of information and communication on top of the pandemic. There's a lot of confusion. There's a lot of publicity around vaccines that generates doubt in the public. We follow that in our work in Quebec, looking at social media discourses along with traditional media publications.

There's a lot of conflicting information, often the result of clinical trials that are portrayed in the media without sufficient consideration of all the details. This makes it difficult for the general public to understand and appraise the recommendations by public health authorities in order to know exactly what to do.

Mr. Darren Fisher: If we had one message for Canadians about vaccine hesitancy, in your opinion, are we articulating that clearly enough?

Dr. Ève Dubé: There's a lot of good work. From a governmental perspective, it's hard to have a take on what the media are doing.

One of the major issues is around how all the journalists are looking at details. It's more along those lines.

Mr. Darren Fisher: Thank you.

I'll go back to Mr. Pinnow for a quick second.

You mentioned the rolling submission. How important was that to getting a deal in place for vaccines for Canada in a timely fashion?

Mr. Cole Pinnow: Just to be clear, it wasn't important to get a deal in place. We had our agreement in place before Health Canada authorized the rolling submission forecast, but it was critical to accelerating and allowing us to bring vaccines to Canada in December.

Mr. Darren Fisher: Okay, I have it. Thank you so much.

Mr. Chair, that's all I have.

The Chair: Thank you, Mr. Fisher.

We'll go now to Mr. Thériault.

[*Translation*]

It's your turn, Mr. Thériault. You have six minutes.

Mr. Luc Thériault: Thank you, Mr. Chair.

Dr. Grandvaux, you said earlier that we should be careful not to publish contradictory information or data.

In terms of the two doses, have you read the study by Dr. De Serres from the Institut national de santé publique du Québec, or INSPQ?

Dr. Nathalie Grandvaux: Yes, I have.

Mr. Luc Thériault: Okay.

Did he reassure you about the gap of over 21 days between the first and second dose?

I believe that, through this study, he showed that the second dose only prolonged the effect of the first dose and that the first dose already provided 80% to 85% immunity.

In the context of a shortage, because we dragged our feet on vaccination for a long time, do you think that this was warranted?

Could this have caused people to worry?

● (1230)

Dr. Nathalie Grandvaux: The study in which Dr. De Serres participated is actually a second analysis of clinical data published as part of clinical trials. It's a different way of analyzing the data.

They removed the data from the first seven days of the clinical trial on the basis that it's well known that the vaccine isn't effective yet during that period. Their analysis showed that the effectiveness of the first dose was similar to the effectiveness of the second dose.

However, it should be noted that, in this analysis, the number of participants who received only the first dose was very limited, since this was a two-dose study. The data can be interpreted based on a very small sample.

Nevertheless, as I said earlier, if we look at the real-world data, such as the field data from the United Kingdom, we see a differential effect based on the age of the person who received the first dose. The data is perhaps justified based on the field data for younger people. I'm concerned about the data for older people. It gives us an immunization status, but it doesn't give us any information on the impact of the second dose over the long term or the wait time for the second dose. That's very different.

The study only shows us whether people are starting to develop immunity.

Mr. Luc Thériault: Speaking of studies, they're a total mess. We have new data, new studies, and things change throughout the week.

Last week, there was an issue regarding the administration of the AstraZeneca vaccine to people aged 65 and over. As the week draws to a close, a study by Public Health England shows that the first doses of the Pfizer and AstraZeneca vaccines are about equally effective in reducing and preventing serious complications and hospitalizations.

How can we make sense of this and get people to trust the information?

Aren't we a bit caught up in this vaccine race, where a whole host of publications and companies are responding to criticism and conducting specific studies to address people's concerns?

So much the better if people are less worried, but how can we make sense of this?

Dr. Nathalie Grandvaux: It's certainly a challenge, given that science is being carried out in real time now. Usually, clinical trials for a vaccine take about 10 years. In this case, the whole process was condensed into one year given the urgency of the situation. All the usual developments are visible to everyone and give rise to misunderstandings. That's why, as I said earlier, the institutions that make the decisions should at least join forces and deliver a consolidated message.

In terms of vaccinations, unfortunately we're behind other countries. We should use this delay to our advantage by studying the situation on the ground. We have access to data from Israel and the United Kingdom. Our institutions, Health Canada and the National Advisory Committee on Immunization, or NACI, should be using the data, working together, and possibly conducting reviews every two weeks or every month.

However, the message should be consolidated and should originate entirely from the same organization. There should be a consensus based on the field data. We should take the time to analyze the data properly, rather than releasing it daily or weekly, and to conduct reviews every two weeks or every month.

Mr. Luc Thériault: That said, you would agree that the Comité sur l'immunisation du Québec, or CIQ, will make the decision on the vaccination strategy in Quebec.

Dr. Nathalie Grandvaux: Yes, unfortunately.

Mr. Luc Thériault: What do you mean?

Dr. Nathalie Grandvaux: This adds a level of confusion. I say "unfortunately," but if I were optimistic enough, I would say that the CIQ and other provincial agencies should be working with the federal agencies. However, I'm not very optimistic about that.

Mr. Luc Thériault: Dr. Dubé, is a passport—

The Chair: Thank you, Mr. Thériault.

Mr. Luc Thériault: Thank you, Mr. Chair.

I'll continue later.

[*English*]

The Chair: Thank you.

We go now to Mr. Davies.

Mr. Davies, go ahead for six minutes.

● (1235)

Mr. Don Davies: Thank you.

Mr. Pinnow, did the Government of Canada attempt to negotiate a licensing agreement to manufacture the Pfizer BioNTech vaccine domestically in Canada?

Mr. Cole Pinnow: Mr. Chair, could I ask the member to clarify the timing of the question regarding when we engaged and how we engaged with the government?

Mr. Don Davies: Well, I suppose from the moment you started negotiating with the Canadian government about vaccine sales, did they ever request that you produce that vaccine here in Canada?

Mr. Cole Pinnow: Yes, they did, but we wanted to move as fast as the speed of science would allow, and having full autonomy over our manufacturing process was vital to be able to do that.

Subsequently, as recently as a month ago, we have undertaken a second evaluation of Canadian capabilities to understand if there's a turnkey solution for our vaccine process. After evaluating six manufacturing sites, which the government provided full capability analyses on, we determined that there was not a viable manufacturing facility here in Canada for fill-finish that would allow us to quickly transfer our process to be able to produce locally.

Mr. Don Davies: In how many countries is Pfizer producing the vaccine around the world?

Mr. Cole Pinnow: Which part of the process? Mr. Chair, I'd like to understand which part of the process, because as I provided in my opening remarks, there are over 19 different countries that are involved in the manufacture of this. If we're specifically talking about fill-finish, then we are looking at two.

Mr. Don Davies: Okay, thank you.

Last week the U.S. pharmaceutical company Novavax published its vaccine agreement with Canada. This is the only agreement made public so far between the Canadian government and a vaccine manufacturer. In that contract, it specifically permits releasing details for the purposes of government administration in keeping with proactive disclosure laws and "reporting to Parliament."

Does Canada's contract with Pfizer contain a similar clause?

Mr. Cole Pinnow: The contract between Canada and Pfizer is confidential in nature. There's only a handful of agreements, one of which you mentioned, that are in the public domain. Each of those has its own purpose behind it. In the vast majority of agreements between manufacturers and countries—

Mr. Don Davies: With respect, Mr. Pinnow, I have limited time. I just asked you if it contained that clause.

The United States released Pfizer's $1.95-billion vaccine contract with Operation Warp Speed last November. That document confirmed that the U.S. had secured 100 million vaccine doses at a price of $19.50 U.S. per dose.

I have two questions. How much is Canada paying per dose? If Pfizer permitted the U.S. government to release at least portions of its contract, why can't it release part of its contract with Canada?

Mr. Cole Pinnow: Mr. Chair, I'd remind the member that in early December he made a statement, at this committee, I believe, that said he was not interested in acquiring commercially sensitive information, and the prices of our contracts are indeed commercially sensitive. We have negotiated those prices country by country with the exception of the EU, which is all managed under one, and we have included the principles of equity to ensure access. We have a tiered pricing system that is relative to each country's income level, the amount of volume that they've committed to and the delivery schedule that they've asked for, so those—

Mr. Don Davies: With respect, Mr. Pinnow, you've allowed us to know the price per dose in the U.S. Is it not commercially sensitive to know that figure?

Mr. Cole Pinnow: Mr. Chair, I would remind the member that we have a different story for every country and so, as we're talking about Canada, that price remains confidential.

Mr. Don Davies: With respect, the price is either commercially sensitive or it's not, Mr. Pinnow. You can't release it in one country and say it's not commercially sensitive to release the price per dose in the U.S. but it is commercially sensitive to not release the price in Canada. I don't understand that.

Let me move on, then. According to the The Washington Post, Israel was able to accelerate rollout in part by paying $50 U.S. per dose of the Pfizer-BioNTech vaccine, nearly double the price paid by the EU. Did Canada pay a premium for any December deliveries of our vaccine or for any vaccines that we've secured to date?

● (1240)

Mr. Cole Pinnow: Mr. Chair, I'd like to remind the member that the U.S. situation is different than Canada's. Going back to his earlier question and comment, the U.S. has continuously supported innovation in the life sciences sector and, therefore, has a different reason to discuss and potentially disclose relative elements of the contract.

We would encourage Canada to consider adopting more favourable policies and positions that would foster innovation in the life sciences sector and the biopharmaceutical industry going forward to increase resilience.

Mr. Don Davies: The question, Mr. Pinnow, was: Did you charge Canada a premium for receiving our doses in December?

Mr. Cole Pinnow: The answer is that prices remain confidential.

The Chair: Thank you, Mr. Davies.

We'll try to shoehorn in a fast second round, so instead of five-minute slots for the Liberals and Conservatives, we'll go to four-minute slots and two-minute slots for the Bloc and NDP.

We'll start the next round with Ms. Rempel Garner.

Please go ahead.

Hon. Michelle Rempel Garner: Thank you, Chair.

Mr. Pinnow, in a response to Mr. Fisher, you suggested that you created a pathway for delivery of the vaccine to Canada in December. Did that mean that there wasn't an initial delivery scheduled into the first contract for December?

Mr. Cole Pinnow: We were always anticipating a Q1 launch, assuming that Health Canada gave a favourable review of our dossier.

Hon. Michelle Rempel Garner: Okay, so we weren't supposed to get doses in December, and we had to renegotiate. Did we have to pay a premium to get those doses in December?

Mr. Cole Pinnow: As I responded earlier, prices are confidential, so we will not be—

Hon. Michelle Rempel Garner: That's interesting. I'm sure it will come out in the wash someday.

You also talked about the fact that you haven't missed a weekly delivery target, but there have been some weeks when we've received zero vaccines, so are we on a quarterly target or a weekly target?

Mr. Cole Pinnow: As I mentioned in our opening statements, around the world, including Canada, Pfizer has committed on a quarterly basis to what the delivery schedule will be.

Hon. Michelle Rempel Garner: In your remarks, you've also talked about big batches over the next few quarters, but if we've gone to a four-month dosing timeline, could that quarterly delivery schedule impact delivery in a four-month dosing timeline?

Mr. Cole Pinnow: The volumes that are in our contract, which we have publicly disclosed and I'd be happy to reiterate now, are what determines our delivery schedule.

Hon. Michelle Rempel Garner: Have you given any advice to NACI on matching your delivery schedule to the dosing recommendations?

Mr. Cole Pinnow: As mentioned before, we have not been in touch with NACI.

Hon. Michelle Rempel Garner: Okay, I have two minutes left, and I'm an economist, not a virologist, so I'd like to go to Dr. Grandvaux.

What am I missing asking Mr. Pinnow?

Dr. Nathalie Grandvaux: I think the question you asked about the contact between NACI and the company is a good one. The match between the deliveries and the schedule of vaccination is an important one.

I don't think that at this stage Pfizer could be involved at another stage of the discussion. As it Monsieur Pinnow mentioned, this is the decision from other regulatory agencies and not for them at this point.

Hon. Michelle Rempel Garner: Mr. Pinnow, you had mentioned a very salient point in your comment to me. You said that the change in dosing and the conflicting information between regulatory agencies could lead to concern, confusion and, potentially, hesitancy.

Would you say that staying with one set of advice is the best way to prevent vaccine hesitancy in this regard, among other issues?

Mr. Cole Pinnow: It is Pfizer's belief that the product monograph, which has a 21-day schedule between doses, is the right approach.

Hon. Michelle Rempel Garner: Dr. Grandvaux, for my last question, are you concerned about potential vaccine-resistant variants occurring due to incomplete dosing?

Dr. Nathalie Grandvaux: Absolutely, yes. One of the current hypotheses is that some of the variants emerge in immunocompromised people because they don't have the full immunity. It would be the same with the vaccine.

● (1245)

Hon. Michelle Rempel Garner: I have 30 seconds left.

Do you believe that it could happen in Canada with a four-month space between the doses of the mRNA vaccines?

Dr. Nathalie Grandvaux: We cannot exclude this possibility.

Hon. Michelle Rempel Garner: Do you think this has been factored into NACI's decision in recommending...?

Dr. Nathalie Grandvaux: No, I don't think so.

Hon. Michelle Rempel Garner: That is very disturbing. I'll end my questions with that.

The Chair: Thank you, Ms. Rempel Garner.

We'll go now to Mr. Kelloway. Please go ahead for four minutes.

Mr. Mike Kelloway (Cape Breton—Canso, Lib.): Thank you, Chair.

Hello everyone. Thank you to the witnesses who are here today. It's very interesting.

I have a short period of time. I'm going to start with Mr. Pinnow. I have two questions.

Can you provide your views on how to better prepare for the next possible pandemic? That is going to where the puck is going to be.

Secondly, is Pfizer looking to or is it open to setting up domestic production in Canada?

Mr. Cole Pinnow: To be successful going forward in creating more resiliency here in Canada, the government needs to create conditions that foster innovation and support investment. We are competing on a global stage and are apparently woefully behind our peers. We need to start with incremental support of the life sciences sector by leveraging the strength of discovery and research to build on the rest of the ecosystem. This includes the role that industry plays in providing its manufacturing expertise and managing global supply change.

An understanding that local market and regulatory conditions do impact and determine our resiliency here in Canada is fundamental. Some of the lessons we have learned from what has taken place during this pandemic is that years of public policy decisions have made Canada less attractive to investment. PMPRB's flawed regulatory changes impede domestic companies from scaling up without artificial support. There are slow drug listings and processes that have limited or delayed access to new medicine. There's mediocre IP protection.

All of this has taken place without a sincere and collaborative consultation with our industry. As I mentioned in my opening statement, we're here and available to help solve this problem collectively.

Mr. Mike Kelloway: Thank you very much.

My last question is for Dr. Dubé.

Dr. Dubé, in regard to your work on vaccine hesitancy—which is an exceptionally important issue today, obviously—what can all levels of government do to communicate to Canadians, especially those at risk of COVID-19, about the safety and efficacy of vaccines? What can we be doing now? What can we be doing better to get that out there?

Dr. Ève Dubé: As I mentioned earlier, I think the vaccine confidence subgroup of the Government of Canada is doing great work in starting to communicate. What we've missed is that we should have started that much earlier. This could have been done in the past summer. I think this left an empty space that the anti-vaccine people have filled out. That's unfortunate. It's not too late and I think good efforts are being made.

I agree with my colleagues on the risk of having different recommendations and the confusion out there that could create more hesitancy. We need to have unified messages. We need to work with all sectors, businesses and religious leaders to have common messages on the importance and safety of the COVID vaccines we have in Canada.

Mr. Mike Kelloway: Thanks very much.

Chair, how much time do I have?

The Chair: You have 25 seconds.

Mr. Mike Kelloway: Okay, I'll just say, somebody mentioned earlier in this testimony the speed of science.

Dr. Dubé, that ties in to your great point that the communication techniques and vehicles we have need to be aligned to the speed of science.

To both you and Mr. Pinnow, thank you very much for your points and for your answers to the question.

The Chair: Thank you, Mr. Kelloway.

We'll go back to Ms. Rempel Garner.

Go ahead, please, for four minutes.

Hon. Michelle Rempel Garner: Thank you, Chair.

Mr. Pinnow, with regard to the contract that was originally signed for your vaccine, you said the deliveries just started with Q1.

I just want to clarify that the Government of Canada did not negotiate delivery of vaccine doses for December of last year in the original contract. Is that correct?

● (1250)

Mr. Cole Pinnow: That's correct.

Hon. Michelle Rempel Garner: When were the doses for December delivery negotiated?

Mr. Cole Pinnow: We began negotiating in mid-November when both we and the government identified a potential pathway to an earlier decision, and concluded that negotiation in December.

Hon. Michelle Rempel Garner: Did the United States have delivery of doses in December negotiated in their original contract?

Mr. Cole Pinnow: In terms of the benchmarks that are often used, both the U.K. and the U.S. anticipated much earlier in the pandemic a potential pathway for a December authorization—

Hon. Michelle Rempel Garner: Okay. I'll take that as a “yes”.

On what date did the Government of Canada engage in negotiations with your company for initial December delivery?

Mr. Cole Pinnow: It was some time in mid-November.

Hon. Michelle Rempel Garner: Oh, okay.

Was the price we paid per dose in December higher than what we're paying for deliveries in Q1?

Mr. Cole Pinnow: Prices are confidential and we will not be sharing them.

Hon. Michelle Rempel Garner: Wow. All right.

I'm going to go back to Dr. Grandvaux for a minute to talk about this concept of consent.

In regard to the decision to delay dosing by four months, you talked about how there isn't data to support that decision, that it has been based on opinion from NACI, and now, I guess, from Health Canada. Can you talk about what that lack of consent means for people in the general public right now, and any potential other negative impacts that we might not have discussed today that Parliament should be concerned with, with the change in that dosing schedule?

Dr. Nathalie Grandvaux: Yes. When you change the dosing like that, it means that you ask the people to take medication, or a vaccine in this case, in a different posology. You have to assess the risk and the benefit in these cases.

When you give that to a patient, you have to inform them in detail of what will be the benefit for their health, and also the potential risk. In this case, we cannot really give them this information, because we don't have the data for that.

Hon. Michelle Rempel Garner: Can you think of any reason the minutes of the NACI meetings or the votes of potential members should be held confidential from the public?

Dr. Nathalie Grandvaux: Well, no, and I don't think they are. They are just delayed. They are coming weeks after the decisions.

Hon. Michelle Rempel Garner: Okay. If this was something that our committee compelled NACI to produce, do you see any reason for that not to happen immediately?

Dr. Nathalie Grandvaux: No. In my opinion, that should happen immediately.

Hon. Michelle Rempel Garner: Do you see any reason that journalists shouldn't be allowed, as part of the NACI deliberations?

Dr. Nathalie Grandvaux: No, there is no confidentiality, because there was no decision on which vaccine...that contract confidentiality.

Hon. Michelle Rempel Garner: Mr. Pinnow, was NACI ever in contact with your company?

Mr. Cole Pinnow: Over the course of all the business we do, we have engaged with NACI, but as it relates to the current four-month dose schedule recommendation, we have not been in contact with them.

Hon. Michelle Rempel Garner: Thank you.

The Chair: Thank you, Ms. Rempel Garner.

We'll go to Dr. Powlowski, please, for four minutes.

Mr. Marcus Powlowski (Thunder Bay—Rainy River, Lib.): My question is to Mr. Pinnow.

You mentioned that the supply chain to make your vaccine includes 86 suppliers in 19 countries. Is Canada one of those 19 countries?

Mr. Cole Pinnow: Right now, a company in Vancouver was critical in our development of this vaccine by providing IP and a licence for that IP that was related to the lipid nanoparticle. While they are not directly supplying us with any part of the supply chain their know-how and expertise was critical.

Mr. Marcus Powlowski: Does having that link give us any advantage in negotiating contracts? That is to say, because we were somehow part of developing this, was that reflected in the price we had to pay?

Mr. Cole Pinnow: The negotiations and additional details on the negotiations are confidential, and unfortunately I cannot share those details.

● (1255)

Mr. Marcus Powlowski: I have to say that Pfizer did a fantastic job. Undoubtedly there are a lot of people alive today who otherwise wouldn't be alive if your company hadn't produced the vaccine as quickly as you did. You certainly get kudos for having done that.

You are a company, however, and you have obligations to your shareholders. You also need to recoup the high costs of developing various drugs, so you have to realize a profit in selling, particularly in developed countries. Financially, I think you're going to do pretty well out of this.

What is Pfizer's attitude towards profits in developing countries? Would you consider the possibility of voluntary licensing, or producing and selling vaccines at cost to developing countries?

Mr. Cole Pinnow: As I mentioned earlier we do have a pricing tier that is reflective of a country's income level. Thirty-six per cent of our contracted volumes are for middle- and low-income countries, and we have made a 40-million dose commitment to COVAX. We also support the Government of Canada's surplus donation plans that are in place. However, on the question around IP, we do not believe that waiving IP is an easy answer to the capacity challenges that we face.

Oftentimes it's been highlighted that there are more than three mRNA vaccines that are currently seeking authorization here in Canada. The biggest bottlenecks are time to development; the manufacturing production, which requires expertise; and the global supply chains, which require procuring very difficult-to-source material. Waiving IP is not going to affect solving the current ramp-up in production that Pfizer and a number of other companies are going through right now.

Mr. Marcus Powlowski: I think you said you're supplying COVAX with a certain number of vaccines. You may not want to reveal this either, but on the price that you charge to COVAX for the vaccines, is that at cost or at a minimum profit?

Mr. Cole Pinnow: Again, I can't discuss any price.

Mr. Marcus Powlowski: Okay.

I have a quick question, hopefully, for Dr. Grandvaux.

I know in Ontario there's a database that links your OHIP number to the vaccine that you got and the time you received it. Also, your OHIP number—and I'm sure you have something similar in Quebec—is linked to test results, so we could theoretically get real-time data by linking these because we'll get the results on the variants. We could link the two so we would know whether the variants were emerging in people who have been vaccinated.

The Chair: Doctor, you had four minutes.

Mr. Marcus Powlowski: Let me just finish.

Is there any attempt to link this data in Quebec if you get real-time data?

Dr. Nathalie Grandvaux: I know the system exists to collect this data, but I don't know if they are connected, and if people are trying to connect data at the moment in Quebec.

The Chair: Thank you, Doctor.

[*Translation*]

We'll now turn to Mr. Lemire from the Bloc Québécois.

Mr. Lemire, you have the floor for two minutes.

Mr. Sébastien Lemire (Abitibi—Témiscamingue, BQ): Thank you, Mr. Chair. I didn't hear the interpretation, but I take it that you're giving me the floor.

My first question is for Mr. Pinnow.

I want to start by congratulating Pfizer for its leadership and for ultimately winning the vaccine race.

I want to know whether the supply and demand factor influences the price of a vaccine in the pharmaceutical industry.

[*English*]

Mr. Cole Pinnow: Pfizer has been on record from the beginning to say that traditional supply and demand economics do not factor into our pricing decision.

[*Translation*]

Mr. Sébastien Lemire: Would the price of a vaccine purchased by the Government of Canada or any other country in the last quarter of 2020, or in December, be higher or lower than if the vaccine were purchased in summer 2021, when there's less demand?

[*English*]

Mr. Cole Pinnow: Again, I appreciate the question, but we will not be discussing pricing publicly.

[*Translation*]

Mr. Sébastien Lemire: I just wanted to know whether this made any sense.

Dr. Dubé, do you consider that Canada paid a high price to symbolically enter the vaccine race and to ensure that we see images of vaccinated Canadians on the news, on the CBC, on Radio-Canada or elsewhere, given the news that we see on the BBC or in the United States?

Do you believe that the price of the dose, estimated at $37.70, is too high compared to Europe's price, which is half that rate?

● (1300)

Dr. Ève Dubé: That's a good question, but it's a little bit outside my area of expertise. I think that, as in every country in the world, vaccination was seen as the way to end the pandemic. All countries rushed to acquire vaccines.

Mr. Sébastien Lemire: I gather that the rush came at the expense of taxpayers.

Thank you, Mr. Chair.

The Chair: Thank you, Mr. Lemire.

[*English*]

We'll go now to Mr. Davies.

Mr. Davies, please go ahead. You have two minutes.

Mr. Don Davies: Thank you.

Mr. Pinnow, you brought up the PMPRB changes. We know that those reforms, which your company opposes, were scheduled to go into force on January 1 of this year, and the Liberal government postponed them for the third time.

Tell me, at any time in 2020, did Pfizer ever link the provision of vaccine doses with its desire to have the government not implement the PMPRB changes?

Mr. Cole Pinnow: Let me be clear: The answer is never.

Mr. Don Davies: Thank you.

Did Pfizer permit the release of the contract with the United States? Was that by agreement, Mr. Pinnow?

Mr. Cole Pinnow: Again, I can't speak to other countries and the unique circumstances that led to disclosures for Pfizer or any other company.

Mr. Don Davies: Will you agree to release the contract you have with the Canadian government? Will you waive confidentiality at least for non-sensitive—non-commercially sensitive—aspects so that Canadians can see the contract?

Mr. Cole Pinnow: Pfizer has provided an unprecedented level of transparency. We've openly shared details of our clinical program. We've published data in peer-reviewed journals. We've shared our manufacturing targets and performance against them.

Mr. Don Davies: Mr. Pinnow—

Mr. Cole Pinnow: This balances the need—

Mr. Don Davies: —you're not trying to answer the question, so my last question will be this. Argentina and other countries claim that Pfizer is using its patent monopoly to try to force a provision in contracts avoiding liability for negligence, fraud or malice. Is such a clause in the Canadian contract?

Mr. Cole Pinnow: Again, terms and conditions of the Canadian contract should remain confidential.

Mr. Don Davies: Can you tell us why they should?

Mr. Cole Pinnow: Because of the geopolitical sensitivities. As I've mentioned earlier, we've negotiated with each country outside of the EU on an individual basis given its unique circumstances. Diving into the details of contracts will not bring vaccines to Canada any quicker, so we strongly recommend that we keep these contracts confidential.

The Chair: Thank you, Mr. Davies.

That wraps up round two and that brings our meeting today to a close.

Thank you to the witnesses and to all the members.

With that, we are adjourned.