Hello, everybody. This is Margaret Harris at WHO Headquarters, Geneva, welcoming you today, February 23, 2022, to a very special press conference to announce more exciting developments in sharing technology to expand local manufacturing.

Speaking today will be Dr Tedros Adhanom Ghebreyesus, WHO Director-General, and he will then be joined by a panel of distinguished guests who will make their remarks in the following order.

First, from the Republic of Korea, Mr Kwon Deok-cheol, Minister of Health and Welfare. Then, from Indonesia, Mrs Retno Lestari Priansari Marsudi, Minister of Foreign Affairs. Then, from Argentina, Dr Carla Vizzotti, Minister of Health,
and from Serbia, Dr Zlatibor Lončar, Minister of Health, and from Viet Nam, Dr Nguyễn Thanh Long, Minister of Health, as well.

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We are providing simultaneous interpretation in the six UN languages, plus Korean, Serbian, Portuguese and Hindi, so that you can really appreciate the rich discussion you’re going to hear. After our distinguished panel have made their remarks, we’ll open the floor to questions from the media. So, we have a packed programme and without further ado I will hand over to Dr Tedros to begin. Dr Tedros, you have the floor.

TAG Thank you. Thank you, Margaret, and Your Excellency, Minister Retno. Good morning, good afternoon and good evening. Vaccines are among the most powerful inventions in human history.

Thanks to vaccines, smallpox is no more, polio is on the brink of eradication, and once-feared diseases like diphtheria, tetanus, measles and meningitis can now be easily prevented and, of course, vaccines have helped to change the course of the COVID-19 pandemic.

But, this scientific triumph has been undermined by vast inequities in access to these life-saving tools. Much of this inequity has been driven by the fact that, globally, vaccine production is concentrated in a few, mostly high-income countries. One of the most obvious lessons of the pandemic, therefore, is the urgent need to increase local production of vaccines, especially in low and middle-income countries.

That’s why, in June last year, we announced our decision to establish the mRNA Technology Transfer Hub in South Africa, as a partnership between WHO, Afrigen Biologics, the Biologicals and Vaccines Institute of Southern Africa, or Biovac, the South African Medical Research Council, the Africa Centres for Disease Control and Prevention, and the Medicines Patent Pool, and with strong support from Belgium, Canada, France, Germany, Norway, the European Union and the African Union.

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The aim of the hub is to provide a facility where manufacturers from low and middle-income countries can receive training in how to produce certain vaccines and the licences to do so. We believe the mRNA Technology Transfer Hub holds huge promise, not just for increasing access to vaccines against COVID-19, but also for other diseases including malaria, tuberculosis and cancer.

I was honoured to have the opportunity to visit the hub two weeks ago and it’s already producing results, with Afrigen’s announcement that it has produced its own mRNA vaccine candidate.

Producing mRNA vaccines poses some barriers to low and middle-income countries, including their cost and the fact that they require a cold chain that is difficult and expensive to implement. It also requires a skilled and trained workforce. Currently, biomanufacturing training facilities are located mainly in high-income countries and operate on a fee-based system, putting them out of reach for many lower-income countries.
That's why today, WHO, the Republic of Korea, and the WHO Academy are announcing the establishment of a global biomanufacturing training hub that will serve low and middle-income countries that wish to produce, not just vaccines but other biologics, including insulin and monoclonal antibodies.

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The Government of the Republic of Korea has offered a large facility that conducts biomanufacturing training locally and will expand its operations to accommodate trainees from other countries. The WHO Academy will support this effort by helping to develop a comprehensive curriculum on biomanufacturing.

The first two countries to join the mRNA Technology Transfer Hub last year were Argentina and Brazil. Companies from both countries are already receiving training. Last week, we announced the first six African countries that will receive technology to produce their own mRNA vaccines, Egypt, Kenya, Nigeria, Senegal, South Africa and Tunisia.

Today we’re announcing a further five, Bangladesh, Indonesia, Pakistan, Serbia and Viet Nam. That brings the total so far to 13, and we’re in discussion with several other countries.

We’re honoured to be joined today by four countries that are now participating in the hub and will start receiving training from next month. But, first, it’s my honour to welcome His Excellency Dr Kwon Deok-cheol, the Minister of Health and Welfare of the Republic of Korea. Minister Kwon, welcome, and thank you so much for your government’s support for this very exciting new initiative and you have the floor.

MH Mr Kwon, we think you’re muted. Can you unmute yourself?

KD Okay. Now, beginning again. Dear excellencies and colleagues, it is a great honour for Korea to be nominated as the WHO’s Global Biomanufacturing Workforce Training Hub. I’m overwhelmed with a sense of excitement, what this means to Korea. Korea takes this chance to fulfil this important role with a sense of duty and high resolve.

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I convey my deepest sense of gratitude to WHO. Together with the WHO and the international community, Korea will spare no effort in training personnel from low and middle-income countries to build and strengthen their own vaccine and biologics manufacturing capabilities.

For Korea to be nominated as the Global Biomanufacturing Workforce Training Hub holds particular significance. Just 60 years ago, Korea was one of the poorest countries in the world. For decades, the impoverished and weak public health system used to be one of the biggest problems that the Korean Government had to solve.

With the help and support of the WHO and the international community, Korea has transitioned into a country with a strong public health system and a country that exports medical essentials such as vaccines and biologics. Korea deeply cherishes the solidarity that the international community has shown us during our transition.
Now, Korea is ready to stand in solidarity with the LMICs to share our experience. Starting in July this year, Korea plans to train 370 professionals from Africa, Asia and South America in the field of the vaccine and biologics and we plan to accommodate more trainees in the future.

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Korea will strive to support all in strengthening their capabilities to manufacture vaccines. The continuing challenges with the coronavirus pandemic humbly reminds us of the critical need for nations to collaborate and stand in solidarity with one another.

In order to overcome this global crisis of the public system, by sharing the lessons Korea has learned from our own experience in the past, Korea will strive to support the LMICs in strengthening their biomanufacturing capabilities so that we could pave our way together towards a safer world during the next pandemic. Korea looks forward to you all for you continued support and interest. Thank you.

TAG Gamsahamnida, Minister Kwon, and thank you once again for the Republic of Korea’s generosity in supporting this effort. And now to the four countries that will receive vaccine technology from the South African hub, and receive training to produce it.

We begin in WHO’s Southeast Asia region, with Indonesia. It’s my great pleasure to welcome Her Excellency Retno Marsudi, the Minister of Foreign Affairs of Indonesia. Minister Marsudi, thank you for joining us today.
Welcome, and you have the floor. Terima kasih.

RN Thank you very much, DG Tedros, colleagues, ladies and gentlemen. It is an honour for me to be back in Geneva and have meetings with DG Tedros, Gavi and COVAX, and I’m very glad to participate in this press conference before flying back to Jakarta.

00:11:39
Colleagues, Indonesia is one of the countries that continuously support vaccine equity, including through transfer of vaccine technology and knowhow to developing countries. Indonesia’s G20 Presidency also includes this issue as one of the priorities.

Today, I’m very pleased to hear that Indonesia and Bio Farma has been trusted to be one of the beneficiaries for the mRNA vaccine technology transfer. Bio Farma is the largest vaccine manufacturer in Southeast Asia, with production capacity of more than 3.2 billion doses per year. It produces 14 types of vaccine and has exported to more than 150 countries.

Indonesia’s ability to harness the mRNA technology will serve the regional need for the mRNA technology-driven vaccine and biotherapeutic development and manufacturing. This transfer of technology will certainly contribute to equal access to health countermeasures, thus helping us recover together and recover stronger.

This is the kind of solution that developing countries need, a solution that empowers, a solution that strengthens our self-reliance, a solution that allows us to contribute to global health resilience.
Colleagues, this kind of cooperation needs support from all of us and we do hope that this cooperation could narrow vaccine inequality. Our time is short. That is why our work to end this pandemic needs to be effective, so the benefit of our collaboration becomes infinite. Together, we show multilateralism delivers and brings benefit to our people. Recover together. Recover stronger. I thank you.

00:13:55
TAG Recover together. Recover stronger. I fully agree, Minister Retno. Terima kasih, and we look forward to continuing to support Indonesia on this journey so that Indonesia can support the world. So, terima kasih and thank you so much for joining us in person. That’s a great honour. I understand you have other commitments, so thank you very much for joining us today and safe travel back home.

Shifting now to the Americas, it’s now my honour to welcome Dr Carla Vizzotti, the Minister of Health of Argentina. Your Excellency, welcome, and you have the floor.

CV Muchas gracias, Dr Tedros. [non-English] of mRNA vaccines for our region and Latin America with the aim to tackle COVID-19 and future infectious disease-related challenges. Accordingly, it’s a pleasure for me to join you today virtually to share this important announcement about recipients in other parts of the world.

I would also like to congratulate them. We’re happy to be work together to tackle this enormous challenge. We’re convinced of the decisive role that a diversified pharmaceutical manufacturing capacity has to promote equitable access. [non-English].

South America is the region of the world that has one of the highest levels of the vaccine coverage and, in the region of the Americas, Argentina has received over 110 million doses of vaccine and we’ve managed to reach almost 80% vaccine coverage and we have therefore surpassed the objective set by the WHO during this year, that’s halfway through this year.

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In our country, we’ve managed to provide over 48 million first doses and 60 million booster doses. We’ve also received almost 100 million doses all over the country. We’ve also provided over five million doses to other regions and continents around the world, and it’s very important to create those virtuous circles and promote solidarity to make progress on vaccinations.

As a result of our vaccine campaign in our country, which has been carried out over three years, we have managed to improve the epidemiological situation and continue working on other areas related to health strategies.

Colleagues, Latin America does have the necessary capacity to improve local production and increase access to vaccines. It also has strategic inputs of other types and it’s very important to show how other countries and regions of the world can help to contribute towards achieving global challenges.

The public sector and the health sector in Argentina a very ready to overcome these challenges and, of course, we’re very happy to have the technical
support for the WHO, particularly with regard to the regional offices, PAHO. We’ve also got the international group of experts participating. We’ve also got in a group a private sector experts.

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Now, of course, if we want to achieve better results and outcomes all over the world and to be prepared for future health emergencies, we need to make sure that we can break the current cycles that are in place and promote equitable distribution of these products. Thank you very much and pleased to be working with you.

TAG Muchas gracias, Minister Vizzotti. Now to Europe, and it’s my privilege to welcome Dr Zlatibor Lončar, the Minister of Health of Serbia. Your Excellency, thank you for joining us today. Welcome, and you have the floor.

ZL Dear Dr Tedros, dear colleagues, dear representatives of the media, the Republic of Serbia has expressed interest in participating in the WHO project dealing with the transfer of mRNA production technology. The efficiency and flexibility of the Serbian system demonstrated in the previous period through prompt diagnostics, prevention, treatment, distribution of vaccines, medication and medical devices have proved a sufficient and requisite precondition to continue with further development in this domain.

By participating in this project, national production capacity will be established, aiming at improved access to vaccines produced through the application of the most modern technologies, contributing as well to the overall increased readiness for the potential pandemic response.

By forming the regional center, so-called mRNA hub, in the Republic of Serbia, we will be able to fulfil the requirements of both national and international health systems. The support of the World Health Organization in this process is of essential importance for the development of continued, safe and modern production of vaccines.

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The development of new technology implies the development of professional knowledge of Serbian experts in training of new, young staff as the absolute national priority. During the pandemic, we have learned that introducing new technologies into research and making decisions based on evidence are the most essential factors for effective response to all public health threats.

I would like to conclude by expressing gratitude to the World Health Organization for its continuous support and I am convinced that we shall continue with excellent cooperation in this area, as well as other public health areas. My best wishes from Belgrade and I’m looking forward to meeting you soon in person here, in Belgrade. Thank you.

TAG Hvala, Your Excellency. Thank you once again for being with us today. Finally, to the Western Pacific, where it’s my great pleasure to welcome His Excellency Dr Nguyễn Thanh Long, the Minister of Health of Viet Nam. Your Excellency, thank you for joining us today, and for Viet Nam’s participation in this exciting new initiative. You have the floor.
Ladies and gentlemen. First of all, I would like to congratulate WHO on the mRNA Vaccine Technology Transfer Hub on the historic achievement made in the last couple of months, including this initiative of many participating countries in the mRNA vaccine technology transfer, the establishment of the Global Biomanufacturing Workforce Training Hub in the Republic of Korea, which was also announced today. I also recognise the MPP and ACT for their part in the initiative.

On behalf of the government and people of Viet Nam, I am very glad to express our thanks at this time to WHO for selecting Viet Nam to receive the mRNA vaccine technology through the WHO mRNA vaccine technology transfer initiative. This shows that WHO highly values our capacity to master the technology and produce a vaccine in large scale is high priority.

The government of Viet Nam are committed to supporting and creating favourable conditions for domestic vaccine manufacture and receiving the mRNA vaccine technology. We know that we have had a lot of experience in vaccine development over the past decade. Our mRNA has also been recognised by WHO.

We believe by participating in this initiative, Viet Nam will produce an mRNA vaccine, not only for domestic consumption but also for the other countries in the region and the world, contributing to reducing inequality in accessing vaccines.

The mRNA vaccine technology is an advanced technology that is allowing the vaccine to adapt to the new variants more easily and we produce enough quantify to allow us not only to control the COVID pandemic but also better response to future pandemics.

Therefore, we now hope to continue receiving support to collaborate with WHO and partner to go one step further in this initiative, thereby contributing to expanding production capacity of vaccines in the region, contributing to activity to ensure regional and international health security. Thank you very much.

TAG Xin cảm ơn, Minister Nguyễn and thank you once again to you, to all our guests for joining us today. We look forward to working with all of you in the months and years ahead.

Our vision is that this initiative will pay dividends for many years to come and help to save many lives because we believe it’s a strategic solution to the problem of equity we’re facing now. Margaret, back to you.

MH Thank you very much, Dr Tedros and distinguished panel. We will now open the floor to questions from the media. Please try to focus your questions on the subject technology transfer and training but we do have our usual team of WHO experts here to ensure you get the best and most complete answers.

We also have Dr Agnès Buzyn, our Executive Director of WHO Academy, who can tell you more about how WHO will be supporting the curriculum for the
biomanufacturing training. First question goes to Donato Mancini, from the Financial Times. Donato, could you unmute yourself and ask your question.

00:26:37
DM Hi. Good morning, good afternoon. Thank you so much for the opportunity. I have two questions for you. I understand this may difficult at this stage but can you quantify the impact this will have concretely with any numbers, if that’s possible, such as you know this will help make XX million doses of vaccine or XX million vials of insulin? Obviously, I understand why this is good news and big news but I think it would help to provide context to our readers.

The second question is critics will say this is great but perhaps a bit late. So, did you try to do this earlier in the pandemic and did you face resistance from certain sectors, such as the industry? Thank you very much.

MH Thank you, Donato. I think Dr Soumya will start and others may join.

SS Thank you, Donato, for that question. Others may certainly like to add. As you remember, right from the beginning of the pandemic, the WHO had recognised that the vaccine inequity or inequity in access to health products in general is a real threat, a real possibility that we needed to get ahead of, and this is why the ACT-Accelerator and the COVAX facility and partnership was created specifically to address the issue of vaccine inequity.

However, because of the fact that vaccines and, in fact, other health products, the manufacturing of these products is concentrated in some regions of the world, what we saw happening was that other regions of the world which did not manufacture products actually got into the back of the queue and they had to wait till the regions that were manufacturing had actually supplied their open populations and then were able to spare doses.

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And we made a call very early on. If you remember, the DG had called for the motion at the WTO on the TRIPS waiver to go ahead, that countries should agree to do that. We had also called upon companies to share their knowhow and technology either through voluntary licensing or through these multilateral mechanisms that exist.

We have the Medicines Patent Pool that does exactly that and has happened with some drugs but we have not seen that happen with vaccines, except for a couple of companies that did go out and do a lot of voluntary licensing.

And we saw clearly that it wasn’t enough and the whole of 2021 we were facing the supply constraint situation where countries were unable to scale-up their vaccination programmes because of unpredictable supplies and often supplies that came with short expiry dates.

So, this concept was launched in April of last year and I think has moved fairly rapidly but, of course, it’s complex. It requires not only developing and transferring a new technology but it also requires a building of facilities that can handle this type of expertise and training people to do this.

So, we’re looking at this as a medium to long-term initiative not, as you said, necessarily solving the problems in 2022. We know the pandemic hasn’t
ended. We know that there may be ongoing demand for vaccines, so this project may still satisfy the demand in the future and make, perhaps, better vaccines with better properties available as we move ahead.

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As you know, one of the things we are trying to do here is to promote more R&D and sharing of information and knowledge with these networks of centres that are going to be set up because mRNA technology is new and currently comes with a lot of limitations in usage, especially the cold storage conditions. So, there could be gamechanging technologies in the pipeline where mRNA could be stored at four to eight degrees, for example, and also be made in ways that make it more affordable to produce these vaccines.

Finally, I think this technology and this whole process of empowering and building capacity in places around the world will not only enable more work on vaccines of other public health importance, like TB, like dengue, like chikungunya and other diseases, but also serve as our backup plan for the next pandemic.

So, that if, and let’s hope there isn’t, but if there is another pandemic with another pathogen, there will be all of these distributed manufacturing sites that are capable of absorbing and quickly scaling-up mRNA, so that if any one lab were to develop a vaccine for that new pathogen, then within a few weeks or months we could have manufacturing scaling-up very rapidly.

I think that really is the goal with which we approached this, not necessarily to solve the problem of today which needs to be solved, basically, by equitable sharing of vaccines and making sure that we address also some of the absorption constraints, the delivery constraints that countries are facing.

Thank you. I wonder if anyone would like to add to that.

MH Dr Mariângela Simão, who is online, has something to add on this. Dr Simão, over to you.

00:32:09
MS Thank you very much, Margaret, and thank you, Donato, for the question. Actually, I want to touch on the biomanufacturing hub and the importance it has. We haven’t yet quantified the issue on diabetes, like you mentioned, but let me say that the biomanufacturing hub in the Republic of Korea is especially important for us to deal with problems that are beyond COVID.

Also, let me talk a little bit about the issues that we did. We were talking about the biotherapeutics for COVID. We did speak with each of the manufacturers of the biotherapeutics. You know, there are some of them already in WHO’s guidelines. There is also an issue that’s mentioned when we’re talking about IT or technology transfer. There’s also the issue of, oh, but the quality manufacturing capacity is not available elsewhere.

Let me say that the biomanufacturing hub, as a training hub working with the regulatory and the good practices, being in Korea will be extremely helpful for WHO and the world to tackle chronic disease like diabetes. There is an increasing need for monoclonal antibodies for cancer treatment, for immune
diseases and so on. So, we’re talking about COVID but we are talking also beyond COVID.

Yes, we did talk with the manufacturers, the current manufacturers, and, no, there was no interest in that transfer. So, that’s why this is being organised now and has a significance for the future and the access to affordable and safe treatments. Thank you.

00:34:00
MH    And, Dr Buzyn, would you like to add anything on the importance of training and the difference this is going to make?

AG    Yes. Thank you very much. First of all, we are really looking forward to work with the Korean Global Biomanufacturing Workforce Training Hub because we think that there is some place for in-person training but also for hybrid experience of digital training to enhance the capacity-building of the healthcare workforce to deal with those issues of biomanufacturing.

The role of the WHO Academy in this hub will be, of course, to establish the entry requirements for the learners, to define the curriculum pathway, to be able to deal with those issues and, of course, to give assessment and credentials to the learners, to be sure that they gain some new skills, new competencies to ensure good quality biological products at the end. So, we are really willing for this collaboration. Thank you.

MH    Thank you so much for all those comprehensive answers. The next question goes to Priti Patnaik, from Geneva Health Files. Priti, unmute yourself and ask your question.

PP    Good afternoon. Thanks for taking my question. Can you clarify whether and when other companies in other Asian countries, including Chinese and Indian companies, may be able to participate in regional manufacturing activities around mRNA vaccines because, clearly, these countries do have early infrastructure to produce these vaccines?

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Because it was previously indicated that some exceptions could be made while issuing licensing from the hub to exclude, potentially, big developing countries. Can you clarify if that’s the case? Thank you.

MH    Thank you, Priti. Dr Martin Friede will answer your question.

MF    Thank you, Priti. A very good question. What we are trying to avoid is to have excessive competition within countries or to be leading to excessive competition. So, countries such as India and China which, A, they’ve got some mRNA candidates already under development and also we received multiple requests from within those countries.

So, we are currently working with the national government to identify what they would like us to be supporting within the country but this will still take some time as we work out what is the most appropriate response for each country. Thank you.
MH    Thank you, Dr Friede. I’m looking around the room and I think that’s fully answered that question. The next question goes to Andy Hoffman, of Bloomberg. Andy, please unmute yourself and ask your question.

00:37:29
AH    Thank you. Good afternoon. Thanks for taking my question. Just so understand it, focusing on COVID-19 mRNA vaccines, the vaccines that will be produced under this programme are the ones that you’re developing from the mRNA vax hub in South Africa.

How long will it take for that formula to be developed so it will be ready to be a vaccine and then be approved by various health authorities, including the WHO, as a vaccine? Have you completely abandoned working with and getting technology transfer from the major mRNA vaccine producers, Pfizer and Moderna? Thank you.

MH    Thank you very much. Dr Soumya Swaminathan will start the answer on this one.

SS    Yes, I’ll start. I’m sure Martin would like to add as well. I’ll take your second question first, and that is have we abandoned the possibility of working with the companies that have proven technologies and we have two, the BioNTech-Pfizer and the Moderna vaccines?

No, we have not and we would very much welcome a partnership with them because, as we were describing, the development from scratch of a vaccine does take time and while Afrigen has, in a very short period of time, working with the academics in South Africa, been able to develop and mRNA vaccine construct based on publicly-available information, this is a new construct and therefore it will have to go through the entire clinical development programme, starting with animal studies and then go through clinical trials, which means that it’s not going to be really available as a vaccine before the end of ’23 or, more likely 2024.

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This timeline can obviously be shortened considerably if a known technology or a known vaccine with proven efficacy and safety were to transfer their knowhow and provide technical assistance to the hub and to the spokes, which means it’s just a question of really producing that vaccine at the quality standards.

I think the South African hub has shown that it’s possible to do, so I think it’s a myth that low and middle-income countries cannot produce mRNA vaccines. We know now from the landscaping we’ve done that there are several existing sites around the world that are quite capable of producing these vaccines. So, yes, I think the WHO is very open and committed to working with partners.

There are a number of other companies, mostly biotech companies, smaller companies, again from around the world, that have mRNA technologies in various stages of development. Some of them are advancing through phase II and, again, we’re talking to many of them.

We’re trying to work and keep track of progress in that area, and they’re also more open to sharing their IP, sharing their knowhow. There will be freedom to
operate in many countries, no restriction with patients. The cost of goods is lower for some of these. The cost of manufacturing is lower. So, there is actually a second generation of vaccines coming through as well which could be even more exciting to work with.

**00:41:03**

But, what we would like also to see is a coordinated approach to this and, when we map what is happening on the African continent, we find several dozen initiatives now by different agencies. What would be not a good outcome is to have a very haphazard development programme that is not coordinated.

So, WHO, we would like to offer ourselves, really, as a coordinator and a convenor to bring together all the different groups and have a plan because I think, as Dr Simão mentioned also, the workforce development and the regulatory capacity of these capacities are very critical components.

We cannot be successful if we do not have a plan to both have a high quality regulatory system in place, an agency that’s at least at WHO Maturity Level 3 by the global benchmarking system, as well as a workforce that is trained in good manufacturing practices. This is why we really are very excited to have this partnership with the Republic of Korea to immediately start training the workforce that’s going to be needed in all these facilities.

Just to go back to an element of Priti’s question, we do not exclude anyone because the hub really is for sharing of technology. So, I don’t think any country that’s interested or wants to have the technology will be denied that.

Obviously, WHO is mandated to work with all of our Member States and we will definitely do that. It’s just a question of with some countries all the details are already available and we can move very quickly, like the ones who are present today, and with other countries we need a little more dialogue with the manufacturer and with the government before we can advance further. Thank you. Martin, would you like to add?

**00:43:00**

MF I think Soumya has really addressed most of the issues but maybe just to add one or two additional points to this. Ever since the announcement of the hub in South Africa, there has been tremendous interest from biotech companies, many of which or several of which are in medium to late-stage clinical development with their own mRNA vaccines.

They’ve now come to the hub proposing collaboration on their second generation technologies which have certain advantages, either in terms of thermostability, in terms of cost of production, ease of production and freedom to operate in low and middle-income countries.

So, when we look at the Afrigen, the chart of development, they will be in clinical trials later on this year with the first candidate. Whether that is the candidate that is taken through to late development and approval or whether it is going to be a second generation candidate which has technical advantages, I think that will depend a little bit on the deals that are signed and also the development of the pandemic.
Thank you very much for those answers. We are getting close to the hour, so we’ve only got time for one more question and that will go to Jessica Hagen, from Pharmaphorum. Jessica, please unmute yourself and ask your question.

00:44:26
JH   Hi. Thank you so much for taking my question. I really appreciate it. I am Jessica Hagen, from Pharmaphorum, a UK-based digital health magazine. How will these hubs evolve as new variants appear that may prove to be able to evade vaccines? Will the trainees’ education for such circumstances evolve as well?

MH   Dr Soumya will begin with that answer.

SS   I didn’t hear the second part of the question but I think the first one was about how will it evolve as the new variants are evolving? Clearly, that’s a global problem and, as you know, the WHO has set up the committee, the TAG-CO-VAC, which is constantly monitoring the situation and is working with the other committees across the house, the TAG-VE and SAGE and the R&D Blueprint expert groups to track what’s happening with not only the evolution of new variants but also how is that impacting the effectiveness of the existing vaccines.

We’re also looking at some of the research that’s coming out of the companies that are trying to manufacture either bivalent or multivalent vaccines. So, I think during this period we have a lot of research going on on multivalent COVID vaccines but also work going on on pan-coronavirus vaccines which ultimately is going to be, I think, what everyone would like to see as a solution, but that’s probably a couple of years away.

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So, I think the idea of having these hubs and spokes and having the expertise available is the ability to quickly pivot and to absorb the technology so that when WHO, the committee TAG-CO-VAC, if they make a recommendation to change vaccine composition, just as we do for influenza every year, then it will be possible for these sites to also do that, and that’s the advantage of the mRNA technology, that it will be possible to adapt to the new variants if the need arises.

So far, as you know, the vaccines have held up very well against all variants, including Omicron, as far as disease is concerned, and while there is some waning of immunity over a period of time, and particularly in the older age groups, the third dose helps to reinforce that immune response again.

This is why I think the ongoing tracking of the research and development, as well as encouraging development of vaccines for tuberculosis, for example, for which we really don’t have a good vaccine, we still use a 100-year-old vaccine, the BCG, and if we were to use all the investments that have been made for COVID, there are huge amounts of R&D investment that have gone into COVID. We need to really leverage that to produce vaccines for some of these other diseases for which we’ve struggled for a long time.

MH   Thank you very much, Dr Swaminathan. I think Dr Simão has something to add.
Very quickly. Thank you, Jessica, for the question. Regarding the training. One of the things Soumya just referred to is actually we have platforms that were ready to be repurposed, not the mRNA. The mRNA platform was already developed for other and it's still in research and development phase.

But, in the case of the training, we are talking about capacity building and this is super important. That means good manufacturing practices, internationally quality assurance reference labs and so on. This is all part of an infrastructure that needs to be ready for whatever variant, whatever pandemic comes up, whatever pathogen we're trying to address.

So, the training is actually extremely important at this stage to create the infrastructure in terms of human resources and equipment in order to be able to respond to any changes or any production issues that come up in the future. Thank you.

Thank you very much, Dr Simão. Now, we’re running out of time, so we’re just asking some of the distinguished panelists if they’ve got final remarks and I hear that the minister from Argentina, Dr Carla Vizzotti, has got something to say. Please take the floor, Dr Vizzotti.

Muchas gracias. I just wanted to commend the work to hold this meeting and also commend the initiative of the WHO and all of the goals it’s trying to achieve. Also, I’d like to welcome these spaces that we have for dissemination of information. These issues are very complex.

Of course, the dissemination and distribution of vaccines and mRNA technology is very complex and, of course, we have to deal with all of these different variants in the face of coronavirus but also we have to note the potential that new diseases could emerge or new pandemics could arise.

Therefore, it’s very important to continue working constantly on all of these projects to make sure that we are in a better position later on. Of course, we have to deal with the challenge of communicating with the media.

I’d also like to commend the effort that’s been made there as well because it’s very complex trying to deal with transmitting all of these messages and figuring out how to do all of this. Of course, here we’re working on video conferences and this is very complex.

I’d like to commend the commitment of the WHO and also the political commitment that it is showing to promote distribution of vaccines to deal with future health emergencies and, of course, the media is a very important vehicle to make sure that the public understands what’s happening and to make sure that the public understands these issues and that they’re complex. They can’t be resolved in just a couple of minutes.

Global commitment is needed to gradually keep improving these vaccines and this requires international commitment from international organisations and governments and I think all the work that is being done to do this is very commendable. Thank you very much.
MH We can hear you now, I think. Can you start from the beginning?

KD [non-English]. There are some questions we are currently planning to discuss on mRNA. There are two parts going forward. It’s about the technology transfer but the training hub provides education for global biomanufacturing. The training hub and the transfer hub are all related, so the Korean Government will organise a steering committee established for the issue. It will be kicking off our discussion.

00:52:46

As I mentioned, starting from July, we will begin the training for 370 trainees. By 2025, we hope that we will provide education for about 2,500 trainees per year. We will discuss with the academy to make sure that this happens. Thank you.

MH Thank you very much for those remarks and for all the rich discussion. I’ll now hand over to Dr Tedros for his final remarks.

TAG Thank you. Thank you so much, Margaret. Maybe, I just would like to comment on one of the questions asked, especially on how long it will take to complete the process of the formula developed by the South African hub, or Afrigen.

As Soumya said, it could take more than two years because it’s new and it should go through the whole process starting from the animal model. However, this process could be shortened if the current holders of the patent for mRNA could share their formula or if IP, the intellectual property, could be waived, which WHO still supports, because that will cut the process significantly and, for the South Africa hub, it would take around six to nine months to complete the process.

So, the fastest would be to share or to waive IP and that’s what we’re trying to do as an option. We haven’t dropped that. We’re talking to the companies and also, as you know, the negotiation in the WTO is ongoing, where that was proposed by South Africa and India. And we hope we will get something out of the negotiation with the pharma industry or through the WTO process.

00:55:00

This pandemic is unprecedented and whatever provisions we had for an emergency like this one, like the IP waiver, if cannot use them now, when do we use them? This is unprecedented and they have to be tested now, actually, in terms of IP waiver, and we want to make that very, very clear.

But, while pushing for that, of course, we need to move with the process we have started, which is the new product that Afrigen has already developed, so all options will be open.

But, then my appreciation to all ministers, to Minister Kwon of Korea, Minster Marsudi of Indonesia, Minister Vizzotti of Argentina, Minister Lončar of Serbia, and Minister of Nguyên of Viet Nam. Thank you so much for joining us. I think this is a long road, a vision that if translated into action could address the problems we are facing now, equity.

We believe it’s a strategic solution and look forward to working with you even more closely to realise this vision. So, thank you so much for joining and thank
you also for all media members who have joined today, and see you in our next presser. Thank you.

00:56:40