September 3, 2021

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Sub.: **Transcript of investor call arranged to discuss about the receipt of Emergency Use Authorization of ZyCoV-D vaccine**

Dear Sir / Madam,

Please find attached the transcript of the investor call arranged on August 23, 2021 to discuss about the receipt of Emergency Use Authorization of ZyCoV-D vaccine.

Please find the same in order.

Thanking you,

Yours faithfully,
For, **CADILA HEALTHCARE LIMITED**

DHAVAL NARENDRA SONI
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DHAVAL N. SONI
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Encl.: As above

“Cadila Healthcare Limited Conference Call to Discuss On ZyCoV-D Vaccine”

August 23, 2021

MANAGEMENT: DR. SHARVIL PATEL – MANAGING DIRECTOR – CADILA HEALTHCARE LIMITED
MR. VISHAL GOR - SENIOR VICE PRESIDENT, CORPORATE FINANCE – CADILA HEALTHCARE LIMITED
MR. ALOK GARG - SENIOR VICE PRESIDENT, MD’S OFFICE – CADILA HEALTHCARE LIMITED

Moderator: Ladies and gentlemen, good day and welcome to the teleconference call of Cadila Healthcare Limited which is scheduled to discuss the "ZyCoV-D Vaccine which has recently been granted the Emergency Use Approval by DCGI." As a reminder, all participant lines will be in the listen-only mode and there will be an opportunity for you to ask questions after the presentation concludes. Should you need assistance during the conference call, please signal an operator by pressing "*" then "0" on your touchtone phone. Please note that this conference is being recorded. I now hand the conference over to Mr. Vishal Gor, Senior Vice President, Corporate Finance Team of Cadila Healthcare Limited. Thank you and over to you Mr. Gor!

Vishal Gor: Thank you. Good afternoon ladies and gentlemen and welcome to the Cadila Healthcare Limited Teleconference to discuss on ZyCoV-D vaccine, which has recently been granted the Emergency Use Approval from DCGI.

For today's call, we have with us Dr. Sharvil Patel – Managing Director of Zydus Cadila and Mr. Alok Garg, Senior Vice President from MD's Office.

This call is only to discuss the of ZyCoV-D vaccine opportunity and if you have any other questions on any other businesses kindly reach out to us separately and we shall be happy to address the same at the earliest. With that I now hand over the call to Dr. Sharvil Patel.

Sharvil Patel: Thank you Vishal and good afternoon ladies and gentlemen as you all are aware on August 20, 2021, we have received the emergency use authorization from the Drug Control General of India for our COVID-19 vaccine candidate, the ZyCoV-D. With this approval it has become the first ever Plasmid DNA Vaccine for human use approved anywhere in the world.

The DNA Plasmid platform because of its rapid plug and play technology can be easily adapted to deal with the new mutations in the viruses which is a big concern with COVID-19. Also being a plasmid DNA Vaccine, ZyCoV-D does not have any problem associated with vector-based immunity.

The phase III clinical trials were conducted in over 28000 volunteers including 1400 subjects in the age group of 12 to 18 years of age. Hence, with this approval, besides the adult population, ZyCoV-D has become the first approved vaccine for the adolescents in the age groups of 12 to 18 years in India.

The vaccine has an excellent safety profile. No subject had any serious or severe adverse events reported during the conduct of the study. None of the subjects discontinued the study

due to the adverse events. In the interim analysis, no moderate cases of COVID-19 disease was observed in the vaccine arm post administration of the third dose suggesting 100% efficacy for the moderate disease and no severe cases or deaths due to COVID-19 in the vaccine arm after the second dose of the vaccine have been reported. The results of the phase I part of the phase I/ II clinical trials have already been published in the e-clinical medical journal of Lancet.

ZyCoV-D is a three-dose vaccine which will be administered first on day 0, day 28th and then on day 56. The vaccine will be administered intradermally using the PharmaJet needle free applicator Tropis which ensures painless vaccine delivery. We also plan to seek an approval for a two-dose regimen of the vaccine as well.

ZyCoV-D is stored at 2 to 8 degree Celsius but has shown stability at temperatures about 25 degree Celsius for at least three months. The thermo stability of the vaccine will help in easing transportation and storage of the vaccine and reduce any cold chain breakdown challenges thus minimizing vaccine wastage.

We have already begun stock piling the vaccine and we will be able to supply the vaccines starting from middle to end of September. We plan to manufacture 10 to 12 Crore doses of the ZyCoV-D annually from our new facility that we have built. Thank you and now we move over to the coordinator for a Q&A.

Moderator: Thank you very much. We will now begin the question-and-answer session. The first question is from the line of Forum Parekh from Choice Institutional Broking. Please go ahead.

Forum Parekh: Congratulations on getting the approval for the first DNA based vaccine. I just wanted to know like what would be the price of the vaccine and how much do you expect it to contribute to the EPS growth?

Sharvil Patel: Thank you first for the acknowledgement. I think we do not have clarity on pricing yet. As I have said in my earlier press briefing also that we do believe that in this coming weeks we should see discussions with the government on the pricing and the quantity of dosage that will be procured and once we are able to know all of that we can come back to you with the pricing as to what it would be. So as of today we are not able to talk about that we have talked about what we will be able to produce which is about 1 Crores doses monthly.

Forum Parekh: So out of this could you just help us break like how much would you be supplying to the government and how much would it be to the private hospitals?

Sharvil Patel: Currently that is also unclear because from the current policy that the government has followed they have looked at 75% for buying for the center and the state and then they have allocated 25% quantities for the private sector so that is the current precedence that is there so once we are clear on that we can also discuss that but that is what currently the government has done for the two vaccines that have currently been approved.

Forum Parekh: So you can take the 75 to 25 ratio on a monthly basis also?

Sharvil Patel: I do not have a clarity yet on that but as I said this is the current condition that the government has done for the last two vaccines.

Forum Parekh: No problem. All the best.

Moderator: Thank you. The next question is from the line of Anubhav Agarwal from Credit Suisse. Please go ahead.

Anubhav Agarwal: Good afternoon Sir. One question was on this adolescent version so when you start supplying in mid September to end September how let us say initially itself we would start supplying for the adolescent piece that is one question and secondly how the mix will change between the adults and adolescent populations the context just I am asking is would it happen that if intuitively I think about parents would think that the vaccine has been used in adults for some portion of time then they would be more eager to get the child vaccinated with this vaccine what you think right from the word go adolescent will be a larger portion for you?

Sharvil Patel: Intuitively and whatever we have currently understood I believe the adolescent population will probably be the larger part of it because one is there is no vaccine approved today and we know that there is a challenge in opening colleges and schools and other things so there is a high probability that there will be a larger use for the adolescent population knowing that there are no vaccines currently available but obviously there will be some share of that which will be also made available for the adults also because the choice is there for people to make and we have also lot of request from, there are lot of peoples in the ages of 18 and above who also want to choose vaccine that has been different from the current.

Anubhav Agarwal: Sharvil Bhai can you also talk about what is the data which has been asked on two doses etc., so what do you need to do incremental on two dose to get it approved?

Sharvil Patel: So that clearly we do not have a clarity yet. We have submitted as I said three things we submitted the 2 milligram arm 3 dose for both the adults and the adolescents and then we submitted the 3 milligram 2 with the arm also so they have finished the immunogenicity

and that was a purely an immunogenicity work so once we have that discussion which we believe can be happening in this next 5 to 7 days or 8 days then we can give more clarity as to what maybe gaps further required, I can at least definitely say that the immunogenicity work has shown that the vaccine has shown equal or better immunogenicity compared to compared to the 3 dose arm.

Anubhav Agarwal: But do you get a claim that you will have to do a full trial for that or maybe just a small trial?

Sharvil Patel: No it would not be approval trial for sure.

Anubhav Agarwal: Thank you.

Moderator: Thank you. The next question is from the line of Charulata Gaidhani from Dalal & Broacha. Please go ahead.

Charulata Gaidhani: Congrats on the approval. My question pertains to you have a capacity of 1 Crore per month. So if you could indicate the volume of doses in September and October onwards by what time could we reach 50%, 60% utilization?

Sharvil Patel: Our endeavor is that from the month of October we start delivering 1 Crore doses in terms of drug products obviously it goes through the whole process of the sterility testing and also CDL testing which itself each of that constitute 14 days but our endeavor is that from the month of October we start delivering 1 Crore doses in terms of drug substance.

Charulata Gaidhani: In terms of profitability if you said indicate some internal estimates whether it will be better than the corporate level profitability?

Sharvil Patel: I do not think I will be able to talk about that but definitely for the current financial year this vaccine will become a significant part of the contribution for the company both in terms of sales and also on the bottomline. Exact numbers only can be given once we are able to formulate the pricing and other things, but we do believe that from the October quarter onwards projection we can see 200 to 350 Crores kind of numbers which can be scaled up to 500 Crores per month but I think more we will have clarity once we are able to firm up the pricing and the logistics and the supply.

Charulata Gaidhani: Thank you. All the best.

Moderator: Thank you. The next question is from the line of Surjit Pal from Prabhudas Lilladher. Please go ahead.

Surjit Pal: Thanks for taking my questions. Congratulations for getting the approval. My first question is that what could be the total population of adolescent age between 12 and 17 which you are targeting currently?

Sharvil Patel: Today the current census talks about 40 Crores population between the ages of 12 to 18.

Surjit Pal: In terms of giving them or offering them any government schemes are there or it will be only through private?

Sharvil Patel: Today as you know right as of the current vaccination program which Government of India has taken up as the largest vaccination program what they are giving vaccines free for at least the amount of vaccines doses they procure and the rest is for private and the private is a very small percentage of the overall vaccination so I think it would not follow any different pattern than this in my opinion.

Surjit Pal: No, my question is it currently what they are offering that is mainly for urban population?

Sharvil Patel: I think they will extend the same for the children. I do not know they would differentiate between adults and children.

Surjit Pal: As far as vial is concerned out of one vial how many dosage you can offer?

Sharvil Patel: 10 doses.

Surjit Pal: Do you think that the pricing will be at par with the double dose guys in terms of considering the two-dose equivalent to your three dose so the per dose we will be equivalent to that level over a total cost?

Sharvil Patel: We have not have the discussion yet and every vaccine is different and ours is a 3 dose so obviously per dose will be the pricing and not absolute pricing.

Surjit Pal: The last question is Sir, see by the time you will be coming out with your products say for example September, October there is a possibility that one of your peers will come out with a single dose they given there is a possibility given that DCGI what they are considering. Do you think your product will have attractiveness in that market to?

Sharvil Patel: Yes, from whatever we are currently aware of we do believe that will happen so we are very confident on the current opportunity size that we are talking about. I do not think it is a question of being able to sell because even if the other dose if I do not know what you are

hinting to but whatever vaccine gets available even is assuming the single dose they are not going to be large quantities available if that is the case.

Surjit Pal: I will get back to the queue I had got a few more questions. Thank you.

Moderator: Thank you. The next question is from the line of Sameer Baisiwala from Morgan Stanley. Please go ahead.

Sameer Baisiwala: Thank you very much. Sharvil Bhai a big congratulations on the approval. Just on pricing I understand like you said the government pricing will be decided later or in consultation but what about the private channels you are free to set the prices over there what are you thinking on this?

Sharvil Patel: Thank you Sameer Bhai. See the pricing is a composite pricing right it all depends on the procurement of quantities and the allocation of quantities between the buying of the center and the state so the pricing will be a methodology of those two decisions and that is how will get decided so I think until that gets done we have no clarity on the private market also one thing consciously we have made a choice that we will definitely price it more economical in the private market but we do not have a current pricing decided yet on that.

Sameer Baisiwala: I missed your comment on whether the pricing would be on the full regimen which is for others 215 x 2 divided by 2 and yours would be x into 3 digit?

Sharvil Patel: To my best estimate the pricing is decided by per dose so somebody maybe giving one dose somebody maybe giving two dose somebody maybe giving three dose but the pricing that is per dose and we believe that will be the same format that will be followed.

Sameer Baisiwala: So it is independent of that regimen that is what you are saying is on a per dose basis.

Sharvil Patel: Yes because at every manufacturer every vaccine is different so you cannot equate every vaccine as the same.

Sameer Baisiwala: It is not the total cost of vaccination. Okay Sharvil Bhai I get that, but just it is a very hypothetical question but an important one so I will ask, assuming the current government pricing which is I think 215 for 1 and 225 for the other if you are there somewhere close to that those number at that price point how good are the margins I mean do you breakeven do you make some money and any color on that?

Sharvil Patel: I think I will answer that question mean I understand these questions a very important and until the pricing gets done and the quantity see I mean pricing is also on factor of quantity

also and the contracted qualities also so I think it is very difficult to just answer it that way but I can definitely say that from our point of view with this approval for ZyCoV-D this definitely becomes an very critical part of what we want to do on vaccines we also believe that this is not soemthing that is going to stay there for just a few months or a few quarters we are as we have already talked about is we are upgrading the platform also with a new variant and all of that work is also underway so I believe this will definitely become a very sizable opportunity for the company for the coming financial year for sure but also in the future also and with respect to pricing and with respect to margins definitely it is the quantity is all the quantities are picked up and we are able to scale it up further this will definitely be a valuable product from the profitability point of view also but that exact profitability I would not be able to answer today but from both the sales revenue point of view and obviously adding to the company's profitability it will be important.

Sameer Baisiwala: I get one or two more if I may. Sir the other question I had is what is the limiting point in your capacity is the drug substance or is it the drug product and I presume you are the only manufacturer for drug substance?

Sharvil Patel: Currently we are the only manufacturer for drug substance and drug product and device. So there are three factors that make we have to solve for when we talk about increased capacity does it once we get to the pricing decision we will look at more CMO partners to produce more drug substance. I think currently we do believe we can still manage drug product on our own but if we need to go outside it is a simple liquid fill in a 2 ml vial so it is not very complicated so we can find enough capacities we need to from outside from the drug product point of view. On the device and applicator and all of that we have scaled it up currently to up to 1 to 1.5 Crore doses and if we need to further scale it up we had also have to do some further investments so that decision again as I said will take once we get the pricing clarity because if we get a pricing that we can suitably give to CMO partner in terms of pass on cost to them also or margin to them also then we will also have a few CMO partners. We are already in final discussion with two of them. We are just waiting for pricing to be clear.

Sameer Baisiwala: My final one Sharvil Bhai is already 45 Crores individuals have got at least one shot and I think we should be inviting 50, 55 Crores by October end individual so therefore do you see this enough urban opportunity for your vaccine or do you think you necessarily will have to go down to smaller towns and even villages to get the required volumes?

Sharvil Patel: I think it is an important question. Now there are two to three things that are happening right, one aspect we have seen is that the countries are talking about with the current platforms of booster dose. We are just talking about that one needs to do a third dose

potentially because the antibodies drain away over a period of time the second aspect of this is also that there have been studies now that are showing that mixing vaccines gives you higher antibody or better production of immunogenicity and the third is that with related to the all the vaccines with the new delta variant we have seen that the efficacy for mild cases is low. It is not as good as it was for the Wuhan strain. So I think the upgradation for the platform which we are also trying to do with using the new delta variant as the new strike region will also happen so if you look at all of that I think while what you say is right so I think this is still going to be an evolving field and I believe there will be enough opportunities created for better protection against COVID which could include a booster dose, which could include mixing or which could include a new delta variant vaccine which everybody is trying to deliver and we are also in advance stages to do so. So I think putting all of those things together it is an evolving time but I see is still a good amount of opportunity to do so. Having said all of this if you look at from my current capacity and expectation point of view obviously we have no way near to what is the requirement so I do not think those are immediate concerns for us in terms of finding a place to, I mean finding enough volunteer to administer this vaccine as of now.

Sameer Baisiwala: Thank you very much.

Moderator: Thank you. The next question is from the line of Ketan Sanghvi from Plethuno Investments. Please go ahead.

Ketan Sanghvi: Thank you for the opportunity. Congratulations on getting the approval. I just had a couple of questions on the opportunity that exists for you. So if you could just throw some light on can you intent to some sort of manufacturing partnerships you want to get a quick arrangements for sell outside approval. So what could be the approval process for that and the other question is I think also looking at the opportunity whether we get dose. Thank you.

Sharvil Patel: I maybe did not get your last part but if I got it right for India as I said we have reached out to at least three CMOs who can potentially manufacture this vaccine and we have I mean we have finished all our discussions we are waiting for our pricing so that we understand what kind of cost we can give to our CMO partner so that is the first part. With respect to outside India we have requests from a few very large manufacturers to a large-scale capacity even a little bit larger than us for the DNA Plasmid platform and they all have shown a very keen interest to partner. What will be the regulatory pathway will be different for every country and for some of them they do believe that after they do so they will do local bridging studies where required and maybe for some countries there could be direct commercialization or drug product filling and commercialization. So I think that is an

evolving field but currently we do have request and we are in discussions with one or two at least two large manufacturers for this platform. Also I think what has been very heartening and important is there has been a lot of research happening on DNA Plasmids and vaccines related to DNA Plasmid technology and with this being the first approved vaccine now we have also lot of requests from research companies and manufacturers who have been doing work on this and partnering to see how do we create the next platform or the next generation of the DNA Plasmid vaccine. So I think a lot of good signs and lot of I think future development will happen in this field and we are very excited that we may have the opportunity to participate in doing so and working with other manufactures and other research firms to really shore up the development of this platform and bring the next version of it, which could even be much better than what we are doing today.

Ketan Sanghvi: Just to clarify the Government of India should not have any problems in whom you say capacity outside India for sale outside India and that should not be a constitute if I understood it right?

Sharvil Patel: See if the technology transfer outside of the country there would not be any concern I would assume.

Ketan Sanghvi: Sir the second question was more about the opportunity do you plan within India, is the question?

Sharvil Patel: That study we are going to file in the next seven days for doing the work for children below the ages of 12 and as soon as we file that and we will get approval to strengthen the study I believe it will not be a very long study and we can do it very soon but once we are updated with that in terms of starting the trial we will apprise everyone about it.

Ketan Sanghvi: Thank you Sir.

Moderator: Thank you. The next question is from the line of Surjit Pal from Prabhudas Lilladher. Please go ahead.

Surjit Pal: Is there any data about this 40 Crores population now for adolescent age in terms of income group households how many of them belong to middle income group household and at work?

Sharvil Patel: I would not have that data with me at present but I am sure there are certain data available but I do not have it right now to share.

Surjit Pal: If everything goes fine why do not you expect this two to below 12 years of age when this could be approved if everything gets right as planned?

Sharvil Patel: So I think it is very difficult to make that estimate but I think if everything goes well we can finish the trial in three months.

Surjit Pal: As far as production is concerned I think already you have certain inventory what should be the quantification of that?

Sharvil Patel: Currently, our inventory if you look at a smaller scale at a current manufacturing site the new site as I said it is just get commission and started taking batches so you would see the 1 Crore doses coming out of that facility which I believe will be fully scaled up by October and that is what our current capacity and the existing plant will then be allocated to the other manufacturing because we had to stop other manufacturing to do this.

Surjit Pal: When your third-party will start manufacturing your products in India?

Sharvil Patel: So I think if everything goes as per plan then they can do so in two to three months.

Surjit Pal: Basically actual state of selling the product in volume could be happen post October time right.

Sharvil Patel: Yes, October onwards.

Surjit Pal: And your vaccine new plant utilization will be around 20%, 30% this 1 Crore per month?

Sharvil Patel: No, it will be 85%, 90%.

Surjit Pal: Is it possible that very first year itself you can make sure the 85% utilization in a plant?

Sharvil Patel: Yes that is what our current plan is to produce 18 to 20 batches a month. The whole production cycle for this is a four-day cycle and we have two streams so I mean that is what we have to do and vaccine you cannot produce that 20% capacity and do any justice to it so all vaccine manufacturing is generally has to be having a utilization of at least about 75%, 80% for you to sell vaccines at this kind of pricing.

Surjit Pal: As far as since you have a technology partner so the government has fixed Rs.215 for normal producers so since you have a partner so government is planning to give you extra for the partner because you have to share with your partner?

Sharvil Patel: We still have to finish that dialogue with them but we do have a partner for device also with whom we share certain royalty.

Surjit Pal: So that we expect the government will bear the cost along with the actual production cost?

Sharvil Patel: The government will look at everything and give a total cost right so it is not that government is going to pay a third party.

Surjit Pal: You do disclose that what should be the sharing in terms of with the partner?

Sharvil Patel: No.

Surjit Pal: Thank you and wish you all the best.

Moderator: Thank you. The next question is from the line of Harith Ahamed from Spark Capital. Please go ahead.

Harith Ahamed: Good afternoon. Thank you for the opportunity. Sir this interim efficacy of 66% that we have shared you may be able to share the number of cases basis which we have arrived at this efficacy percentage and we retain for the final analysis how many cases will we have to hit for to arrive to provide the final analysis?

Sharvil Patel: So the interim efficacy is on 81 subjects and the final will be on 158.

Harith Ahamed: When you say the vaccine can be adapted to potential limitation just trying to understand if the vaccines that we have launched in the next month or so will that be adapted for the delta variant or is that something which is work-in-progress and will come at a later stage?

Sharvil Patel: No, so the current vaccine and the current clinical trial that we have performed as I had also spoken earlier is that when we looked at our event data which is a positive cases that we got to see are all positive cases were in the period of April, May, June which is where 99% of all peers have been just talked about the delta variant and when we did our own sequencing of all the majority of the positive cases we saw that all of them are the delta variant so at least our current efficacy which is around 66% is probably a good reflection of the delta variant. With respect to the upgradation say so recombinant platform provide that particular capability because all we are doing is changing the spike region with an new sequence and you are not making any changes to the construct and nothing changes in terms of expression of the vaccine so this can be done relatively much easier so whether it is an MRNA or a DNA platform this happens much easier because it is a recombinant platform and that we will do we are trying to finish the work also doing the animal studies as we speak and once

all of that is clear we will then build the pathway for how do we get an approval for the new strain. I think the same is also going to get done internationally also with the MRNA and other vaccines so I think there will be some established principals as to how that can be done and as we are more clearer on that we can apprise you all about it but currently we are in the development stage and starting animal study for almost I mean we already have started animal studies.

Harith Ahamed: Thank you.

Moderator: Thank you. The next question is from the line of Nilesh Mehta from Research Delta Advisors. Please go ahead.

Nilesh Mehta: Thanks a lot for the opportunity Congratulations for the approvals. I just had one question are we likely to go international as and are we trying for any international approval for the same or WHO approval from our vaccine if yes any timeline would be helpful?

Sharvil Patel: Thank you Mr. Mehta. I think international as I said we are discussing with a couple of manufacturers, large manufacturers with this and that is the way potentially we can take it internationally because with the current capacity we do not think we have room to supply internationally. With respect to WHO I think always that work as I said will at least require another four to six months to go through and then we can also look at the WHO approval and we have also work actively with them to see what would be required but and internationally that would be the right way would be for us to find a manufacturing partner and then the partner takes forward all the regulatory work.

Nilesh Mehta: So which are the markets we are likely to target as in the WHO phase?

Sharvil Patel: Initially we are looking at the Asian market and the Middle East, North African market.

Nilesh Mehta: In fact roughly about four to five months it will take for me to actually start the process of timing apart from that is what I understood is right.

Sharvil Patel: For India we have already finalized. We obviously are looking at pricing to see what can be the commercial terms. For globally what you said is right we may need another two months so to do so two to three months.

Nilesh Mehta: Thank you very much.

Moderator: Thank you. The next question is from the line of Vishal Manchanda from Nirmal Bang. Please go ahead.

Vishal Manchanda: Good afternoon. Thank you for the opportunity. Sir just wanted to check is there a chance that the government may leave the distribution of vaccines in the adolescent population in the private markets and they may not intervene in this segment so hence that this is something you can cater on your own through the private markets?

Sharvil Patel: Government can definitely decide that. I think we are very well here to make sure that we can on our own cater to the private market. As I said we have already completed the whole logistics, the whole supply chain, the whole frontend supply to be made to different centers, we have already integrated with the Covin app for the vaccine, we have also finished all the work related to counterfeiting to make sure that no vials will be counterfeited and we already ready in terms of our vaccine team to do the whole private rollout so depending on what the government decides we will be able to do either way which is the complete rollout by us or a partnership with the government. Having said so I do believe that 12 to 18 is an integral part of the population that needs to get vaccinated and I do believe that the government will be obviously keen to also be participating that vaccination for that also.

Vishal Manchanda: I think I missed your comment on WHO application for Emergency Use Authorization so we go get where and the follow up to finish which almost take six months?

Sharvil Patel: I do not think we will see a full WHO application till at least for next four to six months but we will start working with them to make sure we are preparing for that but I do not think this is something that can happen in the immediate future.

Vishal Manchanda: Thanks. That is all from my side.

Moderator: Thank you. The next question is from the line of Sameer Baisiwala from Morgan Stanley. Please go ahead.

Sameer Baisiwala: Sharvil Bhai what are the private channels other than private hospitals?

Sharvil Patel: Private hospitals obviously will form the larger part then obviously institutions and colleges and others. I mean I am talking about 12 to 18 years and for the overall it will be just about private market that we are obviously a decent vaccine player we reach our vaccines at least 7, 8 vaccines which we commercialize ourselves which have meant for both children and adults, we have the flu vaccine so as I said the whole evolution of this will happen where booster dosing, two vaccines or different vaccines to be taken for better immunity and all of that will be created so I think it is a market formation that will happen, which will be there but as I said so it will be a mix of both the hospitals which will form the larger chunk of it then obviously institutions who are very keen to do so including large private institutions and then obviously some government state level strong interest also so it depends on the

center takes the call on but obviously at the state level also there were a lot of keenness to vaccinate children.

Sameer Baisiwala: Have you had any tie-ups or collaborations is any of these large partners on the private side?

Sharvil Patel: Yes, so we have had all the discussions. Everything is clear we are just waiting for pricing and the quantity that we can supply to the private market so once we are clear on that we have already aligned the other aspects also.

Sameer Baisiwala: Second is if you think as things stand you would probably be not require to do a full-fledge trial for two dose regiment then it could be a short order of time maybe I do not know what maybe few weeks when you get that approval so why not wait for that before you get down to three dose which is more cumbersome?

Sharvil Patel: No, I do not think that will be only a few weeks because if they ask us to do any even incrementally let me work we will need at least 45 to 60 days to do so. Let us know about we will figure that out. Currently I think this if we have to switch it later we can definitely do it but the change is not very drastic from the current vaccination point of view because even at the three dose level we are finishing the vaccination in less than two months or in two months it is around two months so it is not a very long period of time that one needs to do this so I think we should be still comfortable with this and if once we are clearer on what will be the expectations to move to only a two visit regimen then we will see how we can do that and even for children we need to discuss and see if that will be an automatic approval again we need to do a repeated for two dose for children also.

Sameer Baisiwala: Very clear and Sharvil Bhai what will catalyze the demand for adolescents in the sense is it just a word of mouth because you have a different channels you push it through public private etc., now what catalyzes this demand I mean you need to do marketing just your thoughts on this?

Sharvil Patel: Definitely we have to do marketing, definitely we have to reach out to pediatrician, definitely we need to reach out to state governments who are tackling COVID on an active basis, but I think the way the whole evolution for COVID has happened is the state government and the centre have been taking a far larger and active role in doing so. So I think that has been the current standard of how this vaccine rollout has happened. I do not know it will change any drastically but having said so other than that we have a full marketing and digital plans ready which we are I mean we are all ready to launch as soon as we get the clearance so we have a large plan in our mind to see that if we have to go private also what we can do and we are very comfortable right now with the current understanding

and assumptions and we are seeing significant amount of demand from both sides the state institutions and others also and as I said for us currently our quantities are only 1 Crore doses which are not very large in the overall expectation point of view.

Sameer Baisiwala: Sharvil Bhai I am trying to be funny but it is a mass market product even for dollar cents, you said 40 Crores of people out there I mean putting a full-page ad cover page ad on leading newspaper is it sort of a thing you need to do to make it very well known across the length and breadth of the country or is it more specific right now?

Sharvil Patel: I think one must do everything that is required to obviously to make it aware and we have a very, very large campaign planned for this. We have also been told that the government also has a large plan for this so I think there will be a proper rollout on this and as I said I can tell you from my current understanding that today I am not currently seeing an issue of whether we can find at that many doses to be delivered to your question is whether we can produce to the requirement that we need to so I do still believe that the requirement currently is far more than what we can make so I think the problem is definitely there that we need to solve for the future but not for the present.

Sameer Baisiwala: Sounds very good, just final one what is the cycle time for drug substance manufacturing?

Sharvil Patel: The drug substance is about four days a batch.

Sameer Baisiwala: It is just four days.

Sharvil Patel: Yes.

Sameer Baisiwala: I thought you are competing drugs are more like 80, 90 days or something like that?

Sharvil Patel: See as I said every technology is different so the good part of the DNA platform technologies that the one batch to come out with a four days cycle so we have two streams and we run two streams and that is why we can run about 18 to 22 batches a month.

Sameer Baisiwala: Got it. Thank you so much.

Moderator: Thank you. The next question is from the line of Ranvir Singh from Sunidhi Securities. Please go ahead.

Ranvir Singh: Thank you for taking my question. Have you given in a timeline when the second dose vaccine related data is to be submitted?

Sharvil Patel: Sorry related to what data?

Ranvir Singh: The two dose vaccine data?

Sharvil Patel: No, I think that discussion we are still going to have in this next one week or so more or less and once we are clear on that we will come back with you with the clear timeline.

Ranvir Singh: Just I think lot of discussions have already been done on it on the three doses vaccine I was just trying to understand that you are competing vaccines have a lesser time duration and process obviously that two doses vaccine so apart from marketing what do you think will incentivize that adolescents or the other population to take this vaccine?

Sharvil Patel: It will be the safety data. It will be efficacy data that has been put out and obviously it is the compliance to deliver this doses which are painless because we have an application which is not needle, which is needle free application which means that most all the vaccines obviously today require a intramuscular injection this is only in intradermal application and as I said I think the one part of the whole trial is that when we complete a 28000 volunteers we did not have a single dropout because of the vaccination, which also talks about the very good safety and low side effect profile of the vaccine which will definitely motivate lot of children to do so, a lot of parents to do so also since it is a needle free application there is a lot of phobia related to that which will be taken away from because of this applications and the third thing is if you look at the current market dynamics between the vaccines while there may be lot of vaccines available there are only two vaccines available in any meaningful quantity out of which probably 80%, 90% of supplies by Serum and rest is by one other company. If you look at the current vaccination timeline you look at the counterview that today our vaccines whether it is just three doses get completed in two months whereas the other vaccine one of the vaccine takes much longer for the completion so I think competitively we are well placed and I am comfortable with where we are on this.

Ranvir Singh: Second aspect is like cost wise because we have a three doses so what is the element we normally discuss with the government while fixing a price so because for three doses obviously others have two doses so first the production of the whole package would be lower for two doses vaccine so can you give some thought on it?

Sharvil Patel: Ours is a three-dose vaccine and with 20 milligrams of dose so that is what we have that is what we will discuss with the government.

Ranvir Singh: Yes, so for example if somebody is taking two doses for example Rs.400 or Rs.500 so their cost of production of the whole package is also lower you have a three doses so the price is likely to be higher than the two doses vaccine this is what I wanted to understand??

Sharvil Patel: I think currently the pricing is decided by per dose and not by the total cost of treatment and we will be a three-dose vaccine so we believe the same principal to follow.

Ranvir Singh: That is it from my side. Thanks a lot.

Moderator: Thank you. The next question is from the line of Surya Patra from Phillip Capital. Please go ahead.

Surya Patra: Thank you for the opportunity. Pardon me if I am repeating a question. I just joined little late. Sir what is the commercial arrangement which the PharmaJet?

Sharvil Patel: It is a partnership that we have done where we have they have committed to us the technology they supply and also the devices and that is already well established so that is my current partnership with them.

Surya Patra: Any sense on the cost side or anything that you can share since it is a kind of a per vaccine cost that is for royalty or some fee that we need to pay or how should we think this association?

Sharvil Patel: It is there is definitely royalty also and some other cost also and they will be supplying us the device also the main pen device so all of that has been entered into an agreement there.

Surya Patra: But is it possible to have a sense like whatever you were price for the vaccine what portion of that will be relating to this?

Sharvil Patel: Not, yet. We do not have that clarity yet because we do not have a decision on pricing yet.

Surya Patra: Secondly, I think you would have obviously commented on your global aspirations for the vaccines but since I think a few months that you have been indicating or even in the recent calls that you had indicated that you have been working with global agencies for this vaccine so what is the global agency that you use to refer to while you talking about it and what is your progress on those fronts?

Sharvil Patel: We just obviously have got the first interim data which we have come out with now so global as that we have interest from two manufacturers who have the capability to produce DNA Plasmid technology on a larger scale and they have shown interest to be partnering for manufacturing of this vaccine and that is the current discussion that are going on.

Surya Patra: The Plasmid Sir is it fair to believe that the technology the DNA platform technology is or rather manufacturing under this technology platform it is a cheapest one compared to all the competing vaccines?

Sharvil Patel: No. It is not cheapest. It depends on which technology and which scale it is at. I do not think that is a very simple answer to say one or the either, but it is definitely a competitive technology and it is scalable also I mean we are trying to being sure it is scalable and obviously it has the benefit of plug and play which is means you can adapt fastly to the variation that happens to the mutant.

Surya Patra: Various scientific reports suggest that definitely it is more cost effective compared to MRNA based technology?

Sharvil Patel: It is definitely more cost effective than the MRNA because the MRNA uses liquid stabilizer program so definitely that but as I said to MRNA yes there is benefit to it but on a general basis that cannot be the answer.

Surya Patra: Even if you think about partnering with others then what is the kind of relationship that you have been set at the complex it was just be the facility will be hired and everything will be done by you or what could be the kind of a relationship that you would be having if you would be thinking about contract manufacturing?

Sharvil Patel: I think that not we are in the very early stages of discussion. At this timing, we are looking at two options one option is where we take the existing technology and produce it at larger scales with some of the manufactures who have shown interest. The second is that there have been a lot of development going on, on the DNA platform so we look at marrying some more scientific capabilities on the platform with some other companies who have done something different and three, if we can create even a superior platform than what has been created so those are the two areas on which we are working with.

Surya Patra: But with the success of the DNA platform that you have seen for your this COVID vaccine are you thinking that okay this could be a kind of a thing that you can be utilized for your some of other vaccine pipeline and possibly this is the steppingstone in establishing your vaccine business as a whole in the global market?

Sharvil Patel: Definitely the whole way the recombinant platform was created and DNA and if you look at early on papers from WHO and even if you look at the FDA they were talking about this technology to be used as for the generation next diseases and for in terms of the new viruses that are out and this definitely has a room to be applied for the Flu vaccine which has also multi-variant vaccine with multiple variants that need to be manufactured so there are

definitely applications possible using this platform for some of the other vaccines also and that also is something that we are discussing obviously it is too early but definitely this platform will I do not think we will limit it to just doing work for COVID but it can be used for other Corona viruses and potentially the flu vaccine as an option and also we look at some of the other diseases where we currently do not have a suitable vaccine for.

Surya Patra: Thank you. Wish you all the best.

Moderator: Thank you. As there are no further questions, I would now like to hand the conference over to Mr. Vishal Gor for closing comments.

Vishal Gor: Thank you. Thank you ladies and gentlemen for joining this call we shall keep you updated about any further development on this front. Have a good day.

Sharvil Patel: Thank you.

Moderator: Thank you. On behalf of Cadila Healthcare Limited that concludes this conference. Thank you for joining us and you may now disconnect your lines.