

CONVERSATIONS WITH MIKE MILKEN



Alex Gorsky

CEO, Johnson & Johnson

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Mike Milken: Alex, thank you for joining us today.

Alex Gorsky: Thanks to you and your entire team to really help educate and keep not only your audience but the world informed and educated about this fast-moving pandemic. It's a really important public service.

Well, Alex, I want to thank you for your leadership. On March 30, J&J and BARDA, the Biomedical Advanced Research and Development Authority, announced a \$1 billion partnership to advance the Janssen vaccine candidate for approval. Tell us about that decision and how is it going to unfold?

What we announced that day reflected likely more than a decade and certainly several months of intense 24/7 work that we've been doing – not only in the area of infectious disease and vaccines – but specifically targeting to see how we can help in the current pandemic against the coronavirus.

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What we announced that day was that we have identified a lead candidate for COVID-19 vaccine. Second, we entered into a landmark billion-dollar partnership with the Biomedical Advanced Research and Development Authority, BARDA, that's really going to allow us to accelerate the testing needed to make sure that this candidate can be effective, can be safe. We expect to start human trials in September.

And then the third thing we announced that was very important is that when this vaccine is tested and validated, we're going to need to manufacture in huge quantities, we are scaling up to produce literally hundreds of millions of doses in the early part of 2021 and up to a billion by the end of next year. And that will be done here in the United States. But we're, we're going to have a number of manufacturing facilities throughout the world to help ensure that people around the globe can get access, assuming all of our testing goes as planned.

Lastly, we announced that, we are going to make sure that this vaccine is affordable and available. That we're doing it on a non for-profit basis. This is a bit of a moonshot for us, and we realized that we've still got a tremendous amount of work to do, but we couldn't be more excited about the prospect.

Alex, I remember on April 15th, 1955, getting my polio shot. That was donated to humanity by Salk. And I just can't thank you enough, not just on the part of the Milken Institute and all our centers, but the citizens of the world for J&J's decision to do this on a nonprofit basis and make it accessible to the entire world's population.

But then, this is not the first time you've done that. I remember, I think it was back in October of 2019 you announced donating a half a million doses of the Ebola vaccine as that outbreak raged in the Congo. What has happened with that and what did you learn from that experience that would give us more hope here?

Well, Michael, that's an important question. As you know from your own experience in working in the biopharmaceutical area, it is indeed a long journey where you can have many tests, some that come out the way that the you anticipated, but oftentimes where there can be failures ... that actually give you perhaps a different path on how you can ultimately be successful.

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And that's certainly been the case with us in our platform. The technology that we're talking about here, we actually acquired more than 10 years ago. Some of our initial intentions and objectives frankly didn't work out the way that we wanted. But we

continued very diligently in thinking how might we be able to apply these in a number of different areas.

As you mentioned, we began testing it with Ebola. We were able to rapidly accelerate a program, and the results have been encouraging. Frankly it's those learnings that it's given us great confidence that for the coronavirus vaccine that the carrier that we're using, the same used for Ebola, that we can hopefully get the same results.

Alex, you spoke about the ability to ramp up manufacturing to hundreds of millions and billions. How do you do that?

To produce the number of doses, we're taking the technology from laboratories that we have in Europe. We're opening a manufacturing facility in the United States. And as part of the earlier technology we acquired, that included some manufacturing capabilities. Rather than as is the case with many vaccines, they may have to be produced in chicken eggs that would have to float on the top of a vat and yield perhaps only one or two doses per egg. That can be a very long, complex, arduous process.

We're using something called the PerC6, which it operates in a much more protein-intensive environment such that literally out of a beaker of about a thousand liters, we can develop hundreds of millions of vaccines.

We're doing much of this at risk. When I say risk [I mean] not knowing how the vaccine's going to work. We've been partnering closely with the FDA, with European authorities, with BARDA, with others, to ensure that we're doing everything to maximize safety through this process, but also doing everything

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we can to shorten the timeline. So if in early 2021 this pandemic is still raging, the FDA and other regulatory authorities would be in a position, hopefully, to consider whether it would be appropriate to approve this for distribution on an emergency basis.

It's amazing how the technology has changed. What about distribution? How do you get it to the people?

This is where partnerships are going to be so important, and why throughout this process we have tried hard to partner with organizations in the United States and Europe that work in the vaccine area as well as with the broader healthcare system to make sure that these could be distributed to the areas where they could make the biggest difference.

“I think when people are truly inspired by that sense of mission – of helping others, of making a difference, of doing something that frankly, they probably couldn't imagine doing on their own, of being part of something bigger than themselves – [it] allows people to just go above and beyond what they ever thought may have been possible.”

So with them we'll be thinking it through. For example, one option could be going to healthcare workers first, the people on the front lines, the heroes in the hospitals right now who are frankly of being overwhelmed with patients. Can we come up with ways to ensure that whether it's a first responder, it's a doctor, or it's a nurse or others? Or are there people in particular areas where we know a “hotspot” has

been identified that we can get these distributed, again on a very efficient and data-based manner to ensure that they're are being used where they're needed most.

Alex, let's talk a little bit about closer to home. You have more than 130,000 employees worldwide. How have you helped keep them safe? What operational changes have you made?

Well, Michael, as you can imagine over the past several months we've been looking at this issue very, very closely. We have a significant presence in China. We have over 10,000 direct employees, close to 100,000 indirect employees and associates that support our different organizations in that country.

When we saw the first signs of the virus, we worked closely with our colleagues in China to see how they were doing in terms of ensuring that we were still getting products to patients, to consumers, the steps that they were taking to protect employees, how they were staying connected with the communities where they worked. That gave us a tremendous amount of insight and I believe in many ways helped us to stay ahead of the curve somewhat as we saw the outbreak spread in the United States.

At Johnson and Johnson, we've always had an aspiration of not only being the world's largest and best healthcare company, but also to be the world's healthiest healthcare company. As such, we have a significant group of physicians and nurses and other healthcare providers who work inside Johnson and Johnson and many of our facilities who not only take care of our employees and their families, but also put a huge focus on wellness and prevention.

By getting them activated, they quickly looked at standards that were being set by organizations like the CDC, like the WHO, and we began applying them internally throughout all of our facilities.

We quickly went to a work-at-home policy. We have that employed on a global basis. We implemented policies where people knew that if they had to take time off to be with their families that they could and that they could still continue to be paid and that they could have their benefits.

One thing that I'm particularly proud of, Michael, we also recently approved a policy – knowing the large number of physicians and healthcare providers that we employ at our different organizations – the ability to take up to 14 weeks of paid leave to work in hospitals as part of this pandemic.

Just this morning I received a very moving letter from one of our physicians who's working in the Bronx. And the very human stories he told of being with those patients who, as you know, right now are without family members.

The saying that they have in that ICU and CCU is *no patient shall die alone*. I think it just exemplifies how the employees can make a difference not only for Johnson and Johnson, but in so many other ways at this really important time for us around the world.

In hearing you speak about that, Alex, I can't help but ask you about your experience. As a West Point graduate and in the army, are there any things you learned that you've been able to apply here at J&J?

Frankly, Michael, I would not be the leader I am today were it not from my experience at West Point and a Lieutenant and Captain in the Army. We're facing such unprecedented times and things are moving so quickly, it's gotta be all hands-on deck, everyone's sleeves rolled up, dealing with the issues that are in front of you in an environment where there can be a lot of ambiguity when you're coordinating across multiple functions, regions, disciplines at one time.

At the same time, you've always gotta be thinking about how are we going to use this to ensure that we're better prepared for that next situation that will undoubtedly come down the road. That's certainly something I brought from the military.

I've been incredibly fortunate to really primarily work for two organizations in my life. The United States Army – our government – and Johnson and Johnson. One was to defend our country and democracy and freedom. In the other case it's about how do we help patients and consumers live longer, healthier, and happier lives.

I think when people are truly inspired by that sense of mission – of helping others, of making a difference, of doing something that frankly, they probably couldn't imagine doing on their own, of being part of something bigger than themselves – that it's incredibly inspiring and allows people to just go above and beyond what they ever thought may have been possible.

Alex, we obviously thank you for your service. As the leading healthcare company in the world, and one of the largest investors in research and development in the world, how do you think this will not only change the world, but change J&J?

All of us are going to come out of this experience changed, likely in fundamental ways. We are always trying to anticipate – particularly in a very integrated, global world that we live in where people can travel across borders seamlessly, where goods are sent around the world before ever arriving at their destination – and making sure that we're putting the same kind of detailed planning, the same kind of resources, the same level of commitment towards public health systems as we have in some of these other infrastructures. I think that's going to be absolutely critical for us as we go forward.

Thank you for spending time with us today, and thank you and J&J for being a role model for the companies in the world as we attempt to deal not only with this crisis, but reorder our priorities. Thank you again for joining us today.

Thank you very much for having me here today, Michael.
