Evotec SE
Transcript of the Conference Call
Q1 2020 results, 14 May 2020 – 2.00 pm CEST

Speakers: Dr Werner Lanthaler (CEO), Dr Cord Dohrmann (CSO), Dr Craig Johnstone (COO), Enno Spillner (CFO)

Presentation

Operator

Dear ladies and gentlemen, welcome to the second conference call [2020] of Evotec SE. At our customer's request, this conference call will be recorded. As a reminder, all participants will be in a listen-only mode. After the presentation, there will be the opportunity to ask questions. If any participant has difficulties at any time hearing the conference, please press * followed by 0 on your telephone for operator assistance. May I now hand you over to Werner Lanthaler, who will lead you through this conference? Please go ahead, Sir.

Werner Lanthaler, Chief Executive Officer

Good afternoon. This is Werner speaking from Hamburg. Great to have you on our call. Welcome to "Q1 2020: Multimodality is More Opportunity" That's the title of this presentation. As always, you can find the supporting slides on the web and I will guide you together with my team through the pages that we will show you and name to you from page to page.

If you go to Page No. 2, you see that I'm here together with my team, our CFO, Enno; our COO, Craig; and our CSO, Cord. We are all back in our offices, in the best of health and fully active for the company, which also reflects the spirit of how we are dealing with the pandemic that is ongoing and fading away slowly, at least in some of the countries where Evotec is operating.

If you go to Page No. 3, yes, there was a COVID-related slowdown and adoption of processes. But overall, the company managed extremely well to get through this crisis. You can assume that at every moment in time, despite the pandemic, more than 90% of our total capacity was able to deliver work for our research and our partners. On top of that, Evotec took a central role in the global fight against the virus, especially by taking over the preclinical repurposing efforts together with more than 26 companies and, for example, the "ACTIV" NIH consortium and the "COVID R&D" leaders consortium. It is fantastic to see how the industry has started to cooperate in these days because we all know that only together we will be able to fight against this virus and many other diseases to come. We are very happy to see that platforms like Evotec are increasingly becoming an essential part of the infrastructure of industry-wide efforts where speed, unbiased research and top quality does not help only one partner, but helps many partners at the same time. So, our vision of the shared economy in R&D is getting more and more visible and COVID is only one example that is highlighting this long-term vision of Evotec.

When you go to Page No. 5 of this presentation, you see that our long-term vision is more relevant than ever before. For our more than 3,000 scientists, research truly never stops as

long as there are more than 6,000 untreatable diseases on this planet. Our big strategic opportunity is right there where we are now. We design and apply innovative technologies and processes across all modalities. Access to the best technologies in all modalities multiplies the effectivity of how we can bring more precise medicine to patients. And this is just the beginning of a new era of how drug discovery and development will be done in the future and it is best illustrated by the fact that even a pandemic cannot really stop us.

Here, a very big thank you to our partners. We did not have a single cancellation of projects in the last two months. And a very, very big thank you to all our employees out there who have done an amazing job in keeping the spirit of "Research never stops" alive more than ever before.

When we come to our Q1, let me highlight a few things. Q1 marks another very strong quarter on multiple fronts. Both segments, Evotec Execute and Innovate performed according to their strategy and are in full swing. Most importantly, you should note that with gene therapy through Evotec GT and with our full commitment to Just – Evotec Biologics, the even further expansion of our iPSC therapy into cells, what we call now *EVO*cells, and with the entry into nanoscience-driven manufacturing technologies, we took multiple steps to make multi-modality more of a reality for our platforms and, with this, to multiply it into the market more than ever before.

When you translate our strategy into our Q1 numbers, you see that Q1 is strong. Strong numbers are a signal that make us comfortably confirm our guidance. And more than EUR 300 million in cash show you that we are in a very strong strategic position. Yes, I think it's fair [to say] that, even despite massive global challenges, we are in a very strong position. And yes, despite macro challenges, we would like to remind you that in 2020, we also have some additional challenges, like, for example, the loss of the Sanofi subsidy from our Toulouse transaction in the year 2015. But we are fully committed to building this company and the infrastructure even further, and that's why we will, for example, make significant CapEx investments in 2020 for building our first J.POD® in Seattle. So I think it's fair to say that we are on a very good track for the full year 2020. And with this, again, we confirm our guidance as given in our full year report.

When you go to Page No. 8 of this presentation, why are we so convinced that multi-modality equals more opportunities? Because creating an innovation platform on all modalities is basically something that the industry hasn't seen in the past. There was over a bias either towards small molecule-driven platforms or biologics platforms. What you can see with Evotec is we are building an opportunity space for our partners and for ourselves that make us more unbiased, and with this, more efficient to bring projects forward.
With this, let me remind you that this is just the beginning of where our platforms will go, and let me thank you for following us. And let us follow Enno into our numbers.

Enno Spillner, Chief Financial Officer

Yes, thank you, Werner. I am happy to take over. A warm welcome to all of you from my end as well, here from Hamburg. And I'm very happy to introduce you to our positive Q1 2020 numbers, confirming that Evotec is well on track compared to what was planned and that Evotec's growth story continues further. Q1 2020 numbers show a good 15% uptick on the revenue line, which is driven by various factors – and I will come back to the details of the revenues on the next page.

R&D expenses grew due to an even stronger commitment with respect to our unpartnered R&D, further investing into innovation, sustainability and long-term value generation here at Evotec. The increase in the SG&A mainly results from increased personnel expenses due to the overall growth, for example, in BD and administration, the first time Q1 addition of Just/J.POD® in the U.S., plus the execution of strategic transactions, such as the Evotec GT establishment in Austria, close to Vienna.

The other operating income experienced two factors, actually. While R&D tax credits increased for the UK and France, we experienced a drop-out of R&D tax credits for Italy due to an envisaged change in regulations, effective retroactively to January 1, 2020, in total both effects resulting in an 8% decrease of our other operating income. Overall, it's also fair to say that we experienced some backwinds with regard to favorable FX rates from USD versus EUR, positively affecting revenues, adjusted EBITDA and net income, obviously. With a total of EUR 30 million, our adjusted EBITDA remained stable against Q1 2019. Evotec's stable EBITDA line versus a growing revenue line is mainly to be seen in the context of the reduced milestone-related and very margin-strong revenues, an increase in R&D as well as SG&A costs, while total tax credits have reduced as just described before.

Let's take a closer look at the development of our top line on Page 11. Group revenues increased by EUR 15.6 million or 15% against last year. This positive performance stems from continued growth of the base business across various fields, and a new and positive Q1 contribution of approximately EUR 7.9 million by Just – Evotec Biologics, also containing some revenue recognition from the successful J.POD®/Merck cash up front, which we received in January of this year, equaling USD 15 million. However, revenues from milestones, licenses and upfront – in total EUR 5.4 million in Q1 2020 – came in lower than in the comparable 2019 quarter, showing EUR 10.8 million. The latter shows once again the volatility among the quarters when comparing milestone revenues, and this is why I also keep reminding you that it's always recommended to compare our milestones on an annual basis.

The weaker Euro-US dollar foreign exchange rate was to Evotec's favor, and also IFRS 15 material charges and adjustments for deliverable projects were also higher than last year. Consequently, the overall gross margin totaled at 27.9%, confirming again a solid base margin but in total, it was 2.6 percentage points below last year. And, again, that's mainly due to lower milestone achievements in Q1 2020. That's new and increased amortization due to the adding of the final purchase price allocation of Just. Other than that, Just.Bio added positively to the gross profit from its ongoing operations.

Looking at the two segments on Page 12, we can confirm that both segments, Execute and Innovate, are doing very well. The Execute revenues, including intersegment revenues, amounted to EUR 118.2 million, increasing from EUR 100.3 million in Q1 2019. External revenues increased by EUR 10.4 million and included EUR 7.9 million from Just and the J.POD® activities. Intersegment revenues increased significantly to EUR 26.3 million due to higher project demand from the Innovate side, investing into new projects and R&D. The Execute gross margin, as per year-to-date March, was 29.3% and thus, basically, stable against last year's 29%. Within R&D, under the Execute segment, you will observe something new, namely some small R&D exposure due to R&D work, which is happening within Just.

The year-to-date 2020 adjusted EBITDA of EUR 35.4 million grew above last year's adjusted EBITDA, among others, supported by the significant increase in intersegment work for the Innovate segment, as just described.

Coming to the Innovate segment, the Innovate revenues year-to-date amounted to EUR 23.3 million, which is 24% above last year, due to higher base revenues, including higher project revenues and added long-term partnerships. On the other side, no upfronts and milestones were reached in this segment in Q1. In addition, Evotec invested significantly into active partnerships to increase the likelihood of achieving further milestones in the future; hence, the margin was low at 4.6% in this segment versus last year's 24.8%. Innovate's R&D amounted to EUR 16.2 million, in line with last year, and SG&A amounted to EUR 3.2 million, which is just slightly above last year. As expected, the adjusted EBITDA was negative, but within the expected range, and amounted to EUR -5.4 million versus last year's EUR -2.3 million.

Slide 13 shall summarize a few KPIs that should reassure you about Evotec's strength during these very special times. And, therefore, I would like to draw your attention to a few non-P&L numbers. The balance sheet total remained very stable at EUR 1.18 billion. Other than some decrease in non-current contract liabilities and some increase in stockholders' equity, none of the balance sheet positions really changed in a significant or considerable amount. Evotec continues to hold a very stable liquidity, as Werner already indicated, of EUR 320 million, which is effectively unchanged from end-of-year 2019, when holding EUR 320.7 million. This is a result of a positive operating cash flow and the received upfront payment of EUR 15 million from Merck, in the context of Just, overcompensating for more than doubling the CapEx to EUR 16.3 million due to investing into our J.POD® facilities, where we are expanding our new J.POD® activities in Seattle.

Evotec's equity ratio remains very solid at 41.4%. And beyond that, Evotec continues to maintain a very conservative net debt ratio of 1.1x adjusted EBITDA, including IFRS 16. Without IFRS 16 considerations, the net debt leverage would even be significantly lower. Overall, this is a very solid balance sheet and a very solid cash position, which makes us feel quite comfortable to continue our business as anticipated. That said, I would like to hand over to Craig for more details from the operational view. Thank you all.

Craig Johnstone, Chief Operating Officer

Thank you, Enno, and good afternoon to everyone on the call. It's a pleasure to take you through some of the highlights of the scientific and operational performance during Q1.

Starting on Page 15, and against the background of a very strong financial performance, which Enno has already described, we've continued to invest in and enhance the Evotec infrastructure, thus continuing on our long-term growth trajectory.

Maintaining the highest quality, modality-agnostic, and best-performing platforms for the benefit of our partners under internal R&D is really central to our strategy. And during this quarter, we've made a number of important steps forward. The most marked example of this is our strategic addition of gene therapy expertise, which I'll come back to in detail in a few minutes. In addition, we have extended existing partnerships and have also added some new strategic collaborations. As an example, during this quarter, Evotec expanded its existing relationship with Amgen through a new agreement, which builds on an existing relationship over many years. Evotec will apply its integrated drug discovery and

development platform to design and evaluate novel drug candidates for Amgen's proprietary development pipeline. The multi-year engagement aims to deliver small-molecule preclinical development candidates and IND-ready molecules. And in the small molecule development arena, we were very pleased to initiate a new partnership with Ildong Pharmaceuticals, a long-established medicines development company in South Korea. Through this partnership, Evotec will provide multiple fully integrated INDiGO campaigns to accelerate Ildong's pipeline build-up of new innovative medicines into the clinic. In only the third quarter since we completed the acquisition, Just – Evotec Biologics is making excellent progress in all respects. We signed an exciting new deal with OncoResponse to develop and manufacture their lead antibody in immuno-oncology. And after period-end, we announced a partnership with Ology Bioservices to identify and bring forward a much needed highly developable antibody to SARS-CoV-2. This is a flagship example of how the combination of our AI-based proprietary platform, Abacus, and state-of-the-art methods in agile flexible development of antibodies, can provide a rapid response to unmet medical needs in anti-infectives, for sure, as well as in other indications.

In terms of further enhancement of the scientific platform at Just – Evotec Biologics, we also disclosed for the first time an AI-based methodology to create human-like or humanoid antibody libraries. The novel concept here is to create an antibody screening library, which is populated with members that are predicted to have highly favorable developability characteristics coded in at source, thus removing costly and unproductive iterations of selection and improvement from the antibody development path and, ultimately, accelerating the entire invention and development process for novel antibody therapeutics.

On Page 16, you can see that we continue to support drug discovery and development partners right across the spectrum of customer types, and with a good blend of scale, of partnership, as well as across geographies. We believe this plan represents and demonstrates our position as a core, central, flexibly accessible platform, which enables all types of organizations around the world to progress their missions for patients. In addition, we believe this spread of coverage improves our resilience through challenging external times, perhaps such as we're witnessing at present.

The Autobahn, on Page 17, represents the fully integrated platform, the highest quality infrastructure on which all our projects and activities run, with Execute and Innovate projects, as well as academic BRIDGEs and other activities. In 2019, we added the line of Biologics to the highway. So we're really delighted once again to add a new line to the Autobahn in Q1, that of the rapidly growing field of gene therapy, making our Autobahn truly multi-modality and opening doors into a whole new range of scientific opportunities for our partners and our internal R&D pipeline.

In all other areas of our business, we fully appreciate the importance of the skills, knowledge, know-how, and experience of our scientists. And so, for our entry into gene therapy research, we've recruited a very experienced, very close-knit team of more than 20 gene therapy researchers with strong combined track record in multiple important indications. At the same time, we further broadened our relationship with Takeda with the initiation of a partnership in gene therapy research. We're excited about the addition of this modality to the platform, and I look forward to expanding the capacity and the technologies available.

On Page 18, we foresee the manufacturing of antibodies will move towards smaller, more flexible, less capital-intensive infrastructures as biologics products become more targeted,

more personalized, and applied in areas of more novel biology. Since the product and the process are so intimately linked, and Just – Evotec Biologics represents a fully integrated vision of biologics discovery and development, we embarked upon the construction of the biologics facility of the future in 2019. And at the beginning of Q1 2020, we announced our partnership with Merck Sharp & Dohme. So, on Page 19, I am really excited to share with you an updated image of the facility in Redmond close to Seattle. Despite the difficulties of COVID-19, the exterior of the building is complete and the work continues apace. So we'll expect this innovative facility to come on line during 2021.

I draw this section to a close by concluding that Evotec Execute continues on the same positive trajectory of recent years. And in the first quarter of 2020, we're really pleased to have created new partnerships with global leaders such as Amgen, Merck and Takeda, as well as other numerous high-quality biotech partners, and to have added gene therapy to our comprehensive capabilities. And I look forward to bringing you news of further alliances and partnerships in due course.

And with that, I hand over the next part of the scientific segment to Cord.

Cord Dohrmann, Chief Scientific Officer

Thank you, Craig, and good afternoon to everybody on the call. It is my great pleasure to report that Evotec Innovate continues to perform according to expectations and even beyond. Once again, Evotec Innovate had a great start in 2020 with revenues of over EUR 23 million. This represents a revenue growth of about 24%, and we achieved this despite significantly lower milestone contributions compared to Q1 in 2019.

Evotec Innovate continues to build enormous financial upside through investments in proprietary drug discovery. These investments form the foundation of strategic partnerships with pharma companies and/or spin-off companies. Both contribute to expanding and broadening our co-owned drug product pipeline, which is shown on the next two slides. As usual, we will not be able to take you through all the achievements, but only mention a few highlights. Most projects continue to make significant progress. And despite selected setbacks, the clinical development pipeline continues to grow and progress, with currently 12 compounds in clinical trials. In 2020, we already reported one new clinical entry through our endometriosis collaboration with Bayer, and we expect to enter at least one additional program into the clinic. This program is a therapeutic and potentially prophylactic antibody directed against Chikungunya virus. The clinical trial will be financed and co-managed by NIH. The NIH will take over sponsorship and the trial will be conducted by Duke University. The trial is expected to start in the second half of 2020, barring any unforeseen delays due to the corona crisis.

Just briefly on the next page, I'm coming to our discovery stage pipeline. As far as our discovery's pipeline is concerned, we also made significant progress on multiple fronts. The most significant development in Q1 2020 is, however, that Evotec regained the rights to a highly promising beta cell replacement therapy program for the treatment of diabetes. As you can see on Page 23, we pursued this project in partnership with Sanofi since 2015. The program continuously made progress since then, as documented through various milestone achievements, which were all associated with significant milestone payments. The most significant technical milestone was achieved in December 2019 when we achieved preclinical proof-of-concept with iPSC-derived human beta cells in diabetic animal models.

An example of a key experiment to achieve the milestone is shown on Page 24. In this experiment, diabetic mice were transplanted with a device containing either iPSC-derived human beta cells or a control device. Animals transplanted with a control device exhibited extensive hyperglycaemia, that is to say very high blood glucose levels, which ultimately meant that these animals were in such poor health that they needed to be sacrificed during the course of the experiment. In stark contrast, animals transplanted with a device containing iPSC-derived human beta cells did not only survive, but exhibited blood glucose levels that were completely normalized within a few weeks after transplantation. Normal blood glucose levels were subsequently maintained for an extended period of time, as you can see with the red line. Furthermore, the maintenance of normal blood glucose levels was accompanied by matching human insulin levels that stem from the transplant circulating in the bloodstream. The fact that this type and extent of normalization of blood glucose levels is possible in diabetic animals is very encouraging. It indicates that beta cell therapy treatments based on human iPSC- derived beta cells in human patients is highly promising and a potentially curative treatment approach for diabetic patients. Such a therapy would represent a paradigm shift for insulin-dependent diabetic patients, as it clearly has many advantages over currently available insulin therapies.

The advantages are summarized on Page 25. Daily insulin treatments are not only a significant burden for patients but are clearly not sufficient to maintain optimal blood glucose levels, and therefore, they do not avoid the development of diabetic complications such as retinol, kidney and nerve damage. A beta cell implant is expected to approach a cure, as it should adequately maintain blood glucose levels and thus avoid the development of diabetic complications. Furthermore, there would be no more need for testing of blood glucose levels on a daily basis or multiple insulin injections multiple times a day.
I'm moving on to Page 26. For all of these reasons, beta cell therapy has the potential to become a new standard of therapy for insulin-dependent diabetic patients. Actually, the clinical proof-of-concept has been established many years ago through what is generally referred to as the Edmonton protocol. The Edmonton protocol refers to the transplantation of cadaveric human beta cell islets, which overall were highly effective. Unfortunately, similar to the situation with other organ transplants, there are not enough cadaveric human islets available for transplantation in a broader patient population. iPSC-derived human beta cells could become an endless source of human beta cells and thus a possible treatment for all diabetics currently depending on insulin therapy.

Evotec's beta cell therapy program is ready to move into IND-enabling studies based on extensive characterization in vitro and in vivo. We intend to move this program forward, but believe that the opportunity will not be limited to a single product, but ultimately, a pipeline of products with incremental improvements. Probably one of the most anticipated improvements will be moving from a device that shields the transplant itself from destruction by the immune system to iPSC-derived beta cells, which can be transplanted without a device. There are two major concerns with the direct transplantation of stem cell-derived beta cells. First of all, they would most likely be immediately attacked by the immune system. In particular, this would be the case in type 1 diabetic patients, which suffer from an autoimmune disease. And secondly, they would not be retrievable in case they would lead to a tumor formation. Although it is still early days, compelling technologies have been developed that are likely to address both concerns. To access these kinds of technologies, we entered into a licensing agreement with panCELLa, which is shown on Page 27.

panCELLa is a company specialized in developing cell cloaking technology, which protects cells from immune-mediated destruction, but also safety switches, which enable the drug-induced killing of cells that have been transplanted. panCELLa is developing GMP-compliant iPSC lines, which contain cloaking technology or clear switches or both. Evotec licenses these cell lines in order to be able to not only develop a first-generation beta cell device, but also the next-generation of devices with beta cells, which are protected from the immune system via a cloaking technology and also contain kill switches as a safety measure. Finally, I just want to remind everybody that this project has potential to disrupt one of the largest health care markets in our industry. The insulin market alone generated about EUR 20 billion annual sales in 2018. It is predicted that there will be around 578 million diabetes patients in 2030, out of which about 90% are type 2 diabetic patients who eventually progress to insulin dependency and insulin injections.

With our CureBeta initiative, we intend to build beta cell therapy-focused initiatives, that is, we are positioned to become a leader in a highly competitive field. CureBeta has access to what we believe is the world's leading platform in developing highly functional beta cells and possibly islets. We have secured access to leading technology to be able to develop deviceless beta cell transplants. And finally, through our biologics entity, Just – Evotec Biologics, we have access to leading manufacturing infrastructure, which will be instrumental to bring a beta cell therapy product to market.

Before I end, just a very brief update on our equity participations on Page 29. One of our portfolio companies, Forge, entered into a research and option agreement with Roche to license one of its novel antibiotics for the treatment of hospital-acquired lung infections. Similar to most of our equity holdings, Evotec not only holds an equity stake in Forge, but Evotec was operationally very involved in running the program and most likely will continue to be involved and to option exercise. Forge is eligible to receive over EUR 190 million in total payments and potentially sales-based milestones and royalties upon commercialization of the program. Another portfolio company, Exscientia, entered into a major deal with Bayer. Exscientia will use its artificial intelligence platform to develop projects in cardiovascular disease and oncology. The total deal value is up to EUR 240 million, including upfront and research payments, as well as clinical milestones and potential royalties. In January, Evotec participated in a further financing round of Fibrocor. Fibrocor and Galapagos signed an expanded collaboration in fibrosis. Galapagos made an upfront payment and committed to option fees, milestones and royalties on any programs coming out of this collaboration. And finally, we made a new participation in panCELLa, as mentioned before, as well as in leon-nanodrugs.

With this, I would like to thank you for your attention and will hand back to Werner.

Werner Lanthaler, Chief Executive Officer

Thank you so much. If you move to Page 31 of this presentation, let me just remind you: at the end, it's people. People are at the forefront of our strategy, and talent management is most critical within our leadership philosophy and our long-term vision. Outstanding competencies and long-term experiences, blended with top academic talent, are a fantastic framework for our long-term talent management. In this spirit, we have continued to recruit, also in the last three months, exceptional talent. And let me highlight here just a few more senior leaders that we have hired, where we basically show big commitments to fields that we want to create and make even stronger within Evotec. Friedrich Scheiflinger is a person who is super experienced in gene therapy. And by the way, never call him

Friedrich because the whole world only knows him as Fritz. Markus Dangl will lead our oncology efforts and especially, also, our cell therapy efforts in oncology. And Volker Braun will lead our ESG and also Investor Relations activities, which also shows that the long-term transparency and ESG commitments of Evotec will not be reduced, but be further strengthened going forward.

When you look at the company on Page 32, it is important that we acknowledge that, currently, times are highly volatile, but in volatile times, we have managed to keep our long-term strategy fully on track. We have been able to show that our guidance remains fully on track. With this, again, we confirm our guidance of 2020 of EUR 440–480 million in revenues, of about EUR 100–120 million in EBITDA, and of staying fully committed to our unpartnered R&D, which is about EUR 40 million planned for this year. We, of course, will continue to closely monitor all further developments and are aware of the volatility that is out there in the market, but we see ourselves in a very strong position going forward. When you go to Page 33, let me just invite you to continue to follow us. And let me stress that we are very sorry that our Annual General Meeting this time has to be virtual because it is important for us to have the contact with our shareholders, not only online or via telephones, but also in the direct, in-person contact that we have typically at our AGMs. But this year, we have to switch to a virtual event and have uploaded already the invitation for that and invite you to participate in that event together with us. On that note, let me thank you, let me invite you for questions, and let me stress my gratitude to my team and to you, as our shareholders. Thank you so much.

Q&A

Operator

Thank you. Ladies and gentlemen, if you wish to ask a question, please press 01 now to enter the queue. [operator instructions]. Our first question is from the line of Ram Selvaraju from H.C. Wainwright. Please go ahead.

Boobalan Pachaiyappan, Analyst H.C. Wainwright

Hi, this is Boobalan dialing in for Ram Selvaraju. I have three questions. So the first one is: How did COVID-19 affect your day-to-day operation during the first quarter, as stringent social distancing measures came in effect? And at what capacity did your key plants operate during peak time? And maybe you can comment a little bit on when you expect to run in full capacity.

So that was the first question about COVID-19. The second one was about your collaboration with Ology Bioservices for the development of monoclonal antibodies against SARS-CoV-2. So assuming this collaboration is successful, when would you expect the investigational agent to go into the clinic? And also if you can comment on any variability in terms of frequency observed so far in the number of convalescing patients that would be helpful. That would be the second one.

And the third question is about vaccine development. I'm just curious whether you are in talk with biotech companies for possible COVID-19 vaccine development? Maybe you can comment on whether you have any modality in mind. For instance BioNTech is pursuing

mRNA vaccine. So we are just curious, what are the efforts you're taking in terms of COVID-19 vaccine development? Thank you.

Werner Lanthaler, Chief Executive Officer

Thank you for your questions. So the first on our COVID capacity, we have, at every moment in time, been operational. That's the first answer. The second answer is that at every moment in time, we have been operational at more than 90% of our total capacity. And we are, since weeks already, on the way back to normal. But, of course, we have established, following national guidelines, all necessities to also comply with, for example, social distancing activities that have to be taken. And just to give you one example, we have on all platforms shifted to lower-density work in the lab, which, for example, was possible by introducing shift work on some of our platforms. So with this, Evotec has been following all guidelines, stayed safe and has to again, thank its great employees [for the fact] that we have been able to perform so well in this time, and will continue to do so.

On your second question on the COVID-19 antibody, I have to apologize, but it is our policy that without the permission of our partners, we don't give out technical information, and we don't give out also timelines. But I can assure you that there is highest priority and full alertness to push an agent like this forward into the clinic as soon as possible. And I can also assure you that these efforts are fully supported by the regulatory authorities at this stage.

The third point on vaccines: Evotec is fully multi-modality equipped, with the exception of one modality, which are vaccines. And here, I can give you from my past the full comfort that, at this stage, the world outside of Evotec is using multiple vaccine approaches from mRNA technologies, to measles platforms, to viral vector platforms, to construct vaccines in the COVID-19 scenarios, and you will see many of them in the clinic very soon. So that's also why we don't think a, quote unquote, "COVID-associated rush" into that mobility would strategically, for us, be the right thing to do. But there are great companies out there who will bring vaccines to the infectious disease market very soon.

Operator

Thank you. The next question we have is from Victoria English, Evernow Publishing Ltd. Please go ahead.

Victoria English, Co-founder and editor Evernow Publishing Ltd.

Yes, good afternoon or good morning. I'm just going back to Werner's opening remarks about multi-modal. And I think he was referring to the fact that Evotec has many different types of technologies and platforms that you can now apply to your own portfolio and to others. But are you also thinking about individual products that might be multi-modal? I'm wondering, in the case of the beta cell project, whether that doesn't involve more than one technology.

Werner Lanthaler, Chief Executive Officer

Hello Victoria, very good question. I think the main reason why we have such an appreciation for this multi-modality approach is that today, very often, in the early stage of discovery, you are following not only, for example, a small-molecule approach or a biologics

approach or a gene therapy approach, or a cell therapy approach; you are following several approaches in parallel to then decide on an unbiased note, at a certain gate during the discovery process, which of the modalities now shows the biggest promise to continue with, going forward. And I think, here, being able to offer all technologies and all modalities at the same time, for all product types, enables you, for example, in the beta cell space, to go forward with the cell therapy. And, at the same time, you can, in parallel, also evaluate other technologies if you want to go forward in treating type 1 and type 2 diabetes.
So it's exactly this unbiased approach that enables us, in our Innovate segment, but also our partners, to become multiple-modality-driven. And if you do this in early discovery, the costs are only incremental and the speed to compare this is very fast. And if you would always have to jump from one platform to another, you can imagine it becomes highly complex, and that's why no one is almost able to do that. And that's where, again, the benefit of this platform is there for multiple partners.

Operator

The next question we have is from the line of Naresh Chouhan from Intron Health. Please go ahead.

Naresh Chouhan, Analyst Intron Health

Hi, there. Thanks for taking my question. A couple, please. One on financials and a couple on Just.Bio, and one in gene therapy. On the financials, can you give us some sense of the risk of milestones from the studies that don't progress as anticipated through the year, and therefore, milestones that you may not receive and that you anticipate to receive? Would you be able to quantify, in some way, the milestones that are baked into the guidance that may be at risk from studies that don't progress?

Then, a couple on Just.Bio. Firstly, how strategic do you view this crisis in making Just more valuable? And what have you learned over the last few months that perhaps you wouldn't have known were it not for this crisis? Simply given that you may be invited to be involved in pandemic preparedness, with your affiliation with Bill and Melinda Gates – that kind of thing. So, I'm just trying to understand what the upside may be for Just because of future pandemic preparedness work?

And then, secondly, now that you might have a better idea of the kind of manufacturing output of the J.POD®, can you give us some sense as to how much it can produce? So either in equivalent liters, if you would use a perfusion bioreactor or kilograms of an average antibody produced through the year? I'm just trying to get a sense of what you can actually get out of that first J.POD®.

And then, lastly, on the gene therapy build-up, can you also help us understand how you manufacture this? What vector or vectors are you using? And can the Just infrastructure be used to manufacture it? Or should we assume even further CapEx expansion over the coming years? Thanks.

Werner Lanthaler, Chief Executive Officer

I think I'll take the first question on the milestones, and I'll then defer to Craig on the biologics question, and the J.POD® question, especially. So on milestones, you should see, as a general principle that we look at a whole portfolio of potential milestones every year.

Many of them are preclinical and discovery stage; only a small proportion of them are clinical. And of course, many clinical trials currently are on hold or are not going forward. These, of course, are milestones that currently cannot be cashed in because our partners are not moving forward. I would say the total proportion of that is small, but there is one important clinical trial that we hope will progress forward very soon again. This is all trials on P2X3, for which we have partnered together with Bayer. And here, we know that Bayer is fully preparing to start these trials once it is possible under the COVID scenario. So we don't expect larger delays here because this was anyways planned for the middle of 2020.

On the preclinical milestones, here, you should see that a lot of the preclinical work, as is currently happening on our platforms, is not fully affected by COVID. So therefore, through COVID, the delay of milestones is, I would say, low. The bigger risk to milestones is always the biology, yes? Whether the biology works or doesn't work, and that's something which we have as a risk from quarter to quarter, from year to year. And that's basically unchanged. And how much have we baked into our guidance from milestones? If you assume a similar level of milestones over the average of the last few years, then you are very close to what we have in our guidance at this stage for milestones.

On how strategic our move into biologics was, I think it's fair to fair to say that we have been planning for a strategic move into biologics for the last years already because we see so many macro trends that are pointing into that. And I think that the timing was good by doing this two years ago. I think we are also very happy and see all these macro trends confirmed now. And it will be even more confirmed, for example by the product that Cord mentioned in his presentation, by building a chikungunya antibody, which, of course, will be manufactured at our J.POD®. And here, we also have a product, which is there for preparedness, but also for therapeutic use, and that's something which will apply to many products in the future.

For the more technical questions and capacity questions and cost questions, I hand over to Craig.

Craig Johnstone, Chief Operating Officer

Okay, thanks for the questions. I'll try and make sure I cover them all. One of the questions you asked at the beginning was whether the COVID crisis has made the upside of Just – Evotec Biologics more recognizable. I'd like to highlight that Jim Thomas, our Head of Evotec Biologics and the founder of Just was actually, already, a very prominent thought leader in this field. And actually, one of the bases of the founding of Just was to create a rapid response to infectious agents. So, it's actually built into their vision that the way of working, the very horizontal, very agile, very flexible infrastructure that they wanted to create actually had in mind, right at the beginning of the concept, that rapid response to infections or other dramatic outbreaks would be very, very advantageous. And Jim himself was involved in advising on Ebola and things in his past. And there's actually quite an interesting blog called the Timmerman report, where he recently represented how a rapid and flexible biologics manufacturer fits right into the heart of rapid response.

In terms of capacity: in the spirit of an agile and flexible manufacturer, what we're building in Redmond close to Seattle is an infrastructure that will allow multiple trains or production channels, if you like, to be deployed on a modular basis. So, we expect that there will be a ramp-up as demand comes, and then we will be able to scale out the facility and fit-out the facility over time. Obviously, giving you a sense of output of the full factory by kilogram

indicators is difficult because each individual product will have different yields. And obviously, one of the aims of our technology is to enhance the yields that are able to be extracted from ever decreasingly small volumes, so as to leverage minimum footprint and maximum yield. But what I can say is that we are constructing the infrastructure to be able to accommodate six parallel trains or run environments for antibodies manufacture. I hope that covers your question.

Naresh Chouhan, Analyst Intron Health

Can I just ask on that, if you were to think about the manufacturing capacity of, let's say, a single train or single reactor, in the context of what you might get out of the perfusion or similar size perfusion environment, how should we think about it? How much more efficient is it? I appreciate it's not easy to do per kilogram, but maybe on a per liter basis, I don't know? Some sort of metric. You must have some idea of how much more efficient it is relative to the industry standard or the kind of best that we can see in this. I'm just trying to understand how much better it is.

Craig Johnstone, Chief Operating Officer

Yes. There are many steps in the technological advances that give rise to the efficiencies. And one of them I've just mentioned about footprint, the flexibility, the rapid changeovers from one train to another for different products. And all of those contribute to a much, much more efficient overall infrastructure, as well as technical advances in trying to enhance yield, which is product-dependent. So it's not very easy to give you a general answer, I'm afraid. But we feel that the technologies, when knitted all together, make a major advance in the overall efficiency and the flexibility – that's really a very key feature – of the capabilities and the infrastructure we're building.

Werner Lanthaler, Chief Executive Officer

It just starts with 30%.

Naresh Chouhan, Analyst

Thank you. And on the gene therapy side?

Craig Johnstone, Chief Operating Officer

On the gene therapy side, the team is very much discovery-orientated and we are building up the team, the lab – it's a new lab, so we're bringing the new lab online as we speak – and validating the assets and the technologies. The technologies that will be available to use are also dependent on the nature of the contract and the work that comes from partners, but we're also looking at investing in really cutting-edge technologies and academic partnerships to enhance and really bring further innovation to this field.

And then your final question was, is there synergy with Just? And I think the answer is, clearly, yes. We've built a facility in Seattle, which is very flexible. A lot of the knowledge is transferable; not just the antibodies, but other biological modalities for treatments.

Werner Lanthaler, Chief Executive Officer

So here, for example, the key synergy that we see is into cell therapy manufacturing. And that's, of course, where the story comes together so beautifully: when you have a beta cell project in diabetes and you have a cell therapy capability to manufacture. And also here, in oncology, you will see that in cell therapy manufacturing for oncology, the Just synergy will be really very beautiful for our partners.

Operator

The next question we have is from Joseph Hedden from Rx Securities. Please go ahead sir.

Joseph Hedden, Analyst Rx Securities

Hi there, thanks for taking my questions. Just on R&D for Just – Evotec Biologics. We see the initial spend coming in there. I'm just trying to get a guide for what that might be over this year and next year, as activities start to ramp up. And then staying with Just, the milestones coming from Takeda, what can we expect the first one to be? Is that tied to the completion of the facility? And can you guide us to the magnitude of that? Thanks.

Werner Lanthaler, Chief Executive Officer

So, on your second question, it's not Takeda. It's actually Merck Sharp & Dohme who is our partner on the facility there. And the magnitude of these milestones are single-digit milestones. And they are attached to, yes, constructions, completion of construction, regulatory validation and then, of course, product runs. We don't assume timelines, at this stage, that we want to give you, but that's all on track. I think that's the good news here. And our R&D for Just within the Execute segment, I think here, that will be a small number. I'm handing over to Enno for a moment.

Enno Spillner, Chief Financial Officer

Yes. This will not be a very significant amount. It should be in the range of EUR 3–5 million per annum and a rather stable amount, not significantly increasing. I was just mentioning it because it may cause some questions as to why there's R&D all of a sudden in that segment.

Werner Lanthaler, Chief Executive Officer

But also here, I want to highlight that, for example, the effort that has been put into HAL – so, our humanoid antibody library – is amazing. And that's, of course, the first platform R&D that has to be spent. And we will continue by basically disrupting the platform into next-generation technologies, to take the freedom and also do this on the platform, where appropriate. But of course, all the initiatives that we have ongoing where we spend R&D are prioritized. And, as you can see in the Innovate portfolio and also in others, there is a lot and there's high competition for R&D money. That's why only the best projects ultimately make it to get access to R&D funding.

Operator

Thank you. At the moment there's no further questions in queue. [Operator Instructions] There will be a short pause.

Werner Lanthaler, Chief Executive Officer

If there are no further questions, let me thank you again. Let me invite you to reach out to us directly, if you have further questions, via all channels that are available. And let me again invite you to follow us into our virtual AGM and then, from quarter-to-quarter, because Evotec is just at the beginning. Thank you so much.