Evotec AG
Transcript of the Conference Call
Drug discovery collaboration in neurodegenerative diseases with Celgene, 16 December 2016 – 02.00 pm CET

Speakers: Dr Werner Lanthaler (CEO), Dr Cord Dohrmann (CSO)

Operator

Dear Ladies and Gentlemen, welcome to the conference call of Evotec AG. At our customer's request this conference will be recorded. As a reminder all participants will be in a listen-only mode. After the presentation there will be an opportunity to ask questions. If any participant has difficulty hearing the conference, the star key (*) followed by "0" on your telephone for operator assistance. May I now hand you over to Dr Lanthaler who will start today's conference. Please go ahead, sir.

Werner Lanthaler

Thank you very much. Good afternoon Ladies and Gentlemen. This is Werner Lanthaler speaking from Evotec together with my colleague Cord Dohrmann, the Chief Scientific Officer of Evotec. Thank you for dialling into this call. We understand for many of you it is close before Christmas and it is a difficult topic and today we will be talking about induced pluripotent stem cells ("iPSC").

Having said that we are very happy that we were able to announce yesterday night the first paradigm shifting deal in this field in neurodegeneration together with Celgene and we took this as an opportunity to introduce a bit better into the scene that we are working on here at Evotec. We have uploaded a presentation before this call and I hope you were able to access this presentation, otherwise it is available on the website of Evotec. When you look at this presentation you want to be very careful using words like paradigm shift. Having said that we truly believe that it is appropriate to use this term paradigm shift in the context of what we are currently pursuing with induced pluripotent stem cells. There is a paradigm shift ongoing in the industry where we want to have more rational drug design into the future. Induced pluripotent stem cells is one of the keys that is available now to come to the discovery of the future and that is the mission of Evotec to lead this field. Joining forces with Celgene is of course fantastic for us and that is the point where I want to hand over to Cord Dohrmann who will bring you into the context and content of what we are doing with induced pluripotent stem cells. Thank you so much.

Cord Dohrmann

Thank you Werner and thank you all for joining this call. I will try to take you through the presentation starting on page 4. As we are all part of the pharmaceutical industry it is our goal to create new medicines that will impact the life of patients in fundamental ways. Certain diseases that used to be untreatable until recently and are now treatable and are turning into chronic diseases. And in some cases novel treatments even approach a cure. Although these are fantastic news to everybody involved and for the society as a whole, it also creates new challenges in the industry. The first side of these exciting developments is that treatment standards in many areas have improved significantly and it is getting increasingly difficult to develop the next generation of improved medicines. Due to these developments, average costs of a single new drug are constantly increasing and according to the latest estimates have now reached $ 2.5 bn. At the same time average peak sales are steadily declining since new drugs tend to serve smaller, better defined patient populations. To effectively address these two key trends in the industry, R&D productivity has to improve significantly. Improving R&D productivity really means that we really have to increase the likelihood that each individual for

each R&D project that we start needs to have a higher chance to succeed. This means that relevance for human disease needs to be diligently checked as early as possible, but also competitiveness of each approach compared with other alternatives should be checked as early as possible and as diligently as possible. Although all of this seems rather obvious and I guess quite clear, there are many areas of drug discovery, and testing of human disease relevance and competitiveness of a drug really happens quite late in the process. And this is really due to the fact that pre-clinical models are very often limited in translational and predicted value. This leaves drug developers exposed to huge financial risks in clinical development.

On page 5 you can see to counter these trends in the industry and to improve R&D productivity many efforts have been made to introduce more patient-centric approaches into the drug discovery process. According to recent studies, these efforts are starting to bear fruits, for example projects which are based on targets which are supported by human genetics are twice as likely to succeed as projects without this support of human genetics. Similarly, projects that involve a biomarker basis stratification strategy are about three times as likely to lead to positive clinical outcomes. Today we want to talk about Evotec's efforts to incorporate patient-derived disease models into drug screening and drug development to test human disease relevance as early as possible in the drug discovery process. Patient-derived disease models represent a tremendous opportunity to systematically incorporate human genetics and patient stratification strategies into the drug discovery process right from the start and then continuously throughout development. The benefits of introducing patient derived cellular models as a critical component and filter to select and advance only the most promising projects and compounds is clear to pretty much everybody in the industry. However, there have been very significant technical hurdles that need to be addressed in order to integrate these models effectively into drug discovery and development.

On the next page, page 6, you can see the platform that was established at Evotec over the last few years. In the past few years at Evotec, we have been working on building a unique drug discovery platform that is based on patient-derived disease models using induced pluripotent stem cell technology. We have made exciting progress in building this platform. Specifically, we have managed to seamlessly incorporate patient-derived induced stem cell technology into Evotec's already existing platforms. Key components of this stem cell platform are continuous quality control processes to select the newest only highest quality cell lines, an industrial process to expand and bank these lines and a scale-up process and processes highest quality mature disease relevant cell types. The scale-up to generate the highest quality mature cell types from induced pluripotent stem cell types that are suitable for high-content screening is probably the most challenging aspect here and we have invested a lot of time and effort to make this work. Evotec by now has established this patient-derived disease model platform and has incorporated it successfully into this world-leading phenotypic screening. Before we come to more to the specifics of this technology platform, I would like to just spend a few words about the technologies that are required to make all of this possible and to make all of this work. The key technologies that are needed to be combined are shown on page 7.

Building a high-quality patient-derived disease model platform requires significantly than more than just access to pluripotent stem cell technology. In reality it is a combination and an integration of many key technologies that have been developed over the past few years. The centrepiece of this are of course the human iPS cells. However, traditional components and in particular gene editing steadily improving capabilities in high-content screening and image analysis as well as cellular and molecular analysis tools involving the genome transcriptome and proteome and are all very crucial components. All of these components are required to not only model disease, but to really understand the path of physiological drivers of disease processes and ultimately to devise effective disease-relevant screening campaign. And this is what we are doing at Evotec.

When it comes to iPS cell technology it is basically impossible not to mention Shinya Yamanaka. Here continue on page 9. In this context I would like to quote Isaac Newton who supposedly said "If I have seen further, it is by standing on the shoulders of giants". Shinya Yamanaka is certainly such a giant, as his discovery of the semantics of human cells can be turned into induced pluripotent stem cells that can then be replicated indefinitely has been revolutionary for the life sciences in general and subsequently has been on real to continue the life sciences industry. As his original work has been

published already in 2007 one could argue that it has taken quite some time to really have an impact here, but it is very clear that the promise of iPS cell technology to forever change the way science and medicine is conducted is felt more forcefully all over the place and is appreciated more than ever. Of course, at Evotec, we have not invented iPS cell technology or gene editing or any of the other technologies. We are simply trying to stand on the shoulders of these giants to see a bit further and hopefully create big new approaches to very challenging diseases.

There are two key opportunities when we talk about iPS cell technologies which are depicted on page 10. When we talk about iPS cell technology the people mostly associate cell-based therapy with this technology. Cell-based therapies intend to use cells itself as the therapeutic principle with the goal to replace missing or dysfunctional cell types in the body. One example for this are ongoing in the field of diabetes in the field where lesser functioning insulin cells, so called beta cells, are ultimately respond for the disease. The goal is to make new human beta cells in culture and then to transplant them into diabetic patients to render daily blood glucose measurements and make insulin injections superfluous. Beyond cell therapy, iPS cell technology as a tool to support traditional drug discovery holds just as much promise, maybe even more. In drug discovery, they are forming the basis of a new area of small and large molecular drug discovery. IPS cell technology is expected to deliver patient-derived disease models that are more predictive human disease relevance. They allow the modelling of human disease processes in culture and they will enable the implementation of patient stratifications and strategies in disease areas where this has not been possible before.

On page 11, I just want to go back and describe what iPSC technology really is. So very briefly, you can see the process on slide 11 and how iPS cells are derived from patients and then applied to the drug discovery process to identify the candidates. Very briefly stem cells from a specific patient are turned into induced pluripotent stem cells through the introduction of four key genes. These cells can then be expanded indefinitely and turned essentially in any disease-relevant cell type. And these differentiated cell types can then be used for drug screening and ultimately also for patient stratification strategies. Although all of this may sound fairly simple and straightforward the real tricky part of the process lies in many details that pose really difficult technical challenges. In particular, it is very challenging to carry out all of these experiments and workflows at an industrial scale and a robustness that is really suitable for the work discovery process. Incorporating iPS cell technology to the traditional drug discovery process really represents a paradigm shift which is shown on page 12.

Rigorous testing of disease relevance at the very start of a project really represents a tremendous opportunity to only select for only the best projects. This is very much in contrast to the traditional paradigm which often relies on modern animal models to test for disease relevance and these models have been proven to be questionable or of questionable predicted value for clinical efficacy and thus human relevance. And in many disease areas this is really only during Phase II clinical trials that we really test the disease relevance in the human system. In the field of CNS disease see our prime examples. The use of patient-derived disease models is expected to be a more rigorous filter of disease relevance than previously available cell-based and animal models and thus patient-derived disease models are expected to separate the wheat from the chaff early on the process and beyond will enable the implementation of patient stratification strategies matching each drug candidate with the most suitable patient population during the clinical development process.

On page 13 you can see the areas where we have been particularly active. At Evotec, we have initially focused on building a comprehensive platform covering CNS disease-relevant disease models. We are approaching this in a very systematic fashion by establishing a platform that represents the most important neuronal cell types such as motor neurons, cortical neurons, dopaminergic neurons and also microglia. Beyond this we are also active in other areas, but this is not the topic of today's call. On slide 14 you see a picture of patient-derived human neurons. These patient-derived human neurons do not only express all key markers that you would expect to see in functional human neurons, they also form beautiful neuronal networks and most importantly, they are functionally active. By functionally active we mean that essentially every single neuron in this picture is electro-physiologically active and can respond to pharmacological cues. But this is really not the whole story here. In this picture, you are also looking at patient-derived neurons which look phenotypically normal and are essentially indistinguishable from neurons which are taken from healthy subjects. However,

on a molecular and functional level, the disease neurons, the disease has already taken hold and this can be measured in changes in gene expression and changes in an electrophysiological pattern, making these patient-derived neurons very different from the ones that were derived from healthy patients, from healthy people. So, some of you may think that this is not really great news or is really old news as this has already been demonstrated and published by world-leading academic laboratories and here, in particular, I should mention our collaborators Kevin Eggan and Lee Rubin at Harvard University who have been trail blazers in this field. However, at Evotec, we have optimised and industrialised the process in terms of scale and robustness that now allow us to screen against these disease phenotypes with a goal to identify drug candidates that specifically correct these aberrations. So, it is important to understand that this picture has actually been taken from a single well of a 384-well screening plate. If we were to show you pictures of all the other 383 wells on this screening plate they would look exactly the same and they would not only look exactly the same on this screening plate, but also on the next screening plate, and on the screening plates that have been prepared over the following weeks or the following months. And this is really what we mean by industrialising the process.

On slide 15 we demonstrate just a couple of points I already made. At Evotec, we have established an industrial process to generate patient-derived neurons in 384-well format that allow the screening of small molecules but also large molecule libraries. The process is highly robust in terms of inter and intra plate variability and also in terms of day-to-day variability and is carried out in a semi-automated fashion. And the experience you see here that a list of 1 to 15 is just really an example of many more experiments that have been carried out for these models and have been proven to be highly robust and reproducible. Now on slide 16 you can see that we cannot only make these cells, but that we can work and incorporate these cells into a very robust screening process. A key assay performance indicator are that prime factors. The prime factor is a measure of physical effect size to judge whether a response in an assay is a sufficiently large to want further investigation and attention. The prime factors can lie anywhere between 0 and 1. The factor of 1 would be ideal, but it is usually never reached. And a prime factor of 0 on the other hand, of course, means that the assay is essentially useless. Generally, if that prima value is below 0.5 it is viewed as marginal assay and a prime factor between 0.5 and 1.0 is viewed as excellent. When it comes to cell-based assays as in the case of iPS cell-based assays the prime value around 0.8 is very close to perfection and considering the highly complex assay protocols that we need to go through with iPS cells these, the prime wells are really unprecedented. So in brief, for all the people that I may have lost now in the excursions to prime wells in terms of assay performance, our iPS cell-based screening platform is maybe equivalent to a Ferrari or any other high-performance formula one race cars and we can be extremely proud of this.

Finally on the next slide there are very important aspects about Evotec's iPSC-based screening platform is that our processes are generally applicable to cells derived from very different patients but also healthy subjects. That is indeed the case as is shown on this slide where you are looking at cell lines derived from various patients, but also from healthy people. So why is this really important? From beyond the initial screening and profiling stage of a drug discovery project patient-derived disease models hold the promise of being able to contact essentially a clinical trial in a dish even before you enter the clinic. This will allow us to match drug candidates with very specific patient population which can then be stratified on the basis of genetic markers. The concept is once again depicted on page 18. In many disease areas, but especially the general diseases, patient stratification strategies are very hard to come by. Being able to test already in the pre-clinical setting which drug candidate is most effective in which patient population could significantly increase the likelihood of successful clinical development by filtering out patients early on that will not or most likely not respond to drug candidates. It would also potentially reduce the need to larger clinical trials as one would be able to focus on patient populations and really have a chance to detect a signal. In conclusion I hope that I have convinced you that at Evotec we have established a unique iPSC-based drug discovery platform for small and large molecules which is based on patient-derived disease models. This platform is really primed to impact drug discovery already at screening stages throughout in incorporating human genetics and biomarker based stratification strategies. On page 19 you can see that we have made tremendous progress in the field of only the general diseases, but the platform has, of course, much wider applicability. We are currently in the process to expand the

platform into a number of other highly exciting areas, such as neurodevelopmental disorders, lysosomal storage diseases, myopathies, but also in the field of kidney diseases.

And with this I would like to come to page 21 where you can see that we have been working on an iPS cell strategy for quite some time. At Evotec, we have started our efforts to build a high-quality iPSC-based patient-derived disease model drug discovery platform already in 2012. The vision back then was and still is to become the world's leading iPSC-based drug discovery and we believe that we have made significant steps in this direction and are planning to continue on this path. Our first collaboration in this field already started in 2012 and was with Harvard University in the area of motor neuron disease and this collaboration we termed Cure*MN.* In the field of Huntington's disease, we have a very long-standing collaboration with CHDI where we are also pursuing iPSC-based approaches to Huntington's disease. And in Parkinson's disease we have entered into a collaboration with the Michael J. Fox Foundation in 2016. Our first commercial partnership based on iPSC-based drug discovery we actually signed in 2015 in the field of diabetes with Sanofi, a world-leading company in the diabetes space. Since then we have built one of the largest and broadest platforms currently covering over 50 scientists working in this field who joined us from leading academic laboratories, biotech companies and Pharma companies to continue to build and expend this platform. We will continue to grow this team very aggressively and probably more than double this in the coming years. Our collaboration with Celgene that we just announced is special in regards to its scope and structure. It was very clear right from the start in our discussions with Celgene that we share a common vision and this very challenging field of neurodegeneration needs a very new approach as traditional approaches have invariably failed so far. We are convinced that patient-derived disease models still fare better and combine this with Celgene's insight as a core expertise that Evotec's iPSC-based drug discovery platform really represents a unique chance and opportunity.

Before I go into the Celgene deal in more detail I just want to say a few words about neurological diseases and in particular the burden it places not only on the individual patients, but also on society as a whole and this is shown on page 22. The numbers are really staggering and unfortunately they are expected to get much worse in the future. So dementia alone actually accounted for 46 million patients in 2015 and associated healthcare costs have exceeded over $ 650 bn in 2015. Neurodegenerative diseases are particularly tough to address as they are either driven by genetically inherited factors or of completely unknown etiology. Late-stage clinical development failures are unfortunately the norm and the new approaches are exceedingly rare. IPSC-based patient-derived models represent really new hope and a really good opportunity to change this. Together with Celgene we want to want to get the forefront of this paradigm shifting technology and approach. The next page I almost want to skip as it is a slide representing the market opportunity. I think it is quite clear to anybody here that the neurodegenerative diseases represent a very large market opportunity and the only comment I want to make is that many patients here of course die prematurely of neurodegenerative diseases. If we do manage to slow down the progression rate or hold the progression up of the disease, the number of treated patients will in the future far exceed today's projection. So, at least from our point of view, the market opportunity is significantly bigger than depicted on this slide.

With this I would like to move on to the next slide talking just a few words about our most recent announcement our new strategic collaboration with Celgene in the field of neurodegenerative diseases. As all of you have probably read the press release I want to state a few important facts. This is a very strategic collaboration with a clear focus on neurodegenerative diseases. It has been initially structured for five years with an opportunity to go beyond the obvious neurodegenerative diseases. Evotec will receive an upfront payment of $ 45 m and potential milestones per projects of up to $ 250 m. Celgene will hold exclusive options to in-license worldwide rights to Evotec's programmes. With this I would like to finish and say once again that we are extremely proud to have Celgene as our partner here and are convinced that new product opportunities for treatments of neurodegenerative diseases will emerge from this collaboration. I would like to thank you now for your attention and turn over to my colleague Werner Lanthaler.

Werner Lanthaler

Thank you so much. I think it is clear that paradigm shift is the only thing that we want to achieve here, because it is innovation that is needed in diseases. Let me close with 2016 with the note on page 28 by saying that it was a very good year for us where we achieved what we wanted to achieve in 2016. But I think that we are even more convinced that 2017 which is ahead of us will show that it is just the beginning of EVT Execute going forward and helping others with their drug developments and EVT Innovate really starting a paradigm shift as we are showing it here today. Thank you very much for following Evotec at this point also let me thank you for following throughout the whole year and that we wish you a Merry Christmas and a Happy New Year 2017. And now we are happy to take your questions.

Operator

Dear Ladies and Gentlemen, we will now begin the question and answer session. If you have a question for our speaker, please dial 01 on your telephone keypad new to enter the queue. Once your name has been announced you can ask your question. If find your question is answered before it is your turn to speak, you can dial 02 to cancel your question. If you are using speaker equipment today, please lift your handset before making your selection. One moment please for the first question. The first question comes from Samir Devani, RX Securities. Your line is open, please go ahead.

Samir Devani

Congratulations, that was a very good deal. I have two questions really. The first one is just in terms of timelines, when do you think will you be in a position to present the first IND package to Celgene and the second question is that follows onto that, is if Celgene doesn't exercise its option, do you have to pay a royalty out to them?

Werner Lanthaler

Thank you for your question. First of all, let me disappoint you by not giving you timelines, but at the same time tell you that the wonderful situation that we have created together with Celgene is that they have set the incentive structure in a way that we have every incentive to go as fast as possible and with the best as much resources as possible to achieve IND data points as soon as possible. So that is the deal structure that the incentives to go for us are fantastic. And that is why we will do it in the utmost speed that is possible here. And will we have to pay back royalties to Celgene? No, for us it's pure upside that can be generated on the low double-digit royalties that we will achieve if Celgene takes up the product and develops it to the market. Does that answer your question?

Samir Devani

Yes, it does. Thank you so much.

Operator

The next question comes from Jean-Paul Mannie. Your line is now open. Please go ahead.

Jean-Paul Mannie

Thank you very much and thank you for taking my question. Obviously congratulations with this impressive transaction. A quick question on these other disease areas – obviously this is a milestone in neurodegenerative diseases – do you have any priority or could you give us some guidance on when you expect these other fields to become available and when you think you would be able to sign deals on those? And in terms of teams you mentioned, obviously had a lot of resource to this as a growth engine – can you give any guidance on how you would see that develop? And maybe lastly, do I assume correctly that the $ 45 m would fall upfront in 2016?

Werner Lanthaler

Thank you so much for your question. First of all, be aware that we initiated a large franchise in diabetes with Sanofi as Cord has pointed out in 2015. Secondly, we have initiated now an exclusive franchise in neurodegeneration with Celgene and the branching out into other areas, we do not want to give an external timeline to that, but you see that we have a very clear vision and strategy on many other areas here. And I think it is clear if you have generated a platform that everybody is benefiting into also other disease areas if the platform is working. And that was the real achievement in the last five years to generate a platform which now we can tailor make into different areas. So giving a timeline here, I hope you understand that we do not want to do that. When it comes to the team, it is only about people. And here it really is the combination of people and technologies. And by building up 50 scientists where a flow is in place, I think we have created here a hurdle to enter into the field also for others which is not easy to duplicate because finding scientists that have the capabilities that are needed for such a platform is really not easy in the industry and that is why for us this idea of going way beyond a hundred in the next years is reality and we will integrate this in the process as fast as we can. The $ 45 m are hitting our bank account hopefully still in 2016 when it comes to cash flow; they will be recognised over the initial period of the contract, so over the initial five years of the contract.

Jean-Paul Mannie

Thank you very much.

Operator

The next question comes from Thomas Schießle. Your line is now open. Please go ahead.

Thomas Schießle

Thank you for taking my question. The question is on clarification. Did I get you right that the exclusivity with Celgene is on treatment novelty whereas the platform will be used with Sanofi and diabetes for validation of covering and ongoing drug discovery?

Cord Dohrmann

The exclusivity with Celgene centres around novel drug candidates that we develop in the field of neurodegeneration. And the platform of course has much wider applicability than just only the generation. And the second example is then for example the Sanofi collaboration. We are actually pursuing two strategies. One is a cell-based therapy for diabetes where we intend to replace certain missing insulin producing beta cells and a second strategy is to use these exact same cells, beta cells, to conduct drug screening to identify drugs that positively influence the functionality and survival of human beta cells in patients. And beyond this, beyond these two areas, neurodegeneration and

diabetes, we see many, many, more opportunities to leverage this platform in and a number of these have been mentioned within the presentation, for example, many of the cell types that we have developed, neuronal types, they are only relevant for neurodegeneration disease, but they are also relevant for example for neurodevelopmental disorders, they are relevant for epilepsy, for bipolar disorders, autism-related spectrum disorders, even lysosomal storage disease etc. and similarly we are already active in the field of myopathies and planning on expanding that and we are also active in the field of diabetic complications. And also intend to expand here and this is by now not a complete list, but beyond that there are many more many more opportunities that we are currently evaluating to see if these are opportunities of the future.

Werner Lanthaler

So, Thomas, as you hear Cord has enough to do and I will also order him to make a rest over Christmas on all these topics.

Thomas Schießle

But you will not use this platform as a means to rescue other projects if it comes to toxicology, for example.

Cord Dohrmann

No, it is really the focus is therapies, novel therapies, modifying therapies in these areas, that is really what we are going for.

Thomas Schießle

Thank you so much and congratulations.

Operator

The next question comes from Volker Braun. Your line is now open. Please go ahead.

Volker Braun

Thank you for taking my question. I am blown away to be honest. I am wondering a bit about the other collaborations in the field of neurodegenerative diseases, such as CHDI and others, what about their appetite to get access to the technology, is there any chance for them to get access? How scalable is the technology and also the deal structure of Celgene, doesn't it allow for sharing something or for finding other partners?

Werner Lanthaler

On Huntington's disease, our approach on the foundation that is really working for more than 10 years and we are absolutely happy about this partnership and we will continue of course this partnership with the CHDI foundation to find a cure in Huntington, which we have been doing for ten years, we will continue this for a very long time. Huntington's disease in that sense is not exclusive, that is the area which is really there to help CHDI and that was disclosed of course before we entered into this collaboration with Celgene. We will and want to continue to be active in this field for Huntington's

disease. All of the other transactions that have been made before will continue because that is the nature of contracts that have been agreed and signed before.

Volker Braun

Ok may I then rephrase my question. I hopefully assume that these collaborations will continue, but Celgene and the possibility to get access to this new technology, does that increase the appetite of your existing other partners also for access to the new technology?

Werner Lanthaler

On neurodegenerative diseases, this is exclusive with Celgene and there we are happy so to say that we have found our partner of choice to go in neurodegenerative diseases really strategic and to go together here and that's why the deal structure is constructed in a way that both parties have full incentives to go together and not allow any others in neurodegenerative diseases to get access to what we are doing. Outside of that field, that was where Cord was going with his presentation, but there are about 500 diseases that can be addressed at this stage where this technology could be applicable there is ample space outside of that area.

Volker Braun

So, even if every collaboration was exclusive, understood.

Operator

There are apparently no further questions. Just as a reminder, if you would like to ask a question, please press 01 on your telephone keypad.

Werner Lanthaler

If there are no further questions, let me again thank you very much. We understand that it has been a year where Evotec has made significant progress. We also thank you so much for allowing us to make this progress and also for helping us to translate this progress into the community. And on that note we already today look forward to hearing you again and building Evotec even further into 2017 because as I mentioned before, this is just the beginning.

Operator

We received one last question. Would you like to take the last question?

Werner Lanthaler

Yes, of course.

Operator

We received a last question by Mick Cooper. Your line is now open. Please go ahead.

Mick Cooper

Sorry, my phone was not working properly. Congratulations in particular on the progress you have made with the iPS cells. A few questions: Just to clarify from the last answer. This technology is only for EVT Innovate and not for EVT Execute from what I understand.

Werner Lanthaler

That is a differentiation I would not one hundred percent agree to. We have a business model and the business model allows us into different areas to go where we say what is the right business model to put behind which disease area and where does the partner want to go with us. So I would not exclude that also in the field of our service unit there are areas where we don't want to have a strategic interest or where we don't want to work on products or where we don't think that this is an area where we want to have a competitive edge by co-owning something on EVT Execute but that is not something excluded at all and that is always how we look at it. We have created one platform, the platform has to work first and then we define with our partners, our potential partners what is the right business model to put behind that. So that is really the nice thing that we can work in different business models with different partners. Of course it is a performance-based approach like we are doing it here with Celgene is the most appropriate way to leverage EVT Innovate where we first had a huge investment to make before owning a participation.

Mick Cooper

2 other questions and one very quick one. Does Harvard get a proportion of the upfront? And one interesting question I think: Are you in a position to actually get a better understanding of disease processes and so, for example, in Alzheimer's disease, in identify different forms of Alzheimer's disease, because the presentation focused on the industrialisation of doing screening, but surely you are getting a lot more information from your platform than just from screening.

Werner Lanthaler

Yes, I'll take the first question. If you would be prepared to take the second question, that would be great. It is our principle when we work together with academic partners that we share all the success going forward. So that's also what's applicable here where Harvard was pivotal to allow to be generated. Harvard will also have a share of the milestones and royalties to come. And that is so important because we want academic partners to see that once they trust us with their technologies that we will give them something back and here we have been establishing very good long-term relationships as you have seen in the past, not only with Harvard, but also worked, for example, together with Yale, as recently announced we are very broad in Oxford and in 33 other academic places on the planet, so that is the key principle of us to share success with our academic partners and we will continue that. The second question goes to Cord.

Cord Dohrmann

Mick, thanks for your question, I think it is a really important one. And it is important to reiterate here. So there are three really value driving areas for such a platform. The first one you mentioned, it is really the disease modelling, so being able to follow the disease process in a dish for a very specific patient and patient population. It is a key value driver in order to really understand what is going wrong in certain diseases at a very early stage in order to be able to have a chance to identify disease-modifying therapies. And in that regard as to what disease-modelling is that is the way to go, and of course it is here a big value driver for such a platform. The second one I talked more extensively about is the drug screening and here I maybe talked more about this because the drug screening aspect of course is the identification of something in the candidate's validation as we go

forward, the very obvious value driver, but I also briefly talked about patient stratification strategies that can be implemented using this platform and I think it is all of these three components together in an individual disease area that you want to address and that make us very powerful. This is a very valuable platform so if we briefly look a little bit into the future I am sure that people exposed to the Pharma industry and next generation technologies, people are not just talking patient driving disease models, but also about co-conferencing models and organoid-like models along to create even more disease-relevant assay systems and assay models in the pre-clinical setting. But the fundamental platform for this is ultimately iPSC technology. Without getting the basis right here he will never master the more complex models. And I think here Evotec is currently extremely well positioned and I feel extremely comfortable in this space as most of our competitors have focused more on the cell therapy aspects rather on generation of cell types rather than really implementing processes that allow us to do really robust disease modelling and robust drug screening.

Mick Cooper

Thank you and Merry Christmas to all at Evotec.

Werner Lanthaler

Thank you, I don’t repeat my Christmas wishes for the third time. I will just say thank you to all of you and all the best.