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Life Science seminar - Curasight
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Corporate Participants

Ulrich Krasilnikoff - CEO
Andreas Kjær - CSO & Founder

External Participants

Video - Curasight

Presentation

Moderator

Next company on the agenda is Curasight and with me today I have the CEO Ulrich Krasilnikoff and the CSO and founder Andreas Kjaer. The management team bought a small video to show and they will introduce that later on. So please carry on Ulrich.

Ulrich Krasilnikoff - CEO

Thank you Klaus, for the introduction and thank you for participating in this seminar. My name is Ulrich Krasilnikoff and I'm the CEO and CFO, together with the co founder and CSO and CMO Professor Andreas Kjaer will take you through this exciting case and technology. So what are we dealing with? We are dealing with improved diagnostics methods within cancer types. And also working on a more gentle and targeted treatment and we will hopefully give you some flavor on that. Just some forward looking statements. Just some highlights in case there are new investors on board.

So, what are Curasight as a Company, we are a late stage clinical company. We are founded in Copenhagen back in 2013 based on more than ten years of research, academic research at Rigshospitalet. Until now, we have raised around 20 million euro and still have a good cash position and the cash runway is expected to last well into 2024. Our technology is based on a unique biomarker within cancers, different cancer types named uPAR, and that has led us to the development of a proprietary imaging platform named uTRACE, which is used for diagnostic purpose and that has furthermore led to the creation of uTREAT, a therapeutic platform which will led to more gentle and targeted treatment. But we will come back to that. Our current focus is on brain cancer, prostate cancer, but also head and neck cancer and neuroendocrine tumor is among our portfolio. Besides there are other cancer types to be pursued right now, uTRACE has been broadly tested in more than eight phase two clinical trials and more tested in more than 400 patients and by that considered to be safe and well tolerated. So by that also led to successful and completed five clinical phase two trials both in brain cancer, prostate cancer, head and neck cancer, neuroendocrine tumor and breast cancer. Besides, there are also ongoing studies in lung cancer which is investigating initiating study at Rigshospitalet. Looking from a business perspective, we also see this is quite exciting commercial potential as we are expecting to tap into a rapidly growing market estimated to be around 35 billion US dollar in 2031. Furthermore, we have a very strong IP position with issued patents both in the US, EU, Canada and Japan, also in China, and we still continue to strengthen our IP positions. Then I will hand over to Andreas who will take you through the technology and what we want to aim within the different cancer indications.

Andreas Kjær - CSO & Founder

Yes thank you, So the technology really just to remind, gentle and 50% of all patients with solid tumor will return external radiation therapy. But normally when you do external radiation therapy, you also irradiate healthy tissue. Our technology is more gentle. It's injected radiotherapy, so it seeks out the cancer. It's injected in a blood vessel, it seeks out the cancer from where it irradiates locally, so it's more tailored and it's more gentle. And we actually want to take you through a small video that describes how this works but also describes how there is a link between imaging with uTRACE and treatment with uTREAT. With uTRACE we can predict where the therapy goes and that is what will be shown in this short video. And then I will come back to some details and repeat somewhat was said.

Video - Curasight

More than 50% of all cancer patients would at some time receive external radiation therapy. However, traditional radiation therapy also irradiates healthy tissue, leading to serious side effects. This limits the use and impact of the therapy. Curasight has developed a new type of radiation therapy that solves this problem. Curasights technology builds on the principle called targeted radionuclide therapy. Here the patient is not irradiated from the outside, but instead a compound is injected into a blood vessel from where it automatically seeks out the cancer and any metastasis and from there sends out radiation. The range of the radiation is just 1 mm. Therefore, only the cancer and not the healthy tissue is irradiated. In contrast to traditional radiation therapy, Curasights method can also be used to treat patients with widespread disease. Our compound targets uPAR, a receptor expressed in cancers but not in normal tissue. But how can we know if the therapy reaches the cancer? The answer is with imaging. Using the exact same uPAR targeting compound as for therapy, but modified for imaging, we can exactly predict where the therapy will work. This is called the theranostic principle. By starting with imaging, only patients with a clear tumor Uptake will proceed to targeted radionuclide therapy. This is personalized, tailored therapy. Although uPAR theranostics can be used in most tumors we will start with Glioblastoma, an aggressive brain tumor. As a first indication, Glioblastoma has a poor prognosis with half of all patients dying within one year. 10% of these patients are children.

Andreas Kjær - CSO & Founder

So hope this gave a good impression of the overall technology. And if we just go back here again, then the, theranostic platform we have is a combination of uTRACE that is the diagnostic part shown on the left and then therapy called uTREAT. And the two go for the same target and one can predict if the therapy reaches where it should work. The handle we use, the target on cancer is uPAR and uPAR is both the binding for uTRACE and uTREAT. And the nice thing is that uPAR is expressed on cancer cells so it's a cancer specific target, but not to any larger extent in normal cells. And this is the way that radiation will only work in the cancer cell and not harm the healthy tissue to any high extent. Furthermore, the more aggressive the cancer is, the higher uPAR expression is. So the cancers needing the therapy the most are also the ones we can best target. And on top of being cancer specific then in contrast to most other technologies out there, it's not cancer type specific. So one compound can be used across cancer types. So once it's developed in one type we can go on and test it and use it in other cancer types. If we look how it looks in real world. This is a uTRACE scan of a patient with a brain cancer. To the left you can see the whitish area that's the cancer in the center of the brain. This is the cross section of the brain. On the right you see how uTRACE lights up. So the hotspot, the red area is where we have the most of uTRACE. So in this case we can see it's a cancer that takes up a lot of uTRACE. And what does that tell us? It tells us that it's aggressive but it also tells us that when we go with uTREAT exactly the same distribution will be seen. So we already know before we ever treated

this patient that our therapy will sit in the tumor in a high extent. So in this way we can also be more likely to have success in our clinical trials because if the uptake had been low we would not move this patient into therapy.

On the gentle part, why is targeted radionuclide therapy we believe better than external radiation therapy And why is it by many considered the new type and the new way of doing radiotherapy? That is because if you see on the left and again this is a drawing of a cross section of the brain, you can see how an external beam radiation works. It irradiates from different angles, in this case illustrated by three different angles. And while it targets the tumor all the time, it also delivers a lot of radiation to healthy brain. So that is the green, yellow and orange areas. Whereas if we inject radiation therapy and it seeks out the cancer then very little is irradiated in the healthy brain. And basically what you see on the right is a drawing of what was shown on the image on the last slide in real life. So it's not just the thing we believe this is actually the way it will distribute. So this technology can be used for almost any solid cancer, but we will focus on brain cancer and prostate cancer. And as was mentioned already in brain cancer, we are now ready to go all the way move in to therapy studies in patient because we have the two bits we needed. The phase two study demonstrating that uTRACE is taken up in the tumors, and the preclinical study that showed that uTREAT does actually work on these brain cancers. And then the second indication we focus on is prostate cancer share we go for imaging and this is in partnership with Curium Ulrich will come back to that in details. UTREAT would also work probably. But due to the competitive landscape and the unmet need, we are focusing on imaging. And then finally we have our two other runners up indications neuroendocrine tumors and head and neck cancer. And we will also briefly touch upon them. So the brain cancer, as was also mentioned in the video, is unfortunately a very severe disease. 30,000 new cases in the US and EU with the aggressive form that we are targeting and 10% are in children, radiation is standard of care. So we don't have to convince people that radiation should be used, but we move radiation into this more gentle form. On average, these patients only live a little bit more than one year and after five years only one in 20 are still alive. And nothing in essence happened over the last 15 to 20 years. So there's room for improvement here. And that is what we have set forth that we want to crack the nut and to be able to offer these patients something that hopefully works better than what we have today. So this is at the forefront of what we do. We are planning to move into this clinically on the prostate cancer program where we partnered with Curium. The background here that's imaging and what we want to do is that we want to make a non invasive biopsy by imaging. And the background for that is that when I was in medical school it was always taught that more people die with than off prostate cancer. And that is actually true. Most cancers, prostate cancers will remain relatively benign and not spread and nothing should actually be done. But the problem is that if you're not one of those patients, it's not good just to watch. And therefore the challenge in prostate cancer has always been to identify that majority of cancers where we do not need to do radical therapy, mostly radical prostatectomy, which is a surgical procedure where the whole prostate gland is removed. This is not trivial to overtreat these patients. 4ur out of 5 patients that get their prostate gland removed should not have had it removed because their cancer would never have become aggressive and spread. And it's not trivial because 70% of the patients that have their prostate gland removed get some degree of impotence and or urinary incontinence. So that's also 70% of the 4 out of 5 that should not have been operated. So a lot of unnecessary side effects giving a bad quality of life. So there's really a need to find out how this can be done better. And we want to replace the invasive biopsy. And biopsy is hampered by the side effects not only, but since it's taken through the rectum so basically through the intestine system, there are many causes of infection and bleeding. So it's not a gentle procedure. On top of not being gentle, it's also very unreliable because it's random biopsies, typically twelve, but you might miss the most aggressive part of the cancer. And what does this mean? This means that if you take a readout from biopsy it tells you this is a benign

tumor then you don't really trust in it because you might have missed the aggressive part. So therefore a better safe than sorry strategy is applied and that is again the overtreatment because you never know. Is this true by imaging? You cannot overlook an area because imaging is 3D, it's the whole prostate gland, it's actually the whole body. So if nothing lights up, we don't have an aggressive part of the tumor. So the idea is that we want to make a cut off and here you actually see two patients where on the right you see that it lights up very yellowish. On the left there's nothing that is yellow avid and therefore the one on the left is relatively benign, should be left in what is called active surveillance whereas the one patient to the right is a patient that should have removed the prostate gland. And we want with imaging to be able to say you are low in uptake on your scan, you are in good shape, come back in one or two years and have another scan. We do circumvent the bleeding, the infection, the unpleasantness of getting these biopsies done. So this is what we are planning and where we also have had interaction with FDA, what is called the pre IND meeting on our development plan.

So these were the two large indications or the major focus areas. Not large indications. Prostate is a huge indication because it's the most common cancer in males. Brain cancer is very severe, but not so many patients. On top of that we also go for neuroendocrine tumors, which is a relatively rare disease, but people live relatively long, so there are many patients that have the disease at any time. And here there is also a very large unmet need in our data. From this indication with uTRACE that was approximately 100 patients, we demonstrated that uTRACE is strongly prognostic. And what does this mean? That means if the uptake of uPAR is high, if uTRACE is highly taken up, then there's a poor prognosis shown in what is called survival curves to the right. Basically you start out at 1.0, everybody are alive and when the patients die off the curve drops towards the bottom and the blue line are patient with high uptake, the red line is with low uptake. So this tells us that all the patients that has a high uptake and which we can treat are the ones with a poor prognosis. So this is underscores that uTREAT is relevant in this patient group and therefore this is something we would pursue. In head and neck cancer that is a relatively common cancer. The 6th most common cancer in the world. These patients also get today, many of them external radiation therapy. Here one of the challenges is that the external radiation therapy, because the tumor lies behind the jaw, so you have to irradiate through the jaw and thereby through the teeth. And your teeth have roots that do not tolerate irradiation. So therefore there's a risk of rottening of the teeth after such irradiation therapy. And in many cases the teeth have to be extracted prior to radiation therapy. And of course this is not gentle. And then afterwards you need implants or prosthesis. So if we can do this radiation therapy much more gentle by doing it with uTREAT, the injected version of radiation therapy, which only irradiates up to 1 mm. So if it sits in the cancer, it will not irradiate the jaw, then we could really help this patient and improve the quality of life. Also here, apart from of course we wanted to see are these patients eligible, do they have high expression and thereby light up on uTRACE? And that could also be demonstrated in this study with around 50 patients. And here you can see also again the light blue lines on the survival curves shows that if you have high uPAR uptake, you have a much poorer prognosis than if you have low uptake. And on top of being promising for therapy, the imaging path uTRACE. The clinicians tells us that that's also very valuable because while we are still doing the therapy as we do today, externally, it would be very nice to identify patients with a good prognosis. And that's the ones with low uPAR and low uTRACE uptake because then it might be possible to skip external radiation therapy and do a more gentle therapy because these patients have a good prognosis anyhow so another application. So also very promising for these two extra indications, both uTRACE and uTREAT.

Ulrich Krasilnikoff - CEO

Yeah, and just very shortly about the announcement we had previously in May. This is a strategic milestones for Curasight as we entered this global partnership with Curium And Curium is considered to be one of the largest pharmaceutical companies in the world, pharmaceuticals. They are producing and also distributing pharmaceutical products like uTRACE and they have validated that technology and the setup for Curasight. So that's also proved that we have a business perspective going forward. Why is that interesting - Also interesting, because we will be eligible to receive up to 70 million US dollar in development and commercial milestones as well as a double digit royalties on top of that for the sales afterwards. Furthermore, already as mentioned, we have reached or were able to announce the preclinical results of uTREAT for the treatment of brain cancer in the beginning of June. And that together with the results of the announced phase two study with uTRACE also in brain cancer, means that we have reached a very strategic point also as we want to pursue this as a theranostic approach by using both uTRACE and uTREAT in Glioblastoma. Also what you have seen in the movie and the last we have some milestones already announced. For the first thing of this year, we have reported the results and what we are looking for in the next of the rest of 2023 is that we expect to report additional results from the preclinical additional study, the uTREAT.. Furthermore, we expect to announce some clinical approach, regulatory approach for the prostate cancer in EU. And then we also expect to be able to report some interim results from the ongoing phase two study in lung cancer which will present it at the World Imaging Congress in Prague in September.

Moderator

Thanks a lot Ulrich And thanks a lot Andreas. We are very close to the timeline, sorry to finish this presentation. So yesterday we had a really good discussion about your triggers and what to look for. I will post this interview tomorrow. So for the audience, you can also see what questions actually came up yesterday and then we will start up on the next presentation. So thanks a lot Ulrich, and thanks a lot Andreas for a thoroughly presentation of your pipeline and what to look for.

Moderator

Enjoy your day.

Andreas Kjær - CSO & Founder

Thank you for having us.