

THOMSON REUTERS STREETEVENETS

EDITED TRANSCRIPT

AMRS - Amyris Inc Conference Call to Discuss the Partnership with
Ginkgo Bioworks

EVENT DATE/TIME: JUNE 30, 2016 / 6:30PM GMT



CORPORATE PARTICIPANTS

Peter DeNardo *Amyris, Inc. - Director of Investor Relations and Corporate Communications*

John Melo *Amyris, Inc. - CEO*

Jason Kelly *Ginkgo Bioworks - Cofounder and CEO*

CONFERENCE CALL PARTICIPANTS

Jeff Osborne *Cowen and Company - Analyst*

Amit Dayal *Rodman & Renshaw - Analyst*

Carter Driscoll *FBR Capital Markets & Co. - Analyst*

Lauren Landfield *Zazove - Analyst*

PRESENTATION

Operator

Good day, ladies and gentlemen. Welcome to the Amyris and Ginkgo Bioworks special teleconference. This call is being webcast live on the Events page of the Investor Section of the Amyris website at Amyris.com. This call is property of Amyris and any recordings, recordings, or transmission of this call without express written consent of the Company is strictly prohibited.

As a reminder, today's call is being recorded. You may listen to a webcast replay of this call by going to the Amyris website.

I would now like to turn the call over to Peter DeNardo, Director of Investor Relations and Corporate Communications.

Peter DeNardo - *Amyris, Inc. - Director of Investor Relations and Corporate Communications*

Thank you, Kevin. Good afternoon. Thank you for joining us this afternoon.

With me today are John Melo, our Chief Executive Officer and Raffi Asadorian, our Chief Financial Officer, along with Jason Kelly, Cofounder and CEO of Ginkgo Bioworks.

We will begin today's call with some remarks by John outlining key strategic aspects of the important joint partnership we announced with Ginkgo Bioworks yesterday. Following that, Jason will detail how both companies are plan to work together as seamlessly as possible to accelerate new molecule development and to go to market pursuing a broader number of opportunities.

Before I turn the call over to them, please note that during this call we may make forward-looking statements about events and circumstances that have not yet occurred, including projections regarding the anticipated ability of the Companies to jointly develop products more efficiently and cost-effectively under the partnership, accelerating time-to-market, the number of new products expected to be brought to market pursuant to the partnership, the anticipated ability of the Companies to offer more customers access to their technology platform, the anticipated expansion of the capacity of Amyris's strain engineering, the expected incremental value that we have generated under the partnership, the anticipated achievement of a faster and more predictable approach to product delivery under the partnership, and the anticipated growth of the new products under the partnership.

These statements are based on management's current expectations and actual results and future events may differ materially due to risks and uncertainties, including those detailed in the Company's recent SEC filings on the Risk Factors section of its most recent quarterly report on Form 10-Q filed on May 10, 2016.



Amyris disclaims any obligation to update information contained in these forward-looking statements whether as a result of new information, future events, or otherwise. Please refer to Amyris's SEC filings for a detailed discussion of the relevant risks and uncertainties.

I will now turn the call over to John Melo. John?

John Melo - Amyris, Inc. - CEO

Thank you, Peter. Good afternoon and thank you for joining us today.

We are very pleased to partner with Ginkgo Bioworks to accelerate commercialization of bio-based products while supporting a faster and more predictable trajectory that our Companies could have achieved on their own. Ginkgo will help broaden the capacity of Amyris's strain engineering by providing access to its world-class foundry while Amyris will provide to Ginkgo scale of expertise and access to the world's only commercial scale multiproduct fermentation facility that has manufactured more cultured ingredients than any other known entity.

The key purpose of our partnership is to combine our platforms to deliver more products faster and at a lower cost to our customers. It's to provide the only proven capability to deliver the culture ingredients that enables them to improve their business, grow sustainably, and provide the consumer better performance.

Today, there are various companies striving for partner opportunities and the opportunity to prove out that industrial biotechnology's time has arrived. This fracture approach has made it difficult for any one company to truly stand out.

We believe that through this partnership we can execute on the dream of industrial biotech by providing high performance, sustainably sourced, cultured ingredients with the most predictable and fastest time-to-market for our customers. Ultimately, this breakthrough biotech partnership creates the new standard and will showcase substantial leadership by two industry defining companies joining R&D, scale up, and manufacturing capability and capacity to accelerate new product innovation while more quickly penetrating and capturing market share in the new industrial bioeconomy.

Our combined customer and product portfolio includes 70 current cultured ingredient targets where we are engineering products that replace our customers' current source of material. This provides our customers a higher quality, lower cost, and sustainable source of material for them to support the growth in their business.

These ingredients have a very attractive profile. They have an average selling price of \$50 a kilo. The average target ingredient generates \$10 million of annual revenue when we reach scale production and the Amyris manufacturing capability is expected to generate 50% to 60% gross margins from these products after the value share with Ginkgo. Our current production already includes three specialty ingredients that this year will generate between \$20 million to \$30 million of revenue.

In the last 24 months, we have also proven we can deliver from start of engineering to reaching commercial scale production these cultured ingredients in 12 months or less to our customers. This is unprecedented for industrial biotechnology and a critical basis of our mutual desire to access significantly more scale faster by combining our product portfolios.

Now let me turn to Jason for his perspective on the partnership.

Jason Kelly - Ginkgo Bioworks - Cofounder and CEO

Thank you, John, and good afternoon, everyone. We are delighted to work with Amyris which has many similarities culturally with Ginkgo Bioworks and with regard to our industry vision. For those of you who don't already know Ginkgo, we are an organism design company, and much like Amyris, we were founded by a group of engineers, in our case in 2008. We're focused on building organisms to specification for customers across

a variety of markets, including food, health, and consumer goods. We are privately held today with healthy funding to date and currently employ 100 employees, approximately 80% of them in R&D with significant hiring plans to meet our expected growth.

As John mentioned, we believe this partnership will provide customers unprecedented access to the world's best organism engineering and manufacturing capabilities. Combining both companies existing portfolios of dozens of molecules in the pipeline across flavors, fragrances, and ingredients should allow customers to get to market faster and more reliably with the security of knowing they are partnering with two of the leading companies in the space.

I would like to speak for a minute about how Ginkgo looks at the opportunity for biotechnology in the specialty chemicals industry. Biotechnology is typically associated with pharmaceuticals where you often see high sensitivity to a single therapeutic product. Huge value but also binary risk, zero or 1.

The early era of industrial biotechnology was similar. Whole companies were founded to pursue a single \$1 billion commodity chemical. Again, with a binary outcome.

If the technology works, there is tremendous value created and if it doesn't, it's worth almost nothing. Most times, it didn't work.

The beauty of the specialty ingredients market is that there are many smaller opportunities that allow for the inherent risk present in biotechnology to be mitigated by a portfolio approach. By pursuing 70 molecules together, Ginkgo and Amyris as companies are not subject to the binary risk of any given project not succeeding technically. So long as there is no systemic risk in the platform, we should see a healthy percentage of these products exceed, though we may not know which ones at the outset.

The great thing here is we already have an existence proof at Amyris of successful commercialization of three biotech produced molecules in the flavor and fragrance industry in the last three years. This is the essence of why we chose to partner with Amyris. They were the only company in the specialty chemical space with a track record of commercially scaling biotechnology products successfully. Three for three so far. That is a record unique in the industry and this made Amyris the only choice for us as a partner for this scale of partnership.

The right strategic move now is to begin as many ingredient projects as we can in parallel to leverage the economy of scale of Ginkgo's organism design boundaries and of Amyris's manufacturing facilities. Together, we can begin to bring biotech economics and profit margins to non-pharmaceutical industries like flavors and fragrances, cosmetics, nutrition, sweeteners, and more. This should give investors great upside without the binary risk typical in pharmaceutical.

Now let me turn the call back over to John.

John Melo - Amyris, Inc. - CEO

Thanks, Jason. I would like to take a moment now to describe the specifics of our partnership agreement.

This initially is a three-year partnership where we will share economics of new collaborations and agreed to enable, scale and manufacture the molecules in the Ginkgo portfolio. This will significantly increase the number of cultured ingredients available in the world today and will provide customers access to capacity and capability that is not available in any other single source or company.

This partnership does not change or share the current farnesene derivative portfolio or the historical agreements Amyris has in place. This is combining capacity and capability that enables both companies to grow significantly, deliver faster to customers without either of us needing to make significant new investment.

As outlined in the 8-K with filed regarding the agreement, Amyris is to receive a \$20 million collaboration payment for technology transfer in two installments from Ginkgo. The first payment of \$15 million will be made on or prior to July 24, 2016, subject to the transfer of the technology being



complete. The second payment of \$5 million is due upon satisfaction of certain conditions by March 31 of 2017. Both parties are equally incentivized in pursuing any future collaboration partnership agreement without territorial or sector limits.

For example, if Ginkgo brings in collaboration, the resulting collaboration revenues are split 50-50. Upon reaching commercial cost targets, Amyris will manufacture the molecule in question and build back the Ginkgo cost plus 10%. Amyris and Ginkgo will equally split 50% of the product profit. If Amyris brings in a collaboration, the split of manufacturing cost plus 10% metrics remain the same. These are all products that are contracted with market leaders that have existing markets and customers. We are replacing existing sources with a sustainable source at higher-quality and lower cost.

We expect to successfully develop and scale 20 new molecules from our combined portfolio of 70 over the next three years. This compares to Amyris alone having scaled five in the last five years. This is the expected result of the combined capability and capacity of our two companies.

The 20 molecules are expected to generate \$200 million of annual revenue once they reach mature production. And \$156 million of value to be shared by both companies. The difference between \$156 million and the \$200 million is the cost of goods plus the 10% margin for the transfer price. Approximately \$78 million annually for each of us is what the share ends up being for these products.

For Amyris, this will represent an incremental \$23 million of annual gross margin at target commercial performance. This is \$23 million above what we would have been able to do otherwise are by ourselves. We expect target commercial performance of these 20 molecules will be achieved by the end of 2020. We expect the first ones to start coming out next year and gradually build the scale whereby 2020 -- end of 2020, they will all be achieving target commercial performance.

In addition to the partnership value and the immediate benefit we gain from sharing our platform capability and capacity, we are also expecting the following immediate benefits.

First, a strong contribution to underpin our revenue expectations for this year with the [\$50] million in collaboration payments -- that is fee and invoiced before the end of the quarter and we expect to receive by July 24. These results are in line with our business model of generating \$50 million to \$60 million annually of collaboration payments from partners.

As part of this agreement, we've also been able to restructure most of our short-term debt burden. Our old Hercules note will now mature and not have a minimum cash covenant until 2019. We have also agreed to defer all principal payment until 2019. This significantly reduces our cash outlay to support debt and any short-term debt overhang on our Company.

The combination of this collaboration payment, other recently announced collaborations, and the continued execution of our business plan provides clear visibility to a positive cash flow second half of 2016, and a clear path to sustainability as a company.

To summarize the key benefits of this agreement before I open the call to questions, this partnership enables us to deliver more products faster by combining our product portfolio, technology platforms, and manufacturing capacity to deliver partners' business needs, and to make our planet more sustainable. Secondly, accelerate and enhance revenue growth with immediate revenue benefit from the collaboration payment, and a potential for an incremental \$100 million annually as products reach commercial scale production. We, as a company, expect an incremental \$23 million in product gross margin for Amyris and \$156 million in total annual value share between us at the end of 2020 -- by the end of 2020.

Third, we achieved more rapid advancement in both companies' already well-known and respected levels of R&D expertise, and lastly, providing us both clear leadership as the only offer that can provide customers confident, predictable delivery of high-performance culture ingredients at a target cost and large-scale production in 12 months or less from the customer defining the target.

It is clear to us in speaking with customers, reviewing the Ginkgo product portfolio, and assessing overall market capability and culture that Ginkgo is the only other company in our industry this partnership could be made possible with.



In closing, we appreciate the continued support of our shareholders, the dedication of our R&D teams in collaborating to create better chemistry for a better planet, and our partners who share our vision of making renewable products mainstream while improving their business results.

I would now like to open the line for any questions you may have. Kevin, can you help us with that?

QUESTIONS AND ANSWERS

Operator

(Operator Instructions) Jeff Osborne, Cowen and Company.

Jeff Osborne - Cowen and Company - Analyst

Good afternoon, guys. Thanks for doing a call, very helpful. I was wondering maybe just -- I have three or four questions, but by way of background, can you just talk about the journey that led you to this partnership when you started talking to each other? And maybe from Ginkgo's perspective, how many folks they talked with?

Jason Kelly - Ginkgo Bioworks - Cofounder and CEO

Sure, yes. So I can say that we have a great sense of the industrial biotech space. The Company has been operating since 2008. A lot of the team has been involved in this sort of field of embedded biology for much longer than that so we sort of knew straight off that this was something that we would only do with Amyris and we were in a convenient spot where we recently hired our Chief Commercialization Officer, Pete Boynton, who was previously the CCO at Amyris, I guess probably three or four years back for a period of about four years. And so I had Pete connect me with John and so our conversation got going from there.

Jeff Osborne - Cowen and Company - Analyst

Excellent.

John Melo - Amyris, Inc. - CEO

I will add a few comments, Jeff, from our side. We -- around February, had a strategy session with our Board at the time. We really focused or decided to focus on really our purpose which is all about making renewables mainstream, and at that point, it was all about reach and leveraging existing capacity to enable the industry to grow faster.

And as we looked at that, one critical asset we had that we believe did not have enough scale going through it was really our scale up and manufacturing. We thought the fact that Brotas was working very well, we were able to achieve record low costs, and we had scale of capacity to take more molecules through it. Our focus began then in looking at what companies have molecules, what companies have a great product portfolio, and then how can we help them get there?

And at the time, we started talking to about three companies in the sector that had a good enough product portfolio that would make sense for us. And then the further we got, the clearer it became that where the best product portfolio lie and the one that had the deepest relationships with customers was really Ginkgo. And then it became really the start of the discussion to get deeper into would it be possible and, really, it was Jason -- give him credit for this that said just scaling up the manufacturing would be good, but we have this foundry -- we have this whole new foundry that we are building. We have amazing capacity, we have great science, great engineering, how can we combine both? How can we actually just



take the capacity of both companies and all the way from engineering to manufacturing actually really enable the business to work a lot faster and efficiently? Which got us to the outcome that we are announcing.

Jason Kelly - *Ginkgo Bioworks - Cofounder and CEO*

And I will add one last point. I would say a thing for me is the beginnings of a real economy of scale in the actual -- what you might consider the R&D or the genetic engineering through opening our foundries, we are automating and standardizing work that has historically been perceived as R&D. So what we see is the more of those projects we do in parallel, the better the economics get. So what we really needed was a way to then pass that through to scale that up successfully and do that in a trusted way and with another partner particularly who may have other projects that could feed into that infrastructure. As well as infrastructure of their own to combine with. And so again, Amyris was unique in that respect. But really it's the beginnings of a true scale business in terms of the more projects you do here, the better they get.

Jeff Osborne - *Cowen and Company - Analyst*

Got it. No, thanks for the details there. And then speaking for capacity, how do you think about just the Brotas capacity and how much you are allocating to Ginkgo versus the other farnesene derivative customers that you have. And then does Ginkgo have any fermentation capacity? And if you could just kind of give us a sense of what the total capacity is between the two companies combined.

John Melo - *Amyris, Inc. - CEO*

Our focus other than some smaller projects is all about really leveraging up what we have in Brotas and Campinas. Campinas for scale up, Brotas for doing the fermentation. And we have the single plant today that is foreseen and we are doing the batches of the cultured ingredients. And we are in process of kicking off a second project that we expect will be complete some time beginning of 2018 to the middle of 2018. And that project will be a second plant.

That second plant, in light of this relationship, will have a slightly different configuration. It will actually be a couple of large things, 200,000 liters like we have now, and then a significant number, we were still trying to figure out exactly the right configuration of 50,000 liter tanks to really run the profile of molecules that we have in the combined portfolio which is, again, much more cultured in specialty than it is large-scale.

So the simple way to think about it, Jeff, is we are doubling capacity, adding flexibility. That actually will have a dedicated plant that supports the need of these 20 molecules between now and the end of 2020, and then we are looking at using our CJ Bio relationship to move more and more of the foreseen high-volume, low-cost for commodity market manufacturing, too.

Jason Kelly - *Ginkgo Bioworks - Cofounder and CEO*

And just a comment on the Ginkgo side. No production fermentation, no plants that develop production fermentation. So we say we are the organism company. Our focus is really on the development of the yeast or microbes; and we really look to leverage partners to do manufacturing. So we are really excited again here because Amyris is such a leader in that space.

Jeff Osborne - *Cowen and Company - Analyst*

Perfect. And either this is for John or Raffi, the last question. Just can you give us a running scorecard of the \$50 million to \$60 million of collaboration payments kind of year to date? Obviously, \$15 here. I'm not sure where the other F&F customers are and until I can go through the Qs and Ks and 8-Ks to add that up but do you happen to have that figure? Just kind of a running total of where we are year to date, relative to what you need to close over the next five to six months?

John Melo - Amyris, Inc. - CEO

I think I would tell you we are over 80% of the way there and we are in the final stages of enough to say that we will definitely be on the bottom end of that number if not somewhere in the middle.

Jeff Osborne - Cowen and Company - Analyst

Okay, good to hear. I appreciate it, John. Thank you.

Operator

Amit Dayal, Rodman and Renshaw.

Amit Dayal - Rodman & Renshaw - Analyst

Thank you. Congratulation, guys. This is really interesting. As a part of this IP or technology transfer, John, you had discussed maybe looking at unloading some non-core assets. Is this part of that effort or is this separate?

John Melo - Amyris, Inc. - CEO

Thanks, Amit, for being on the call and the answer is this is separate. The non-core assets are non-core IP-related. And, again, those are going very well. We expect to start announcing the close maybe of the first one over the next 30 days, the second over the next 60 to 90 days, and then a couple more before the end of the year and we expect to be on target if not better than expected for the proceeds from those sales.

Amit Dayal - Rodman & Renshaw - Analyst

Understood, that's helpful, thank you. And just one more question maybe -- are there any overlapping efforts in terms of molecule development between the two companies or are those relatively differentiated as well?

John Melo - Amyris, Inc. - CEO

There is -- there is some overlap without question. You can only imagine, and we are being thoughtful about how we deal with the overlaps. A good example is we've got one particular project where the molecules are slightly different. The end market partners are different, and by combining, we end up both actually getting access to probably over 80% of the end market for that class of molecule. So, rather than collapsing and going into one program, we are actually going to keep both programs and do best practice sharing without creating conflict with exclusivity each of those partners have.

That way we will share everything we can that helps each of those projects. We won't create a conflict for the partners, and we will actually share the margin on the manufacturing side so that we are both incentivized to go as fast as we can and grow the pie as big as we can for our combined businesses.

Amit Dayal - Rodman & Renshaw - Analyst

Understood. Thank you. That's all I have. Thank you, guys.



Operator

(Operator Instructions) Carter Driscoll, FBR.

Carter Driscoll - *FBR Capital Markets & Co. - Analyst*

Question about getting back to the initial journey made to this former partnership, was there any discussion since it sounds like it seems like a pretty natural fit and while there may be some overlap, it doesn't sound tremendously like there was any real impediment to a more formal combination of the Company outside of maybe private partner -- the private public aspect? Was that ever discussed among the two of you? Is it something you can share?

John Melo - *Amyris, Inc. - CEO*

I'm sure we will both have a point of view on this. I can tell you it's definitely in our conversation and I think as we looked at market structure and as we looked at the opportunity to have greater reach or make the pie bigger, we felt that staying independent in creating this kind of partnership actually gave us the biggest value creation or biggest access or reach to the pie rather than having to make some hard choices about consolidating the portfolio across some customers and products. So yes, it was discussed and we made an explicit decision not to rally around end markets and how best to provide maximum reach. Jason?

Jason Kelly - *Ginkgo Bioworks - Cofounder and CEO*

Yes, and I will agree with that and I will add one additional wrinkle. I think as industries mature or when they first start, I think you tend to see in a new industry companies that have to do everything themselves just because there's really nowhere else to go, no other specialists that exist yet. I think one of the things that's been happening over the last decade in industrial biotechnology is sort of the beginnings of companies that really focus in various parts of the technological stack and offer those and offer them better than any generalist could.

And so, you are seeing this as an example and for example the DNA synthesis industry. So, Ginkgo just placed a large 600 million base pair that's equal to about 60% of the worldwide gene synthesis market order last month from two companies that are now really becoming -- creating a healthy sector of companies that just focus on doing what previously would've been a niche R&D activity, but they are operating now. Its factories to offer that. So there's no sense for example for Ginkgo to do that in-house. We really want to leverage that specialist entity.

I think that's a similar situation here between Ginkgo and Amyris. While there is some overlap in what we do, a lot of what we do is different. And I think there's a way to create a complementary value chain here where we each do what we do better than the other, and stitch that together as separate entities and leverage being able to work with a wider market to ultimately achieve a bigger scale than we could as a vertically integrated company trying to do everything themselves.

So I'll just throw that extra wrinkle in from the standpoint of the maturation of this industry.

Carter Driscoll - *FBR Capital Markets & Co. - Analyst*

I appreciate that, that's very thorough. Maybe next question, can you -- John, you obviously talked about the target of 20 molecules over the next few years versus what you guys have achieved with a handful is, a, can you talk about maybe more specificity about how that will shrink your time to market versus what you have done as a standalone -- put a bracket around it in months hopefully? And then, of those molecules, maybe share with us high level the target end markets with any level of specificity if you could.

John Melo - Amyris, Inc. - CEO

Yes, I think a couple of critical points. Obviously, there's a lot of lessons learned especially on our side and what we've attempted to do and how we've gone about it which, as a result, has given us phenomenal platform, but it's also given us great learnings in how to prioritize what we do.

And I think having the joint capacity, number one, will actually give us the ability to go a lot faster and do more. And then secondly and most critical, the class of molecules we are targeting together are molecules that, if I just give you one example, we have a fragrance molecule that fits in this class kind of the same side actually of much higher ASP than the \$50 I spoke about, but also smaller volume than the average volume of our portfolio. And that molecule was engineered first pass in about 30 days.

And it has taken us -- probably by the time we're done, it will be about six months to go from pathway working, achieving target, to being scaled and producing at the plant. So by choosing a class of molecules that has that kind of profile, that leverages our core assets like our pathway, our host, our manufacturing capacity, and our molecules that already exist in our portfolio. We don't have to go out and contract these. We know what they are, and they are in the industry as you would expect.

They are in flavors, fragrances, cosmetic actives, some food ingredients, and there's probably a few other classes we could talk about, but it's that kind of segmentation where we have contracts where the volumes are pretty clear with these contracts and these partners and where the technology and how to achieve the result is pretty clear, based on our history.

So because of that dynamic, we believe we can do what we are describing. I would tell you that if we were trying to get everything under \$1 a kilo or even \$1.50 a kilo, and they were huge markets where a plant need to be dedicated for these, we would struggle to get one out over the two-year window. So, I just want to highlight that for you. The class of molecule, the type of end market, the volumes and costs we are dealing with, and the technology progress we've made enable us to be very predictable and actually through the added capacity of joining our assets enables us to get to that number of output.

Carter Driscoll - FBR Capital Markets & Co. - Analyst

Let me just -- one final one. So, is it fair to say of the target molecules you're hoping to produce that there is both an element of potentially a higher blended ASP across that portfolio and a lower COGS? I mean, there's elements of both, I'm assuming. Are there disproportionate one or two molecules that might have a significantly higher ASP, but a smaller target market? Or if you could talk about any type of blend, just a little bit of additional color if you have any at this point would be helpful.

John Melo - Amyris, Inc. - CEO

Yes, no, we do, and we are being careful with what we disclose because of all the partners involved, but I can tell you that the spectrum is very wide. We have molecules that are less than 20 tons a year, but have a \$500 to \$700 a kilo price point. We have other molecules that are 1,000 tons year and have more like \$15 or \$20 a kilo price point.

I think what is common to all of them is what we have proven in being able to use Brotas to produce these because of our batch approach and the scale of Brotas that the cost we can produce that is significantly less than anyone expects. If we -- I can tell you now by looking at the Ginkgo portfolio with the target costs they have versus the costs we believe we can produce at is significantly different.

So, that is one of the huge synergies we see is a much lower cost to produce, and a market price that gives us a lot of flexibility in getting to market fast.



Carter Driscoll - *FBR Capital Markets & Co. - Analyst*

All right, maybe just one last follow-up, so just specific to you -- so, if I understand correctly, from the discussion we've had and the prepared remarks, it sounds like the economics of the partnership really begin to take effect in 2017, and that is separate from your anticipation that you will reach potentially positive cash flow in the second half of this year. Is that a fair statement?

John Melo - *Amyris, Inc. - CEO*

Let me say that the \$50 million collaboration payment, and the elimination of principal payments to the old Hercules debt combined change our cash or said differently, have a direct impact to cash of about \$45 million in the second half of this year for us. Now not all of that is incremental. Obviously, we had some of that already expected, but I think it's important to talk about the materiality of the cash impact for us in the second half, and the combination of deferring the principal payments and the collaboration payment coming in. I hope that helps.

Carter Driscoll - *FBR Capital Markets & Co. - Analyst*

Yes, no, it does. And I'm assuming there is a -- like you said, there is a specific identifiable, deliverable for that \$50 million payment and I'm assuming you will make that public when it occurs?

John Melo - *Amyris, Inc. - CEO*

Yes, we expected most of that will get delivered by end of day today. So --

Carter Driscoll - *FBR Capital Markets & Co. - Analyst*

Got you, got you. Appreciate it. I will get back into queue, thanks, gentlemen.

Operator

(Operator Instructions) Lauren Landfield,Zazove.

Lauren Landfield - *Zazove - Analyst*

Can you maybe help me understand in terms of the competitive landscape, is Ginkgo a competitor today? Do you guys actually go head-to-head with them when you are talking about these bespoke molecules with customers?

John Melo - *Amyris, Inc. - CEO*

I will let Jason give his perspective. I can tell you that most of our deals -- the recent deal with Givaudan is a good example. Ginkgo has been talking and I believe may even have a molecule or to either in discussion for in works with Givaudan, but what we did was a platform play for Givaudan. We actually created an opportunity by approaching Givaudan about actually going after sector that they had been not going after with biotech.

So the profile of our deals, even though we have encountered Ginkgo in several of our customer relations, we've actually gone after a different format of deal. We do think, especially after reviewing our compliant portfolios, there is significant doubling of touch points that I believe will have a lot of synergy in our offer to customers going forward even though we're going to maintain obviously separate sales forces, just knowing that we will be able to combine the offer and talk to the customer about how we really scale up and accelerate production should change the nature of the offer that Ginkgo has. And the level of debate that a customer might have with us about the choices they have. Jason?



Jason Kelly - *Ginkgo Bioworks - Cofounder and CEO*

Yes, I would echo that exactly. I think combined we now have the clear industry defining option whereas previously I think there was a bigger pool of folks out there. Now I think together we are the clear standout, although there are others to choose from.

Lauren Landfield - *Zazove - Analyst*

So when you guys were referring to capacity, you're talking about development capacity. I guess it was just a little unclear to me what Ginkgo brings. I understand that it seems like a bit of a derisking event for Amyris to the extent that if you do have this development capacity that you can funnel these new molecules into your production capabilities, and it looks like Amyris receives an increased amount of molecules that it can push through its infrastructure. Is that the right way to think about it?

John Melo - *Amyris, Inc. - CEO*

I will give a little more color, Lauren, to try to help. So Ginkgo today has 100 folks, soon to be 140. They have a new foundry coming alive, and those are all things like the hiring of additional scientists, the ability to have more engineering capacity, we would have to consider in light of the number of contracts we have signed.

The fact that we can do the partnership gives us immediate access to their foundry, immediate access to their team, and they get immediate access to enable us to do more molecules for the same partners at the same time that would then give us more throughput at Brotas for higher revenue and margin faster from our manufacturing. So it is a bit of a -- on that end of it, a bit of a cost play so we don't both have to add -- you have a situation where Ginkgo doesn't have to go out and hire and build a lot of scale-up capability and manufacturing to help these products get to market with their partners.

So they can get the value on the long side -- on the end of getting a product to market. So we can accelerate that for them with less cost. And for us, rather than every new contract we sign, we have to hire X number of people. What we could do is actually share and reduce the amount of additional capacity until we actually use up the capacity both of us have.

Lauren Landfield - *Zazove - Analyst*

Okay, that makes a lot of sense. And then on the Brotas side, I know you guys are sold out until 2020. When you talk about the additional capacity that you are going to bring to this, is this relative to the -- I think you said the CJ Byer deal in the other plant you are developing down there. Is it anticipating that you're going to basically fill up the new capacity you're bringing on?

John Melo - *Amyris, Inc. - CEO*

Exactly. Actually, that is an important question and let me actually give you some color on that question. Remember that our ASP right now, because of the amount of foreseen we are making at Brotas is running at \$3 or less. I don't have the exact number. Raffi could help with that. The average selling price of the products we're talking about here is \$50. And if I think about the value -- the value of the value share which will come in as gross margin to us, and then the cost plus, maybe they gets to about \$30 to \$40 in ASP reported by Amyris per unit of production versus that \$3 or so that we have today. So it provides a significant more leverage revenue and margin from Brotas than the foreseen we are making. And then the foreseen we are making, we have significant markets now that are coming on.

The nutraceutical market that we have not disclosed the exact vitamin -- but the nutraceutical market. The polymers market, and our great value relationship as well as what we are doing with Novi. Each of those markets is building to be about 10,000 tons apiece, and instead of us building more capacity to make foreseen at an average of \$3 or \$2 selling price, we are moving that to partner manufacturing -- large-scale partner with CJ for large-scale foreseen at low cost and we're taking the specialty and loading them into Brotas. And that is a shift in the use of Brotas to create



again more value or said differently generate more revenue in cash from our owned asset and then use partner manufacturing for large volume, lower margin foreseen.

Lauren Landfield - *Zazove - Analyst*

When do you think you will be able to actually start producing molecules and quantities of commercial side out of the CJ bio facilities -- the other facilities that you are looking to outsource this to?

John Melo - *Amyris, Inc. - CEO*

Based on where we are today, it will be all CJ Bio. They have facilities in different parts of the world, but all CJ. And we expect to be manufacturing at CJ probably in the next 12 to 18 months.

Lauren Landfield - *Zazove - Analyst*

Great. And then as far as the -- it was a little unclear as far as the responsibilities with respect to the sales channel. Are you able to sign up deals independently and not push it through the partnership?

John Melo - *Amyris, Inc. - CEO*

That is correct. We each will be selling -- I'm sorry, the last part of what you said is not correct, Lauren.

We can sell independently. They come to the partnership, and we both have an ability that if we for some reason don't believe it's a good product engineer or good product to produce, we have an ability to free the other partner to go do it on their own if we choose to not do it. But the choice is on the partner that has that capability (multiple speakers)

Lauren Landfield - *Zazove - Analyst*

So with regards to all of 2016 revenue, I assume when you look at your plan, most of that is either signed up or about to be signed up. Are there any carveouts for existing works in progress if you will such that that wouldn't impact your revenue guidance or you would have to share some of that?

John Melo - *Amyris, Inc. - CEO*

Yes, we don't -- especially with the pipeline in our activity today, we don't expect any change to our guidance. And I think it's an important point that our guidance is based mostly on products and collaborations we already have signed. And with the collaboration payment from Ginkgo, which we are not sharing back to Ginkgo, that actually puts us as well on track to exceed what we have given as guidance for our revenue forecasts.

Lauren Landfield - *Zazove - Analyst*

Great. And then I think a lot of the last question is really what is this IP transfer I guess? I'm not clear on that. From you --

John Melo - Amyris, Inc. - CEO

I will give you one example, Lauren, but it's pretty extensive and there's obviously a lot of detail to work through on the IP piece of this. But I think one example may help you with that. We have a yeast strain that is probably one of the most robust available today to be able to engineer -- highly engineer products with. That is a strain that we know how to scale and works really well. We've invested a lot in making that work and we've invested a lot in making that in industrial strain. That is an example of something we are sharing with Ginkgo to give them an opportunity to take the products they are making, put them in that yeast host, so that when we get the products they are engineering, we can scale them in our environment because it's a host we know works. So that is one example of knowledge and IP sharing between the two companies.

Lauren Landfield - Zazove - Analyst

Okay. I guess that is more know-how than patents. You're not transferring any of the 700 patents into this are you?

John Melo - Amyris, Inc. - CEO

We are making accessible patents that enable the products that we will be producing at our plant.

Lauren Landfield - Zazove - Analyst

But they are not going to be able to license them out in other words?

John Melo - Amyris, Inc. - CEO

No, they are not able to license them out.

Lauren Landfield - Zazove - Analyst

Great, thank you so much.

Operator

(Operator Instructions) I am not showing any further questions at this time. I would like to turn the call back over to our host.

John Melo - Amyris, Inc. - CEO

Great, Kevin. Thank you very much and I really want to appreciate everybody's participation and your support along our journey and really very thankful for all the Ginkgo and Amyris folks that may be on the call. I know partnerships sometimes are difficult to bring together and I am counting on everyone's ability to trust and build on each other's capability to make this a real successful partnership. And I am really excited about our ability to really deliver for partners in a predictable way and get these 20 molecules developed and deliver it over the next three years together. Jason, anything you would like to close with?

Jason Kelly - Ginkgo Bioworks - Cofounder and CEO

Here, here.



John Melo - Amyris, Inc. - CEO

Great. Thank you. Everybody have a good afternoon or good morning.

Operator

Ladies and gentlemen, this does conclude today's presentation. You may now disconnect and have a wonderful day.

DISCLAIMER

Thomson Reuters reserves the right to make changes to documents, content, or other information on this web site without obligation to notify any person of such changes.

In the conference calls upon which Event Transcripts are based, companies may make projections or other forward-looking statements regarding a variety of items. Such forward-looking statements are based upon current expectations and involve risks and uncertainties. Actual results may differ materially from those stated in any forward-looking statement based on a number of important factors and risks, which are more specifically identified in the companies' most recent SEC filings. Although the companies may indicate and believe that the assumptions underlying the forward-looking statements are reasonable, any of the assumptions could prove inaccurate or incorrect and, therefore, there can be no assurance that the results contemplated in the forward-looking statements will be realized.

THE INFORMATION CONTAINED IN EVENT TRANSCRIPTS IS A TEXTUAL REPRESENTATION OF THE APPLICABLE COMPANY'S CONFERENCE CALL AND WHILE EFFORTS ARE MADE TO PROVIDE AN ACCURATE TRANSCRIPTION, THERE MAY BE MATERIAL ERRORS, OMISSIONS, OR INACCURACIES IN THE REPORTING OF THE SUBSTANCE OF THE CONFERENCE CALLS. IN NO WAY DOES THOMSON REUTERS OR THE APPLICABLE COMPANY ASSUME ANY RESPONSIBILITY FOR ANY INVESTMENT OR OTHER DECISIONS MADE BASED UPON THE INFORMATION PROVIDED ON THIS WEB SITE OR IN ANY EVENT TRANSCRIPT. USERS ARE ADVISED TO REVIEW THE APPLICABLE COMPANY'S CONFERENCE CALL ITSELF AND THE APPLICABLE COMPANY'S SEC FILINGS BEFORE MAKING ANY INVESTMENT OR OTHER DECISIONS.

©2016, Thomson Reuters. All Rights Reserved.