

Biogen Inc.

# Biogen Inc. presents at 43rd Annual J.P. Morgan Healthcare Conference 2025

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## Event Participants

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### Christopher Schott Analyst

Okay. I think we are ready to kick off the next session here. So good morning, everybody. I'm Chris Schott from JPMorgan, and I'm pleased to be introducing Biogen today. From the company, we have Chris Viehbacher, the company's President and CEO.

Chris has been CEO for a little bit over 2 years now. So looking forward to the presentation here. We're going to do about a 20-minute presentation, and then we're going to go over to Q&A from there.

So I'm going to turn it over to Chris. We're going to -- if some of the folks on -- yes.

### Christopher Viehbacher Executive

All right. Good morning, everyone. So let's just see. Here we go. So we covered that.

So new year, new opportunities. What we're principally focused on, obviously, in the near term is really executing strongly on the 4 product launches that we did last year with LEQEMBI, with SKYCLARYS, with ZURZUVAE and with QALSODY.

What I'd like to talk about this morning is where is Biogen going longer term? And there's really 3 main areas of focus here. The first is nothing that we have seen so far with the launch of LEQEMBI dissuades from the fact that there is still significant unmet need in Alzheimer's, and therefore, there is also a significant commercial opportunity. And we're doubling down on Alzheimer's.

The second is, I think in 2024, we made significant progress on our pipeline. And in fact, I think we have really seen an awful lot of conviction and confidence in our pipeline, at least, internally from what we see. And we all know all of the uncertainties around pipelines, but I

think as we look at it with a franchise in lupus and Alzheimer's and nephrology that there is a real opportunity to have significant growth well into the next decade from the pipeline. And the third is I think we made an awful lot of change within Biogen, introducing accountability and a lot more rigor around how we allocate capital.

So let's talk about Alzheimer's disease. Pretty much most investor meetings always focus on this. Let me start over on the right side of the chart, 120,000 deaths. I think a lot of people think about Alzheimer's, they think about a little bit of memory loss.

Let's remind ourselves, Alzheimer's kills people. 120,000 every year. It's a fatal disease. And then there's a discussion around efficacy, and we often cite CDR sum of boxes. But if you go talk to any physician who's actually treating patients, they're not using CDR sum of boxes.

So what really matters to patients is a worry about becoming a burden on their families. They do not want their spouse bathing them. They do not want their children feeding them. They do not want their friends having to drive them around. This loss of independence is extremely important.

And as someone at the tail end of the baby boomer generation, I can say we baby boomers don't want to stop living. We're living life to the fullest all the way, and this loss of independence from Alzheimer's is what really bothers people.

Now usually, when we talk about the market opportunity, we talk about 30 million people with Alzheimer's around the world. But really, that's not accurate in some ways because once your disease has progressed too far, we can't help you with LEQEMBI.

What we do see is most of the patients who are getting treated are newly diagnosed. It's not the patients who've been in a neurology practice for a number of years largely because the disease has advanced too much for that. And indeed, one of the things that is important when a patient first presented to a neurologist is that they have to have a cognitive assessment to see whether they are actually eligible. So really, the market opportunity is 500,000 new patients diagnosed in the U.S. alone.

So what has been the experience? Now we always said that this was going to be a steady and a slower launch than what we might see for other products. And that's simply because of the complexity of the treatment paradigm. If you're talking to physicians, the thing that will come across very rapidly is how much work this is for physicians when a new patient comes along.

You've got to do that cognitive assessment. Where am I going to send them for either the PET scan or the lumbar puncture? I've got to think about scheduling these MRIs at exact time points. I've got to go and negotiate for use of the infusion beds. All of those things are things that neurologists haven't really had to do.

Now this is not unusual for an oncologist. They figured out how to go and do these collaborative approaches, but it is a real change in the practice of neurology. The good news is that they are actually doing that. And as you see -- you can see from that chart, every week, we're finding new prescribers.

Every week, more patients go on drug. Every week and every quarter, and all through last

year, we have been able to sell more. Now it's not an accelerating path. And I think this is the path that we would expect to see, that steady quarter-on-quarter growth.

Now what can we do to accelerate that? Well, we have a number of catalysts, I think, that can help. The ones on the left really are meant to think about how do we make the burden on the physician easier? First one, hopefully, we'll see an FDA approval for IV maintenance. We know that after we remove all of the plaque after 18 months, we have data that suggests that the particularly soluble form of plaque comes back.

And indeed, we have data out 3 years that shows that people who continued on therapy do better.

Now we'll have -- we expect to get that indication, hopefully, in this month. Later in the year, and actually, we just put out a press release overnight, we now actually have a PDUFA date of 31st of August where we'll expect to see the subcutaneous form.

Now that's big because although we make maintenance a little easier than treatment and that we move from biweekly infusion to once-monthly infusions, the subcutaneous will be definitely a lot easier for the physician. You don't have to utilize the infusion beds, for example. And then I think a major catalyst is going to be the subcutaneous form for initiation.

And the final one on the bottom are blood-based diagnostics. There is an expectation that somewhere in the middle of this year, at least 2 blood-based diagnostics could have an FDA approval. And if that's the case, then we might be able to dispense with the PET scan or the lumbar puncture. So if you can dispense with the lumbar puncture and you can reduce the need for infusion beds, the burden on the physician will get lighter. So that's in the near term.

Longer term, I think we have to think about efficacy. The CDR sum of boxes of 27% isn't really the measure of efficacy. Actually, these antibodies are highly efficacious. We can remove amyloid plaque to nearly undetectable levels. The question is really, for whom is that really the most benefit.

And Alzheimer's is really a disease of progressive neuronal and synaptic injury and loss. So we showed data at CTAD in 2023 for low tau patients, and those patients actually had much higher levels of efficacy. We had something like close to 70% stabilized after 6 months, and close to 60% actually demonstrated some form of actual improvement. So it suggests that we need to really be thinking who's the right patient for treatment? And can you go early enough?

And one of the things that our partner, Eisai, and Biogen are doing is we are funding a landmark study that we started in 2020 going and demonstrating the benefit of treatment in presymptomatic patients.

Now when I first saw this, how the heck do you find these people? There are potentially people in this room who have plaques growing in their brains right now but don't know it. And what -- that's where these blood-based diagnostics had been important. We have actually been able to now fully recruit that study. It will take several years yet because there is a follow-up necessary to see what happens.

But this will provide the answer as to whether or not we could actually have a preventive approach to Alzheimer's.

And indeed, there are neurologists who will say, "Actually, we think that at some point in time, patients over the -- or anybody over the age of 50 will start to get a P-tau test as part of the normal blood test," just like you get cholesterol or other measures in your blood. Because really, by the time you get diagnosed with Alzheimer's, a lot of damage has been done by this, this dreaded disease. So AHEAD, I think, could also be a major game changer to this.

Now we also know that MOI beta is not the -- is probably not the only cause of Alzheimer's, and tau is another. And in fact, Biogen's view is that Alzheimer's is really an amyloid-driven tauopathy. And tau is related to the severity of the disease.

So it makes sense to think about tau. We have an ASO that targets tau. And a lot of people have tried this approach with antibodies. But the antibodies act extracellularly and have so far, have not been able to show that they work. The ASO acts intracellularly to reduce the production of tau.

Now it turns out that you can't actually reduce it completely. We are targeting about a 50% reduction because it seems like some level of tau is needed. We had presented some promising biomarker and clinical trends already in a Phase Ib. We are in -- currently in a Phase II that will read out in 2026. We are testing dosing between quarterly dosing and semiannual dosing.

But we actually think that this could be an opportunity to have even greater efficacy for Alzheimer's patients.

Lupus is another significant opportunity for Biogen. Our company was founded 45 years ago. And for much of that time, we have focused on multiple sclerosis. There's a lot of learning from multiple sclerosis that can be applied to lupus, and there are 5 million patients. They have a wide range of symptoms, different organ involvement, and there are limited treatment options.

There have been, I think, 2 products so far that have been approved.

The first one is dapirolizumab, which showed positive Phase III results last fall. This actually acts on really reducing the production of T cells and B cells. So it's on the immunology pathway. What was important was not just the benefit on BICLA, which is the composite score that people use, 50% reduction in severe disease flares.

And one of the things that you see in a lot of these diseases is can you reduce steroids because steroids are pretty damaging to people's health. And there, we actually saw a significant number of patients successfully being able to [indiscernible] and we've got a pretty good safety profile here. So we have already started a second Phase III study that is enrolling and expect to launch in a few years.

We have a second molecule, homegrown, litifilimab, and this is the first-in-class biologic, not only for SLE but for also CLE. And there is no actual drug currently approved for CLE, which is the cutaneous form of lupus. And that has a different mechanism of action. That really is

looking to reduce the production of interferon and so really is going on the inflammatory pathway. We have Phase III studies ongoing in both CLE and -- SLE and CLE.

SLE is expected to read out in 2026 and CLE between '26 and '27.

And finally, I think the acquisition of HI-Bio in 2024 was pretty transformational. First, this is a little different than what Biogen has been able to do in the past. We've been focused on neuroscience and a lot of neurodegenerative diseases. You can't really do Phase II studies.

Here, we can get proof of concept in studies. You look at the AMR indication, for example. We saw over 80% resolution in AMR. And we've already -- we're starting to get these trials now up and running, and we expect to initiate all 3 studies in the course of 2025.

And it's not only that we can give -- get a lot more confidence. These are not 5-year Phase III studies. So we can do these studies shorter. We have a positive proof of concept. We can actually do prelaunch activities, and that's a change in the way we do things at Biogen.

We're not looking to do left turns into oncology or cardiometabolic, but we need to be able to go into diseases where we understand the underlying disease biology. We're going to continue with ALS in Alzheimer's, and neuroscience has been who we are. But we're trying to open the aperture and move more into both rare diseases and immunology, and HI-Bio plants the flag in both of those.

And so you can see, we actually are getting momentum across our late-stage pipeline. And again, '24 was really a watershed year, at least for me personally because I'm starting to get increased confidence around the pipeline.

And the final areas, we've brought a lot of discipline to the company. First, we have clearly got this MS portfolio that is facing increased competition. But what you can see is that actually last year with our new products, we were pretty much on the pharma side able to balance the decrease in our MS portfolio with the new products.

Our decrease in revenue of \$228 million really was a function of the decrease in contract manufacturing revenue, which was a contract that had been in place for a number of years. It was quite low margin and did not get renewed. And that's a little where we are going to be as Biogen for the next couple of years, trying to balance -- can the new products offset the decline in the MS portfolio? And finally, on the cost side, I'd just like to point out that on the gross margin side, you saw a significant improvement in margin, 400 basis points. And we have 800 basis points improvement in operating margin.

Tim Power joined us recently as the new Head of IR from BMS. And I think, Tim, it would be fair to say you're pretty impressed that a company can do 800 basis points of operating margin in 1 year.

What is important in that is that we did not, in any way, scrimp on the investment in new products. We took \$250 million essentially out of our legacy product portfolio and invested in new products and new product growth. And that actually -- we shouldn't forget that actually, cost savings generate cash. And you can see that the cash flow generation has gone from \$1.3 billion to \$2 billion. And that's important because we want to continue to invest in Biogen

and having the cash flow to be able to do that is what's important.

So I'll just go back and say we continue to believe in the potential of Alzheimer's, and nobody is really doing as much on as many modalities as Biogen in Alzheimer's. We believe we have a transformational multibillion-dollar pipeline potential, and we're going to continue to be very disciplined about how we deploy our capital.

And with that, I'll turn it over to you, Chris.

### **Christopher Schott** Analyst

Great. Thanks for those comments. Maybe just to start the conversation, we'd love to kick off with LEQEMBI. It sounds like you're kind of laying out a ramp, this kind of steady ramp that we've been seeing continuing into 2025. When you think about the -- let's say, hurdles to adoption that have been out in the market, like how would you rank order at this point?

What are the biggest hurdles for physicians who are still considering kind of prescribing the products and how to use it in their practice?

### **Christopher Viehbacher** Executive

The biggest hurdle is still clearly the need to implement the treatment paradigm. I said there are 500,000 new patients diagnosed every year. There are only 13,000 neurologists. So there's already also a bottleneck in being able to get to see a neurologist.

Now that's where the blood-based diagnostics can help because I think a lot of the patients are in primary care. And I think over time, the primary care physicians can start to triage patients so that those who get in to see a neurologist are actually going to be able to be treated.

The other is I think as we simplify this treatment paradigm, it's not necessarily the neurologist that has to do all this work. You can have nurse practitioners and other people in the office who can start to manage the patient. The neurologist is going to want to own the diagnosis, but things can happen.

Now we're also -- we had a big meeting in Tokyo before the holidays, looking at first real full year of launch. And I think it's fair to say we had to spend an awful lot of time educating physicians first about safety. Safety is clearly of primary importance, but also about this whole treatment pathway. Are PET scans reimbursed or not, and what about the diagnostics and where do I go for the lumbar puncture?

We didn't have a lot of time to talk about treatment benefit. And I think we have an opportunity to refine our messages going into the second year where we really focus on that, some of those patient preoccupations about independents. So I think there's also things that we can do on the commercial front.

But again, I think it is going to be this ability to create the care pathways and just funnel all these patients through. But as we simplify it, as we bring in primary care, I think over time and particularly, I think after the subcutaneous for induction, we may see actually an acceleration at that point.

**Christopher Schott** Analyst

Great. Maybe just talk about the [indiscernible] as a blood-based diagnostics coming in. How quickly would you anticipate that those get adopted once they're more broadly available?

**Christopher Viehbacher** Executive

Well, it's -- if you just let it take its natural course, it will take quite a while because you can get a diagnostic onto the market and just have a clear lab, but you probably don't have reimbursement and you might not have the validity. So the FDA approval is important for reimbursement. There has been a history of slow reimbursement for diagnostics, which seems crazy. And perhaps, if we do get an administration more interested in prevention, maybe we can get a little bit more emphasis on diagnostics and biomarkers.

But I think my experience with abacavir at GSK, which had a hypersensitivity reaction, we developed a companion diagnostic at GSK for that. As GSK, we actually got actively involved in educating physicians about that, and take up was pretty strong. So we'll have to see once these are approved. We may be able to work with the diagnostics companies and educate physicians that they are available. And considering that it is a considerable cost to do a PET scan or even a lumbar puncture, one would think there's a cost-effectiveness argument that one could make with payers.

**Christopher Schott** Analyst

Yes. And would you expect that with the blood-based diagnostic, that PET piece can kind of fall away in this?

**Christopher Viehbacher** Executive

That's the hope that, that would be the case. I mean as I see Priya here in the front row, as Pia would say, I think you're going to need something like 90% concordance between a PET scan and a diagnostic for that to happen. And it seems like some of them are going to be able to do that. But we'll see what happens.

**Christopher Schott** Analyst

Yes. On the subcu piece of it, I mean the maintenance one first. How important is the maintenance subcu from your perspective?

**Christopher Viehbacher** Executive

Well, I think it's important from a couple of different reasons. We're probably just getting now to the point where the first patients have been on for 18 months, we've cleared the plaque. But what do you do then? And what we saw when we started to withdraw [Aduhelm], people don't want to come off the drug and -- because they feel that they are doing better. And so they want that option.

This will give that indication, assuming it gets approved. And as subcutaneous that then also makes that convenient.

So we're expanding the market on one hand. The other is this is not an indication that



donanemab can go after. So it's a clear point of differentiation between lecanemab and donanemab. And I think that's going to be also quite important. Do you really want to go on one drug, but then have to switch to another?

And really, on the ARIA front, you typically see ARIA early in the treatment. So you really are -- hopefully passed most of the ARIA risk by the time you get to maintenance.

**Christopher Schott** Analyst

Yes, makes sense. And then in terms -- I guess and just that subcu follow-up, is the -- when we think about kind of moving out to the earlier like the patients starting this, how -- what percent of patients is just the infusion too much of a hurdle to get through? So in a sense of like as we think about that next approval through, like how big of a step-up could that be?

**Christopher Viehbacher** Executive

I don't think there's actually generally an infusion bed capacity issue. It can be at specific institutions. There's also what we have seen on occasion is even as capacity in a particular institution arises, there's a reluctance to let the patient go to an off-site infusion center because infusion beds are an important source of revenue for hospitals.

But generally, there's not -- Eisai has also made -- have contractual arrangements to make more infusion beds available off-campus. But I don't think there's that -- it's more the -- you do have to have that at particular time points. And you have to have someone who's scheduling that up in front, same as the infusion beds and not just -- it's not that -- rocket science, but you need someone who does that. And that's getting into that routine is really more of the barrier. But the actual bed capacity does not seem to be generally speaking a problem.

**Christopher Schott** Analyst

And this -- actually a little bit more durational, how are you finding patients in terms of their willingness to stay on therapy? Is it generally once the patient is on, they're staying on for long periods of time?

**Christopher Viehbacher** Executive

Yes, that seems so. It's a little hard to track numbers of patients now because all we really can do is we have an algorithm that takes number of vials that we're selling, and we try to back into actual patients. But we haven't had a lot of reports of people dropping off therapy.

**Christopher Schott** Analyst

Maybe just a couple more on this. There's competitor coming in the market. Just any early anecdotal comments of just how that has on one hand, maybe a second player helping with the education helps. And on the flip side, you've got a competitor. How's that balance working out?

**Christopher Viehbacher** Executive

Well, no, we're clearly mindful of the financial power of Lilly, and we certainly wouldn't want to



underestimate a competitor. So far, but it's early days, we haven't really seen that much. It seems from the data we have that they're getting about maybe 30% of new patients. There hasn't been -- it hasn't created market growth yet, but I think part of the problem is they can't just come into the, say, IDNs and use our protocols because they have a different treatment paradigm. They have an extra MRI.

It's not clear when you can stop treatment on that.

So they're still probably working through some of that protocol. So I would think that they're not completely out there. But this isn't really going to be a share of voice name. This is really around growing a market, working with physicians, helping them to understand what's the most efficient pathway. Can we make that burden easier?

Another point of differentiation is we have a subcutaneous formulation, Donanemab won't. So -- and when you think about between now and the end of the decade, treatment is probably still going to be dominated by these 2 antibodies. And so I think we have enough points of differentiation that we'll be able to -- we're not obviously as big and powerful as Lilly, but I think we'll be able to stand our ground on the competition. And we have enough points of differentiation that we can be successful there.

### **Christopher Schott** Analyst

Great. Maybe just shifting over to the AHEAD 3-45 trial. Just timing of that, when can we think about a readout?

### **Christopher Viehbacher** Executive

We haven't actually disclosed that, but we've just had most recent patient in. And the follow-up period is how long again? It's 4 years for everybody. So it -- now we're not going to necessarily wait till the last patient has had 4 years. There may be an opportunity to do that sooner.

But that is the commitment of Biogen in Alzheimer's. Who else would do that study? I mean that is a -- that will be a truly landmark study.

We will really define whether or not you can have a preventive care approach to Alzheimer's and who really can benefit the most. And we think when you look at this early patient data on low tau, the expectation is, obviously, we need the clinical trial data to validate that. But you can imagine, if you could actually get to patients before they really have symptoms, we could really have an incredible impact on this terrible disease.

### **Christopher Schott** Analyst

Yes, absolutely. Yes. It's an exciting study. So maybe just sticking on Alzheimer's, talking about tau. First of all, just how do you think about the opportunity with your tau program relative to LEQEMBI?

### **Christopher Viehbacher** Executive

Well, one of the things that we have seen and one of the interesting about Biogen is that pretty much all of our medicines are treating a pretty devastating disease. And I grew up in

primary care medicines, and we think about once a day versus twice a day or pill versus IV.

When you have a truly devastating disease, it's all about efficacy. And I think that, first and foremost, is what tau is going to offer. What we have seen in early data, it clearly has to be validated, but we're seeing multiple fold times efficacy that we saw with A beta. So there's a real opportunity to see a much greater efficacy intrathecal, which is not necessarily the most convenient way. But I think if we can get to quarterly, but certainly semiannual dosing that, that will be manageable for patients.

One of the things that I always look at is what happened in clinical recruitment. We actually recruited that study even ahead of schedule. So it was clearly not an impediment to recruitment. And it comes back to, again, if this works, and I have a terrible disease, I want the best efficacy I can get.

### **Christopher Schott** Analyst

What do we think about for the bar to move this forward as we think about the Phase II data in 2026? Like what are you hoping forward to see in the profile?

### **Christopher Viehbacher** Executive

Well, I think really Phase II will certainly inform us about the dosing. That's important. We're looking to see validation of some of the data we saw in Phase I. I think we've -- I think there's quite a high degree of optimism that we will see that data. And then one of the most interesting things is if we are able to validate that with the Phase II.

Obviously, we're thinking about Phase III to go into with the tau program. But you could also go into other tauopathies and a number of those.

So there's an opportunity to really have multiple shots on goal here. Priya and her team did an amazing job of redesigning the Phase II study and been able to lop 4 years off the program. And I think what we are going to be doing are things in parallel. So by the time we get the Phase II data, we want to go as fast as possible into the Phase III, and we'll be doing some of that development of Phase III in preparation at risk to make sure we can go as fast as possible.

### **Christopher Schott** Analyst

Great. Bigger picture question on R&D. I know when you started and part of the goal was to maybe rebalance the portfolio a little bit. How far along in the process are we, given your pipeline today?

### **Christopher Viehbacher** Executive

So I think we still have what we have inherited. I mean lupus is clearly also has been a challenging target. I mean we're very proud of the fact that this is only the third medicine to actually get a Phase III trial, but it also shows that this is a pretty tough area in which to do R&D. But I do think we will succeed. I think we're feeling pretty good about the tau, but I think -- that's why HI-Bio was important for us.

This is really trying to move us into an adjacent space.

Biogen has an awful lot of capability. We understand the immune system because we've been in it with MS for many years. We're not necessarily going to go into the big indications like AD or RA. But I think we can find rare disease spaces, specialty immunology, where we can play. We've been specialized at low-volume, high-value products.

We have an incredible ability to help patients navigate system. I think one of the reasons that Biogen was so successful in MS is we have been able to actually help patients navigate the very complex reimbursement programs. We know how to provide genetic testing. We have an awful lot of really high-level scientific education of physicians, and that's what I think we really want to leverage when we go into these other areas.

**Christopher Schott** Analyst

Yes. Makes sense. Just on the lupus programs, how do you kind of position the 2 programs against each other? How do you think about them?

**Christopher Viehbacher** Executive

Well, they're going to be in different -- the different mechanisms of action. And this is a complex disease that affects different organs at a time. So I think it's going to be a little like MS. You're really going to decide which product is best at which point in time for every patient. And so I don't think this is one product for the whole disease.

CLE is clearly something that's of interest because no one has actually been approved in that space. And so litifilimab certainly can play there where dapi is probably not going to play.

But I think that will be some of the things that come out of now the Phase III studies is to figure out exactly where you would position that for which patients. Again, we did the same thing in MS.

**Christopher Schott** Analyst

Great. Maybe just tipping over to SKYCLARYS. Would love just an update in terms of how that ramp has been progressing, both U.S. and ex U.S.

**Christopher Viehbacher** Executive

Yes. So the interesting about Friedreich's ataxia is that there is a group of patients out there who have been diagnosed, and you can get at those quite early. We did that in the U.S., first 1,000 patients, fine, seeing the same thing in Europe.

We're expecting to see now SKYCLARYS approved outside of U.S. and Europe sometime this year, particularly in South America. There's a high prevalence there. But the reality is that a lot of physicians, particularly primary care, have never heard of Friedreich's ataxia. And so it can take quite a long time for patients to actually get diagnosed.

So one of the things that occurs in most rare diseases is once you offer a therapy, there's a whole lot more interest in diagnosing patients. So that's where we are now in really educating physicians about if you see these symptoms, you should ask, could this be Friedreich's ataxia? If you think that, you may want to consider a genetic test.

So it's hunting patients. That's what rare disease is all about. You start to see a slower growth because they're not there in physician waiting rooms. But we have been able to validate from an analysis of medical records that there are, in fact -- we thought there were about 4,400 patients in the U.S. Actually, we think there's about 4,800.

There's more in Europe. And there's actually quite an awful lot in Brazil, in Colombia, in Argentina. And so we see steady growth. It's a little lumpy because it depends on how many patients you found last week, but that's just the nature of rare diseases.

**Christopher Schott** Analyst

Should we think about the growth of this product coming more ex U.S.? Or do you think that we could start to see a reacceleration in U.S.?

**Christopher Viehbacher** Executive

Yes, I think it's been -- I think SPINRAZA, it's a good model for that. I mean we have, I think -- remember, we have -- I think it's about 50% or 60% of our revenue for SPINRAZA ex U.S. Actually, on rare diseases, we tend to get actually quite good pricing outside the U.S. So I think you'll see a significant part of the revenue coming from ex U.S. And by the way, I didn't mention it, but the same is true of LEQEMBI.

**Christopher Schott** Analyst

Okay. Yes. Actually, that's a nice ramp there. Just a big [ one ] for the business development. Just talk about appetite right now for BD and what's the -- how are you thinking about priorities?

**Christopher Viehbacher** Executive

Yes. So to me, as an industry, we have been sourcing innovation from outside our companies for quite a long time. And there is a sense that, well, you do M&A when you got your back up against the wall.

But actually, what you want to really be doing is being -- is looking outside constantly. And actually, today, we have Priya as Head of Development. We have Jane Grogan, Head of Research, and we have Adam Keeney in Business Development. All 3 of those see as their day job, the need to actually look outside the company and where can we find innovation to bring in? How do we grow the substrate for future growth of the company?

And that might be an early-stage asset like we did with neomorph. It might be a mid-stage asset like HI-Bio or it might be an acquisition like Reata. But we're not necessarily saying, "Hey, well, we're seeing the decline of the MS business, and the pipeline is over here. We need to go do a deal." That's not where we are. I see some proposals that we should be prepared to overpay.

We're never going to do that, not knowingly anyway. So I think that's where the discipline of capital is. But I think R&D is what it is. I've learned over 35 years, you can never actually have enough pipeline no matter who you are, and you should be constantly looking for things.

**Christopher Schott** Analyst

Is there any bias right now of just [ the updates ] you're seeing looking more at the earlier stage versus mid versus Reata, something that's later stage?

**Christopher Viehbacher** Executive

Bias is actually for early to mid just because of cost, right? I mean trying to find something that's late stage that's affordable is difficult. One of the -- I was at a seminar, and banker was doing a presentation on M&A in our industry. Average premium in our industry is 70%. And there is no other industry where that's the case.

And you think about the IRA, you think about the pressure our industry is under, it's -- our industry is kind of out of favor versus tech, for example. I think the pricing of later-stage assets can be inhibitory to doing a deal. Now that said, if we could find another Reata, that would be a nice thing to do, but those things are really hard to find.

**Christopher Schott** Analyst

Great. Maybe just last few minutes here. Just as we go into 2025, purchase and pulls, which is we just directionally think about for numbers this year.

**Christopher Viehbacher** Executive

Well, you're probably going to hear from a number of companies. Obviously, there's the Medicare tax to fund the \$2,000 deductible. There's a currency effect. The euro is down. And for all of us who have international business, there's really going to be some headwinds there.

Our MS business, we're not sure when a TYSABRI biosimilar comes in. We were able to defend a patent in Europe for TECFIDERA. Exactly how that holds is also a bit of a question. But we continue to really drive focus on LEQEMBI, on SKYCLARYS. ZURZUVAE has been doing well.

And QALSODY, although a smaller product, has a really important patient impact. So we're focused on execution of new product launches and really getting this pipeline to market as soon as we can.

**Christopher Schott** Analyst

Because you mentioned in the presentation that kind of balance you saw ex the contract manufacturing, is that like a -- that's a reason -- is that a reasonable way to think about the next few years?

**Christopher Viehbacher** Executive

Yes. I think we're going to be -- does MS decline in 1 year a little more than the new products? I mean that is where we're going to be. Absent a deal, I think we're not going to have an enormous growth until we really get LEQEMBI, growing at a different trajectory.

But you can't really run this business on a 1-year perspective. Our job is to build a strong Biogen for the future. We see some of these new products coming in, in 2028. And then the

company can grow in the 2030s and beyond. And you don't want to really have a lot of distraction for that.

That's just -- we've seen that movie play out many times. This is not a new situation in our industry where the heritage products are under competitive threat, and the pipeline hasn't yet arrived. And you just have to be resilient and stay the course and build your company.

**Christopher Schott** Analyst

Great. I think we are out of time. Thank you so much for the comments. We appreciate it.

**Christopher Viehbacher** Executive

Thanks again.