



Innovation at a crossroads

by Ray Pressburger

Video transcript

Ray Pressburger: Good morning, everybody. Super thrilled to be here and starting off just by saying thank you to the endpoints team for what's turned out to be a great morning already and an exciting two days ahead. Personally, very thankful to be here at the beginning of J.P. Morgan Week, a week that I think we would all agree kind of kicks off our years in industry, sets the tone for what's to come, how we all feel going into the year, and hopefully starts conversations around the things that we're going to spend our time doing. As part of setting tone, last year I remember, you know, much of the tone here throughout the week was challenged. A lot of discussion on headwinds, the capital markets, the economic uncertainties. The IRA was fresh on the scene and real, and we, you know, had spent much of last year finding ways to have positive conversations amidst the headwinds of the industry. I'd like to use this time, though, to maybe do my small part in offering a sense of optimism and positivity going into the week this year, and hopefully for the year ahead, for you, for our colleagues. In some ways, I don't have to do much to do that. You know, we just had a banner year as an industry. We haven't talked

about that a lot this morning. 57 NMEs approved. 66 total drugs, including vaccines and BLA approvals. That's the most since 2018 and nearly the most ever. That success in the clinic and regulatory success is something we should all be optimistic about and celebrate. But that's actually not what I'm here to offer a little bit of optimism about. What I wanted to talk about as a backdrop for our industry in 2024 is a bit of a moment that we're having. And that moment is the culmination of many, many years of investment in digital technology and what it's doing for our industry. Lots of people will talk more throughout the next couple of days on things like AI and the convergence of science and technology and the promise that we've already had some conversation around here today. But I don't want to suggest that this is just my opinion or something I think you should all be excited about. Let me share something with you that hopefully will give you some degree of confidence that this is really here and there's a reason for it. Every year we run a process leading up to a culminated event we call our CEO forum. We bring together a little over a dozen CEOs of the top 15 top 20 pharmaceutical companies in the world. We have a private event. It's a round table.

Chatham House rules. It's peer conversations that talk about the issues that are most relevant to the industry. That event was last night. Moving up to that event we spend a considerable amount of time with those CEOs and others really understanding what's the top issues on their mind.

What do they care about?

What are they excited about?

What are they worried about?

All the things you'd expect.

In some ways what we find every year is incredibly unsurprising. Last year and we published these things every year, access and affordability and pricing challenges with the IRA, economic uncertainty, keeping up with the pace of innovation, productivity. These are the things that we hear. Last year one of the dominant themes was the talent topic for the industry. That order of those five things changes every year which one is the number one, which one is the number three. Those things are, but none of them should be surprising to anybody in this room.

What was different this year for the first time ever for us is that not only was this the first time it appeared in the top five but it went right to number one was technology, digital technology.

The CEOs in our forum said the number one thing that they think about is keeping up with the pace of what technology enables their organizations to achieve. Not improving scientific innovation which of course is always going to be at the heart of our industry and important. Not actually the economics and IRA. It is now the number one issue of the biggest companies in our industry. How do I take advantage of and keep up with technology in pharmaceuticals? That's the question. We didn't lead with that. They told us that and spent a

considerable amount of the discussion last night actually talking through the ins and the outs of that. In some ways I said it's not surprising that this is a conversation. It was surprising as the number one. But there's a lot of reasons to not be surprised. Back at that point in 2022 we closed the year with \$2.5 billion of investments in AI companies, another billion in partnerships from the pharmaceutical industry, \$45 billion worth of value on top of that. All that happened a year and change ago and then all of a sudden here in 2024 we had the \$3 billion partnership via Alphabet and Lilly and teams which we'll talk more about tomorrow on the panel. There are over 70 phase one assets that were AI mediated in 30 and phase two. That's real. It's happening now. One of the companies in the audience today, Emgen, publicly talks about cutting discovery timelines for antibodies in half using technology. That's real. These are real impacts now. By the way, this is not just discovery which everybody will talk about.

We've got the AstraZeneca business launch in Evanova who promises they've launched their own business based on the promise of digital technology and clinical development. People took the grand pre-prize this year in digital health at the pre-gallon for their success.

You can look well beyond discovery and development into areas like commercial manufacturing and supply that the industry is changing.

It's interesting because all of that's happening but why now? I was looking back at a 2012 NIH paper on computational drug discovery and another publication back in the same year around why digital marketing capabilities will mean that we'll have no such thing as sales

reps in this industry by the year 2020. Those things haven't happened. Why is now different and is it really different? Why do these CEOs feel that way? Why is it the number one issue right now and why is it different?

The reality is that 10 years in the making has been foundation building. There has been the release and work to unlock clinical data, data sets across the world, integrate data, the technology advancements themselves in patient level data security, the validation and integration of tools across the development lifecycle. All of these things needed to be in place and now we're not there anymore. We're not at a place where we just need foundational things. The foundational technology is now actually being used in the most important parts of our business to compete. This is what the CEOs told us. Technology is the new competitive frontier in our industry. It will be the difference maker and it will drive success and lack thereof across the sector. Why is that a point for optimism? Why should we be excited about that? There's CEO of Generate Biomedicines, Mike Nally, many of you have probably heard events like this and others. I've heard him say a few times something that really sticks with me. He says it's specific to discovery because that's the world that his business lives in but I think it applies beyond that. He says that AI gives the opportunity to move from an artisanal craft, a drug discovery, to an engineered process. What does that mean? That means we move from relying on the great and good of the smartest people and the armies that we can accumulate of them to actually being able to control the outcomes through engineering. I think that's an incredible way to think about it and it goes well beyond discovery. If you were to think about

this idea of artisanal to engineered, it's the same in the commercial model. There's nothing more artisanal than having 10 agencies compete on the best positioning and message for a drug. That is artisanal at its very core. Who can be the most creative and come up with the most interesting thing to differentiate on? But that's not the world we're in anymore. We're now in a world where marketing isn't a positioning. It's 150 different messages assembled at the right moment to give to the right customer. It's artificial intelligence being used to predict when to engage that customer in what way. This is now the same concept.

We're moving from artisanal to engineered. It's true across manufacturing and supply. Our ability to real time and dynamically reallocate supply is becoming a competitive frontier in areas like radioligand therapy. It batch failures, quality control. One of my major clients talks to me about that being their core differentiation, their ability to deliver on time.

Optimism means we can control something for the better. We can use this technology to compete and the time is right now. It's funny.

A few years back, I was in an executive committee meeting with one of my clients and somebody used this term. It stuck with me, this phrase I should say. You said in this industry, we're rarely wrong about the direction of travel. But we're almost always wrong around the pace.

We've seen this coming. We've been investing in these foundations for a decade. We've probably thought that this moment was going to be sooner, but it's here now. Our industry sees it. What does that mean for all of you, for the companies in the room, for the rest of this week and what people are spending their time doing and thinking,

and why am I sharing this with you right now?

Well number one, if you're a smaller biotech here, you're going to spend the week. Presumably the year talking to potential partners. What I would offer is if these companies believe the competitive frontier will be technology, it will be the place that they can build competitive differentiation and win in the marketplace, then as you talk to them as partners, if you're talking to the bigger pharmaceutical companies about partnering, ask them. Make them show you.

How are they going to help you compete? How are they going to help you extract the most value out of these assets that you're going to partner on with their capabilities? They believe it's the differentiation in their organization. Hold them to that. Ask them that. Not just their development footprint, not just their expertise in running programs, not just their commercial footprint. Ask them. Number two, even if you're not going to partner big and you're talking with your other types of partners, your CRO partners, your CDMO partners, these kinds of companies who we're all here meeting with this week, ask them. In the same discussion last night in our CEO forum, the number one and number two inhibitor that the CEOs said they had in realizing this potential is no longer the availability of the technology. It's the talent and their organization. They said we will not be able to find enough people who have digital skills that we need to take advantage of these capabilities in our organization. And we need to declutter, remove the thousands of processes and SOPs out of the way so that these technologies can thrive in our organization with that talent. So why do I say that if talent becomes the scarcity in this, it's the currency, then as you look at your

partners, your CRO partners, your CDMO partners, all kinds of partners, test them. What talent are they bringing you to be able to compete in this way? These are conversations you can be having this week. And I would add one more for the biotech, which is as you look at the year ahead, if you believe anything that I'm saying here, if you believe the technology and digital technology will become part of the competitive frontier like the CEOs of our largest companies do, then think about your board. Think about the leadership team.

What are they bringing to that? To you. For the rest of you in the room, those who are maybe representing the larger companies who will be looking for innovation and partners in the innovation front, I would offer that that talent topic, in many cases, is in the smaller companies, and you know that. And it's a little bit interesting. There's been a lot of conversation this morning around deal making. And of course, deal making deals will always be valued on assets, assets in pipeline, which are platform.

What does the pipeline look like? What is the value? There was a conversation this morning on that. But in the same conversation, there are companies like Generate who raised a quarter of a billion dollars in their latest round just on the basis of their capability, not just their pipeline. So clearly, technology and capability has value. So as you talk to the smaller companies here, and you think about the talent they have, how do you factor that into your deal making decision process? And I would add, as you bring those organizations into your fold and you partner with them, making sure that we don't suffocate that digital talent and give it the room to breathe. So there's a long week ahead. There's partnerships. There's conversations you all will be having. At the heart of all of it

will be the scientific innovation. We'll have 100 conversations around GOP ones. We'll have 100 conversations around ADCs. We'll talk at length about deal activity and M&A for the coming year and partnerships. And all of that will be the case. But I want to encourage everybody, as you think about that, to make sure that you're thinking about the This is the moment. It's not 2012 anymore. And everybody in the industry is beginning to see it.

technology dimension to how you're going to compete, how you're going to partner, who you're going to partner with. And I hope we can all celebrate that as a plan of optimism for the year ahead, because it moves us from our Tissenol to engineer. We can control our industry more than we've ever been able to before.