A Biotech/Pharmaceutical Revolution
Hal Clark and Janet Luby Interview
Tape 1
INVESCO

(Music)

HC: Hi, I'm Hal Clark, Senior Client Portfolio Manager for the Invesco US Growth Equities Team. I'm here with Janet Luby, a Portfolio Manager and Senior Equity Analyst for our large cap growth team. Janet, welcome.

JL: Thank you, Hal.

HC: So, Janet, you're the sector expert for the healthcare sector. You've been in the industry for over 20 years. Tell us what you're seeing in pharmaceutical and biotech.

JL: Well, sure, Hal. What we're seeing in the therapeutic space can really best be described as an evolution which is morphing into really more of a revolution as new therapies take hold and new ways of discovering these therapies take hold. Now we refer to this as the innovation curve, and what this is is a rolling ten year average of first in class compounds going back about 90 years to 1920. And it really tells the story of the progress

that drug discovery has made in terms of successful outcomes and addressing more and more medical needs. So if you look back to the earlier part of the 20th century, drug discovery was something of a hit or miss process really, and there was a lot of luck involved as well. For instance, penicillin was discovered by accident actually, and then yet still it wasn't actually commercialized until the early 1940s when we needed it for the army in World War II. With that said, though, there was fairly good and steady improvement in the drug discovery process through about the mid-2000s when it really took off.

HC: So what's been driving that rapid acceleration?

JL: Well, it's a function of a lot of things coming together at once. There were some really good and positive things that really planted the seeds for this that began to happen in the early 1990s. The first of these, the passage of the first PDUFA legislation, and what PDUFA means is Prescription Drug User Fee Act, and what this really means is it was the first more formal alignment between drug companies and the FDA. And it really actually came about in some part due to AIDS activists from the

late 1980s where there was pressure on the FDA because sometimes it took them up to three years to approve a drug, and this was literally costing lives in some cases. So now we're on the fifth iteration of this. You're seeing more and more collaboration between the FDA and the drug companies and earlier and earlier stages of the process, and so what this means practically is that a drug's chances of approval on the first pass have gotten better over this time frame. And then the number two big thing that has happened over this time period was actually the mapping of the human genome, because for the first time scientists could actually break things down to the fundamental building blocks of the human condition. When I first started digging into the promise of immuno-oncology, for instance, I spent some time here at MD Anderson, and Dr. Allison, who is a pioneer in this space, he characterized it as finally having a periodic table of genes, a blueprint to work from, rather than the existing library of known genes and the combinations thereof. So those are two aspects that have been hugely impactful to this wave of innovation from a clinical standpoint. And then we layer on the technology side of it, too.

HC: So how does technology fit into the

healthcare story?

JL: Well, it's hugely impactful, too, because you have better and faster analytics and computing power, better diagnostics and better life sciences tools, so it all comes together in a way where you can do the same thing in seconds that used to take months or even years to do. So this in turn leads us to a situation where you're better able to identify a person's condition in a much more individualized way, and that's essentially the promise of personalized medicine.

So when you have the ability to target a promising drug with a person who it's more likely to help, that's just a win for everyone. And it really speaks to this virtuous cycle that I describe with better outcomes for patients and for clinical trials. And then I would also note that this is, you know, a big part of the move toward companies partnering more with each other, which has the effect of lowering both the economic as well as the clinical risk that can be associated with any one blockbuster drug. So in some ways we take a situation where we have more collaboration between drug sponsors and the FDA, a road map of the human genome, and we layer onto that faster and better technology, and

we think that this all adds up to a pipeline that's better and smarter than it has been in the past.

HC: Yes, that sounds like a very compelling story and it sounds like it's pretty much good for everybody, but how do you invest in that?

JL: Well, it is a high conviction idea for us, and that's borne out by the heavy positioning in the therapeutic space that we have, particularly within biotech. And we really began to develop and build on this theme in 2012 and 2013 as we conducted deep dives into therapeutic areas like Hepatitis C, oncology and multiple sclerosis, and we could see untapped potential for new therapies was likely to exceed expectations and drive really meaningful growth. And this was especially true in Hepatitis C when we could see that there was huge demand present based only on the existing and diagnosed patients, and that as awareness of these new therapies came about it was going to drive even more growth and essentially increase the market. And so as a result we've been with the group for quite some time now, and we're just now beginning to see this meaningful acceleration in growth rates as these therapies come to fruition.

And so I guess to wrap up I would just say that this is a really, really dynamic time in healthcare, and we believe that these agents have changed our set to drive meaningful new therapies and new growth and redefine standards of care in many cases.

HC: Thank you, Janet.

JL: Thank you.

HC: And thank you for watching.

(Music)

(END OF TAPE)

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