PPD

PPD presentation delivered at the 39th Annual J.P. Morgan Healthcare Conference on Monday, January 11, 2021 at 2:50 PM

Tycho Peterson: We're going to kick it off. I am Tycho Peterson from the life science team. It's my pleasure to introduce our next company this afternoon, PPD. For those that want to ask questions, there's a submit question function on the website.

With that, let me turn it over to David.

David Simmons: Thanks for the intro, Tycho. Thanks to all of you for joining our session today. I'd say we're excited to be here and very excited to share the PPD success story. If we go through the deck, you'll notice common thing on slide two. I want to draw your attention to the disclaimer for today's presentation, and encourage you guys to read this at your leisure.

One thing to point out, which I am sure you all appreciate, is that we're currently in a quiet period. As such, we won't be commenting on our financial performance for the fourth quarter nor for the full year 2020, nor will we be providing 2021 guidance.

We will provide that information on our fourth-quarter results call, however, so just stay tuned for that. If you could orient to slide three, I'm going to start my presentation with slide three. PPD is one of the largest CROs in the world, I just got to give a sense of who we are, with more than 25,000 employees across 46 countries.

We provide a full spectrum of services to biopharma and biotech companies, and governments who are pursuing drug development programs, from phase I through phase IV and post-approval studies. We are comprised of a clinical development services segment, representing approximately 80 percent of our revenue, and a lab services segment comprising approximately 20 percent of our revenues.

We've been executing drug development programs for 35 years, with a consistent high-quality set of standard operating procedures across the globe. Only a select few CROs in the world can say

this. The scope of our clinical development services segment is broad.

We have leading experience and differentiated capabilities in oncology, chronic disease, vaccines, infectious and rare disease, which together account for over 75 percent of the total R&D spend in our customer base.

In concert with our core CRO engine, our clinical business includes a data-driven patient recruitment platform, which we believe is the largest wholly-owned clinical research site network, spanning five continents. It also includes peri and post-approval capabilities, including real-world evidence generation. We also have one of the largest medical communications teams in the market.

The integration of these offerings at a global scale, combined with our therapeutic expertise, creates a powerhouse of evidence generation. When I say evidence generation, it's evidence of safety, efficacy, and value of new medicines. I want to give you a tangible example, an idea of our business, for those that are unfamiliar with it.

I'm sure you've heard quite a bit about COVID vaccine development. We've played a vital part in many of those studies, activating sites, screening patients, collecting and analyzing data. I'm proud to say we've enrolled more than 75,000 patients into COVID 19 trials around the world.

This is a testament not only to the capabilities we've built, but also the trust our customers have in us to partner with them in the development of their most valuable assets. Now turning to labs, over a long period of time, we've built robust labs capabilities that we believe are unmatched in the traditional CRO space.

In addition to our award-winning central labs, this segment is also comprised of a GMP, a bioanalytical, a biomarker, and a vaccines lab, with locations across the US, Europe, and Asia. These are not diagnostic labs.

They are high science laboratories that are focused on cutting edge R&D in areas such as monoclonal antibodies, cell and gene therapies, antibody-drug conjugates, and obviously vaccines. Our leadership position in labs is evident in the growth and margin profile of this segment. We believe our capabilities here would be difficult to replicate.

If you turn to slide four, at the time of our IPO, which was only 11 months ago, we shared our strong track record of growth, which you see on the top part of the chart. We asserted that we

were growing faster than the underlying market due to several factors. Then the COVID 19 pandemic took hold, changing our entire industry and many other industries.

Despite this, we've continued our track record of strong growth. If you look at the bottom of the chart, you'll see that our end markets have remained robust. Larger CROs continue to gain share from smaller CROs, and PPD has many standout capabilities that differentiate us from the competition.

These standout capabilities include our differentiated labs, our tailored customer engagement model, our leading talent and culture, and more than $1 billion of capital that we deployed over recent years to differentiate our services and expand our addressable market in the areas of site networks, patient recruitment, and post-approval services, including real-world evidence.

If you turn to slide five, as I mentioned, we operate in large and growing markets. Biopharma innovation is strong and biotech funding has repeatedly reached new records in the last couple of years.

At the time of our IPO, we shared an expectation that we weren't yet at the peak of outsourcing penetration within clinical development, and that labs had even more room to grow. We continue to believe this to be true.

With the pandemic presenting disruptions and adding to trial complexity, we have seen customers continue to take advantage of CRO support for our outside expertise, our investigator relationships, our technology, and our variable workforce. Within these attractive markets, we believe we're gaining share for several reasons.

Namely, there's only a select few CROs that are truly global with consistent operating procedures. At PPD, we offer differentiated capabilities across key therapeutic areas through both our clinical development and our lab segments. We partner with our customers to optimize delivery. Our talent and turnover rates are industry leading. Our colleague base is extremely stable and industry-leading.

If you turn to slide six, I want to dive a bit deeper into these strengths that been causal to our success in 2020, and that will help us continue our momentum moving forward. Let's start with our talent.

Our ability to meet and exceed our customers' expectations depends on our people. I truly

believe we have industry-leading talent in terms of the expertise, commitment and the stability of our workforce. Take project managers as an example. This is the most critical role in our business as it relates to trial conduct quality, customer satisfaction, and repeat business.

Our project manager turnover rate at PPD was much lower than the industry average as of the end of 2019. Since then, we've made significant gains as we turn the impacts of the pandemic on its head, offering flexibility and choice to our employees rather than the compensation cuts and even layoffs that you saw from some of our peer group.

Why does this matter? A stable, tenured team leads to customer satisfaction and repeat customer business. It also translates into an ability for PPD to adapt faster and with more effectiveness. If you need proof of this, the pandemic provides it. Our backlog conversion rates remain in the upper echelon of the industry and have experienced very little deterioration.

Secondly, we were one of the first movers to develop a specific biotech offering within a large global CRO. Prior to 2014, lead generation for us was receiving an RFP from a biotech customer and some of these were from unfunded companies which is not the best kind of leads to get. We have turned that model on its head. Lead generation now begins at a funding event for a specific biotech company.

This early engagement has increased our RFP volume. We then can collaborate with the customer as they're defining their clinical development strategy. By the time the RFP is issued, we understand their needs and, in many cases, have even shaped the RFP. This has resulted in higher win rates, from winning roughly a quarter of opportunities a few years back, to now more than 43 percent.

Lastly, we've been making investments and building capabilities in data and technology for many years, not as an end in and of itself, but to enable cost or time savings for our customers and for us.

This brings me to slide seven, where I'd like to highlight the more than one billion dollars of investments that we've made to provide new, truly differentiated services to one, significantly increase our addressable market and two, to help sustain our double-digit growth rates into the future.

During the COVID pandemic, each of these investments has been vital to our ability to support ongoing trials and to kick off new studies. First, we own differentiated patient data that we

leverage to recruit patients faster and a global site network which remained open during the pandemic. This includes the world's largest wholly owned vaccine site network.

With high throughput sites across all major geographies, we're supporting clients to meet aggressive enrollment milestones and to improve diversity representation within trials. Second, we offer evidence-based solutions that help demonstrate real-world effectiveness, safety and value of new medicines.

For new COVID-19 vaccines and therapy studies, we have leveraged our scientific expertise and data to optimize, adapt study design and site selection, to account for new and emerging COVID hot spots. These capabilities will also be important as our customers pursue post-approval safety studies, especially for vaccines.

Third, we have ownership stakes in both Medable and Science 37 to enable the application of digital technologies to the clinical trial process. We do this to reduce patient burden and to remove inefficiencies.

At the same time, within PPD, we've built a keystone capability to design and operationalize these highly complex trials, including this technology, and to bring the right external and internal capabilities together to the greatest effect. These capabilities have allowed us to offer trial continuity for clients throughout the pandemic even as site access was disrupted.

We are now supporting more than three times as many digital and virtual studies as we were before the pandemic. While this is still a nascent area, PPD is a leader in helping customers leverage these technologies for their clinical development programs.

Finally, I touched on our labs' capabilities already and their focus on cutting edge R&D. Over the past several years, we've invested to expand our capacity and implement technology.

During the pandemic, high customer demand and quick implementation of shift work has allowed us to continue to utilize this capacity with our lab segment realizing greater than 25 percent year-to-date revenue growth through Q3 2020. Now turning to slide eight.

Many companies will assert their uniqueness, but I wanted to quickly offer several third-party proof points of our excellence in innovation. I'm not going to go through these, but they're here for your reference to read at your leisure.

With that, I want to now turn it over to Chris Scully to illustrate how our operational strengths have been what has driven our recent financial performance.

Chris Scully: Thank you, David and thank you all for joining us today. I'm excited for the opportunity to discuss our financial performance with you. Before I kick off, as David mentioned, I will not be speaking to fourth quarter or fully year 2020 results or our 2021 outlook, but instead, we'll provide those updates on our quarter four call.

Now, let's turn to slide nine which takes a deeper dive into our long-term track record as a business. As you can see in these highlights, we have a consistent and demonstrated history of strong financial performance and growth above the overall CRO market.

Between 2015 and 2018, under the old ASC 605 accounting standard, we delivered a 10.8 percent compound annual growth in revenue and an 11.7 percent compound annual growth and adjusted EBITDA.

From 2018 through the third quarter of 2020, under the new ASC 606 standard, we delivered a 9.1 percent compound annual growth in revenue and a 10.1 percent compound annual growth and adjusted EBITDA.

Across the two accounting standards, we have had 10 percent or more adjusted EBITDA growth in four out of the last five years, including year-to-date Q3 2020 for a highly consistent track record of growth. Moving on to slide 10.

Underpinning our financial performance has been a sustained performance in terms of customer-based bookings, with the 12.3 percent compound annual growth in net authorization since 2015 and reliable conversion of those awards into revenues, with backlog conversion rates that have either been stable or increasing every year from 2015 to 2019.

Over the last 12 months, our backlog conversion decreased 40 bps due to the impact of COVID on site access and patient enrollment activities, a rate of erosion that we believe is better than the rest of the industry. This speaks to our differentiated capabilities and our execution during the pandemic as well as to the quality of bookings recorded under our backlog policy.

This long-term stability of our backlog conversion rates has meant that a 1.20 net book-to-bill ratio on a historical ASC 605 basis reliably translates into double-digit revenue growth. Furthermore, the 1.31 times net book-to-bill ratio that we recorded in the last 12 months along with 15.9 percent

year-on-year growth in our quarter three ending backlog positions us well for growth in the future.

Turning to slide 11, you can see that both for the third quarter of 2020 and through year-to-date quarter three, PPD has continued to deliver double-digit growth across all key metrics, including net authorizations, revenue and adjusted EBITDA.

Our net authorization's growth for quarter three was 33.3 percent over the third quarter of 2019, while revenue and adjusted EBITDA growth over the same period was 20.5 percent and 14.8 percent respectively. We're really pleased with that strong performance.

Turning to slide 12 and rounding out our historical results through Q3 2020. In addition to our P&L performance this year, we've continued to strengthen our balance sheet since the IPO, remaining on track or ahead of our goals of dropping net leverage to the low fours by the end of this year and into the threes next.

As of September 30th, we have our highest quarter ending liquidity position in over 10 years. In addition, this morning, we announced the allocation of a new $3.05 billion term loan that is expected to close this week.

The term loan B is initially expected to bear interest at LIBOR plus 225 with a 50 bps floor and include step downs upon achieving certain net leverage levels or revised credit ratings. The proceeds, plus cash on hand, are expected to be used to refinance the full amount of our existing credit agreement, as well as to pay the fees and expenses of the transaction.

In addition, the new facility doubles our existing revolver capacity to $600 million. This transaction generated strong demand, and subject to customary closing conditions, will further strengthen our balance sheet and liquidity.

On the P&L, based on the initial LIBOR plus 225 coupon and current one-month LIBOR rate, we expect annual run rate gross interest expense, inclusive of amortization and swaps, to be approximately $187 million. Additional details, including the estimated impacts from LIBOR changes, can be found in today's 8-K. We look forward to sharing more details with you on our quarter four call.

Turning to slide 13. I'll end by recapping the some of the key investment highlights that David and I have touched on today.

First, we operate in large and growing end markets, with strong fundamentals, with current trends

in R&D funding and outsourcing signaling solid momentum and opportunity.

Second, PPD has demonstrated a consistent track record of gaining share and delivering strong performance, with a long history of double-digit growth.

Third, we have invested significantly but strategically with over $1 billion aimed at strengthening our differentiated services and expanding our total addressable market to fuel future growth.

Fourth, and finally, we have a strong culture and long-tenured, talented team that drives customer satisfaction and helps us win. We bring the power of one PPD to our customers, as their success is causal to our success.

With that, Tycho, I'll now hand it over, back to you to open up the call for Q&A.

Tycho: Great, thanks. I'm going to kick it off with one of the things that you hit on in your closing remarks, Chris, which was around the theme of share gains. We saw that both with the COVID and non-COVID work in authorizations, in EBIDTA, and backlog trends.

Can you talk a little bit about what's driving the clinical work share gains? Is it virtual trials where you were able to pick up share? Talk a little bit about how sustainable you think the share gains are and what the big drivers have been.

David: Why don't I take that? I'm going to talk about authorizations. If you really look at our businesses, how are we winning in the workplace? What's the volume of stuff we're bidding on? Win rates, why are we winning? That's where your questions orient?

The second lens we look, so if you want to come back on this, you can, which is how productively are we converting the backlog of work we have under revenues in EBIDTA? I'm going to stay on this first part of competitive positioning and new work that's going out. To put it in perspective, while the pandemic has been a shock, 2020 was really a remarkable year for PPD.

Mind you, there's several PPD-specific drivers of our out-performance. First, and this is very sustainable, is I always talk about the talent and culture of our organization. It plays out when you have a stable workforce and you have people who are very tenured, then they know each other in a business like ours where, I'll take the Moderna vaccine program, for example, since everyone knows we're working on that, we had 20 functions from across PPD on supporting Moderna. We have a project manager that coordinates across all this subject matter expertise.

You can imagine how good we are when our project managers have rich, long, and enduring relationships with the subject matter experts. They can adapt. They can move very quickly. They can engage the customer, all knowing who to contact and to move things within PPD in this context of every study being a bespoke clinical trial design.

Being nimble and adaptable, enabled by our culture with low turnover. is a major factor why we've been winning work before the pandemic and why we're winning even more work and gaining share amidst the pandemic. Another one is our unique set of differentiated lab services. I know you talked about clinical. I'll come back to clinical as example.

In labs, this constellation of GMP, bioanalytical and central labs, with BioA vaccines and GMP being really highly scientific lab constructs, when I say that not just the equipment and methods that are used, but the people, the 3,500 scientists we have, this is really hard to replicate, really unique. It's been drawn upon by our customers. You can see it in the growth rates.

On the clinical side, now this was something that was a booster in 2020, we happen to have a really big depth of expertise in infectious disease and vaccines across labs, our core clinical segments, our vaccine's lab site network, and our ability to recruit patients. You look at all this and you think about the vaccines program and the pandemic. Also, outside the pandemic there's a lot of vaccines working the industry.

We're so well-positioned in a differentiated way there. I could go on forever. Let me get one more point which is our customer engagement model. We have this bifurcated approach. Our roots were in large biopharma and supporting strategic partnerships on very complex relationship networks within large biopharma companies.

In 2014, we set up a separate, distinct, and completely dedicated biotech model. Above the level of CRAs and CTMs which are fungible, we have dedicated project managers and leadership infrastructure for biotech that aren't working on biopharma projects.

We put in this lead generation model to start working with biotech customers as soon as they have a funding event which makes us a lot stronger. There's a lot more underneath this. It's early data and technology. There's a story behind that.

But, if I had to call out these elements, I would say this culture piece, how well-positioned we are in therapeutic areas, the depth of expertise we have, and the customer engagement model. You put those three together, that's why our share gains have been so pronounced.

Tycho: On the lab side, you put up huge numbers in 2020. You have 27 percent in the third quarter, 20 percent in the quarter before that. How do you think about the sustainability of that growth in lab?

David: Very direct and to the point, we think it's sustainable. I'm not sure we can sustain these 20-plus percent growth rates. That was somewhat of a really big spike that was somewhat COVID boosted that we're currently seeing. When you think about strong teens, double-digit growth, we think this is indeed sustainable. This is where we were pre-pandemic.

We think that we can continue this type of cadence. I'll give you a few reasons why I'm making that assertion and feeling of sustainability. If we go back eight years, right at the time we privatized, we were distant fourth in labs, pretty much across all those lab segments that I talked about. There was a lot of room for growth for us to gain share. We knew at that time that we had advantages.

We weren't really executing on those advantages. We believe that labs outsourcing was earlier innings than clinical outsourcing. It was a really good place to be at a good foundation of strong capabilities. We just had to get better at capital allocation, better at labs leadership, and basic fundamentals of execution.

We refreshed leadership, really focused on our knitting and got after this, and made really good capital allocation decisions. I talked about expertise in monoclonal antibodies, antibody drug conjugates, and vaccines. Now if you see where we are, you can see that was really well-placed areas to put capital and nail that room for growth to gain share.

That's what's led us to this place. We still have room to go. We're by no ways or means in a strong number one position in all these segments. We think we have the momentum to get there. We've got more share gain to get to that point. We continue to believe that we're early innings in this outsourcing penetration labs, particularly the BioA vaccines and GMP lab segments that we're in.

In order to make sure we take advantage of this being sustainable, we need to continue to be good and just in time capacity expansion. We need to invest for growth. We don't get ahead of our skis. We're just ahead of demand. We're getting really, really good at this. Investments in technology to make our teams more efficient, think about electronic lab notebooks as an example of this.

Building our scientific expertise and bench strength, and here I'm thinking about human capital. Right now, we have a little more than 3,500 scientists. They're in areas of demand from R&D dollars perspective. We need to keep building that, doing that well, keeping those turnover rates low, and being a great place to work for our colleagues.

This is specifically true in GMP, BioA, and vaccines when I talk about this scientific expertise. To finish on the type of work we're doing-- especially in vaccines, BioA, and GMP, this is really high science work-- it's very, very difficult to replicate the scale and scope of the capabilities we have.

Tycho: I know, you guys, didn't pre-announce the fourth quarter. I'm wondering if you can talk a little bit about site access, trial startups, patient enrollment, where we are in the recovery. Make it qualitative, if you don't want to quantify it. Curious about with cases still going up, how you're thinking about the recovery.

Chris: Thanks, Tycho. If I break that into two components, one about basically site access and second about cancellations as those were the two elements that we had put caveats around in the guidance that we gave for the fourth quarter. As you noted, we can't talk about PPD specifics.

If I frame how things are going overall in general terms across the industry as a whole, there really hasn't been an appreciable pick up that I'm aware of in the public announcement of developing programs of any note that have been canceled or discontinued in quarter four. As you know, we haven't seen an increase in our cancellations due to COVID through quarter three year to date.

For site access, while the number of COVID cases around the world has, as you noted, risen in quarter four and restrictions were being placed in many geographies, we'll see our own end sites themselves have learned an awful lot from earlier in the year about how to safely conduct work during the pandemic. This is not to say that things are fully back to normal at sites, they're clearly not.

Sites are clearly better prepared to handle the rise in cases in quarter four than they were perhaps earlier in the year.

Tycho: How about putting it into perspective, when do you expect COVID bookings to start to moderate and non-COVID bookings to pick up?

David: Let me jump in on that one. One, I don't see it as these binary drop-offs and pickups. First of all, if I take COVID work, I personally think that the COVID opportunity volume is sustainable. I know there's a couple of things and there's risk of cancellations now that vaccines have been approved.

We've seen emergency use authorization in the US granted for Moderna and Pfizer. We've seen AZ's product approved in the UK. We've seen a Chinese vaccine approved in China, a Russia vaccine approved in Russia. Yet, we've seen no public announcements of any cancellations of the other vaccine programs that are running, which bear out the belief that the driver of need for more efficacious vaccine volume is there.

That's a booster to believe that we'll continue to see these programs pursued. The second thing that we're seeing variations on the virus which is another reason to believe that we're going to continue to see vaccines work.

In terms of tail of COVID work, if I'm forced into somebody telling me, "Yeah, there's got to be a drop-off at some point, when will it be?" Well, I see it being more durable and lasting than most people do. Another example of this is now that some vaccines are on the market, approved, and getting massive uptake, there's a large need for post-approval safety studies.

We were very rapid as a society to review and approve these vaccines. The data was high quality and the efficacy and safety were pretty well known. Now we're going to get it from tens of thousands or a couple hundred thousand patients in a test setting into millions of patients. That's another piece of work that continues on the vaccines.

Adding into that, you look at Operation Warp Speed on a therapeutic side. They did a press release last week that talked about adding a new investigational product into the platform study that they're operating. They're foreseeing more investigational products being added in.

The pursuit of therapeutics around coronavirus infections underlies a belief that even with vaccination, some people aren't going to be vaccinated. They're going to get infected and they're going to have to be treated. All this is leading up to me believing the tail side. That's one part of the question.

The other part of the question was the pickup of when will we get back to normal on the non-COVID work and be able to prosecute our backlog at the pace we were in 2019 on that traditional work. That's a lot tied to the rollout of the vaccine program.

I can say now, last time we talked, at the end of Q3, I didn't know. I thought the window of uncertainty could be relatively short, meaning as early as the middle of 2021 that we could be back to normal, all the way into 2022, depending on whether the vaccines being studied were efficacious or not in getting approved.

Now that we've seen this emergency use authorization, my window of uncertainty is tightening a lot, and I'm bringing it in a lot closer. Could there be some COVID dropping off? I'm less concerned there will be. Maybe there will be, but I'm less concerned there will be.

At what time will we see a return to normalcy in our ability to prosecute the backlog? That's getting sooner, rather than later. That gets at the two parts of the question, yes?

Tycho: That's helpful. One that came in over email was on distributed versus virtual clinical trials. Are there permanent structural changes here for the industry? What's your view of that?

David: We've seen promise in applying digital technologies and decentralized approaches using those technologies, which also require process adaptations, such as visits and support. As example, phlebotomy draws at patient's home, if you're going to go that far, just to visualize something.

We've seen that in play. We've made investments in Science 37 and Medable to support the development and maturation of these technologies, as well as to understand how those technologies could be applied and speed the feedback loops between our application with customers and the technologies themselves. We've always believed that there was applicability.

This was going to help improve patient access into clinical trials, shorten the time of clinical studies, and increase our ability to address trial complexity by taking some or all of the study to the patients.

The pandemic has, if anything, accelerated this. It's proven that these technologies and processes do have a home. They are effective. Not all of them are effective across all study types. Everything's bespoke, so you've got to fit these things together.

Within that context there's been acceleration. I mentioned the volume of decentralized and virtual study awards in our backlog has tripled since the pandemic. It's still small. We have five percent or less of what's going into backlog. It is growing. We're quite bullish on the applicability of this.

It's still going to be a long journey for the technologies to evolve and for all of us, as an industry,

technology providers, CROs, customers, where and when to fit which technologies in which settings, when to adopt the trial designs or adapt the trial designs to the technologies, and then regulators accepting the data that are coming out of the studies.

Tycho: Is there a halo effect on the pandemic, in terms of outsourcing in general? In other words, are some of your sponsors that maybe didn't outsources as much before now turning to you? Given the logistical challenges they faced over the past year, do you see the penetration rates accelerating on the backend of the pandemic?

David: First, we believe there's a halo effect, if nothing else, from a greater understanding from society of the value of innovative drug development as a result of the pandemic.

Specifically, everybody gets this, but imagine, as a member of society, how you would feel with this pandemic raging and without vaccines and therapeutic innovation being brought to patients by our customers and our industry? I think based on that alone, society values our customer base and innovative R&D even more.

As mentioned in my prepared comments, our starting point is I don't believe we're at peak outsourcing penetration within clinical, and labs has more room to grow as a starting point.

We're more or less aligned with your view, Tycho, in looking at one of your reports I read, that next-generation capabilities, we would call that increasing trial complexity, because we do see increasing trial complexity being a factor, that these things come in together. Next-gen capabilities, we talked about Medable, Science 37 and these approaches, increasingly complex trials. You get those together, everything, and all these approaches coming together are unprecedented.

When we have these types of phenomenon, those that have the most experience applying, demonstrating, and proving that we can generate the highest quality data for a regulatory submission with these novel approaches.

Then that's a draw for more outsourcing penetration, rather than the tough lessons of applying these, trying to be learned customer by customers. They'll take advantage of the CROs that have the experience. We're certainly building that up. That's supportive of this further outsourcing penetration.

In terms of our ability to gain share against this, I've already talked about why we're gaining share. A couple trends that are probably relevant is that the large global CROs have really stood

out in this pandemic because we've been able to apply remote monitoring, risk-based monitoring, digital/virtual technologies, and adaptive approaches.

We've been gaining share from smaller CROs. That's going to continue, too. Second, this is PPD-specific on the second point, we've gained inroads with new customers leveraging our infectious disease and vaccines capabilities.

As the pandemic's gone out there's been some customers pursuing COVID work that we've been called in to support and we've won awards on who haven't worked with us much in other areas. Now they've been able to see PPD compared to their own internal capabilities and compared to other CROs that are battling the pandemic.

I can tell you, we're shining in a lot of these comparisons. We're going to start to see more RFP volumes from some customers that we wanted to serve that may have not been able to penetrate in the past. We'll be able to grow share wallet with them.

Tycho: David, in your comments you highlighted the biotech customer engagement model. You've had some good, impressive win rates there. Can you talk about traction from the biotech offering, how you feel about the evolution, maturity, competitive position of the biotech business? Are you making incremental investments there this year?

David: First of all, to delineate biotech models, every CRO that you see that talks will have their name and then a biotech offering. Everybody claims a biotech offering, but they're very different from one another.

For example, many of the large CROs approach to creating a biotech offering was to purchase a smaller, midsize CRO, and that became the foundation stones of the approach to biotech. We didn't do that. We built ours organically in PPD. We wanted to leverage the consistent standard operating procedures and systems across the company when we execute clinical or labs work.

We put this dedicated set of people on top of it and stopped allowing people to be fungible all the way through the organization, across biotech and large biopharma. We have dedicated biotech folks. We start lead generation very early. We're probably more wired than anyone in visibility of RFP volume that's from companies that have well-funded balance sheets.

An example of this, this isn't biotech specific, but across our competitive decision volumes we're seeing in 2020 through the end of third quarter, we've seen double-digit growth of competitive

decision volume. That being bids that we're bidding on, the dollar value of bids. What's the total dollar value we bid on in 2020 through Q3 compared to that same period in 2019?

We're more than 10 percent higher in 2020. That's consistent across large biopharma and biotech. We're continuing to see more. I'd say the growth of that is higher than the growth of R&D spending in that segment. We're ferreting out pockets that we weren't in before.

Second piece is when you say, "Well, your model sounds different, but how do I really know it's working?" Our win rates have gone from 25 percent in our biotech bidding four or five years ago. At the time of IPO, I presented that we were up to 35 percent win rates as of the end of 2019. That win rate has improved even further, up to about 40 percent in 2020.

We're not just seeing more, we're winning a higher percentage of that. Some of that may been aided and abetted in 2020 by COVID work that's being pursued. Do we sustain 40 percent or not? I don't know. The point is we're showing up with a competitive offering. I feel really good about the positioning.

We will invest in terms of do we need to invest to get more coverage and increase that visibility of the spending that's going on. If we can't do it with our existing force, we'll invest in that area to make sure we're pushing the envelope of getting full visibility into what's being spent. We're always investing in our workforce to stay ahead of demand curve.

As I mentioned, we never took our workforce down in the pandemic. We started hiring very early to expand. In third quarter we're now over 25,000 colleagues. The investment is making sure when we do get access to these bids, we've got the resources to run the work and we don't have to prioritize anything because we have the resources to treat everything with the urgency it desires.

Tycho: We hit the end of the session. I want to thank you both for taking the time today. This was a great overview. Enjoy the rest of the conference.

David: Thanks, Tycho.

Chris: Thank you.

Tycho: Take care.