Jubilant Pharmova Limited
Investor & Analyst Day Transcript
June 18, 2021

Moderator: Ladies and gentlemen, thank you for standing by. We welcome you to the Jubilant Pharmova Virtual Meet. At this moment, all participants are in the listen-only mode. Later, we will conduct a question-and-answer session. At that time, you may raise your hand to ask a question. I now hand over the proceedings to Mr. Hemant Bakhru, Investor Relations at Jubilant Pharmova. Thank you, and over to you.

Hemant Bakhru Good evening, everyone. Thank you for joining Jubilant Pharmova's Analyst Meet. I would like to remind you that some of the statements made on the call today could be forward-looking in nature and a detailed disclaimer in this regard has been included in the presentation.

On the call today, we have Mr. Shyam Bhartia, Chairman; Mr. Hari Bhartia, Co-Chairman and Managing Director; Mr. Arvind Chokhany, Group CFO; Mr. Pramod Yadav, CEO, Jubilant Pharma; Mr. Sergio Calvo, President, Radiopharmaceuticals; Mr. Chris Preti, President, Allergy Business Unit; Mr. Amit Arora, President, CMO; Mr. Gunjan, Head API business; Mr. Terry Fullem, President, Jubilant Cadista; and Mr. Jasdeep Singh, President, Generics, Non-U.S. business; finally, Mr. Christopher Krawstchuk, CFO, Jubilant Pharma; Mr. Marcel Velterop, President, Jubilant Biosys; Dr. Syed Kazmi, CEO, Jubilant Therapeutics; Mr. Arun Sharma, CFO, Jubilant Pharmova.

I now invite Mr. Shyam Bhartia to share his comments. Over to you, sir.

Shyam Bhartia Thank you, Hemant. Good evening, everyone. A very warm welcome to the Analyst Meet of Jubilant Pharmova. On behalf of the Jubilant Pharmova family, I want to thank you for taking the time out to join us today and giving us the opportunity to explain our pharmaceutical business as well as respond to your questions.

As you are aware, from 1st February 2021, the entire Chemicals business of erstwhile Jubilant Life Sciences has been demerged into Jubilant Ingrevia Limited and remaining Pharmaceutical business continues to be part of Jubilant Pharmova Limited. Our journey of the pharmaceutical business started from the year 2003 onwards when we first acquired our API business in Nanjangud, Karnataka.

Over the next 6 years, we continued to build the Pharma business with well-thought-through strategy of moving up the value chain, while being closer to the customer. We built Dosage form facility in Roorkee, and various R&D

centers in India, and acquired Dosage form facility - Sterile and Non-sterile injectable CMO, Allergy Immunotherapy and Radiopharmaceutical businesses in North America.

Later, to complement our Radiopharma business, we acquired a radiopharmacy network in 2017. As we saw, an increasing opportunity in nuclear medicine, especially in Theranostic and PET, we invested in SOFIE Biosciences in the year 2020 and are the largest shareholders.

As a business conglomerate of 40 years of existence, Jubilant has built leadership position in most of its businesses. We continue to maintain a majority market share in most of our products. In Radiopharmaceuticals, we are expanding our product pipeline with in-house research and development as well as entering into strategic partnerships.

In Radiopharmacy business, we have begun to execute a detailed turnaround plan. CMO business is delivering strong growth. And we are further investing into growth CapEx. Generics and API business continue to grow, and we are adding more capacities. R&D focus is more on complex generics.

Contract Research and Development Services business continues to do well. And we are doubling our capacity in this business. Our proprietary novel drug business, we are moving to clinical phase in 1 drug candidate and are evaluating funding through a private or public equity raise during coming 18 to 24 months.

Despite COVID-19-related lockdowns, we have been able to ensure continuity in most of our manufacturing operations across all business segments, while at the same time ensuring safety of our employees. I take this opportunity to thank all our employees who have worked tirelessly across all our plants and offices to ensure continuity in company's operation, while continuing to serve our global customers.

Jubilant Pharmova is ideally positioned to capitalize on its growth opportunities because of cost and market leadership in several products, through integration and continuous improvement, timely delivery track-record with full compliances, longstanding industry relationships and highly experienced management team with an excellent execution capability.

I would now like to hand over to our Group CFO to share his perspective of the company. Thank you and over to you, Arvind.

Arvind Chokhany

Thank you, Mr. Bhartia, and very good evening to everyone. And I invite all of you to today's Pharmova's Analyst Meet. And I hope all of you are very well, healthy and safe. And as I would like to take you through the 2 or 3 slides, to provide a broad overview on the business, I would like to start a little bit with the overview, and if we can move to the next slide on the overview.

So subsequent to the demerger of the Specialty Chemicals business from Life Sciences, Jubilant Pharmova Limited has three principal operating subsidiaries: Jubilant Pharma Limited, Biosys and Therapeutics Limited; which are in the business of Pharmaceuticals, Contract Drug Discovery and In-House Drug Discovery respectively.

The company's Pharmaceutical business is diversified with presence in niche and high-entry-barrier businesses such as Radiopharma, Allergy Therapy and Contract Manufacturing business. Our Contract Research and Development Services, that is CRDS is a third-party drug discovery business. And we have created strong chemistry and biologic capabilities through our facilities in Noida and Bangalore.

We are one of India's leading Drug Discovery players. In our proprietary business, we have some very promising and high-potential assets in the areas of Oncology and Autoimmune disorders. The company's revenue is well spread across Specialty Pharma, CDMO and Generics businesses, while the CRDS business is ramping very well and we are doubling capacities in this business, in view of the strong demand here.

In terms of geography, as we can see in the pie, North America is our largest market, which account for almost 4/5th of our top-line. We are a US$820 million integrated global Pharmaceutical and Contract Research company. As we can see, we have 6 U.S. FDA approved manufacturing facilities, including 4 in North America and 2 in India, in addition to 2 world-class facilities for contract research.

Employee strength is around 5,800 people, of which roughly 40% are based in North America. I would like to take you to the subsequent slide on the business overview. As we can see that our pharmaceutical business has 3 main specialty lines, in Specialty Pharma, CDMO and Generics.

As we can see from this slide that we have created strong leadership positions in various businesses, which our business heads will explain in subsequent details. Radiopharma business is fully integrated, from manufacturing to distribution, through the Radiopharmaceuticals and Radiopharmacies respectively in which we are ranked number 3 and 2 the U.S.

In Allergy business, we are number 2 player in the U.S. and sole supplier for venom products. In CMO business, we have established strong relationships with leading specialty pharmaceutical companies. We are adding capacities in these businesses to meet strong demand. In Generics business, we have manufacturing presence both in U.S. and in India and we are a leading player in several product categories. Solid Dosage business is vertically integrated with our API business. Our Contract Research business is fully integrated with Drug Discovery business.

As I take you to the next slide, we will talk a little bit about the experience of the Management Team. As we can see, that Jubilant Pharmova Limited is led by very experienced Management Team and Board with decades of experience in creating value in multiple businesses with strong Corporate Governance.

Our 3 main business segments are led by experienced CEOs with domain knowledge over 3 decades. At Jubilant, our vision is to attain global leadership position, continuously create growth opportunities, and enhance return on capital for our stakeholders. And we'll see and examine that in more detail.

And with this, I would like to invite Pramod to elaborate on the Pharmaceutical business in more detail. Over to you, Pramod. Thank you.

Pramod Yadav

Thank you, Arvind, and very good evening to all. I will introduce Jubilant Pharma business briefly. And subsequently, each business will be covered in detail by the respective business Presidents.

As Mr. Bhartia mentioned, we started building up Jubilant Pharma business in 2003. And on the top portion of the slide, you can see the timelines, the way we kept on building the businesses. You may see on the bottom left of the slide, that our 3 business segments are Specialty, CDMO and Generics, and may notice that while most of Indian pharma companies are focused on so called the Generic segments.

We are very unique, in that sense, where Specialty and CDMO contributes 75%, while the Generics is balance 25% in our portfolio. This makes our majority of revenue coming in from segments, which have higher growth potentials, more barrier to entry and also sustainable margin on the long run.

Few key business-highlights on the right bottom of the slide. We have about 80% revenue coming from North America, 6 manufacturing sites, strong R&D capabilities, serving to more than 80 countries globally, long-term relationship with who's who into pharma industry, very diversified business models with only 40% supplies coming from top-10 vendors, only 32% revenue from top-10 customers and only 30% from top-10 products, so very diversified in all the aspects.

5,200 employees globally, with 2,300 in North America, and last but not the least, highly qualified, dedicated and experienced Management Team and the Board. Next slide please.

So here you can see we have 6 manufacturing sites, 2 each in India, U.S. and Canada. Since 80% of Jubilant Pharma revenues come from the North America market, each site is inspected by FDA regularly and you may see last inspection details on the bottom left of the slide.

In addition to FDA, sites are also inspected by various other global regulatory authorities. And to further explain, Indian sites are at the Roorkee manufacturing Generics, at Nanjangud for the API, U.S. site in Salisbury for the Generics, Spokane CMO, as well as CMO for sterile injectables as well as Allergy Immunotherapy.

At Montreal, we have a Sterile and Non-sterile injectables, Ophthalmic, ointments, creams and liquids and also radiopharmaceuticals. In addition to this, what you don't see on this slide is that we have network of 48 radiopharmacies in 22 states in the U.S. Next slide, please.

So here on this slide, we are explaining you that in each of the businesses we are in, what are the key characteristics, what are the market dynamics, and how considerable headroom we have for growth in each of the business. I mentioned earlier, Specialty is our niche U.S.-focused, high barrier to entry and the business is required front-end. We have our own network of radiopharmacies, in both in – and in both the Radiopharma as well as Allergy, we have our large front-end sales team.

While most of these businesses are through long-term contracts, having complex supply chain and having limited players leading to concentrated market. The Radiopharmaceuticals currently are growing by about 6% to 8%, and in fact, having potential to grow even at much, much higher rate. And Sergio will explain that.

In CDMO business, that is operation oriented, so they're requiring cost and quality leaderships with agile R&D in API. The CMO business has a lot of tailwinds currently, due to shortage of a sterile injectable capacity, and which got further fueled with the increasing vaccine demands with current ongoing pandemic situation. It has high-entry-barrier due to strict quality and the GMP requirements and also higher capital cost.

On quality, I would like to highlight that we have very clean quality record, and in Spokane, our recent FDA inspection with the zero 483 observations. API also having tailwinds currently due to the disruptions in China and also favorable policy reforms like the Production-Linked Incentive schemes in India.

And like Generics, here also demand is shifting towards the complex APIs. Both these markets, CMO and the APIs are also growing in the range of 6% to 8%. And finally, Generics, which requires ability to continuously identify niche products, and then also launch them, as of now there is improved outlook in U.S. market, and also non-U.S. market, which is stable with the de-risked growth opportunities. Overall, Generic market is also growing by 6% to 7%. Next slide, please.

So while we operate in the diversified business segments, each of our business currently is at different stage of evolution. Let me explain that. In 3 of our businesses, which are Radiopharmaceuticals, Allergy and CMO, we are sustaining momentum, we are maintaining the growth rate, and also protecting margins and generating healthy cash flows.

Like in Radiopharmaceuticals, we have the leadership in profitable products like MAA, DTPA; we have highly advanced PET cardiology products like the RUBY-FILL, which continues to grow rapidly. In Allergy business, we have leverage, our strength of the – as a venom sole supplier position, build higher market share in the U.S. and adding capacities.

In CMO, we are not only sweating our existing assets to a maximum, but also expanding Spokane Sterile fill & finish capability – the capacities by 50% and entering into niche, Ophthalmic in Montreal next year, which Amit will explain with the state-of-the-art preservative-free technologies.

However, the API and the Generics are the businesses which we shall scale up by leveraging the leadership positions, by customer relationships, and by focusing more on to the research spent on complex or the difficult-to-enter segments. And unlike other businesses, the Radiopharmacies business, however, is at the turnaround phase. And for that we have developed solid action plan comprising of commercial excellence, under which we will drive market share and growth, and operational excellence to drive efficiencies in operations as well as the procurement.

So, markets are already in place for the sustainable and accelerated growth across each portfolio. While each of the businesses are at different stage of

evolution as explained on the previous slide. We also at the same time have a robust growth-oriented strategy in place for each of the business. While the business Presidents will be discussing same in details, let me explain in brief, in Radiopharmaceutical, we will continue to grow our RUBY-FILL launch our NDA I-131 MIBG, which is having market potential of about $200 million.

And we have our own R&D pipeline of 7 products, which we will launch over the next 3 to 4 years having market potential of about $300 million. And we are also working on growing Theranostics and the new products under pipeline under various partnerships. In Allergy, we are entering into partnerships with the distributors' ex-U.S. and there we will grow the market rapidly. We are also exploring opportunities of launching the adjacent products in our allergy immunotherapy.

In CMO other than expansions already announced, we are also evaluating further expansions in sterile fill and finish capacity in Spokane, which will double the capacity from the current level as well as Montreal where we are increasing a sterile fill and finish capabilities or the capacities by 50%, and also evaluating new ophthalmic line other than the one which is already as of now under commission.

In API, while we continue to debottleneck the existing Nanjangud site and improve assets throughput. We are also evaluating greenfield site to cater to increasing customer needs. In Generics, we have 37 pending ANDAs for approval, which we will be launching post approvals. Also various U.S. products we are extending to focused Pharma emerging non-U.S. markets, and our own front end presence in some of the selected markets.

In the Radiopharmacy, as explained earlier, we have that turnaround plan in place to eventually target the single-digit positive EBITDA margins. We have many fundamental capability investments already made, and our network which is predominantly being SPECT, we made a strategic investment into SOFIE, who has the complimentary large PET network of 14 pharmacies. This will help us to target the large IDNs jointly, by which will be offered to our customers full basket of the products. We also plan to expand our network by adopting – by opening up more of the pharmacies in those metropolitan areas where currently we are not at present.

So, with all these stages of evaluation, where we are and in each of the businesses, we have a huge growth opportunity. On this slide, let me explain you what the 5 key differentiators are we have for the Jubilant Radiopharma business. While for each business we have focused growth in strategy. We will sustain the outperformance in each of the businesses. The first key differentiator is a diversified portfolio. So, whether it's the business segments, or the customer base, the vendor base, or the product range, though, we remain focused with the U.S. centric front end, which drives innovation at the back end in the R&D. However, same gets supported by the robust operations we have in the low-cost economies of India.

And the second is a scale and leadership in each of the businesses. While especially the business leadership in the U.S., we will continue to grow with in-house R&D as well as strategic partnerships. We will at the same time also grow our CMO, API and the Generics by addition of more manufacturing capacities and focusing on rather more complex molecules.

Third is the sustainable mode for high entry barrier in few of the businesses clubbed with the long-term contracts, which makes the entry barrier even more stronger. And at the same time, various portfolio synergies help us to keep our cost in checks, like the vertical integration we have in API and the Generics. We make Allergy and Radiopharmaceutical products in our own Sterile facilities. We are integrated in Radiopharmaceuticals and the pharmacies.

Fourth is, strong mergers and acquisitions and the turnaround muscle and sustainable operations in long run. In each of the business since we acquired, we have invested in a strategic growth CapEx, invested in human capital, and we have grown the revenues and the margins multiple times.

Let me give you examples like API, we have grown 7 times since we acquired it in the revenue. And the dosage form in U.S., we have grown 30 times, Spokane business we have grown 3 times since the acquisition, the Montreal business we have grown 4 times since the acquisitions. This demonstrates our expertise in identifying and integrating the assets and then sweating the assets. We are in the process of doing something similar turnaround in radiopharmacy business as of now, while we are also expanding our innovative pipelines through partnerships.

And fifth one is, of course, the experienced proven management team. while each of our business heads is focusing independently headed by the respective presidents, who are experienced leaders, having deep insight of industry and proven track record for themselves.

With this, I sum up overall Jubilant Pharma introduction, and I hand over to Sergio to walk you through Radiopharma business in detail.

Sergio Calvo

Thank you, Pramod. Good evening to everyone. It's a pleasure to be here. I'm Sergio Calvo, President of the Radiopharmaceuticals division. I'll be presenting Jubilant Radiopharma, which includes Radiopharmacies and Radiopharmaceuticals. I'll start with Radiopharmaceuticals with next slide, please.

Jubilant Radiopharma serves the nuclear medicine specialty. Nuclear medicine is a medical specialty that uses small amounts of radiation to diagnose and treat disease. It's widely used in the world with more than 40 million procedures in the world, half of them approximately in North America. Nuclear medicine as an imaging our diagnostic modality is similar to other diagnostic imaging tests like X-ray, CT and MRI. The difference is that in nuclear medicine we inject the radiation into the patient, so it's a chemical process in which the radiopharmaceutical, which is the combination of the drug and the radioisotope, is metabolized by the body, which means we will take a picture of the physiology or the biochemistry of the patient. And the image is very rich in clinical information for the physicians.

There are 2 types of imaging modalities in nuclear medicine, so-called SPECT imaging and PET imaging. The differences the way the radioisotope decays the type of radiation emitted and the equipment that is used to photograph that radiation. There are many applications for SPECT, many others for PET, some of them overlap, PET is known to be a little more powerful in terms of image resolution, but SPECT has many merits and qualities as well.

The fourth row of this slide, you see the most interesting area of nuclear medicine at the moment. Nuclear medicine can be used to treat disease has been used for many, many years, 80 years to be precise in thyroid imaging, for example. Most recently, we've been able to develop very specific Peptides, very targeted Peptides that carry radiation to the insides or boundaries of tumors to treat cancer in a very effective way and with low, in general, side effects for the patient.

Nuclear therapies or radiopharmaceutical therapies are becoming one of the most powerful tools to treat cancer. The combination of imaging and therapy using the same molecule is something unique of nuclear medicine. This is being called Theranostics. Theranostics is a term used in a lot of contexts, but most prevalent in nuclear medicine today, we're talking more about the potential of this combination in the subsequent slides.

The value chain of nuclear medicine is very complex. There are many players around the world. And it starts with the production of the radioisotopes, which are isotopes can be produced in nuclear reactors or particle accelerators. This slide is showing a nuclear reactor chain, there are only a few of them in the world. They are expensive operations to run. From them, they go into so-called processors, those companies that you see listed here, they purify the radioisotopes and make them ready for medical use. Then it goes to manufacturers of Radiopharmaceuticals companies that will combine them with the drugs to make Radiopharmaceuticals. That's where we play.

And from this point, we move into the commercial or in hospital radio-pharmacy, that's where the individual patient doses are prepared. We also play a very important role in this field, as Pramod mentioned. We have a network of Radiopharmacies. We are the only major player with a strong presence on both manufacturing and commercial Radio-pharmacy in North America. SOFIE Biosciences also has a presence on both sides, and they are one of our most important partners.

Here we show our estimates based on reliable sources of the nuclear medicine market in the next 10 years. As of today, the market is about $5.5 billion, primarily based on SPECT and PET imaging. Therapy is a meaningful contribution with about $1 billion. But therapy, as I mentioned before, is about to start growing much, much faster, and could reach according the most optimistic or perhaps realistic estimates up to $20 billion globally by the end of this decade, so huge opportunity.

Mind you that a lot of it will be taken by big pharma, they are coming into this field because of the scope with growth potential and their investment required to play Novartis, Bayer, and many others started investing heavily. But there is a very important role for companies of all sizes, and I think ours is in a sweet spot to play here, because most of the cancer treatments or many of the cancer treatments that will arise from this Theranostics era will be niche applications. So the big companies will not be able to cover them all and we have a very important role to play.

Next slide. This is a snapshot of the current split across companies, globally and the United States. We believe our position in the world today is number 5 with very strong presence in North America. Some of the companies listed here are present in more than 1 continent like Curium, for example, or GE.

We are number 3 in North America with about 12% market share according to the latest estimates.

One interesting thing about nuclear medicine as a market, it's very fragmented more than 80 companies playing today of which reasonable size and about 100 companies developing nuclear medicine products, many of them are trying to develop nuclear therapies, which are the highest potential as you saw. Many of those companies will need partners to commercialize their products.

Next slide. A few words about us, our division is based in Canada, we are one of the most traditional vendors in this space, we were founded in 1955. Nuclear medicine predates that, but the invention of the SPECT imaging device, the Gamma Camera was in 1953, just to give you an idea of how early we were in this field. We have two pillars in our organization, one is quality. We are highly regulated and we are known to be compliant with the most stringent quality principles.

The second one is our quest for innovation. We are number 3 in the U.S.; we are leaders in some critical products such as lung imaging and therapeutic iodine. We are the innovation leader in Cardiac PET, we will talk about more later. And we have avant-garde programs to beat diseases such as Neuroblastoma.

Next slide. This is a snapshot of our portfolio. I'll show a few key products in more detail. There are 6 SPECT products that are generic, 1 proprietary product in PET will be filled, 1 commercial therapy Iodine 131, and 1 clinical program in MIBG for Neuroblastoma - high potential and it's going to play a major role for kids.

Next slide. For few more details about some of our lead products. On the left side you see our RUBY-FILL. This is a bedside generator of Rubidium-82. The short half-life of Rubidium only 75 seconds makes it mandatory to have a generator very close to where the patient is. With Rubidium-82, we are capable of creating a very powerful image of the heart. It is the most powerful test, non-invasive test for the heart.

We can tell the physician the status of coronary artery disease, and most importantly, to provide very insightful guidance, where to intervene if we are going to stent not. It's a very powerful tool for interventional cardiology and clinical cardiologists. This is complimentary to enroll that nuclear medicine SPECT imaging plays in cardiology as well, which is widespread, and PET is becoming a more powerful, a revolutionary step in nuclear cardiology, and growing fast in the United States, but still with the potential to grow much, much further, and much, much further outside of the United States as well.

The second column shows our traditional MAA and DTPA. We are leaders in these products as well play a major role diagnosing Pulmonary Emboli, 4 million people in the United States every year are suspected of having Pulmonary Emboli. And we are one of the best – we are the best test to diagnose Pulmonary Emboli with very, very low radiation exposure.

Third column shows radioactive iodine for thyroid disease. This therapy was invented in 1941. It is a therapy that cures the patient. All the new sophisticated therapies there are existing now, they extend the life of the

patient for now, hopefully, they will do more than that iodine cures. And we are the leaders in North America for this product.

Next slide. Looking forward, we will not abandon our current position in any way. But there are evolutionary steps that we are planning. So, this slide is a summary showing that our current portfolio and strategy will be strengthened, we will continue to invest in SPECT Generics. It is a high margin; it is a stable profitable market.

We will grow leaps and bounds our branded portfolio will be filled for PET cardiac imaging huge opportunity and major role for us to play in cardiology. We are building an innovative pipeline that is going to be primarily focused on PET, and even more specifically Theranostics, which, as I showed you, where the opportunity really is.

Next slide. This slide represents our playfield. Today, we serve about a $400 million market size. Mind you that, I am here talking about this product specific segments like what's the market size of MAA in North America, which is where we are. And when I add up the markets that we truly serve in the geography of where we are currently really acting, it adds up to about $400 million. That's our playfield.

By introducing new products, by ourselves and with our partners, we are going to enlarge this playfield to more than $1 billion – more than $1.5 billion within the next 5 years. This is not accounting for any mergers or acquisitions that could take place during our history. This is only through planned initiatives that we have under execution at the moment.

With further inroads into therapies, which are also in planning stage, we plan to expand our market potential to the range of $5 billion during the next decade. That is our goal. That is our aim. And I think it's our duty to play a major role in the expansion of Nuclear Therapies.

Next slide. Here I'll show a little more about the strategic pillars of our growth strategy. So, the first column shows, expanding the core portfolio, how stable and strong the SPECT market is in the United States. So that is one of the things we are doing, expanding that portfolio.

Second, play a major role expanding the cardiac PET market. It is an opportunity, and it is a social role that we can play making cardiology a better tool and more powerful for physicians around the world with RUBY-FILL.

Third row, our ongoing MIBG program for Neuroblastoma. About 800 children are diagnosed with Neuroblastoma every year, and many of them could benefit from this treatment. And we have 2 clinical trials, an expanded access program to provide this treatment to as many kids as we can. And hopefully, this – we will have a commercial product available within the next 2 years.

Fourth pillar, strategic partnerships, we have chosen – announced 2 already. I will detail a little more about them in the next 2 slides. And those are fundamental for us to expand even more our capabilities and we are more integrated company in the radiopharma space. Finally, we are very attentive and actively pursuing inorganic opportunities.

As I said, there are about 100 companies developing nuclear medicine solutions around the world. Many of them would benefit from partnerships and we are actively pursuing them. Next slide.

Few words about SOFIE Biosciences. This partnership was announced in November 2020. This company is founded on innovation. They have a network of Radiopharmacies in United States and they were blessed with very, very fortunate strategic moves in the recent past.

SOFIE has state of the art CMO facility for therapeutics, which they planned way before this boom was starting to happen. They also have manufacturing and distribution agreement with Lantheus for the drug PYLARIFY, which was approved by the FDA just 2 weeks ago. This is a targeted PSMA agent for prostate cancer, which is one of the fastest growing PET in in the world. SOFIE will be part of it.

SOFIE also has an exclusive manufacturing and distribution agreement for most geographies of United States, for the Life-Molecular drug Neuraceq. This is an amyloid imaging tracer, primarily for Alzheimer's disease.

The drug has been approved for a while, but the growth starts now, because 2 weeks ago the FDA approved aducanumab, Biogen’s drug, first disease-modifying drug approved by the FDA for the treatment of Alzheimer's disease. The usage of this drug most likely will require an amyloid scan before the drug is approved. So, this market is about to grow very fast.

Finally, SOFIE has 70% of the rights of the family of FAP or FAP-targeted or FAPI molecules developed by University of Heidelberg. FAPI is a miracle tracer for PET, would be a revolution in many ways. It provides a very high signal to background ratio, high resolution, and that's a very specific tracer for solid tumors. From a diagnostic perspective, it is going to be a revolution. Also, from a workflow perspective, this tracer can be injected, and the patient can be imaged immediately. The conventional tracers like FDG requires the patient to rest for about 1 hour before the scan starts.

It is also a workflow revolution for PET centers. FAPI molecules, because they are specific, they can be used for diagnostic and treatment. There are studies already showing that when we combine FAPI molecules with treatment isotopes, we can use it to destroy the cancer or to turn down the cancer walls, the so-called stroma walls around the tumor. So, it's going to be a fantastic adjunct treatment for external radiotherapy, chemotherapy and immunotherapy.

SOFIE and Jubilant are kind of made for each other. We have perfect synergies, complimentary portfolios, complimentary skills. And the only thing we have really in common, fully overlapping is the quest for innovation. Next slide.

We also announced in March 2021, a partnership with the company Isotopia. Based in Israel, this company is a world-class multidisciplinary team of scientists and nuclear sciences, radiochemistry, nuclear engineers, physicists and so on. 2 lead products of Isotopia are PSMA agent, which can be prepared in just 5 minutes with gallium-68 and lutetium-177, a beta emitter used in therapies in one of the most important radioisotopes in the future of

radiopharmaceutical therapies. There are also many synergies with Jubilant. Next slide please.

Here I summarize the only 2 partnerships already announced. We have many others that we are considering. How we can become or how we are today and will be even more so integrated in the nuclear medicine space by combining our capabilities with those of our partners in the State. And this shows, from the synthesis of API to the development of molecules, to radiolabeling, to manufacturing, and finally to distribution, we are the most integrated company in the Radiopharmaceutical space.

On the distribution side, I now will explain a little bit about our strategy on the Radiopharmacies division. Next slide.

Radiopharmacies are the final step of the value chain. That's where we prepare the individual doses for the patients. It is a very complex operation. There are many products involved. We have to be available 24/7 for our customers, because most of them can do emergency services. And they require product pretty much any time scheduled or not. Usually, we go for wide geography, for just from a handful of pharmacies, for the continental size of the United States, each of them over a very large geography. It is a logistics challenge. When we're dealing with a product that is decaying fast, it's radiation, so not an easy operation to manage, but a fascinating business.

Next slide. Just like Radiopharmaceuticals, Radiopharmacies are in the context of nuclear medicine. So the aging population and high prevalence of disease – increasing prevalence of disease in the aging population, definitely they will increase demand for nuclear medicine procedures.

And specifically, for the Radiopharmacies, the increase of Generics pipelines, the ones we are developing, and others usually makes their margins better. So, profitability has a natural trend to increase. Also, their portfolio is increasing, because of the development of new PET tracers, new therapies, new SPECT tracers as well, that are proprietary. So, the portfolio, which bring higher margins are also increasing. It is a good time to be in this business. Next slide.

Besides the high potential, it is not an easy business to get into. It's highly regulated. The supply chain is complex. And to place in major pharmacies, it requires a lot of CapEx, could be to the tune of $5 million, just to put a number, to set-up a new radiopharmacy facility. So, there are not newcomers seen in this space very frequently. So, we have a relatively stable competitive landscape.

Next slide. This is a competitive landscape for Radiopharmacies. We are the second largest network, and we serve a base of about 1,700 customers. On this list, you see Cardinal Health, which has PET and SPECT pharmacies. We have primarily SPECT pharmacies, and SOFIE Biosciences, as shown at the bottom of this page, is primarily a PET radio-pharmacy network combining the 2 networks we can be much more comprehensive in our portfolio.

The third one Petnet, is only PET RLS is only SPECT in Pharmalogic, was primarily SPECT. So, with the partnership with SOFIE, Jubilant and Cardinal Health, are the only 2 truly players on both PET and SPECT.

Next slide. So here we show the United States map. Blue dots are our radiopharmacies at 48 locations, and we have here also shown the SOFIE PET pharmacies in red. Our key figures are shown here. We have about 750 employees. We serve 1,700 customers, about 3 million doses are delivered every year. That's not accounting for SOFIE, which would add another half a million to this number.

Next slide. So, radiopharmacies, and its future, we have a lot of key differentiators. The vertical integration with JDI brings safe supply chain, the partnership with SOFIE possibility to provide a comprehensive portfolio one-stop shop for customers. Number 3, second largest network convenience geographically to serve customers and we are planning to expand to about 20 new sites in the next 5 years. Early access to innovative products through the vertical integration with Radiopharmaceuticals. And fifth, perhaps the most important, we have a strong track record of quality and good service.

Next slide. To close, I will leave you with our strategic pillars for the Radiopharmacy division, driving operational efficiency to reduce costs, improve efficiencies, drive commercial excellence, to increase our market share. And then finally, drive network optimization and expansion to serve an even more and even larger base of customers and seize opportunities in the United States.

I conclude by saying Jubilant Radiopharma is in a fascinating field of nuclear medicine, one of the fastest growing fields in medicine, and one of the best opportunities for our company.

With this, I'll turn to Chris Preti to present the Allergy business unit. Over to you, Chris.

Chris Preti

Thank you, Sergio. Good evening, everyone. My name is Chris Preti. And I have the pleasure of actually representing the Allergy business unit as the President. What I would like to do is first define what I mean by Allergy Immunotherapy. Specifically, this is all around treating the underlying cause of the disease, what is causing the reaction to the allergen versus just suppressing the symptoms that are causing the reaction. And in particular, if you look at the market itself under AIT - Allergy Immunotherapy, there's 2 main groups.

The first group is what's called Subcutaneous Immunotherapy, otherwise known as SCIT. These are allergy shots and worldwide, this is the most predominant form of Allergy Immunotherapy - SCIT. The other form lesser is called SLIT, Sublingual Immunotherapy and this comes in the form of drops or tablets. If you look specifically at the U.S. market, over 90% of the U.S. market is in this SCIT form or shots. Outside the U.S. is SLIT predominantly for the tablets and the drops.

Going one step further and looking at actually the SCIT marketplace. There is another category under the SCIT marketplace, which is Venom Immunotherapy, otherwise known as VIT. And specifically, this is very important therapy for individuals, who have anaphylaxis or a reaction to flying stinging insects such as bees, for example. And the reason I highlight this is in 2018 following ALKs-Albello exit from the U.S. market. Jubilant HollisterStier became the sole provider and supplier of VIT (Venom Immunotherapy) in the U.S. marketplace.

Next slide, please. If you look a little bit about my business, specifically, there are over 100 different allergenic extract products that we offer, 6 different insect products, and an exclusive array of skin diagnostic devices. We are the number 2 player in the Allergenic SCIT U.S. marketplace. And there's a high barrier to entry, because these are biologics that have been grandfathered in their biologic license application, or BLA into the U.S. So that is a high barrier to entry to competitor entrance.

The marketplace in the U.S. consists of 2 customer groups, Allergists and Ear Nose & Throat Physicians or ENTs. And the products are sold under the HollisterStier name in the U.S., because that name goes back over 100 years in the allergist community, and with that name comes a lot of equity and a lot of reliability in terms of quality for allergy treatment.

We have a dedicated salesforce in the U.S. And we have key distribution partnerships to allow us to actually introduce our products in Europe, Canada and South Korea. Our products are manufactured at our Spokane facility approved by the U.S. FDA and Health Canada. And we are 1 of 2 suppliers with onshore manufacturing, and the only manufacturer of venom in the U.S., which provides a potential strategic advantage, as I mentioned earlier.

Next slide, please. If you look at our categories of products, there's 3 major categories. On the left is our non-venom extracts. These are the 100-plus different products that are produced in a unique Acetone Precipitated process using phenol-free excipients. What this means is that the end, the product that is produced is more potent and more robust, providing us an advantage in the marketplace. And this provides an array of non-venom products from dog to cat, to mite, to mold, to an array of pollen options for folks who suffer from allergens.

Our in-house capabilities, we have small sterile fills, and also commercial scale Lyophilization. In terms of the middle column, this is our venom products. This is the anchor to our business. One of the reasons why is in the U.S. alone, 16 million Americans are at risk of anaphylaxis reaction to a flying stinging insect, and there's over 230,000 hospitalizations, ER visits every single year, because of an anaphylaxis reaction through a flying stinging insect and 60 deaths a year. So that is why it's critical to have an option Venom Immunotherapy or VIT, that's highly efficacious and ours is in 98% of the cases to provide this therapy and this significant benefit to patients. We cover the whole array of flying stinging insects listed on this slide from honeybees to hornets, to wasps, to yellow jackets, and mixed vespids.

And then our third category on the right is our trading goods, our skin testing devices. And once again, these are unique in terms of the actual stainless-steel tip used actually provides less or minimal trauma to the patient when testing for appropriate allergies.

Next slide, please. In terms of key sources of differentiation, there are 4 main buckets. The first, as I mentioned before, is with a Sole Venom supplier in the U.S. marketplace. Customers like to buy the portfolio of products and having a portfolio of non-venom extracts plus venom allows us to uniquely differ our products and our offer to the customers.

We also have the opportunity as a sole provider in the U.S. marketplace to double the opportunity, to double the amount of doses in the U.S. marketplace as it relates to Venom Immunotherapy. And we are aggressively promoting through our BeeAware campaign, this is a digital campaign to raise awareness around venom anaphylaxis and the importance of getting diagnosed and tested.

Our second differentiator is that these are biological products with very difficult to replicate supply chains. But over the years, many years, we have optimized the supply chain of this natural biological product. We have optimized it such that we now have a consistent and reliable supply of these products. And as I mentioned earlier, that coupled with the fact that these are grandfathered in biological license application products, it provides us a barrier to entry a competitive advantage within the marketplace.

The third differentiator is onshore manufacturing. Specifically, as I mentioned, we're the only venom provider in the U.S. marketplace. And we're investing in new capacities, our capital is predominantly going towards increasing our capacity, so that we could meet a 100% increase in increasing demand in the U.S. and ex-U.S., as it relates to venom and non-venom extracts.

And our last differentiator is branded differentiated portfolio. We have new offerings coming out of our R&D pipeline, specifically a dog and cat product. And we continue to leverage the HollisterStier name, and the equity that brings with the allergist community.

Next slide, please. This is just a quick example of some of our aggressive BeeAware promotion and digital campaign that we're doing. This runs the array of resources, specifically patient testimonials as listed on the left, patient educational materials in the middle column, digital assets, illuminating and highlighting the importance of getting diagnosed how many individuals specifically suffer from it venom anaphylaxis potentially, and the seriousness of this disease. And then on the right, resources for patients and individuals to look up and identify their local allergist to go in and engage with them about appropriate diagnosis and testing in the Venom Immunotherapy space.

Next slide, please. And to close, our strategy going forward. Today, the health of the Allergy business unit is very strong. In the future, the health of the business will be even stronger, we have a good future strong growth through 2 aspects, growing our venom and non-venom business in the U.S., and growing our ex-U.S. venom footprint and expanding our venom outside the U.S. There are 3 pillars that will support this growth and this strategy.

The first on the left is leveraging existing capabilities. Specifically, this is around being the sole provider of venom, and offering that portfolio of products, venom and non-venom to the customers, doubling the amount of doses worldwide that we produced from approximately 500,000 to 1 million over the long-term horizon. Aggressively promoting our BeeAware campaign is also leveraging our existing resources; and then finally, leveraging the HollisterStier brand name and the equity that provides to the allergy community.

The middle pillar is all around enhancing our U.S. footprint and our portfolio. Specifically, now that we have actually optimized our supply chain, we are

changing the customer mindset from Made to Sell, to Made to Stock, and giving the customer the reliability that we can supply the whole array of antigens and extracts that they are looking for.

We are evolving our digital campaigns as well, to make sure that we can engage with the customers where they want to engage with, and we're upgrading our capacities, as I mentioned earlier. Specifically, the majority of our capital plan over the next 5 years is to upgrade our facilities so that we can meet the increasing demands that the market will actually tell us over the next 5 years.

And the last pillar on the right is expanding target markets and portfolio. And there's 2 elements of this: 1, the new launches that I mentioned, specifically coming out of our R&D portfolio, one for dog and one for cat, which will allow us to continue to differentiate in the marketplace; and then 2, ex-U.S. expansion, specifically within venom. If you look at the entire worldwide venom market, 98% of the market is comprised of 2 players, Jubilant HollisterStier and one other player.

We will tap into that continued opportunity in that footprint ex-U.S. through strategic partnerships, as I mentioned before, through establishing our own presence through Jubilant in the some of these local affiliates, and then through partnerships with local entities where that is required, so that we can continue to grow our ex-U.S. venom footprint.

So, I will close by saying, the health will continue to be strong and we will continue to grow our business through U.S. expansion in venom and non-venom, and further venom expansion outside the U.S.

And now, it is my pleasure to turn it over to my colleague, Amit Arora.

Amit Arora

Good evening, everyone. And it is a pleasure to meet all of you virtually. Thank you, Chris. If you can go to the next slide. So, the global CMO pharmaceutical industry has continued to grow, it continued to grow in high-single-digits. And within that, if you really look at the injectable market that is growing pretty much at the fastest pace, as we know today. The sterile injectable demand continues to be strong, because of rising demand from new launches, including COVID. And over 70% of the molecules are what Jubilant can handle at both of their sides, Spokane and Montreal in Canada.

The Ophthalmic demand, another area where we have continued to focus on and invest, is growing significantly again, because of the ageing population. And ability for us it's about how the preservative free market is growing, which prevents irritation to the eye and increases life of the product in the hand of the patient, where Europe is pretty much getting on to preservative free and U.S. will follow over the next 2 to 3 years, where we are investing in.

Now the trends in the CMO business, they are fairly, fairly strong as you would have also seen with the COVID opportunities in the past, where in the last 18 months, where all these virtual companies have passed on their business to CMOs like us. And then the trends are also from the perspective of shortages in the injectable drugs and injectable capacities, where Jubilant is gaining because of that shortage and capacities.

And the technical expertise in the drugs where we are a niche player and have very strong relationships with existing customers which I will talk about

on the next slide. So sterile injectable business, which is again at both our sites in Montreal and Spokane accounts for over 80% of the revenues. And non-steroid products, which are majority of them in Montreal, account for 20% of our CMO revenue.

In injections, we can handle vial sizes from 2 ml to 100 ml, and our batches can go as high as 2,000 liters. We have a very robust order book position as of today. And as I mentioned about the partnerships, we serve 7 of the top 20 pharmaceutical companies globally. And our relationships with almost all of them extend beyond 5 years, which has given us consistency in our operation and growth as well. Our sites, Spokane, it manufactures clinical and commercial fill and finish batches for parenteral drugs. And Montreal is a multi-dose form capability, which includes injectables and fills, semi-solids, and liquid creams and lotions, a very strong inspection track-record. As you would have heard Pramod mention earlier that our last inspection with FDA resulted in zero 483's and we are very proud of that inspection history with a lot of other regulators, including Russia, Korea, Japan and Anvisa.

Again, we spoke about investment earlier. Our $92 million investment will increase our capacity by 50% in Spokane. And we have another preservative-free Ophthalmic line coming up in Montreal. And we are pretty much one of the only CMOS who is investing in Ophthalmic in North America.

If you move on to the next one, so what are we trying to do? Again, you have seen some of the announcements we made on our COVID-related products in the last some months. But we have continued to look at expansion across the board. Other than the expansions already announced we are looking at another brand-new line, high-speed isolator line at Spokane, which potentially will double our existing capacity too.

And then, we are also looking at expansion of our Montreal facility, where tripling the capacity on sterile fill & finish over the next 4 years, and have potential to increase our revenue significantly. As we leverage our existing assets and expand on the existing sites, that would also result in our margin expansion across both sites and the CMO business. We have continued to work on operational efficiencies, which I think as most of you would be aware is the core for CMO.

We continue to focus on our First Time Right. We continue to focus on minimum deviations on the batch, increase product yields for our customers, and patients, and very high capital efficiency. And all these are done through Business Excellence initiatives, where we have invested on, on our sites.

Our focus has always been with new lines coming in, new customers across all dosage forms. And we continue to support our customers in new product launches. And that through the development phase, because when the opportunity comes in, we can track it. And one of the opportunities which we publicly announced is, obviously, Gilead remdesivir, which even in fact started manufacturing for Gilead from the development phase almost 4, 5 years ago, and as the opportunity came in, we really encashed on that for a site.

And we continue to focus on creating long-term high-value contracts with large pharmaceutical companies to continue to grow. And including COVID projects or excluding, we have continued to grow our business, grow our

current products with existing customers, and also getting new products starting from clinical phases in old dosage forms. So, thank you with that.

And with that, I pass on to Gunjan.

Gunjan Singh

Thanks, Amit. Good evening, everyone, once again, this is Gunjan Singh, and I am responsible for the API business at Jubilant. I will now take you through the business in the next few slides.

Well, as you all know, API is in a very interesting phase currently, especially in the Indian context. Looking at this chart over here, if you see, from a usage point of view, the API can be classified under 2 buckets, either it's outsourced or captive. So, at Jubilant, we play on both, but dominant play is on the outsourced one.

And from a patent perspective, the below pie-chart, if you see, that classifies depending upon the patent, whether the API is for innovator or for Generic. And here our dominant play is on the Generic side. So overall, long story short, it's close to around $48 billion worth of market, addressable market that is available to us from an API standpoint.

Next slide, please. So, regarding the highlights of our business, we are playing largely in the regulated market. More than 60% of the sales are coming from U.S., Europe and Brazil market. Also, most of these relationships, as Amit just mentioned in his section, several of our relationships also extend beyond a decade or so.

As I earlier mentioned, around 80% of our revenues are coming from third-party sales, so which is non-captive usage of the API there. Also from a portfolio standpoint, if we see, our dominant presence is in the lifestyle-related therapy. What this means for us is that it gives us a larger market-size to address. At the same time, there is a consistent demand for these kinds of products there.

Also, over the period of time, Jubilant has very successfully developed its own niche in some of the select geography such as Brazil, South Korea, Middle East. We have a very regional play as well, in terms of partnerships with the local, regional, dominant formulators there.

Our facility at Nanjangud provides API globally and has been approved by FDA, PMDA Japan, Korea, COFEPRIS Mexico, ANVISA, all the global certifications are available with the facility. As you can see over on the right side as well, this is the list of API where we have a dominant market position in terms of market share globally, so ranging from around 10% to 20%, and going as high as 50-to-70-odd-percent in select APIs.

Now, this kind of a dominant position also helps us in bucketing or basketing our APIs and further strengthening our customer relationships. Next slide, please.

We will now talk quickly around our USPs, our key sources of differentiation. And as I was saying in the previous slide, our leadership position in some of these products, especially the franchisee products such as Carbamazepine and Oxcarbazepine, Pinaverium help us have a deeper share of the customer’s wallet.

And also, in addition to these niche APIs, we are also present across multiple product ranges, including products such as Valsartan, Azithromycin, Irbesartan, and so on. Our R&D capabilities are really distinguished. And these help us in adding the complex APIs, which is now currently as well and going forward as well will be the key thing in demand.

We have invested a lot in terms of developing and strengthening our relationships with the customers and several of our relationships extend beyond decades. We also know that in the generic industry it's important that we always keep our costs under control. So, our key focus has been on cost reduction through R&D and process chemistry, at the same time doing more from less. And that's through the debottlenecking initiatives at our Nanjangud facility.

Additionally, we also are privileged in terms to have our own forward integration with the use of API in captive Formulation products through our Dosage team. Next slide, please.

Coming to our strategy going forward. So, as a business we have chosen these 3 key pillars in terms of charting out the future growth for our products. And the first pillar is around putting focus on more sustainability and more predictability.

Now, if you see, on these pillars, if we analyze the new business, the new growth, there we want to have a more robust and agile portfolio. So, what [indiscernible] at the same time, so if you – we are expecting close to around 20% of the revenue to come in from these select portfolio additions.

And the same time on the existing portfolio, we are going to focus on further de-risking and sustaining our cost leadership on the products. The second pillar for our strategy is to invest in growth. Now, this typically involves investing in debottlenecking, investing in niche R&D investments, and also investing in new capabilities and capacities. We have recently initiated designing work for a greenfield product at our SEZ in Bharuch, as part of our further capacity addition.

And the last pillar here is to invest in relationships. So basically, this means that expanding our entry further into the emerging markets and strengthening the position into U.S. and Europe markets, at the same time providing a more significant value proposition to our customers.

And last but not the least, strengthening the approach of the organization to be a more customer-centric organization, so that we take this business to the next step.

With this, I will hand over this to Jasdeep and Terry, my colleagues, who will explain about the Dosages.

Terry Fullem

Thank you, Gunjan. I am Terry Fullem. I am the President of Jubilant Cadista, which is the U.S. Generics business for Jubilant. But I will be speaking to our global Dosages and Formulations business. So, on the first slide, I'm just going to go through first few slides, just a brief overview of the market, I think, many of you are familiar with our market, but I'm not going to spend a lot of time on this. So, the Global Generics market in 2020 was $329 billion that is expected to grow to about $475 billion to $500 billion by 2025.

And if you look at some of the trends that are going on, so the volume in the Generics segment is really driven by patent expiry of a number of molecules, I'll show that in a minute. And there's also going along with that increased affordability and access to pharmaceuticals with the shift. And then at the same time going in parallel to that is kind of a move towards complex Generics.

Next slide, please. So, this is a breakdown of the different types of markets, and also where the industry expects them to go. So, the light blue is the generic portion of spend. And I am highlighting spend, because script is slightly a different story. So, on a global basis about a quarter of the spend is in Generics, and if you look at the developed markets down at the bottom at 16%. But if you look at script volume, that's actually a very different story. So in the U.S., for example, the generic makeup about 10% of the spend, but makeup 90% of the script. So, it's kind of flip flop, because the generics are low priced. But our innovative products are very high priced. If you look down the road to 2025, I expect the Global Generics to increase in terms of their proportion of spending from 26% that to about 30%. And that's really being driven by the developed markets.

Next slide. So, this is a graph on the left hand side of patent expiries and the dollar value of those expiries. So recently, in 2020 and 2021, there's kind of in a low point in those expiries, so $14 billion and $16 billion, respectively. But going forward, that's going to ramp back up to even higher than it has been in the past. So that's really what is going to be driving a lot of this generic growth.

In terms of the first few bullets, I kind of already spoke to on the first slide. But there is some other trends that are going on, is really a look at supply chain across the globe. In the U.S., specifically, there is a lot of attention on that. And it's being balanced with concern on pricing of pharmaceuticals and also quality. So those 3 things are being looked at all at the same time. And prior to COVID, there was already a concern with overseas or reliance on overseas manufacturing, and then COVID kind of exacerbated that concern. So there are a lot of policies being proposed, but in the U.S. for on-shoring, at least some of their production that that has gone overseas.

Next slide. So that is a little bit about the overview of the market. Now I am going to talk a bit about our business. So, on a global basis, we're a market leader in the U.S. in select products. And on the right-hand side, you can see what those products are. We have capabilities and multiple dosage forms. We're vertically integrated with our API business. We also have our own in-house R&D for Formulations. We cover broad therapeutic areas, including cardiovascular, central nervous system and gastrointestinal. We have manufacturing facilities approved by U.S. regulatory, UK, Brazil, Japan, Australia and South Africa.

Our Roorkee, India site expansion was completed in FY 2020. And our Salisbury, Maryland, which is our U.S. site, is pretty much at the end of its expansion, which will increase our capacity by about 85% in that facility. Our non-U.S. business supplies over 45 countries with 80% of the revenue coming from 10 countries and is really driven by distributor led and B2B model, while retain the marketing authorizations in most of those countries.

And the UK and South Africa, we have recently started our own offices, as a part of our long-term plan of going direct to market with our own sales team. This is a significant part of our growth strategy, at least in those markets. And then another focus area for us in non-U.S. is branded Generics. So Jubilant branded products are sold currently in 8 countries with a portfolio of 57 products.

Next slide, please. In terms of our sources of differentiation. One is how we go about selecting products. So, we target areas that will be expected to have lower competition that way we can have better margins. And we take extra effort in identifying those markets. So, we believe, we are able to do that better than our competition. Also, in terms of vertical integration, we definitely leverage that significantly 60% of our revenues are supported by our own in-house API, which provides both supply security and also a cost advantage.

We have calibrated redundancy in manufacturing and flexibility in our supply chain. So what that means is, in certain respect – in certain products, we do qualify the products in more than one manufacturing site, so that if there's an issue one place, we can ramp up in the other and respond more quickly. And also, this means dual sourcing a lot of our materials. We have multi-agency approved facilities, and we have durable B2B customer relationships and 7 customers accounted for about 70% of our FY 2020 revenue.

Next slide, please. So in terms of our go forward strategy, it's really 3 pillars. First is leveraging our R&D capabilities. So, we're looking to enter underserved markets through opportunity identification and do that rapidly. So that's the key in the generics business is to be quick to respond when you see opportunities. At the same time, we are moving up the value chain to get into more difficult products. And we are doing that partly with our in-house capability, but also partnering where we don't have those capabilities.

We are focusing on various delivery systems and dosage forms. And we're ensuring robust formulations in terms of our scale-up to support reliable supply. So often, you grow by your competitors not having good supply, and if you do have good supply, and you're able to fill that gap. In terms of sustainable manufacturing, it is really a balance. The balance is between cost, supply reliability, and speed to market.

So, to solely focus on any one of those would not be a winning strategy. So, the secret to success is really doing a good balance of those 3, to make sure that you do have a good cost position, that you're able to respond to the market quickly. And that you have reliable supply, which is extremely important to the customers.

We mitigate our supplier concentration by having alternate sources of API, we file products from multiple locations, as I mentioned before. We're exploring additional manufacturing sites either through partnerships and inorganic growth. And we ensure sustained compliance through global regulatory standards to have that consistent growth.

And our last pillar is market expansion. So, as I mentioned in some of the previous slides, we are really looking at even though U.S. is our biggest business, there's a lot of opportunity in the non-U.S. markets. And we expect to launch a number of products over the next few years both in the U.S. but also in those non-U.S. markets. New products are expected to add potential

revenue of US$300 million in the period of FY 2022 through FY 2026. And we are also going to be shifting from a traditional B2B model to a B2C model in some of those key non-U.S. markets to leverage the growth potential there.

So, with that, I am going to hand it over to Chris to walk through our financials. Thank you very much.

Christopher Krawstchuk

Good day, everybody. Chris Krawstchuk, CFO for Jubilant Pharma. So let me take you through our financial statements and our financial performance for FY 2021. As you can see, we printed $782 million of revenue compared to $803 million, and EBITDA of $177 million and $211 million respectively. Revenues by segment were principally driven by Specialty Pharmaceuticals, of course, CDMO, and our generic business, as the folks just outlined. And our year-on-year performances, as a result of these businesses were really reflective of the performance of our management team and the market conditions in fiscal year 2021 and, of course, impacted by COVID-19.

As you can see, due to the diversity of our businesses and our markets that we serve our customers in, we were able to seize opportunities in our CDMO business to help our patients and our customers navigate through, and yet still manage risk associated with COVID-19. Our CDMO business performed extremely well in fiscal year 2021 driven by strong performance and certain onetime take or pay contracts, and strong performance in our generics business. This was partially offset by the performance of our Specialty Pharma business, which was mostly impacted by COVID-19.

This was principally driven by what I would call patient behavior as well as HCP behavior, principally in the area of lung perfusions, as a result of patients seeking what I would call less accurate kinds of treatments. This effectively happened early on in fiscal year 2021. We see improvement in those COVID conditions today, as the U.S. has been almost fully vaccinated, and patients and practitioners are seeking more accurate lung perfusions, lung scans, et cetera. So, our Specialty Pharma business is recovering nicely in that regard, particularly in North America, as vaccines have rolled out.

Year-on-year, our profit after tax was effectively driven by changes in tax rates and driven by our changes in accounting associated with deductibility of goodwill.

So, aside from the financial performance of our business, let me turn it over to Marcel, who will talk a little bit about our Jubilant Biosys business.

Marcel Velterop

Hi. Good evening, everyone. Can we have the next slide, please? It is my pleasure to introduce you to the industry of research as a service. And this slide introduces you to what is a very attractive marketplace of global research outsourcing both in the preclinical stage as well as in the clinical stage. And market has been growing consistently about 7% annually from a number of $25 billion some 8 years ago. And we are exceeding $40 billion, $42 billion in the coming year. So the market is continuing to grow, we see signs of that. And if we look at the drivers of that growth, it is driven by the very high cost escalation that the site and industry has seen over the past few decades. You've all heard of $1 billion plus development cost of a new medicine, which includes all the failures, of course. And the industry has been looking for ways to trim costs to reduce that number become more efficient. And one of those ways was outsourcing their services, and that is notably

taking place in the small molecule area, which is the area that Jubilant Biosys focuses on.

Big pharma companies are focusing on their core competencies development and commercialization. And they are increasingly relying on virtual companies, which have emerged and those are the biotech companies that we read exciting stories about in the press, notably in the U.S., some in Europe and other geographies, who feed who develop compounds, discover compounds and licensed them out with sufficient clinical data. And my colleague, Syed will give you a lot more insights in the next presentation.

And the other benefit of outsourcing is, of course, that rather than invest and maintain very advanced research laboratories, huge staffs, which are fixed costs in nature, you actually pay for research as you need it. And as soon as you have candidates, you go to the clinic, you can convert your efforts from the research Drug Discovery phase to the development phase and move your finances with the phase of the compound, and that has proven to be a very efficient methodology.

Next slide, please. So what does Jubilant Biosys do in this industry? On the left-hand side is a snapshot, we have capability in scientists, which provides new Drug Discovery services to those innovators in the U.S., Europe and Asia Pacific, including Japan. Those are the markets where we see innovation taking place primarily.

We can offer integrated Drug Discovery service that means we can offer a portfolio service that combined leads to a new candidate, which can go to clinic. And that requires all of the services that I'll introduce a little bit later, and we can do functional services, which is essentially a menu and depending on the requirement of an innovator, we can offer chemistry, biology or further testing of those compounds in live and cell-based systems.

The business is driven by a number of long-term relationships, which gives stability and also give references to expand our business in future. We have in addition engaged in several risk-shared discovery projects, where we sacrifice some top-line in return for milestones and upsides in case programs reach successful next phases. The services offered out of 2 locations in India, one in North India, Noida and Greater Noida, where primarily chemistry and analytical services will take place to make 1,000s and 1,000s of compounds that get tested, and the ones that make it will then be scaled up and GMP infrastructure for phase 1 clinical trials.

In our Bengaluru site is where we have all 3 preclinical services concentrated from biology, medicinal chemistry, et cetera, which are required to serve into an investigational new drug application. This site also houses the brand TrialStat, which is an electronic data capture system for clinical trials. Clinical trials are one of the most expensive parts of developing a new drug. And in recent years, the automation and digitization has accelerated. And Jubilant is playing its role by and startup as we call it, we're developing a software platform that we have rolled out in North America, and all of the services are being developed out of our Bengaluru site. Related to that is a foray into digitization services that one can read about in industry on a daily basis.

In machine learning, artificial intelligence, we are making inroads in that to understand the domain, understand how it applies in drug discovery and how it accelerates drug discovery in the next 1 or 2 years. And later this year, we hope to learn some services in this area that will improve the speed of the quality of what we are doing.

If you look at the right-hand side in the discovery area, you see an array of services. And I will not go into the scientific detail of all of them. But it gives you a snapshot of the breadth of capabilities required to both design a molecule test it, including animal testing, avoid toxicology effects, and then finally be able to come up with a compound that has the potential to go to human clinical trials. That is the rigor that we find in the drug hunting phase of where we are in this business, which is a very exciting business to be in.

The business has been doing extremely well in the past couple of years. We have nearly grown 50% in 3 years and touching close to 20% year-on-year and we expect to see continued growth in fiscal 2022. And we will make some major investments that are introduced on the next slide, please.

Our strategy is based on 4 key pillars, and the most important one is expansion of capacity and capability in our 2 key locations in North India, Noida and Greater Noida, as well as Bengaluru. The first addition will actually occur in the next quarter that investment is approved it is nearing completion and that will more than double our chemistry capability to synthesize complex molecules which are then ready for testing phase.

In addition, we are in advanced stages of planning a completely new site that will replace our existing site in Bengaluru on a much larger location, where we can grow and that will also be more than doubling capacity if all is approved later in the year and you will be informed accordingly. That site will also include in the plans is a larger GMP Pilot plant that will take us up to phase 2 clinical supplies. It will have an associated expanded process research and analytical research department for new chemical entity CDMO services. That combination of knowledge generation and pilot plant is required.

Lastly, we are planning a globally compliant GLP TOX lab, where animal studies take place to test compounds for final stages that will increase the number of therapeutic areas that we can offer to customers. That is the foundation of our business.

The quality of our business is driven by operational efficiencies. We have been succeeding in a very efficient electronic lab notebook for 500 to 600 scientists which we've done recently that has tremendously improved productivity of the sites that we deliver. We are driving quality, data integrity assurance through a robust system of quality assurance and SOPs, which will lead to ISO certification that we are targeting by quarter 1 of next calendar year.

Jubilant has a huge experience with Business Excellence across all its businesses. And we have recently applied that also in the research stage. And we've seen amazing results, accelerating turnaround time of 30% to 40% in discrete parts of our business, which is delighting our customers very much and is underpinning the growth that we are seeing.

Due to the complexity of the science, we are also focusing on high-end talents, PhDs, as well as global pedigree PhDs with post-docs. Business expansion occurs in the third pillar, new customer targets, because the top-50 pharma is increasingly focusing on other modalities, we see thousands of biotech companies emerge in the U.S. and Europe as well as Korea, Japan, Australia, et cetera. So, we are looking to geographically expand our customer base.

And that has been working quite well. And we are increasingly looking to close longer-term contracts, which is not typical for this business. Most of it is done in relatively short-term focus, 6 to 12 months. In the past year, we have been able to close 2- to 3-year deals with several large VC companies in the U.S.

And finally, technology development is critical as finding new drugs is increasingly difficult. Applying new technologies, the earlier mentioned machine learning, AI, which is going to deliver value for us in the coming year. The digital services we are offering and we are expanding in clinical research through our TrialStat brand. And we are applying chemical technologies such as flow chemistry, which enables synthesis of highly complex NCEs that are difficult to make in regular setups.

And finally, because the biology is increasingly complex, we are investing in new state-of-the-art instruments that give us a higher resolution to model exactly what the compounds that we are making are doing to a cell or an animal, and in order to select the right candidates. These are the 4 pillars of our business that has driven the growth rates that I've presented to you in the previous slide.

And with that, I'll hand over to my colleague and customer, Syed, in Jubilant Therapeutics.

Syed Kazmi

Thank you, Marcel. Good evening, everyone. I'm Syed Kazmi and I have the pleasure of representing Jubilant's proprietary Novel Drug business, Jubilant Therapeutics, as President and CEO.

Jubilant Therapeutics was born out of Jubilant's Drug Discovery organization that Marcel just walked you through. And we now have several first-in-class and best-in-class drug development candidates that are moving along very nicely in the area of Oncology and Autoimmune disorders that I'll walk you through very shortly.

This slide, as you're well aware, is really describes the multistep process for a novel drug discovery and development, starting from the target identification and validation, and then the process of discovering novel drug candidates, and taking those through the preclinical, exploratory and candidate selection phase.

And then, on the right-hand side, as you are well aware, the clinical process then starts after investigational new drug applications are submitted to regulatory agencies and first-in-human studies, Phase I would then be followed by the mid-stage and the pivotal trials before the drug can reach the market.

So this cartoon is essentially here to really give you a sense of where exactly Jubilant's proprietary drug development business, Jubilant Therapeutics,

stands today. And if I could draw your attention to the intersection of preclinical and clinical, we are very excited that we are really at the value inflection point of transforming Jubilant Therapeutics from preclinical to a clinical stage company, which is really one of the most important milestones in the evolution of novel drug development business as you well know.

As I will describe to you later, our advanced program is going through the IND track studies with the IND filing later this year and starting the human studies in both solid tumors as well as blood cancers early next year. And there are other programs that are right behind, going through this journey of finalizing and optimizing and doing all the sophisticated animal-based studies to prepare these drug candidates for first-in-human studies.

So, as we go through this journey for a biotech like Jubilant Therapeutics, there are 2 primary value creation opportunities for novel proprietary drug business. The one is where you have these wonderful exciting first-in-class differentiated programs that can be partnered in a licensing or collaboration setting with large global companies.

And the second value creation opportunity is to access funding through private or public raise. And we will give you an introduction to both of these value-creation opportunities for biotechs in general, and for Jubilant Therapeutics, in particular, over the next 2 slides. So next slide, please.

So, biotech companies like Jubilant Therapeutics dominate the new drug pipeline with novel agents, as shown here in this summary. And if you look at the top bar that represents unpartnered biotechs like Jubilant Therapeutics, with first-in-class to a best-in-class programs. And at every stage of the drug development, these biotechs, which includes Jubilant Therapeutics, have more new drugs in pipeline compared to the large pharma companies that are shown in the bottom bar, the third bar there.

The external innovation or partnering with biotech companies are becoming more commonplace for pharma companies to develop new drugs, as much as 2/3rds of the pharma late-stage pipelines come from biotech companies like Jubilant Therapeutics and other peers. And just to give you a sense, that the recent data shows that over 1/3rd of pharma investment, in this case, the precise number from the recent survey is about 36% of total investment of Big Pharma is towards these deals to bring in novel candidates from innovative biotechs.

So, partnering pipeline programs with large pharma, other biotechs to innovative venture firms with the upfront milestones, royalties and equity-linked deals is really one of the, like I said before, a key value-unlocking opportunity for Jubilant Therapeutics.

In our case, we have pursued and will continue to do so, the partnering opportunities at the right value inflection point, which will be typically after IND filing or actually having some clinical proof of concept data from our innovative programs to maximize the deal value. And partnering, as you well know, we have already done with our 2 prior programs, one with a very top-notch VC company called Frazier with – and with a company formed around Jubilant asset called Lengo Therapeutics. And we have also partnered with Checkpoint Therapeutics before.

Going forward, we will continue to explore these value creation opportunities for Jubilant Therapeutics pipeline as well at an appropriate value inflection point. Next slide please.

The second value creation opportunity for novel proprietary companies like Jubilant Therapeutics is driven by the fact that there is a lot of attention and demand for biotech companies to attract funding through private/public placement. And if you look at the recent data, the biotech IPOs have really grown exponentially. And also, if you look at the size and valuation of these biotech IPOs they are at all-time high.

And especially last year, we have seen a lot of activity in both private placement and public market access for innovative biotechs. And the key there is to have a differentiated product for unmet medical need, especially in Oncology.

Increasingly, these companies are growing and accessing external funding now, starting from preclinical to phase 1 stage. This is a new trend, because there is a lot of demand for innovation from investors and from large pharma companies. So, over the last few years, we've actually seen a number of preclinical, where we sit right now are seem to be phase 1 company going public. Majority of these companies have Oncology focus, which by the way, we play in the same sandbox. And more than 50% of the IPOs, just to give you an example, in 2020 and 2021 year to date, have lead assets in stages where we sit in today. And it is really a matter of generating some proof of concept to give the best possible valuation and go through some of the private/public funding rounds.

Last year alone, I think as many as 91 biotech companies went public, with a total raise of about $16.5 billion. And this year, year to date, it is going to be, looks like it will be even better, because already close to about 53 biotech companies have gone public in the last 6 months with a total raise of $9 billion.

So similarly, Jubilant Therapeutics has an equally and, in some cases, better pipeline with novel targets and advanced preclinical programs with opportunity to raise capital through private placement or public markets over the next 18 to 24 months. So next slide gives you a snapshot of where we are and who we are in terms of our management, our collaborations, and our programs.

So, we are advancing, as I said before, potent and selective small molecule precision therapeutics in the area of Oncology and Autoimmune disease. The company was launched formally about 20 months ago, in Bedminster, New Jersey, with discovery labs in India.

And we are now at the cusp of, like I said, transforming the company from preclinical to clinical over the next 6 to 9 months. We have assembled an excellent and experienced leadership team with both large pharma and biotech pedigree, experienced in bringing novel compounds from discovery to the clinic. And we are very fortunate to be working with a number of top names in Oncology and Autoimmune therapeutics, the key opinion leaders and our scientific advisory board from world-class institutions, such as Memorial Sloan, Francis Crick in UK, Dana Farber in Boston, and several others.

In terms of our pipeline programs, just to give you a quick introduction, our first-in-class dual inhibitor of 2 validated oncology targets are now in the IND filing stage with the filing completed, hopefully, later this year.

And as I said, this program is targeted for both solid tumors and he-malignancies. Our second program is a differentiated modulators of target that has been well established to play a key role in a number of cancer types, but more particularly in brain cancers, especially glioblastoma, for which there is a very little therapy available, and it's almost a death sentence, and the survival is very, very limited.

We have managed to develop molecules that can pass what is called blood-brain barrier. So not every drug will be able to reach brain, because nature has put in this mechanism to prevent some of these drugs to go through brain and have all kinds of deleterious side effects. But you can still develop very targeted therapies that can pass through the blood-brain barrier, and act on specific proteins or genes to modulate and treat some of these brain cancers. And ours is a very differentiated best-in-class molecule that is targeted not only for glioblastoma, but also for other brain cancer that are secondary to lung cancer, breast cancer, prostate cancer, and so on.

Our third program is a first-in-class modulator in the autoimmune inflammation space. And this program is also going through the critical IND track studies. And we hope to file an IND for this program, as well as for PRMT5 program in first half of next year. So, you can see that over the next 12 to 18 months, we are looking at 3 of our programs, going through the IND filing process and getting ready for clinical studies, which is pretty remarkable, if you look at the overall ecosystem of biotechs, because most of these companies with very good valuations usually have one such lead program in their pipeline. And we are fortunate to have 3 very novel and very selective precision therapeutic candidates that are going through the initial process of IND filing, so human studies can begin.

We have other programs too, behind these 3, including a checkpoint inhibitor program, which is an oral therapy. As you know, Checkpoint inhibitors like PD1, PD-L1s have become the new standard of care, is probably the best thing that has happened to the field of Oncology to the point where we are now talking significant, significant clinical benefits from these novel drug base. These are all injectables. And our goal is to develop a small molecule that can be taken orally, for long-term maintenance therapy. We have some undisclosed discovery-stage programs against difficult to drug targets in the area of what we call ‘Oncogenes’ that are so critical for regulating a number of tumor progression. And that's utilizing our state-of-the-art technology platform that is described in the next slide, please.

So, this platform that we are leveraging from our sister company, it integrates computational chemistry, structural biology, and sophisticated methodologies to study protein, protein interactions to understand targets well, so we can develop novel small-molecule modulators.

And the goal is to really optimize these modulators with the best possible therapeutic index. And we do that for identifying novel hits, and then subsequently optimize these hits into a potential clinical candidate, which

then goes through very sophisticated integrated translational assays to then be able to select integral clinical candidates.

And from these efforts, as I mentioned before to you, there are 3 programs that have emerged. I am sufficed to say, without going into too much scientific detail that the first program, which is called LSD1/HDAC6 Dual inhibitor. So you can think about these. These are 2 targets that belong to a class called 'Epigenetics'.

So, these are not specific gene-sequencing approaches, but these are the pathways and mechanism that influence gene expression. And in this case, these 2 targets essentially either decrease or increase expression of a number of genes that are involved in cancer progression. So, by interfering with this target in a selective fashion, you can interfere tumor growth, and in some cases, achieve what is called tumor regression without having to affect other pathways, where these agents are also involved to a certain extent.

So, the idea here is to develop a selective molecule that we have been able to do with the best possible therapeutic index. And then, along with that, we have utilized AI-enabled algorithms in a strategic partnership to identify biomarkers that can be used for selecting patients that are going to respond best to our drug candidate, as well as tracking clinical activity during the trial process.

Our second program, as I mentioned, it is a differentiated program, as I will tell you in a minute. This target has been subject to a lot of interest as one of the primary targets at brain metastases, brain cancers. And we happen to have a very differentiated molecule with enhanced exposure in both brain as well as in plasma. So, it has potential for development across multiple tumor types, and is going through the final process of lead optimization and the studies that will be needed for eventual IND filing.

PAD4 is essentially an autoimmune target. And you can think about autoimmune diseases like Lupus or Rheumatoid Arthritis or Psoriasis, as you know, diseases triggered by auto antigens in the body. And pathways like PAD4 interfere and stop the creation of those autoantigens, and thereby treat or help reduce the implications of autoimmune diseases without the liability of immunosuppression.

A number of Autoimmune targets that are out there, like Humiras of the world with TNF or JAK2s. These agents, while they prevent creation of these auto antigens, they also cause immune suppression. And when patients are more prone to infections, this mechanism we have chosen, which has this very clever pathway to regulate auto-antigens without the liability of causing immunosuppression.

And again, like PRMT5 this program is moving along nicely towards IND-enabling studies. This pathway also plays a role in tumor metastasis. So, we are looking at dual track development for PAD4. Next slide, please.

So, how do we compare to some of the other companies that are playing in this space and the indications that we are pursuing? So just to give you a quick sense, for our dual inhibitor program, as lead indications, we are looking at some leukemia subsets, as well as small-cell lung cancer indication, which, as you know, is close to about 15% of the total lung cell

population. There is really nothing other than chemotherapy that works in this disease. And both these indications, as you see on the right column are multibillion dollar indications. Our PAD4 on the autoimmune side is targeted for subsets of rheumatoid arthritis, some inflammatory derm indications as well as oncology. And as you can see, rheumatoid arthritis is a huge, huge market.

There are many agents, but there is still a need for agents that can give you that Autoimmune effect without the liability of infection or immunosuppression. In our brain cancer program, as well as some of the lymphoma for PRMT5 these are, again, $1 billion opportunities. So we are playing in significant markets. And if these agents continue to show the differentiated profile, these will result hopefully, and of course, as you know, drug development is driven by data, but hopefully in large value assets.

The company is, just to give you a reference point, for our dual inhibitor program there are 2 companies, Oryzon and Imago, that are shown in bottom right. These 2 companies have LSD1 program only. So, this is not a dual inhibitor. And their value is largely driven by LSD1 inhibitor program.

And in one case, Oryzon based largely on that 1 program has a market cap of $235 million. And another private company just did a Series C with a pre-money of $180 million. The nearest surrogate for our PAD4 program is a company called Padlock, which was sold to BMS, not too long ago in the discovery stage, even earlier than where we are today for a deal value of up to $600 million, including an upfront of $150 million.

And there are 2 companies – there are many companies that are working on PRMT5. But just to highlight, a company called Prelude Therapeutics, who just went public, is now has a market cap of $1.5 billion, largely driven by this single program called PRMT5. And another company Tango Therapeutics just went through a SPAC merger with a value of close to $1 billion. So, this is just to give you a sandbox, where we're playing and the potential value propositions down the road depending, of course, on the success of our programs.

Next slide, please. So just to summarize, as Jubilant Therapeutics, we are not transitioning to clinical stage very exciting and with great programs in early next year, with our dual inhibitor program. And like I said subsets of acute monocytic leukemia, there are some, again, blood cancer types, when this case it's called MPN, and then the select solid tumors with the specific gene signatures.

Next to IND filings around the corner in first half of next year, and like I mentioned before in terms of value creation, we're looking at creating shareholder value in this business through pharma/biotech partnership at an appropriate value inflection point and private/public equity raise during the coming 18 to 24 months.

And with that now, I invite Mr. Arun Sharma to give you an overview of Pharmova Financials. Over to you.

Arun Sharma

Good evening, everyone. I hope everyone is doing well and keeping safe. So, if you can see the slide, our results, revenue for FY 2021 is Rs. 6,099 crores, up from Rs. 5,976 crores which was reported in FY 2020. This

revenue has been reported despite the challenges of COVID, which we faced in few of our businesses. So, Jubilant Pharmova has delivered a stable performance for this year, despite these challenges and stoppage one of our API plants at Nanjangud.

If you go revenue by segment, in FY 2021, you see 37.8% is contributed by our Specialty Pharma business, 33% is contributed by our CDMO business, Generics contributes 24.2% and CRDS contributes 5% of our business.

The EBITDA margin has been slightly lower side because of COVID challenges this year. And we reported Rs. 1,414 crores of EBITDA this year in FY 2021 against Rs. 1,585 crores last year. PAT margin has been almost 10% at Rs. 574 crores, again it is little lower Rs. 678 crores reported last year.

Next slide, please. So, if you go to Return on Capital Employed. Our return on capital employed for FY 2021 was at 14.2%, which is quite comparable with all the major pharma companies. Leverage if you see, our leverage for this year is at 1.36 times and in leveraging we have a focus on deleveraging our company, whatever free cash we have, we try to deleverage our company. And this year if you look at our financials, they reduced our gross debt by almost Rs. 761 crores and our net debt by almost Rs. 309 crores on a constant currency basis.

Capital expenditure this year has been Rs. 276 crores, which is 4.5% of the sales. Working capital has been 86 days down from 94 days, as I released much cash into a system to have the operations smoothly.

Next slide, please. So, coming out with the detailed P&L account, as you can see pharmaceutical reported a total revenue of Rs. 5,790 crores in FY 2021. This is breakdown into Specialty Pharma of Rs. 2,303 crores. CDMO reported Rs. 2,010 crores. Generics supported Rs. 1,476 crores.

Contract Research and Development Services have been growing quite steadily over the years in here, and reported revenue of Rs. 305 crores. So total revenue from our Pharmova business which you call continuing business due to demerger in February is Rs. 6,099 crores; 2% as compared to last year.

Coming on to EBITDA, pharmaceutical EBITDA was at Rs. 1,386 crores and contract research and development service EBITDA was Rs. 109 crores. Proprietary novel drugs, we have books on expenses here. So our reported EBITDA is Rs. 1,414 crores. After depreciation, amortization, and finance cost of Rs. 184 crores. We reported profit before tax of Rs. 881 crores.

If we look at our finance costs, so we are always trying to optimize it, so that we borrow at a much lower rate. And this year in FY 2021, we have replaced our high yield bond of 4.875% with a much lower cost of term loans, which has brought the reduction in the interest cost.

After exceptional items of Rs. 21 crores, we are reported profit before tax of Rs. 71 crores and tax expenses of Rs. 297 crores, so PAT reported at Rs. 574 crores. EPS is at Rs. 36.04 per share. So pharmaceutical EBITDA margins are 23.9%, contract research and development services reported EBITDA margins of 35.6%. So overall reported EBITDA margin is 23.2% for Jubilant Pharmova for FY 2021.

With this, I come to an end of my financial presentation. I'll hand over to Hemant for Q&A session.

Moderator Thank you very much. We will now begin the question-and-answer session. To ask question please click raise-hand in the webinar controls. Your name will be announced, your line will be un-muted. Kindly restrict your questions to 2 per participant at a time. Reminder, anyone who wishes to ask a question may click raise-hand. First question is from Mr. Alankar Garude from Macquarie Capital.

Alankar Garude Hi, thank you for the detailed presentation, much appreciated. My first question is to the Group CFO, Mr. Chokhany. Sir, you mentioned about continuously achieving ROCE at least 10 percentage points higher than the cost of capital. Firstly, what would be your ROCE target for the business over the next 3 to 5 years?

And secondly, can you give an indicative number on the quantum of cumulative CapEx planned across different segments over the next few years?

Arvind Chokhany So, presently, we are at an ROCE, as you know, of around 17%. And our target is to maintain the ROCE over a medium term. There may be certain short-term fluctuations because of some of the CapExes. And we have given indicative 3-year CapEx for different businesses that we have provided. And we are being very mindful of these CapExes, so that our ROCE does not fluctuate in line with our investments. So, I would say that, our objective is to maintain the ROCE and not to cause too much volatility in our ROCE from present levels, and at the same time to ensure that we invest for the future. So that's what I would respond to that, Alankar.

Alankar Garude Thank you, sir.

Arvind Chokhany You're welcome.

Shyam Bhartia I would just add that, as you know that 95% of our business is in Jubilant Pharma. And Drug Discovery is also about 95% exports to U.S. and Europe. And the Jubilant Pharma business is a dollarized business. So, the cost of capital is also lower in dollars as compared to in rupees.

Alankar Garude Fair enough, sir. My second question is to Sergio. Now, ex MAA and DTPA, we have spoken about 90% return to pre-COVID levels for Radiopharma manufacturing businesses. But then these 2 products excel for amongst our top 3 products. And if you are including them, the impact would be much higher. So, I would say, even if you adjust for, say, the competition in MAA, when can we expect the Radiopharma a manufacturing stage to return to pre-COVID levels?

Sergio Calvo So, from a market perspective, we expect recovery to pre-COVID levels in the first semester of this fiscal year. However, it is important to notice that we have competition on MAA now. And the pre-COVID level coincides with the moment that we were without competition as well. So, we do not expect the MAA sales to recover to our pre-COVID levels.

Alankar Garude Sorry, Sergio, you mentioned recovery to pre-COVID by when? I missed that.

Sergio Calvo First half of this fiscal year.

Alankar Garude Okay, okay.

Sergio Calvo Third quarter of the calendar year.

Alankar Garude Understood. And one final question, if I may. And again, it's a follow-up to Sergio. With all the legal issues behind, when can we expect RUBY-FILL sales to exceed that of Bracco's Cardiogen-82?

Sergio Calvo The legal issues are getting very close to resolution. I don't think we will face any trouble on that side. RUBY-FILL was also impacted by COVID. Many PET centers that were supposed to invest in cardiac PET were delayed. And the growth of the market is a progressive phenomenon in the U.S., something that we drive, something that the market by itself organically grow. So, RUBY-FILL is growing at the moment. And we are actively working to grow it much, much further than today. So especially after COVID, things are getting back to normal. PET centers are resuming their projects to start cardiac PET programs. I would say that part of business and its growth is already happening.

Moderator Thank you. Next question is from Mr. Rakesh Jhunjhunwala from Rare Enterprises. Sir, please un-mute yourself and ask the question.

Rakesh Jhunjhunwala Thank you for very detailed presentation. What I would like to ask is you have an orphan drug, for which you are trying to apply pediatric oncology?

Pramod Yadav Yes, sir.

Rakesh Jhunjhunwala When is that progress?

Pramod Yadav So we have I131-MIBG, which is for the neuroblastoma.

Rakesh Jhunjhunwala Yeah, but at what stage is it now?

Pramod Yadav Yeah, so it's phase 2 and phase 3, both the trials are going simultaneously.

Rakesh Jhunjhunwala And if you are able to launch it, on what time period could we launch it?

Pramod Yadav Yeah, so we expect the launch after phase 2 trial in early FY 2024. And for phase 2 trial, we will get the permission to launch it after the first relapse. Simultaneously phase 3 trial, which is going on, that is for its approval as a first-line therapy. That opens up the market even much more and that approval and launch we are expecting it early FY 2025.

Rakesh Jhunjhunwala Second thing is you have now entered the Radiopharma business in Europe, if I'm right. How significant can that be?

Pramod Yadav Yeah, so in the Europe, currently, we have entered for the product RUBY-FILL, which Sergio explained on his slides, is for the PET cardiac product. And Europe also like U.S. has a quite a large market. And it is totally untapped. So, in the Europe, no one had the approval for this. Our competition Bracco had installed very limited sites under a special access program kind of the thing in Europe, but not a fully approved product. So, ours is a fully approved product, in the first one. And the market over there has to be developed, but the potential is huge.

Rakesh Jhunjhunwala Roughly, what is the size of the market?

Pramod Yadav Size of the market, currently, you can say that, since the product is not there, so the market is not there. But the way we have the projections for RUBY-

FILL, we expect this product to deliver as close to $200 million revenue in the next few years.

Rakesh Jhunjhunwala Annual revenue?

Pramod Yadav Yes.

Rakesh Jhunjhunwala Third thing is the CDMO business which you have in Bengaluru, which has that 35% margin, I think Rs. 306 crores of turnover you have in that, where you got development and research on contractual basis. How scalable is that business? And how much are you scaling? What kind of projection do you have for that?

Hari Bhartia What you are talking about is our discovery services business, where we do 2 things. We do integrated Drug Discovery and we do Chemistry Service, things like DMPK. So, I think, Marcel, in his opening remarks said that we have are almost doubling the capacity for the Chemistry Service. Now, that is very scalable. And with the Chemistry Service, we are going to add DMPK very soon.

Rakesh Jhunjhunwala What is DMPK?

Hari Bhartia It is an additional service that I can ask Marcel to explain, that comes with chemistry. When customers who come to us for FTEs on chemistry, also request DMPK services. Marcel, if you can explain that?

Marcel Velterop Yeah, yeah, it is a testing platform - Drug Metabolism Pharmacokinetics. Essentially, it tries to model what happens to the compound when it gets metabolized in an organism, whether a cell or animal.

Rakesh Jhunjhunwala Fair enough, fair enough.

Marcel Velterop So, that is the first filter of Drug Discovery.

Hari Bhartia Yeah, so, the other part, I want to just add Rakesh Ji, that while chemistry service is scalable in terms of FTEs, and Marcel can give you the numbers that we are scaling up in our present expansion, the potential that we have here almost doubling, we also have potential to scale up our, what we call, CDMO, the scale-up business. That means in chemistry service, we do very early stage in few grams. We produce compounds for our customers. But that has a potential into producing kilos for their preclinical requirement and clinical requirement for phase 1 and 2. So we continue to look at expanding that. So that's where we are working on. How do we expand the capacity there, so that we continue to have served customers who come to us at an early stage and we continue to retain them for a later stage, when they increase the quantity of compound that they require?

Rakesh Jhunjhunwala Am I right in assuming that this business is some part of what Syngene is doing a bit from Biocon subsidiary, is it similar?

Hari Bhartia Yes. Yes, similar.

Rakesh Jhunjhunwala So, that is highly scalable. Syngene has got a pretty good profitability and a very good turnover. So what is the potential turnover it can reach?

Hari Bhartia Rakesh Ji, we will also scale up. It was a very small business and we are scaling it up very fast. But I'll tell you the differentiation that we have, Rakesh. Our integrated Drug Discovery is a very differentiated, that means, we actually discovered the compound for biotechs and large pharma. And we

have done over 85 programs in the history of the company, which is a very, very rare, very few companies in the world are known for integrated drug discovery and we use computational chemistry and structure-based drug design to do that. That is a very unique differentiation. So our Biosys' reputation was built on, so we have a great science reputation. And now, we are going into more in terms of areas, which are expandable. Integrated Drug Discovery is difficult to scale up more than what we are doing. We will continue to scale that up, because there are other services that we are adding to that, which are high end. But we are now getting into areas, which we will scale up much faster. That is in chemistry and the CDMO part.

Rakesh Jhunjhunwala How many people do we have in that business today?

Hari Bhartia Marcel?

Marcel Velterop What was the question, how much?

Rakesh Jhunjhunwala How many people we have in that business today?

Marcel Velterop We have about 850 people, growing to 950 to 1,000 in the coming fiscal year.

Rakesh Jhunjhunwala Right and how many people would Syngene have?

Marcel Velterop Syngene has few thousand, 3,000 to 4,000 people.

Rakesh Jhunjhunwala How can we be lower than them, sir, you have to beat them.

Marcel Velterop I can tell you we have some land in place. But the scalability of Syngene is also linked to huge infrastructure. You need a lot of research buildings.

Rakesh Jhunjhunwala You will always grant them. They are everywhere, dime a dozen.

Shyam Bhartia Rakesh Ji, part of the Syngene business is also, I don't know whether you have studied that is also a CDMO business.

Hari Bhartia So, no, no, and we are gearing up for expansion.

Rakesh Jhunjhunwala There is fantastic scope in that business. I know it is like a software service. And I think we need to really scale up and invest money, even take some more risk immediately. And buildings are everywhere, dime a dozen, sir. Buildings are everywhere, dime a dozen.

Hari Bhartia Rakesh Ji, we have a great team. And we have great scientific capability, very well known in the market. We have acquired 10 acres of land near the airport, where we are expanding in the future in the next 5 years, our research park. We have already – tomorrow, we are going to inaugurate a very large center in greater Noida. And whenever you have time, would love for you to visit.

Rakesh Jhunjhunwala Are centers to Noida and Bengaluru?

Shyam Bhartia That's right.

Hari Bhartia Yeah, absolutely.

Rakesh Jhunjhunwala Okay, sir. I see there is great potential in that business. You must expand it. And best of luck for all the endeavors. Yes, I will look forward to them. Best of luck. Thank you and all the best.

Hari Bhartia Thank you.

Shyam Bhartia Thank you, Rakesh Ji.

Moderator Thank you. Next question is from Mr. Zafar Ahmadullah from Theleme Partners.

Zafar Ahmadullah Thank you for the presentation. Just a couple of questions, please. The first one is on Radiopharma, where if I understand correctly, there are 2 parts of the business. And the Pharmacy business, we are losing money, and then trying to turn around. So, can you sort of give us a bit of light on that and maybe it would be helpful if you could split the numbers out so that because at the moment when our profits look less than they are, because the losses of the Pharmacy business are sort of coloring the numbers up? So, if you could maybe explain that, please?

Pramod Yadav Yeah. So in the Radiopharma business, we mentioned that the Radiopharmaceuticals and the Pharmacies business are integrated. And it's the strategic acquisition for us, because it helps us to take our all the products through the dispensing up to the nuclear imaging centers. The entire acquisition had been a strategic because we have quite a strong R&D pipeline of the products plus, we are also bringing products through the partnership arrangement. And if we have our own dispensing system, then we have a better access and a wider access to our customer base. So, it will not be fair to treat these 2 of the businesses separately. But, however, when we internally analyze and look at a standalone business, we know that in this business currently EBITDA is negative. But I mentioned that we have a very robust turnaround plan for this, we did a very detailed exercise, and we will turnaround this business on 3 aspects: one is the commercial excellence, we mentioned that we are growing our market share rapidly; and the operational excellence where we are bringing lot of efficiencies into operations into procurement; and third is overall network optimization. And with that, we we expect that we will be able to turnaround the business in about 2 years' timeframe and this business will remain very strategic and will continue to grow this business.

Zafar Ahmadullah Okay. Thanks. The second question is on the CDMO side, you mentioned that last year, the margins are benefited from some one-off contracts in COVID. And I think because they were last minute ones, they were very profitable. Roughly, can you give us some idea how much the sort of basis inflated, because of this so that when we go into the current year, most of that will run off? I am sure there'll be some spillover, but how much is left?

Pramod Yadav So in our last quarterly call, we indicated that we have done 5 COVID related deals. And with that in FY 2021, we had generated about Rs. 535 crores revenue. With those 5 deals, which we had, we are expecting another about Rs. 200 crores plus revenue in FY 2022. However, please appreciate that currently, the COVID market remains very volatile, things continue to change every week, every month. And there is a possibility that the volumes can go up. And last week itself, we announced another 6th deal with the Ocugen, who is trying to bring Bharat Biotech product into the U.S. market. So, things continue to evolve.

Zafar Ahmadullah Okay. Thanks. And my last question is more a capital allocation question, so maybe Mr. Bhartia can do it. It is related to Jubilant Therapeutics, that obviously we have this interesting pipeline. But is Jubilant Pharma, the correct vehicle basically to exploit this pipeline, the story of Indian pharma are trying to do innovative products is unfortunately disappointing. And is our

capital best employed at this scale in this area? I mean, do we have a budget? How much we are ready to spend here? It's a bit of a gamble, of course, we all know that, and obviously we get lucky, we can get ready, we can do very well. So, is this the right vehicle? And does it all make sense to use other people's capital possibly on de-risk? How do you think about a sort of budget of how much money we want to put into this?

Hari Bhartia

Let me explain, the reason for doing this in Pharmova. As you know Jubilant Therapeutics is an independent company is not part of Pharma, but definitely part of Pharmova. Where do we get our strength from in the – and I think, the strength came, because Jubilant Biosys has been doing this Drug Discovery for other companies and biotech, and they have created huge value through our research and we continue to do that. We felt at a certain point, that we should work also on our proprietary molecules. And these are early stage. And I can tell you, Zafar Bhai, this is the most efficient way to do Drug Discovery to use the best of Indian talent, which we have, which we do it for others to apply in therapeutics. And even in the early stage, when we did develop some of the proprietary molecules. As you may have seen in our early announcements, we have already licensed a few and generated cash with that.

So, I can assure you that this initiative is very capital efficient, I would say much more efficient than anywhere being done, because we have used some of the out-licensing funds to use in this, and some of our own funds. And going forward, Syed did explain that we will in the next 18 months raise private or public fund to take these programs to the clinical stage.

Moderator

Thank you. Next question is from Mr. Rahul Veera from Abakkus Asset Managers.

Rahul Veera

Hi, good evening, gentlemen. Just a quick question for Pramod Sir. Sir, we have added a couple of new more CapEx is beyond what we were discussed in the previous con call, especially like the Ophthalmic lines, and Montreal expansion. So what will be the cumulative CapEx over the next 3 years?

Pramod Yadav

Rahul, this Ophthalmic line in Montreal, we had announced earlier also and that's under commissioning, we expect it to be commissioned in FY 2023 plus we announced our Spokane expansion which is increasing capacity by about 50% at that site for an investment of $92 million. These are the CapEx which are under implementation currently. Now, in today's presentation, we also indicated that we are also evaluating on various other expansion programs, which includes another Ophthalmic line in Montreal, which includes Montreal expansion of a sterile fill and finish, and also another prefilled syringe flex line. And this evaluation also includes another expansion in Spokane, which – in Spokane, we will be able to double up the capacity from existing levels. So those are the various initiatives, which currently we are evaluating. Once we have done, the basis of design, we will be able to know exactly how much is the requirement and when the board approved for that investment, we will make the announcement for the investment as well.

Q - Rahul Veera

Sure, sir. This is helpful. Thank you so much.

A - Pramod Yadav

Thank you.

Moderator Thank you. Next question is from Mr. Tushar Manudhane from Motilal Oswal Financial Services.

Tushar Manudhane I think strategic level have both CDMO as well as our own drug discovery and in the CDMO space how has our experience been with the innovators, is there any conflict?

Hari Bhartia Tushar, I think I got the question. You are probably talking about conflict of interest, isn't it?

Tushar Manudhane Correct, correct, correct.

Hari Bhartia Yeah, yeah. So let me explain. Firstly, all the integrated Drug Discovery players globally do develop their own proprietary set of molecules. And I can explain, sometimes they do completely contract work. Sometimes they develop what they call early target ideas and take it forward to generate hit or lead. And this they offer to their clients, which are large pharma companies for out-licensing. And then, when they out-license they continue to do those services, which are required to take this forward. Now, in case of Jubilant Therapeutics, it's just a separate entity which has taken early-stage risk. And our interest is never to really go into the market with the end-product, even while we are developing this and we probably will take it to phase 1 or phase 2, when the value inflection will be higher, this is still available to large pharma to buy.

As you know, 60% to 70% of large pharma's portfolio, and now probably 80%, comes by in-licensing at different stages, some could be preclinical, some could be phase 1, 2 or sometimes even in phase 3 they are bringing in these products. So, what we are doing is, we are playing a role like any other biotech, which is developing a product, and then, hopefully offer it to larger pharmaceutical companies to take it to the market.

Tushar Manudhane So then, the next question was related to Jubilant Therapeutics, wherein, as in we are not going to get into clinical trial phase 2 or phase 3, then specific reason for raising the funds?

Hari Bhartia No, we will get into phase 2 if required. And – but for phase 1 also, we need to raise funds. And phase 2a or 2b, we will look at that. Depending on, if we find that the molecules have – we have a stronger interest, we may take it to phase 2 and then license it out. So, the opportunity exists.

And let me tell you, these are all open things. The targets that Jubilant Therapeutics works on, Biosys does not work it for any clients, because Biosys does the work. So, we are very transparent. It is purely if we are working for a project for our clients, then they will not work it for Jubilant Therapeutics, because these are all target exclusivities.

We already work for many pharmaceutical companies. So, we make sure that when we work for one pharma in a particular target, we don't work for another pharmaceutical company on the same target. So that is how we maintain sanctity and clarity. And that's how other CROs also do it.

Tushar Manudhane Great, well, thanks, thanks a lot for that clarity. Just on Jubilant Therapeutics again, in terms of, while either through the fundraise or through out-licensing, but overall the investment that would be required over next 2 to 3 years,

	whether we have it in house or through external funding, any ballpark number you would like to share?
Hari Bhartia	I would not share you the full numbers, but I can tell you this is run very efficiently and done at a very low cost. All our early-stage programs, we have brought it and I would say is one of the most efficient way to do it. And if the amount of money that we have spent on these, we can sell all these products immediately right now. I can tell you right now. But it's important to sell or exit through IPO at the right time. And that's where, Syed, who's the CEO, he's progressing these molecules in a very effective manner. And we are hoping that when it goes into clinic, and has a proof of concept, the value inflection is in multiples. And if you study any of these biotechs globally, you will also get I'm sure the similar sense. As far as early-stage investments, it is small part of our overall investments that we do in Pharma or in our CRO, so we do not see a stress on that.
Moderator	Thank you. Next question is from Mr. Vishal Manchanda from Nirmal Bang Securities.
Vishal Manchanda	So a question on the private equity fundraise, would you be doing this at the parent level or would this be done at the subsidiary level?
Syed Kazmi	So this is Syed. So, our goal for Therapeutics, right?
Shyam Bhartia	No, no, no, I don't think this is a….
Syed Kazmi	Okay, sorry.
Shyam Bhartia	This is a – which level are you asking about parent…
Vishal Manchanda	And so you're contemplating a private equity fundraise. So, just wanted to check whether it could be done at the parent level or it would be done at the subsidiary level, where the funding may be required?
Shyam Bhartia	No, are you in reference to therapeutics you are asking or you are – in general, you are asking for private equity fundraise?
Vishal Manchanda	Not specifically in reference to Therapeutics.
Hari Bhartia	Okay, that is good. No, we are at this moment, we are not considering a private equity fundraise, either at the holding or at the subsidiary level.
Shyam Bhartia	See, what we have stated is at Jubilant Therapeutics, we will raise funds from private or – in next 15 to 18 months.
Vishal Manchanda	Okay. And would it be right to benchmark Jubilant Therapeutics to companies like Evotec or Galapagos?
Shyam Bhartia	No. What Galapagos and Evotec does is what Biosys is doing to some extent. Of course, Biosys has a large chemistry service. But the integrated drug discovery part is what Biosys is doing. Yes, Galapagos to some extent has gone into both, into service and what Therapeutics is doing. So, yeah, it's a mixture.
Vishal Manchanda	Okay.
Shyam Bhartia	And we can discuss this separately in a greater detail, minutely also, if you want.

Vishal Manchanda So, was Jubilant Therapeutics always a separate entity or it's a spinoff, that is a spinoff from Biosys?

Hari Bhartia Some early stage work we did in Biosys. And then, as and when we decided to progress, the programs then Therapeutics was formed.

Vishal Manchanda Got it. And a few questions on the Radiopharma business. Basically, the first one is on RUBY-FILL. So just wanted to understand what proposition that RUBY-FILL brings. So why would hospitals shift from CardioGen to RUBY-FILL?

Pramod Yadav I will let Sergio answer this

Sergio Calvo Yeah, I will. Thank you for the question. So RUBY-FILL and CardioGen both serve the same purpose. The difference is the way the infusion of Rubidium happens, the algorithm of infusion. And our major advantages on that point, we have others on the workflow side. And our image quality is also preserved for more weeks than our competitor. Those advantages are demonstrated by scientific investigation clinical papers and so on.

Pramod Yadav In addition to what Sergio said, our product is able to deliver the dose in a much more safer way. We are able to calibrate the dose with the weight of the patient and can actually deliver what the quantity is required. So, the controls are far-far superior, all done through the computer and everything visible to the doctor on the screen.

Vishal Manchanda Would that translate into better savings for hospitals? Since you are able to titrate the dose as per the patient weight?

Pramod Yadav It's more the safety of the patient.

Shyam Bhartia I think they can take out more doses out of our generators.

Vishal Manchanda Yeah, so they'll be able to handle more patients for the same volume?

Shyam Bhartia Yes.

Pramod Yadav So our generator efficiency is much better in comparison to the competition. And our safety profile for the product is far, far better.

Vishal Manchanda And what I would also see, there was, that there have been some details around the volume expiry and time expiry? Does that also help our larger volume – larger expiring time? Is that also different for CardioGen and RUBY-FILL?

Sergio Calvo: I think you're talking about the expiration date of the generator, that column. Yeah. So this is as Pramod mentioned and Mr. Bhartia, as well. What differentiates the generator is the fact that we can infuse a constant activity at the dose that is tailored to the patient. And we can provide better image qualities at lower doses, and even if the generator is approaching the end of its lifecycle. So, the original systems first generation such as Bracco, image quality is better when you are in the beginning of the column, life in the beginning of the cycle, but it tends to go down to get worse, towards the end like in the last after 3, 4 weeks, it's known that the image quality deteriorates.

Our image quality is constant during the entire cycle of the generator, we can use 5-, 6-, and 7-weeks cycles have that flexibility as well. And during the entire time, the reading physician will see a consistent image quality. It is very difficult for a cardiologist reading the study to have in a certain week, a

better image and towards the end of the cycle. A bad image throws them off. And they do not know what they are looking at. It's very, very vital to have consistent image quality across the entire cycle of the generator.

Vishal Manchanda

Thanks. That is helpful. And just one more on DTPA, so if this drug is approved for lung scans, and also other scans like brain imaging and renal scans. So, as you said this year, the sales had declined because lung scans are not permitted with the DTPA. So just a sense on what percentage of sales of DTPA would be coming from non-lung scans?

Sergio Calvo

DTPA is used the lung scans more than 90%. There are alternatives for to scan the kidneys and alternatives to scan the brain, the primary use of DTPA, is so-called ventilation scan. So, it's used in combination with our product MAA. MAAs looks at the perfusion and the DTPA looks at the ventilation. The Pulmonary Emboli usually will impact the perfusion but will not impact the ventilation. So, the way pulmonary emboli are detected, the perfusion scan will be abnormal in a certain region, the ventilation scan will be normal, and this mismatch of the 2 is indicative of pulmonary emboli. That's the primary – that's the largest application by far for TPA today, because the patient has to inhale. It has certain risks of contamination during the peak of the COVID crisis. Many hospitals decided not to do the ventilation scans. Some of them were doing only the perfusion scan and trying to figure it out without the very important support of the ventilation scan. And this is now going back to normal, because people in the United States are by and large vaccinated, healthcare professionals are best vaccinated, including technologists, and therefore the Society of Nuclear Medicine issued a new guidance saying that it is safe to go back to performing ventilation scans and that's what we are observing.

Moderator

Thank you. As we are closer to the time, we will take last 3 questions. Next question is from Mr. Aditya Khemka.

Aditya Khemka

Yeah. Hi. Thanks for the opportunity. Sir, on the API business in the Pharmova vertical, we have even Nanjangud, which is under, I think, a warning letter from the U.S. FDA. Can you talk a bit about the capacity utilization currently at Nanjangud? And how is the warning letter impacting us and what is the status of resolution of the warning letter?

Pramod Yadav

So Nanjangud is not under warning letter. It's under OAI, Official Action Indicated, when FDA inspected all the observations which they made for the inspection mostly, I think, 90% of them were related to nitrosamine impurities. And that were the issue industry was a struggling that time. We very actively got engaged with the FDA. So, they didn't escalate it from official action to warning letter. We are one of the company, where the official action indicator remains for that long. And the reason for that – is that, though, we have completed all the remediation activities. But unfortunately, by the time we completed this, the COVID pandemic has started. And FDA has stopped the inspections, because their auditor didn't want to travel. When they just started doing it again, India hit the second wave. And now, again, the FDA inspections are on hold. I am sure that the FDA is piling up the list of the pending inspections as soon as they start doing the inspection, again, they should have Nanjangud plant also on the priority, and they should inspect it.

They also in between started doing the virtual inspections, but very selectively. And the decision on that or the prerogative of that is with the FDA, where they want to do virtual and where they want to do physical. So, we are waiting. That's the status of the FDA regulatory compliance. In terms of capacity utilization, you asked. So last year was during this COVID time, unfortunately, our plant was shut for about 2.5 months. So, in the rest of the year, we had run the plant at full capacity. What I mean to say full operating capacity, and hence the revenue for the business for FY 2021 were more or less at par with FY 2020 in spite of 2.5 months closure. Currently, we continue to see the demand from the customer for our products. And they need for us to increase the capacity. And we continue to do the debottlenecking of the various streams to increase the capacity, and we plan to debottleneck it by about more than 30% over the next 2 years. At the same time, Gunjan explained that we are also evaluating another greenfield site for the future expansions.

Aditya Khemka Can you also talk about how vertically integrated are we in our API manufacturing? How much of our raw material comes from China? How much of it is indigenous? And do we buy just the basic raw material from China? Or do we also buy advanced intermediates?

Pramod Yadav Like any other API manufacturer in India, there was dependency on China, and there is dependency on China. That is how overall API industries in India and China got developed. But with this geopolitical disturbance, we took very proactive approach. And we started looking at each and every KSM, or advanced intermediate, we were buying from China, to have an alternate source of that outside China, preferably in India. Some of the products are available, but not all, those which are not available. We have taken up the projects in our own R&D to develop the technologies. And we are in the process of transferring such developed technologies to the other Indian sites, who can make the similar KSM or the advanced intermediates. And then, we start procuring them. So, we have a very structured plan in place to reduce dependency from China, and that plan is working on track.

Aditya Khemka Got it. I have one last question. On the Radiopharmaceutical business side, so while I listen to all the comments that you guys gave, and it sounds very encouraging, but my understanding and my previous reading was that this is a market where the volumes are actually stagnant to maybe declining in low-single-digits, the MAA and DTPA market. And, therefore, all the revenue growth that we have seen in the past 5 or 6 years in the segment has largely been driven by price increases. But hearing you guys out today, it seems to – has something changed there? Has there been volume growth in overall MAA and DTPA as a market, I am not talking about your segment, your revenue? I am talking about overall MAA market and DTPA market, because I thought this was slightly outdated sort of products in the Radiopharma business and there have been new technologies which have come in, and therefore, the preference of doctors towards these technologies is actually going down? Please correct me if I'm wrong.

Pramod Yadav I will set the base and then I will request Sergio to add on. The way the nuclear medicine market got developed initially is mostly focused on the diagnostic treatments through SPECT. Over the last few years from SPECT, the technology is started moving towards PET, because PET gives you much

sharper image. And then in between came that time, we are from the diagnostic industry started moving on to the therapeutic side. And now the latest buzzword in the Radiopharma is the Theranostics, where the same drug substance you attach with the different isotopes, one isotope helps you to get the diagnosis treatment and the other isotope helps you to give the therapeutic treatment for that. So overall currently in the industry, when we mentioned that volumes are flat, that reference is mostly to the existing generic product being used for the diagnostic treatment through a SPECT modality. However, even in the diagnosis, the PET is growing by about 6% to 8%. And the huge growth what Sergio was showing on his graph will come from therapeutic and theranostic molecules, where all the development as you started happening only from the last about 5 to 8 years. And number of large pharma company, number of research institutes who are working on it, there's a huge potential and expectation is that by 2030, it can grow up to $20 billion market size just on the Theranostics site. And while PET will continue to grow, SPECT probably will remain flat. However, in SPECT the price increases will continue to happen. You would like to add anything Sergio on this.

Sergio Calvo

You have covered very well, Pramod. Thanks. Actually, I would like illustrate just to giving the 3 milestones that happened in the therapeutic site just for illustration purposes, call it, commentary to complement what Pramod said. So, in 2013, Bayer launched Xofigo, so now for therapy for bone metastasis, primarily prostate cancer. It was a game changer. But it was relatively mild impact in the patient's survival. But it was a change in direction for nuclear medicine, the first inflection points.

The other one happened in 2018 with the approval of a drug called Lutathera, which was developed by a company called AAA. And this company was acquired by Novartis for $4 billion, soon after they launched the product. That was a another inflection point. No centers, academic centers in the United States are currently offering Lutathera for the treatment of neuroendocrine tumors.

Just a week ago, Novartis announced conclusion of the trial that is experimenting with tissue PSMA treatment for metastatic castration-resistant prostate cancer with very, very favorable results. So yeah, that is a result of the acquisition of a company called Endocyte, probably you also know 2 years ago for $2 billion. And that is going to be yet another inflection point, first and large, huge application prostate cancer in therapeutics. This trend is not bound to changes from outset. We have many other drugs in the pipeline, prostate neuroendocrine tumors, and whole family of products based on FAPI, which I mentioned in my presentation. So the therapeutics – I'm sorry, do you have a follow-up question?

Aditya Khemka

Yeah, I do have a follow-up there and also sorry to interrupt you. And just to understand this better, PET is obviously the more modern technology sharper images, SPECT is the older technology. How is SPECT price compared to a SPECT scan typically in the United States, could you give us ballpark figures to what the pricing difference between the 2 scans are?

Sergio Calvo

That's a wide range, I would like to just rectify something. Indeed, the PET image quality is better in most cases. But by and large, SPECT and PET are complementary. SPECT is used in many different organs, and PET is used

primarily in Oncology, growing in cardiology, as I mentioned, and growing now in neurology as well. SPECT is more general purpose, but they are complementary, and I believe both modalities will continue to exist.

PET is growing much faster, because number one, the growth in amyloid, prostate, cardiac PET, and as therapies grow, PET will be the preferred, perhaps, not the only one, but the preferred imaging modality that will enable the therapies, right. So as Theranostic grows, PET will grow with it.

Shyam Bhartia And having said that, our existing products volume, as Pramod said, is likely to remain not likely to grow. But we have in pipeline 5 or 6 products, some of the products are SPECT products, which will add the overall sales increase in our SPECT products to new product introductions.

Moderator Thank you. Next question is from Mr. Rahul Veera from Abakkus Asset Managers.

Rahul Veera Hi, sir. Since, we have been discussing so much about the growth of the PET scan, are we going to increase our stake in SOFIE?

Shyam Bhartia See, we are already there in PET scan through Rubidium Generator. Rubidium Generator is a PET scanning, uses PET camera for scanning. So we are already there in one of the heart imaging in PET scan. Now, Sergio can add to it what other things in PET we are doing.

Sergio Calvo So the partnership with SOFIE is one of the ways we are going to if reinforce our position in fact, this is not the only initiative. The partnership with Isotopia will give us our access to PET tracers as well. And our research and development capabilities, our labeling capabilities are also suitable for the development of PET tracers. It's an area we are investing ourselves. To the question whether intensify relationship with SOFIE, absolutely. I think we are finding more synergies by today and cooperating more and more finding many areas that could be done as a partnership. This may lead to higher stakes or not, so that's an event discussion, and I don't think we are ready to announce anything like that.

Rahul Veera Sure, because this time we recorded some kind of licensing revenue in SOFIE. Is that correct?

Pramod Yadav Yeah, because of the 25% is state what we have, so equivalent equity basis, we have recognized the revenue. SOFIE had out license there 40 for the therapeutic application to Novartis. And against that out-licensing, they have got the milestone payments, there are many more milestone payments are expected. And they will continue to be getting recognized as they come in. But SOFIE has retained the right for the diagnostic application. So, while the Novartis will take approval for the therapeutic, along with therapeutic SOFIE's diagnostic will be used for the diagnosis, and both the SOFIE diagnosis and the Novartis therapeutics will continue to get approve for the many applications into the many geographies, and the market will continue to grow.

Christopher Krawstchuk So, if I could just add to what Pramod said, we do not record revenue for SOFIE, we actually account for them on their, what's called equity method investment. And we pick up our share of SOFIE's profit and loss in our financial statements commensurate with our evolving interest in the company with 25%.

Moderator Thank you. Next question is from Mr. Saion Mukherjee.

Saion Mukherjee So, my question is on the CMO business, I mean, if I look at the history, I mean, there has been some issues with FDA in the past, the revenues were quite muted or stagnant, I would say, and we see an improved growth because of COVID, and now substantial capacity expansion that you talked about. I am wondering what has changed in the contract manufacturing business, it seems that you are in a stronger growth trajectory. You also talked about the order book. And the second question is just, if you can throw some light on the profitability and margin of that business?

Pramod Yadav So Saion on the first question, let me answer this way that we made this announcement of the new lines now. And we are saying that this will be up and running in calendar year 2024. So that's the timeframe it takes to implement any of the expansion in the CMO business. And if you look at the expansion also for this 50% capacity increase is to the tune of $92 million. So, this business is capital intensive. And then this business has huge compliance regulations. So, you are right in saying that in the past, we had some issues, but that is a history. That was many, many years ago. Since then, our quality record is very clean. And FDA pays extra attention to the cGMP compliances on sterile injectables because any misadventure there could be lethal.

Many CMOs in the past have gone through these quality issues. And hence it becomes difficult to make such an investment over a long run, and then get into quality issue and not utilize the investment. This has resulted in industry shying away from the investments and that had led to the demand supply gap. So, over the last 3, 4 years, the market had been tight. And that had been helping us to renew each contract at a better term whenever that contract came for the renewal. That also made us think how we can sweat the assets to its maximum. And hence, we debottlenecked our existing lines to about 30%, 35%, which came very handy when this additional demand of the COVID came, because we were able to use our expanded capacity – debottleneck capacity for these COVID contracts at a much higher margin. So, the market remains tight and additional vaccine demand of the COVID has further added to that tightness. So, industry today requires investment, and we, being one of the pioneer and we being one of the large player in this industry in the North America, we are also taking lead to make these investments and meet our customers demand.

Saion Mukherjee Okay. So anything on profitability margin you would like to share?

Pramod Yadav So you can very well imagine yourself that if the market is tight. So, of course, the context will be done with the good margins and the profitability. So the margins have been good in this business, and especially the COVID deals had even higher margins.

Saion Mukherjee I see. Okay. So overall you think it is above the company average margin for Pharmova or the CMO Business?

Pramod Yadav So the margins in our all the Specialty businesses are good. Radiopharma margins are good, and Allergy margins are good, and CMO margins are good. And that is why over the last few years, our focus had been to move more and more towards the Specialty. And that is what I mentioned in my first slide that we are a little different Indian pharma company, who has so

much of focus on a Specialty. While we also have the API and Generics as our continuing cash-cows, and we also continue to build those businesses.

Saion Mukherjee

Okay. So just, I mean, a question on Specialty, see actually what worries us is also competition like what happened in Radiopharma. We have seen competition in MAA. There were some issues with the Radiopharmacy business also. Now, in Allergy extract, you have the venoms where there is no competition at this point. And it seems that this business you keep taking price increases, so that helps the profitability. So, I'm just wondering about risk from competition and sudden drop in margin. Anything that you can help us understand elaborate? How should we think about the overall profitability and margin of the Specialty business, given all these risks?

Pramod Yadav

Yeah, so I will say that we should not be worried for the competition. We should look at the business in a long run. In a long run, all these businesses have entry to barrier. In a long run, all these businesses have sustainable margins. In the long run all these businesses have high growth potential.

Now, in individual products time to time there will be competition, time to time the competition will be going out. There could be 100% sole supply situation. So, there could be little blip here and there quarter on quarter. We should not be worried on that as long as strategically we are committed that this is the business, which has a huge potential at a good margin and on sustainable basis.

Saion Mukherjee

Answer on M&A front, you did mention you look at M&A. What are the top one or two areas or gaps that's your priority when you're looking at M&A across all your businesses at this point in time?

Pramod Yadav

Sergio in his presentation used the word that the Radiopharma is a fascinating world. So, when it's a fascinating world, we cannot have each and every competency, each and every technology, the each and every aspect of science within the company. There are N number of industry's research institutes who are working on this innovative platform. There is always opportunity for us to look at them and tap into those innovations when they are at the various stages of the development. So, we continue to look at that.

Shyam Bhartia

It's based on the partnership side, not on the acquisitions.

Saion Mukherjee

But anyway, I mean, it looks like Specialty and Radiopharma seem to be the key focus area compared to, let's say, API or Generics, which you can possibly achieve what you want to achieve organically. That would be a right assessment to make, right?

Pramod Yadav

In API and Generics also, there are the opportunities. We have very good quality products. And we mentioned that we are shifting our focus from the vanilla products to the complex generics in both the businesses. And they will also bring additional revenue at a higher margin.

We have the capacity. We have scope to debottleneck the capacity. And at the same time, we also continue to grow those businesses and we will expand the capacities as per the requirement, because we understand this business. And both these businesses bring consistent cash flow and healthy cash flow.

Saion Mukherjee And so, in this complex generics, you are looking at other formulations like injectables, et cetera, because currently the presence is largely in oral solids.

Pramod Yadav Yeah, so currently the presence is into the oral solids, but we are looking at the different forms of the deliveries. So, like even we made this announcement that we have developed the sublingual Remdesivir. And we had said that our product is equivalent in pharmacokinetics to the injectable product. That is a different delivery system. Like this, we are also working on the other delivery system. It will be premature for me to talk about that at this stage, but you will continue to see the activities happening on that side.

Saion Mukherjee Sir, and the last thing, sir, I was expecting, sir, you will give some growth guidance, if not short-term, long-term 5 years growth guidance. Can you give some color, sir? Can you quantify with all the measures that you are taking? What is the kind of growth expectation we should have?

Christopher Krawstchuk Growth expectations for the pharmaceutical business will continue as we execute our strategy and to guide you as it relates to where we see each of those businesses. We are happy to do that. But we provide guidance on a total company basis, not on an individual basis. But you can hear that our expectations as it relates to Pharma, Specialty business will continue to grow as Pramod cited in the first slide of our presentation. He kind of went through each of the businesses, where they're going to grow, what percentage and how they're going to grow commensurate with the overall market capture. So we're happy to go through that again. But I would say, Arvind, default to you on total company. But I think Pramod went through where we are going to sit and how we best strategic position our business and in the various markets we operate in.

Pramod Yadav And, overall, like FY 2021 we were impacted because of COVID. There could be a little bit impact of competition here and there. But the way we have explained you about our businesses and the way we have strategies in place, what I can definitely assure you is that, that our businesses will continue to deliver very healthy growth, our businesses will continue to improve their margins, our businesses will continue to deliver higher rate of return on capital employed.

Christopher Krawstchuk And then, just maybe complementing, what Pramod said here, certainly as Pramod talked about our growth, we are absolutely investing in growth capital to fuel our future growth of the company. And you have heard some announcements that we have made, but we're making strategic investments in every one of our pharmaceutical businesses as it relates to fueling growth for our future success.

Moderator Thank you. So now, the last question is from Mr. Alankar.

Alankar Garude Hi, sir. Thank you for the follow-up. Sir, 2 questions. Firstly, are you satisfied with the outcome of the Roorkee inspection which happened in March?

Pramod Yadav We are still awaiting the FDA's final outcome on that, which is expected anytime. FDA generally takes about 90 days after the inspection. So, FDA had few observations and we have already given the robust CAPA on that, corrective and preventive action-plan on that. We expect that should be acceptable to the FDA. It will not be appropriate on my part to make the judgment what FDA will be deciding.

Alankar Garude Sure, sir. And do we have any plans because we didn't complete the expansion of Salisbury soon. Do we have any plans to transfer some of these 37 filings to Salisbury?

Pramod Yadav So in Salisbury, we just expanded the capacity. Terry mentioned that it's almost coming to the fag end of its commissioning. And he also touched upon that we have many products for which we have dual site approvals in place. And we are also working for the other products where the dual site approval is needed. So that strategy will be depending upon product to product. But as of now, we expect that the FDA inspection outcome should be favorable. So, we are waiting for that outcome.

Alankar Garude Understood, sir. And my last question is on MAA. Do we expect to hold on to the current market share and expect pricing to sustain? I mean, is there a possibility of changes as and when both contracts come up for delivery?

Pramod Yadav So this business is traditionally done through long-term contracts. And when the competition came in, we ended up negotiating the contracts within the purview of what the contract was allowing. And we mentioned that whenever there will be any generic player, 20%, 30% market share goes to the new player. And that's natural. And that's what has happened here also. But with that, remaining market share, we have contracts in place.

Alankar Garude Understood, sir. So, we are confident of protecting our current 70%-80% market share.

Pramod Yadav Absolutely.

Moderator Thank you. Ladies and gentlemen, on behalf of Jubilant Pharmova Limited, that concludes this session. Thank you for joining us and you may now disconnect.
