

SPARC/Sec/SE/2021-22/078

December 16, 2021

National Stock Exchange of India Ltd., Exchange Plaza, 5th Floor, Plot No. C/1, G Block, Bandra Kurla Complex, Bandra (East), Mumbai – 400 051. **BSE Limited,** Market Operations Dept. P. J. Towers, Dalal Street, Mumbai - 400 001.

Ref: Scrip Code: NSE: SPARC; BSE: 532872

Dear Sir/Madam,

Sub: Transcript of the Investor Presentation: Update on SPARC strategy and portfolio

Pursuant to Regulation 30 of the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 and further to our letters dated November 26, 2021 and December 09, 2021 bearing reference no. SPARC/Sec/SE/2021-22/070 and SPARC/Sec/SE/2021-22/075 respectively, we enclose herewith a copy of the transcript of the presentation made to the investors on Thursday, December 09, 2021 on the above mentioned subject, which we shall be uploading on our website after sending this letter to you.

This is for your information and dissemination.

Yours faithfully,

For Sun Pharma Advanced Research Company Ltd.

Dinesh Lahoti Company Secretary and Compliance Officer ICSI Membership No. A22471

Encl: As above



"Update on SPARC Strategy and Portfolio Conference Call"

December 09, 2021

COMPANY REPRESENTATIVES: MR. ANIL RAGHAVAN – CEO DR. SIU-LONG YAO – EVP CLINICAL DEVELOPMENT & OPERATIONS DR. NITIN DAMLE – SR. VP AND CHIEF INNOVATION OFFICER MR. CHETAN RAJPARA – CFO MR. JAYDEEP ISSRANI – SR. GM BUSINESS DEVELOPMENT



Moderator:	Ladies and gentlemen, good day and welcome to Update on SPARC Strategy and Portfolio hosted by SPARC.
	As a reminder, all participant lines will be in the listen-only mode, and there will be an opportunity for you to ask questions after the presentation concludes. Should you need assistance during the conference call, please signal an operator by pressing "*" then "0" on your touchtone phone. Please note that this conference is being recorded.
	I now hand the conference over to Mr. Jaydeep Issrani. Thank you and over to you, sir.
Jaydeep Issrani:	Good evening, ladies and gentlemen. I am Jaydeep Issrani. On behalf of SPARC, I thank you for joining today with us, for SPARC's update on Strategy and Portfolio. On our call today will be CEO, Mr. Anil Raghavan and Members of SPARC, Senior Management Team.
	The presentation that we will be using for today's discussion was sent out earlier. We hope you have received the slides. The slides are also available on our website that is <u>www.sparc.life</u> . We will also upload the call transcript on SPARC's website soon. The format of the discussion will be similar to what we have followed in the past i.e. we will go through the presentation first, and then open the call for questions.
	Before we start, I would like to remind you that our discussion today include forward-looking statements that are subject to risks and uncertainties associated with our business, that may cause actual results to differ from those projected in the presentation.
	I will now hand it over to Mr. Anil Raghavan for his presentation.
Anil Raghavan:	Thank you Jaydeep for the introduction.
	Hello everybody. A very warm welcome to all of you to the 11 th edition of SPARC's annual pipeline update. Thank you so much for joining us today and for your continued engagement and support. Always means a lot to us. We are delighted to welcome you back to this important call.
	As usual, we have the SPARC's management team on the call today.
	In the interest of time, we don't plan to do personal introductions. I request the presenters to briefly introduce themselves at the beginning of their segments.
	By way of agenda for today, we will start with brief comments on our strategy and certain updates on important programs, pertaining to late stage clinical assets particularly and commercialization. Subsequently we will dedicate most of our time in the rest of the call to provide more detailed updates on five important programs which are four NCE clinical programs plus one important biologics platform with clinical visibility. Dr Siu Long Yao and Dr Nitin



Damle will provide those updates. We will conclude the presentation with brief comments on our financial performance and cash flows from Chetan Rajpara, our Chief Financial Officer.

So with that, let's get started with slide 4 please

We are starting with a brief snapshot of SPARC. Bit of a state of the union. As regular participants in this call, most of you are aware of our pivot from a 'delivery systems innovation' focused group to an innovator with reasonable appetite for early stage risk. We have made significant progress in that journey. Given where we have reached, I want to highlight five key drivers of SPARC's value upfront, without dwelling too much into each one. We can go over this in greater detail if we need to during the Q&A

First is the portfolio itself. Four NCE clinical programs in areas of considerable unmet medical needs. Vodobatinib in Neurodegenerative Diseases, and its companion program in late line Chronic Myelogenous Leukemia for patients failing on ponatinib, vibozilimod in dermatology autoimmune conditions where S1PR1 targeted therapies are evolving into an important class alternative to JAK inhibitors and finally our Selective Estrogen Degrader, SCO-120. We are adding a very high potential platform built around a set of novel antibodies against a Tumor Associated Antigen, (TAA1) to this mix. Including this one, on the pre-clinical side, we have now around 10+ programs at various stages of prosecution. So we believe our portfolio has enormous potential.

Also better balance in terms of risks and novelty. SPARC is clearly going beyond our initial niches of validated biology and small molecule follow-on's. That transition is very real now. We have in the process, become a balanced risk taker with differentiated assets pursing validated biology on one hand, for example BCR-ABL, or S1PR1s or completely novel mechanisms such as c-Abl inhibition in neurodegeneration or targeting new Tumor Associated Antigens using differentiated constructs. So our intent is simple, go after good science wherever possible in a modality-agnostic way when we have an opportunity to push the standards of care in difficult to treat diseases. We are really proud to note that we have made important strides in that direction.

Now, the operating model. At its core, SPARC proposition is its translational engine powered on actual brick and mortar lab infrastructure, not virtual, and high quality human capital which give us a substantially lower cost of failure. We have 350+ scientists with overall headcount now touching 400. Three locations, four labs, and a self-sufficient process which can take a program all the way from bench to bedside. With significant validation in place, we believe our translation can be a real differentiator for SPARC.

At the other end of the chain, we maintain substantial flexibility. In the last few years, we have converted many of our late stage assets from our legacy portfolio. Elepsia[™] with Tripoint, Xelpros[®] with Sun, PDP-716 and SDN-037 now with Visiox and phenobarbital hopefully coming sometime in 2022. These transactions and potential royalties will certainly give us access to some non-dilutive cash. Not really enough to make our operations cash neutral. But this can contribute in a meaningful way and make a difference. These cash-flows with the recently raised



preferential issue allows us to keep most of the higher value programs in-house for the next set of inflection points, giving us strategic flexibility to do interesting things hopefully in the future.

And finally on this slide, the team. We have a truly global high quality talent pool both at the middle to senior levels as well at the entry level. Significant 'been there, done that' experience at the senior rungs of the organization creates an opportunity to develop the raw talent available in India. Add in a diversified and highly accomplished advisory layer, we have the human capital to build a good quality operation. That's a significant strength and means everything in our industry.

So the broad point I want to leave you with from this slide is simple, for investors with appropriate risk appetite looking for a bet in pharmaceutical innovation from India, SPARC offers a viable option with a high value portfolio and a validated operating model.

Now allow me to highlight some elements of this model in a bit more color before I move on. Slide 5 please.

As we have indicated in the past, our operating model is getting built out fully with several important elements becoming more prominent. Instead of talking through the whole slide, let me focus on a few important components I want to highlight.

Accessing early stage science is a 'do or die' consideration for us. We have been building up our academic and small biotech outreach in a systematic manner in the last few years. We can now see the real impact of these relationships on our portfolio, both in our clinical and pre-clinical programs. Particularly in pre-clinical programs. We have structured relationships or ongoing collaborative efforts with several tier one academic systems globally or their biotech spin offs. Like Wash U, Michigan, UCSF, etc on the university side and companies like Biomodifying among academic spin-offs. These early-stage strategic partnerships are going to be a key element of our operating model.

Our go/no-go decision making has become substantially more stringent with external participation in the form of reviews with our scientific advisory board and external KOLs. Idea is to kill unviable programs early and completely before it starts consuming significant discretionary spend during the costlier phases of late-stage development

As we have spoken about many times in the past, our Indian foot print offers significant cost arbitrage. But it goes beyond costs. There is certainly patient and data access advantages stemming from being here, which can make our programs more competitive. We are increasingly looking at leveraging these opportunities from India

And finally on the commercial side, we now have several external commercial relationships like I have mentioned, Tripoint in the case of Elepsia[™] and Visiox in the case PDP-716/SDN-037 or CMS for China. We are also reviewing additional external possibilities for some of the other near term licensing opportunities. These transactions offer important validations for our model



in addition to giving us space to take the more valuable assets to later stage milestones which can give us better realizations.

And more broadly on this slide, we couldn't have been able to do the portfolio pivot which we managed without significant adjustments and capability development in the operating model, which we have done. And we are confident that SPARC represents a possibility for higher returns on innovation capital as we can take significantly more shots on the goal for a given investment.

Now a quick look at the portfolio strategy.

As you know, we are focused on three important niches with in our identified Therapeutic Areas: Neurodegenerative Diseases within Neurology; Treatment resistance in certain tumors; and some auto-immune disorders in the immunology space

Neurodegenerative diseases haven't seen much by way of innovation in a decade or two, making the standards of care pretty stagnant. But we are seeing very attractive new science in this area giving us exciting new testable hypotheses. We have to see this with progress on the biomarker side of these diseases, particularly imaging which gives us a lot of anticipation about diseases like PD, AD, ALS, etc.

Oncology continues to be interesting for many reasons in spite of high competitive intensity. Regulatory support for accelerated approvals and potential for premium pricing are two important factors. Add in the mega basic science efforts going on in this space, oncology is difficult to ignore for a company like SPARC trying to do a multi-therapeutic area portfolio

And finally, Immunology. Many areas with significant unmet needs. Localized immune suppression or modulation, or effective oral options, or mechanistically synergistic combinations are all opportunities worth chasing.

And in terms of intent, we would like to have a multi-modality tool kit. We believe we now have a modular biologics platform which allows us enough flexibility to go after specific targets using multiple strategies. We call it molecular engineering for precision medicine. We want to do that in short cycle innovation. Fast hypothesis generation, testing and go/no gos.

So the key take away is this, broader focus on high value, ripe for innovation areas with an intent to engineer solutions using modular platforms.

Let's go to the next slide please, that's 7

This is the story of our pivot which most of you are very familiar with. So I am not planning to spend a lot of time here. Here are some highlights I want to leave you with



We are completing our legacy reformulation effort now. We have three NDAs planned in early part of 2022. PDP-716, SDN-037 and Phenobarbital and that completes our transition out of simple delivery-system based programs

I already touched on the clinical stage NCEs.

We are adding an important pre-clinical platform play with antibodies targeting preferentially expressed tumor antigens. Here we have multiple possibilities to create ADCs, T-cell engagers, and other multi-specific entities. That is very important addition which can give us high impact first-in-class options going forward. We will do a deeper dive later on in the presentation.

Before we transition to NCEs and Biologics based targeting, I guess it is important to talk about a few late-stage programs either in the market or going into submission in short order. Very briefly

Let's start with $Elepsia^{TM}$ on slide 8.

As you know we have licensed ElepsiaTM to an early-stage US Neurology Specialty called Tripoint Therapeutics earlier this year. We have been working with Tripoint to launch ElepsiaTM in the US. We are happy to note that Tripoint had a very good launch earlier this year and scaling fast. Tripoint has 40 reps promoting the product now. They plan to accelerate their roll-out going into next year and have payor support from both Medicaid and Employer provided systems. We are very hopeful about the trajectory of ElepsiaTM going into 2022 and beyond.

Now for a brief update on PDP-716, let's go over to slide 9

PDP-716 as you may know is a Once-a-Day formulation of a widely used second line Glaucoma drug Brimonidine which is indicated thrice a day. We have had a successful Phase 3 readout earlier this year. You may remember we also had a successful Phase 2 study for this product.

In these studies we compared a 0.35% Brimonidine once a day formulation with TID Alphagan[®] P 0.1% eye drops. In the chart here, we have the data from the recently concluded phase 3 study. As you can see, the study measures intraocular pressure at three time points 8AM, 10AM and 4PM across four visits at baseline, weeks 2, 6, and 12. Across these time points on multiple visits, the Once-a-Day study drug demonstrated comparable IOP reduction to Alphagan[®] P Thrice a Day. Study also demonstrated comparability of safety profiles, 38.8% on OD vs 32.3% on Alphagan[®] P.

These successful readouts set the stage for a submission early next year (calendar 2022) and the Visiox transaction which we announced this week.

Now let's also take a look at the other ophthalmic formulation, SDN-037 in the next slide.



SDN-037 is a twice-a-day formulation of an ophthalmic steroid used to treat the signs and symptoms of inflammation post cataract surgery. Here in this Phase III study, a statically significant number of patients achieved an ACC-0 rating, without having to take rescue medication compared to placebo. 68.3% on study drug vs 32.5% on placebo. SDN-037 formulation was well tolerated and has an adverse event profile comparable to published Difluprednate data.

As PDP-716, SDN-037 will also go into a submission in early 2022 calendar and forms part of the Visiox transaction which I will touch upon next.

Slide 11 please

First on the Visiox transaction. As we have announced yesterday, we have licensed PDP-716 and SDN-037 to a US based ophthalmic focused startup called Visiox. In addition to the regular licensing components like an upfront payment, milestones and royalties, this transaction also gets SPARC a 10% ownership of Visiox. That allows an opportunity to get an additional slice of their success beyond the regular royalty structure. We are super excited about our partnership with Visiox and really looking forward to an US NDA submission in early 2022 and subsequent market authorization.

Another important transaction, we announced this week is our licensing of a number of antibodies against a unique cancer target from an Israeli company called Biomodifying. As we will discuss later, we have a growing interest in Biologics and these antibodies will add to our ongoing efforts to leverage antibodies in oncology and inflammation either as standalone therapies or as part of multi-specific combinations. We believe these programs will add significant value to the SPARC portfolio in the medium term.

Let us now move to the next slide to briefly discuss the ongoing impact of the Covid-19 pandemic on our business. Slide 12 please

Covid has been a frustrating disruption for companies like SPARC in many ways. Pandemic induced shutdown and restrictions resulted in lost lab time, manufacturing and supply chain disruption leading to delays in the supply of investigational products or other study materials and on clinical trial conduct, across the board. The chart here on the right side of the slide summarizes the extent of disruption in the clinical research eco-system in terms of delayed study start, enrolment delays, study suspensions, cancellations, and so on and so forth.

Even though we have done reasonably well on many fronts, we cannot claim to be an exception here. We have done very well with our lab operations. We have come back to almost full capacity early on in the pandemic without having to shut down again during the delta-induced second wave. We have done allright with drug supply with significant support from our CMC partners. But we have been certainly impacted on clinical trial execution both in terms site initiation, enrolment, and ongoing conduct. The impact has been more in studies which are reliant on a



single country for patient accrual or relatively rare patient populations. Vodobatinib CML is an example of such a setting and we have seen delays in that program.

Our first task was to ensure continuity of patients who are already on the trial both from an ethical and data preservation standpoint. We believe we have done well to ensure continuity of patients in most parts through virtualization or through a mix of hybrid techniques.

We have also de-risked our studies through significant geographic distribution, flexibility in processes, direct to patient outreach, patient support services and providing extensive supply chain and logistics support to our sites. We are hopeful going into 2022 to reclaim some of the lost ground through aggressive execution and direct engagement with sites.

Before we move on from this slide, let me say this. It is obviously an understatement to say Covid has been a major disruption. While we may not have mitigated our risks fully, we feel good about the proactive measures taken to deal with the pandemic and minimize the overall impact on our portfolio. I believe lot of these operational process adjustments we have made during this phase will become standard practices in the future, with a potential to elevate the overall quality of our operations.

Now before I transition, I want to briefly talk about our last fund-raising round, and plans for the future. And briefly cover upcoming milestone. Let's go to next slide

Slide 13 please

Let me briefly comment on our fund-raising plans

Earlier this year we have concluded a preferential issue of warrants to the tune of 1112 Crs, roughly 148m dollars. More than 50% or more precisely around 600 Crores came from our promoter and the rest from a group of marquee domestic investors and foreign portfolio investors. I want to thank everyone on the call for your support and encouragement throughout this process.

The warrants will be converted by the end of 2022, allowing us cash to fund the development of Vodobatinib current trials in CML and PD, SCO-120 proof of concept studies and our discovery operations. This will also allow us to make necessary investments to build the capabilities necessary for newer modalities such as Biologics.

At the same time, our portfolio is expanding with multiple options for additional INDs in the medium term in addition to additional indication options for some of the existing programs which need to be, both preclinically and clinically prosecuted. We also need to plan the transition of current clinical programs to later stages of clinical development without major phase transition delays. With these considerations, we obtained shareholder's approval to raise up to 1800 crores. We are in the process of evaluating our options for raising additional capital. We look forward to your continued support as we move forward with this intent.



Now let's go to slide 14 to take a look at SPARC's catalysts in the next few years. On the legacy end, we expect to see Elepsia[™] and Xelpros[®] growing. We look forward to working with Visiox to ensure NDA submissions in the coming quarter for PDP-716 and SDN-037, setting the stage for NDA approvals and launch in early 2023. We are working on a similar clock for Phenobarbital. We hope to see a licensing event for this product, hopefully in 2022.

Now moving on to NCEs. On Vodobatinib, PROSEEK and its companion trial in Lewy Body with Dementia are both on track for data in 2023. Vodobatinib CML program is lagging our original schedule as I mentioned earlier. We hope to go into a submission in 2024 and trying hard to get back some lost time here. On Vibozilimod (SCD-044), we hope to have clinical proof of concept for both Psoriasis and Atopic Dermatitis by 2023. SCO-120 our Selective Estrogen Receptor degrader is ramping up from its first in human SAD/MAD studies to patient trials as we speak. We expect to have early PoC by the same time frame, that's 2023.

In addition, we are working towards moving at least two more programs to a US IND. We will review one of those programs later in this presentation. We hope to have at least one more IND in the same time frame. We will also stay in the hunt for additional assets from our external innovation effort.

Slide 15 has a nice summary of these programs. I have touched upon most of these programs multiple times already in my comments. We can come back to this if you have specific questions during Q&A

I will transition the call to Dr Siu-Long Yao who heads up our Clinical Development group for the next leg. He will cover the clinical stage programs in a bit more detail. I look forward to seeing you later for Q&A. Thanks again for your time. Over to you Siu.

Dr. Siu-Long Yao: Thank you, Anil. My name is Siu Yao and I oversee clinical development. I also want to extend a warm welcome to all those who have supported us through the years as well as newer folks who may be on the line now. We truly appreciate all your support and faith in what we do.

Slide 17 presents some data that you've seen before in the past but I've included here as a reminder for you. The diagram on the right is a kinome analysis that looks at potential targets of vodobatinib and shows that the activity of vodobatinib is specific against various related targets as opposed to many similar drugs where there is significant off-target activity. This allows us to hit the BCR-Abl target harder and potentially get more activity.

The current plan is to study vodobatinib in the last line setting. That is, in patients failing greater than or equal to 3 lines of therapy. We believe that this setting in highly resistant disease will best demonstrate the benefit of the highly specific nature of vodobatinib.

As opposed to other drugs in the class, there have not been any QT effects which can potentially lead to heart rhythm disturbances and death. Orphan drug designation has been received from



the FDA and EMA and, as you may know, orphan designation can extend the exclusivity of an approved drug beyond the conventional patent life.

Finally, we've been fortunate in that the results with vodobatinib have been selected for either oral or poster presentation at several major meetings now.

Slide 18 is meant to give you a flavor of some of the results we've seen so far. This is a so-called swimmer's plot where the lines represent the duration of response. There are some caveats when looking at this type of data that you should keep in mind. Perhaps the most important to note is that the data are ordered according to when the patients enrolled in the study. Patients at the top of the figure enrolled most recently whereas patients at the bottom were enrolled much earlier during the study. As a consequence, the patients at the bottom of the study have the potential to respond and stay on study the longest because they've had the potential to be treated the longest. Patients at the top of the figure entered the study more recently, so that less time has passed and, of course, the potential to have a longer response is, therefore, not available to them.

Nonetheless, you can see that there have been some marked responses, some of which have occurred at relatively low doses. If you look at the bottom line, for example, that subject has responded for over 4 years with a dose of 12 mg. The population summarized here is resistant or intolerant to at least 3 prior lines of therapy, so observing a median duration on study of nearly 21 months is notable under these circumstances.

The next slide, slide 19, summarize the design of the ongoing study in CML and where we are. The study consists of 3 parts; a single ascending dose healthy volunteer component, a multiple ascending dose in patients with CML and a pivotal efficacy part in patients who are refractory to \geq 3 treatments, one of which includes ponatinib. As we've previously discussed, there is general agreement between us and the FDA that this population represents an important unmet medical need and significant activity in this setting could provide the information needed for marketing authorization.

We are most interested in the chronic phase group since that's the largest group. There are a variety of sites recruiting in a variety of sites across countries such as the US, Belgium, France, Italy, Spain, Romania, Hungary, Singapore, the UK and Korea, and we are about a quarter of the way through accrual with pivotal data anticipated to read out in 2024.

The next few slides beginning with slide 20 provide some information on the use of vodobatinib for the treatment of Parkinson's disease. In particular, we believe that vodobatinib has most, if not all, of the properties needed to make a meaningful impact against the effect of c-Abl dysregulation in this disease.

Vodobatinib has sub-nanomolar potency and exceptionally limited off-target activity giving it great potential to intensely limit c-Abl activity without causing unacceptable side effects. The ability of vodobatinib to penetrate brain, with a brain/plasma ratio of approximately 0.9, further augments vodobatinib's potential in the target tissue. The net effect is augmentation of



autophagic flux and prevention of Parkin mediated mitochondrial control. All of this is technical scientific shop talk to basically tell you that vodobatinib is very specific for what needs to be done, has a unique ability to get to the place where the job needs to be done and then gets the job by removing the toxic alpha synuclein that is the sine qua non hallmark of Parkinson's Disease.

In the past, we've shared some cellular data on the effects of vodobatinib in Parkinson's disease. Slide 21 gives you an example of the effects we've seen on behavior. As many of you know, Parkinson's disease is classically associated with tremors due to the death of neurons in the substantia nigra part of the brain.

This slide depicts the results of the pole test in an experimental model of Parkinson's disease. PFF, or preformed fibrils, represent a method of inducing Parkinson's disease in mice. Mice that have Parkinson's disease due to PFF injection are unsteady and have difficulty in climbing down a pole. It takes them longer to descend.

The graph on the right summarizes the results of treatment with vodobatinib in this model. On the y axis is time in seconds required to descend the pole. Going across the bottom on the x axis are various groups of mice. The 1st column represents normal mice treated with placebo and the 2nd column shows the results from mice treated with vodobatinib only. The purpose of these control groups is to establish a baseline for normal mice and to show that vodobatinib does not affect normal mice.

The next 3 columns consist of mice which have had Parkinson's disease artificially induced by the injection of PFF. You can see that increasing doses of vodobatinib result in shorter descending times so that by the time you get to the highest dose of vodobatinib, the time required for the mice to make it down the pole is very similar to the time required for normal mice to descend.

In past presentations, we showed you that vodobatinib protects against neuronal loss in cellular studies. These data show that the neuronal protection afforded by vodobatinib can have behavioral results which may be clinical meaningful.

Slide 22 goes over the preclinical studies that we've done to support clinical studies and increase our confidence in vodobatinib and its safety. We've demonstrated the compound's safety in acute toxicity single and multiple dose studies in mice, rats and dogs by oral and intraperitoneal routes across a variety of exposure timeframes. There was not evidence of genotoxicity meaning that the likelihood that chronic use could be associated with the development of cancer in humans is low.

Reproductive toxicity studies have been completed across a variety of species, and, as far as contact is concerned, there was only slight eye irritation and no skin irritation when the drug was applied to these surfaces. Finally, there was excellent cardiovascular safety in preclinical studies



with minimal hERG (human Ether-à-go-go-Related Gene potassium channel) effects in vitro and no significant cardiovascular toxicity observed in monitored dogs.

Slide 23: One of the questions we've been running into recently concerns the results of a study performed with a similar cAbl inhibitor called nilotinib which is actually already approved and on the market for CML. In that study, a group of investigators completed a study where they evaluated 2 different doses of nilotinib against a placebo in patients with Parkinson's disease. The results of that study did not show much of a difference in outcomes between the 3 groups.

In their conclusions, the investigators specifically stated that their "results do not refute the hypothesis that c-Abl inhibition is a potentially important therapeutic target for PD disease-modification interventions. Indeed, there are a number of novel molecules targeting c-Abl pathway in development that have a better therapeutic profile"

The data in slide 23 summarize the properties of vodobatinib: its better therapeutic profile; and why it is a better drug than nilotinib. To start off, we took a very systematic approach and first determined the concentrations needed in the cerebrospinal fluid in order for the drug to work in the mouse PFF model that I showed you earlier. We then performed a clinical study to make sure we knew the minimal dose that we needed to get that same concentration in the cerebrospinal fluid of humans.

What we can tell you is that, ultimately, we have a compound that is approximately 20-fold more potent than nilotinib with which we are able to get 10-fold more drug into the CSF compared to nilotinib. The net effect is that potency with vodobatinib is about 200-fold greater than nilotinib.

As I mentioned, this is all able to occur without cardiac rhythm disturbances or other toxicity that could limit vodobatinib administration. Part of this ability to intensely target c-Abl in the brain may relate to the fact that vodobatinib is not removed by drug pumps thus allowing it to cross the blood brain barrier.

Slide 24 summarizes the design of the ongoing clinical study in Parkinson's disease. There are 2 doses of vodobatinib and a placebo to which patients are randomized. Over the past year, we've added an open label extension to obtain more information on the long-term effects of treatment, and also to give patients an opportunity to continue to receive drug if they feel it's helping them.

There are 84 sites involved in the study and about 40% of the patients have been enrolled. Top line data are expected in 2023.

Slide 25: The endpoints of the PROSEEK study are summarized in slide 25. The primary endpoint is the change in the Movement Disorders Society Uniform Parkinson's Disease Rating Scale and secondary outcomes include the time to start of symptomatic medication, EQ-5D score – a quality of life measure, the clinician global impression of severity score as well as other pharmacokinetic and pharmacodynamic measures.



We are also evaluating a few exploratory endpoints such as change dopamine activity in the brain along with skin biopsies looking at the amount of toxic synuclein and smart phone based measures of motor performance and CSF markers.

Slide 26 is here to remind you that we are also collaborating with a Georgetown investigator to determine if vodobatinib might be useful in Lewy Body Dementia. This disease has a lot of overlap with Parkinson's disease and many suspect that the etiologies may be similar.

In this study, patients are randomized to either placebo, or a low or high dose of vodobatinib. Treatment is for 12 weeks and about a third of the patients have been randomized. Endpoints include safety and tolerability as well as a variety of biomarkers with a data readout in 2023.

Slide 27 moves on to vibozilimod, a sphingosine S1PR1 agonist that is being developed for a couple of inflammatory diseases. This is a background slide to give you some context for some of the subsequent slides. There are multiple drugs either approved or in late phase studies in this class, including fingolimod, ozanimod and etrasimod. Fingolimod was the pioneer in the class, but it's been associated with serious cardiac side effects thought to be due to its effects on, for example, the S1PR3 receptor in the family.

Currently, vibozilimod is in early Phase 2 studies in atopic dermatitis and psoriasis with read outs expected in 2023. I'll provide you with a little more detail about this in the next few slides.

Slide 28 provides a little more information on what we've seen so far with vibozilimod in humans. We initially studied vibozilimod in a 3 part study consisting of a single ascending dose part, followed by a food effect part, followed by a multiple ascending dose component.

In general, vibozilimod has performed the way that we anticipated based on the preclinical data. In the single ascending dose portion of the study, 6 dose levels were studied in males and 1 in females. There was a 55% reduction in lymphocyte counts following a 1 mg single dose. You can see this in the figure on the right. This magnitude of effect is expected to be associated with efficacy as has been observed in other drugs in the class.

There was no food effect observed in the food effect portion of the study. 4 dose levels were studied in the multiple ascending dose portion of the study. Approximately 60% reductions in lymphocyte counts were observed following 1 mg doses. Representative pharmacokinetics are shown at the right, with a half-life just shy of 3 days.

Slide 29 summarizes the design of the ongoing Phase 2 study in psoriasis. In this study 240 patients are randomized among 3 doses of vibozilimod and placebo and treated for 16 weeks to obtain results on PASI75, the primary endpoint of the study. There are a series of subsequent re-randomizations to provide insight into things like the durability of response on therapy. and following cessation of therapy. This study has just started with approximately 10% of the subjects randomized.



Slide 30: The design of the atopic dermatitis study is summarized in slide 30. This study also consists of 240 patients randomized to 3 different doses of vibozilimod or placebo. The primary endpoint also occurs at Week 16 and this study also recently started.

Slide 31 provides some background on our oral selective estrogen receptor degrader. As you may know, this is a substantial market. Approximately 200,000 women are diagnosed with estrogen receptor positive disease, and as you can see on the right, survival can be poor in advanced disease. These women, along with the 20-30% of them who acquire mutations, would be eligible for treatment with SCO-120. Oral SCO-120 is designed to be a step above intramuscular fulvestrant which is both uncomfortable to receive as well as very poorly active or inactive against estrogen receptor mutations at practical doses.

We are in the midst of transitioning from healthy volunteer studies to studies in patients. In general, SCO-120 has been very well tolerated and there have been no really notable AEs. The multiple dose study in patients will be starting soon and patent expiry is expected to be around 2040.

Slide 32 summarizes some preclinical efficacy data with results in mice with brain metastases. On the y axis you have the proportion of mice with brain metastases surviving. On the x axis is time in days. Treatment is started on Day 7 and continued for 8 weeks. There are a lot of curves here, some of which can be difficult to distinguish, but I'm going to ask you to focus on the x axis and the curves that end around 98, 84 and 77 days. Those are the light blue, orange and red curves that end around those days. Those groups of mice have the longest survivals and those groups are the groups who have been treated with the high, middle and low doses of SCO-120.

There is another curve in gray that actually clusters with the control groups represented by the group of other curves ending around Day 35. That gray group is fulvestrant and you can see that survival with fulvestrant is not much better than the control groups. In fact, this is consistent with what we know clinically. Namely that fulvestrant does not penetrate well into the CNS and is not a good treatment for patients with brain metastases.

In short, these results suggest that SCO-120 may have activity in patients with brain metastases as well as tumors elsewhere in the body.

Slide 33 goes over our current clinical plan for SCO-120 in patients with breast cancer. We've completed dose escalation in volunteers and are at or near exposures that we expect to be efficacious. We will confirm the tolerability of these doses in patients and see if we can escalate a bit more in Part 1 of the study that's soon to start. Altogether this will probably involve around 15 patients. The main focus will be to confirm the safety and pharmacokinetics we saw in volunteers, in patients.

Part 2 of the study will focus on obtaining preliminary efficacy information and pharmacodynamic confirmation of the dose to be used for later phase studies. There will be



around 15 patients involved in this part of the study. This study will start shortly and provide results in 2023.

Slide 34 goes over the last drug that I'll touch on in my portion of the presentation. Phenobarbital is a well-known existing drug for the treatment of seizures and previous studies have shown that its activity can be superior to that of existing anti-epileptic drugs such as levetiracetam. However, its current formulation has some limitations, especially when it is used for the treatment of seizures in neonates.

As noted in the 2nd bullet, the current formulation contains benzyl alcohol as a preservative. Unfortunately, benzyl alcohol is toxic to neonates and can cause a "gasping syndrome" which can ultimately be fatal. There have been many guidances and advisories which warn against the administration of drugs containing benzyl alcohol to neonates.

What we've done is to remove the benzyl alcohol so that this will no longer be an issue in the treatment of neonatal seizures. SPARC's formulation has been granted orphan drug designation by the FDA and we are anticipating filing for approval sometime in 2022.

I hope I've been able to get you up to speed on some of the more important clinical stage programs in our pipeline. I'd like to introduce my colleague, Dr. Nitin Damle, who will tell you about something perhaps even more exciting in the preclinical space. Nitin.

Dr. Nitin Damle: Thank you Siu, and Good evening to you all. My name is Nitin Damle and I look after the Biologics R&D at SPARC.

In the next 10 minutes or so, I would like to discuss our efforts in the biologics space. We had noted in our presentation to this audience, a year ago, that we have been exploring development of a new biologic technology platform with the potential, to yield multiple molecularly engineered, precision medicines. This modular platform technology has evolved from the antibody engineering advances made over the last 20 years or so and leverages the applications, of single chain Fv as a unit, for antigen binding as shown on slide # 37.

Using such modularly-assembled, scFv-Fc immunofusions can be used, as a substitute for a classical tetrameric IgG, and can do almost everything that IgG antibodies can. This platform allows us to make use of any antigen specificity of choice and thereby create mono, bi, tri or even tetraspecific immunofusions, with the power of effecting functions of as many as four distinct antibodies. We have been able to create such multifunctional immunofusions, with anti-tumor and anti-angiogenesis effects, for use in cancer therapy, and anti-inflammatory immunofusions for use in inflammatory diseases and these are currently being explored for their therapeutic impact.



What I would like to share with you here is a glimpse of our very first biologic asset being developed as an antibody-drug conjugate or ADC targeted to, as yet undisclosed tumorassociated antigen 1 or TAA1. The concept of ADC is pretty straight forward. ADCs represent antibody-targeted chemotherapy in which a potent cytotoxic drug is covalently linked to an antibody with a specificity for a tumor antigen that is overexpressed on the surface of tumor cells, via which the cytotoxic agent can be preferentially delivered to the targeted tumor cells. Thus delivered cytotoxic agent then kills the tumor cells but spares the rest of the body from the toxicities of the drug. ADCs are rapidly becoming a staple in cancer therapy with the regulatory approval of at least 11 distinct ADCs in the US and Europe over the last 20 years.

In our very first ADC asset, we have made use of the clinically and commercially validated druglinker combination to create our own ADC. The target of our ADC is an antigen, here referred to as Tumor-Associated Antigen-1 or TAA1, which is over-expressed on the cell surface of a wide variety of human carcinomas including those that have relatively fewer treatment options. Additionally, when antibodies bind to TAA1, they are rapidly internalized. Hence TAA1 can be an ideal tumor antigen for targeted delivery of potent cytotoxic payloads or other drugs. Here, I would like to share with you, a glimpse of in vitro as well as in vivo activities of the TAA1targeted ADC.

Next, slide # 38 please. Here we show the in vitro growth inhibitory effect of the ADC against a pancreatic cancer cell line that overexpresses TAA1. The left side graph shows that TAA1targeted ADC, in a concentration dependent manner, inhibits the growth of this cancer cell line. In the graph on the right side, is the effect of a similar ADC made using a CD20-specific isotypematched antibody that does not bind to carcinoma cells. This nonbinder ADC is able to exert cytotoxic effect only at the highest concentration tested and is about 100 fold weaker than the TAA1-targeted ADC. Similarly, although not shown here, TAA1-specific ADC is unable to mediate preferential cytotoxic effect against carcinomas that lack the expression of TAA1 indicating that the anti-tumor effect of TAA1-specific ADC is specific for TAA1-expressing tumor cells.

We have further evaluated TAA1-targeted ADC in multiple human carcinoma xenografts established in immunodeficient mice. Next, slide # 39 please. Here, we have evaluated low, intermediate or high dose of anti-TAA1 ADC in the pancreatic carcinoma xenograft that expresses high levels of TAA1 as well as an ovarian carcinoma xenograft that expresses low levels of TAA1. In this evaluation, the putative therapeutics were administered in tumor-bearing mice, once a week for three weeks, after which the growth of the tumor xenografts was monitored. The anti-TAA1 ADC in a dose-dependent manner strongly inhibits the growth of both high and low TAA1 expressing carcinoma xenografts. In contrast, neither the unconjugated cytotoxic drug, used at the same concentration as that in the highest dose of the ADCs, nor the nonbinding anti-CD20 ADC at the highest dose can exert, meaningful growth suppressive effects against these carcinoma xenografts.



We are presently evaluating the impact of TAA1-targeted ADC against human carcinoma xenografts that express varying levels of TAA1 to further establish the TAA1 specificity of this ADC. Although not shown here, the anti-TAA1 ADC can suppress the growth of TAA1-expressing carcinomas irrespective of their size. We are excited about these preclinical results and hope to advance this ADC through preclinical development, with an eye on the IND submission targeted for the year 2023. Next, slide # 40 please. We are exploring a number of distinct ADC opportunities that can benefit from the experience of developing the anti-TAA1 ADC.

Our current TAA1-focused efforts are not limited to just the ADC platform. Using TAA1 targeting as an anchor, we are also exploring biologic strategies to engage the immune system much more effectively in cancer therapy. In this regard, we are also exploring T-cell engaging strategy using our bispecific immunofusions in which one specificity is targeted to the CD3/T cell receptor complex and the other being TAA1. Using such a T-cell engager, tumor cells and T cells can be brought together resulting in the activation of T cells and their subsequent attack on tumor cells. In another version of the same strategy, immunoenhancing cytokines or co-stimulatory ligands can be used as a part of the bispecific or trispecific immunofusion assembly. However, these remain quite exploratory in their development. What we would like to emphasize here is that this immunofusion platform has the potential to represent multiple first-in-class biologic products in our near term pipeline.

Next, slide # 41 please.

While I have discussed so far the biologics aspect of our R&D, there are a number of small molecule/NCE opportunities that we are pursuing. There are two such opportunities that I am going to mention here. The first is a synthetic, targeted cytotoxic agent in which a cytotoxic payload is linked to a small molecule ligand for a tumor-associated antigen preferentially expressed on metastatic prostate carcinomas. In a way, this approach is similar to that of ADCs except that the tumor targeting agent is a small molecule. The second small molecule opportunity is an immunomodulatory agent that we would like to develop for alopecia areata. You may learn about these opportunities in our subsequent presentations in the years to come.

Now I will stop here and would like to invite Chetan Rajpara, SPARC's CFO, to provide financial update. Chetan.

Chetan Rajpara:

Thanks, Dr. Damle.

Good evening, everyone. I plan to go over the SPARC financials and cash position, at a high level. I will keep this really brief. Slide No. 42 please...



During FY21, Total Income was at Rs. 258 Cr (USD 34.8 MN), while Total Expenses were at Rs. 410 Cr (USD 55.2 MN), resulting in to a Net Loss of Rs. 151 Cr (USD 20.4 MN). I would like to mention that, FY21 income includes an upfront payment of USD 20 MN from SCD-044 licensing deal, which is a non-recurring item.

Let me update you on our financial results for the first half of FY22.

For H1-FY22, Total Income was at Rs. 56 Cr (USD 7.6 MN), while Total Expenses were at Rs. 173 Cr (USD 23.4 MN), resulting in to a Net Loss of Rs. 117 Cr (USD 15.8 MN).

Slide no. 43 please...

The Company has raised Rs. 1,112 Cr (~USD 148 MN) in July 2021, by way of a preferential issue of warrants, in order to meet the expenses over next 24 to 30 months. Of this, Rs. 600 Cr (~USD 80 MN) was contributed by promoters and remaining Rs. 512 Cr (~USD 68 MN) was from 30 external investors, including 8 FPIs.

The Company received Rs. 278 Cr (~USD 37 MN) being 25% payable by investors on application. Balance Rs. 834 Cr (~USD 111 MN) shall be received upon the conversion of warrants by investors, within 18 months from the date of allotment.

Cash on hand as at 30th November 2021 was Rs. 12 Cr (~USD 1.6 MN). The Company also has a line of credit for Rs. 250 Cr (~USD 33 MN) from parent company, in addition to bank facilities for Rs. 218 Cr (~USD 29 MN), of which facilities for Rs. 100 Cr (~USD 13 MN) is utilized as on 30th November 2021.

The Company has obtained the shareholders' approval for raising an additional sum up to Rs. 1800 Cr (~USD 240 MN) by way of issuance of fresh equity or debt.

The Company is in process of licensing certain late stage clinical assets, to generate the additional liquidity. For FY22, approx. 41% of the expenses are budgeted for the clinical costs. However, we are aggressively managing our costs and working to control our non-clinical expenses tightly.

The Company has taken all possible measures to limit the impact of COVID-19 in order to ensure business continuity with minimal disruption. The Company will further evaluate and actively respond to minimize its impact on the financial performance.

That's all from me today on the financial update. A big thanks to all for joining the call. I will now hand over the call to Jaydeep for facilitating the Q&A.

Jaydeep Issrani: Thank you, Chetan. We will now open the call for question-and-answer session.



Moderator:We will begin the question-and-answer session. The first question is from the line of Ketan
Gandhi from Gandhi Securities. Please go ahead.

Ketan Gandhi:Any guidance on PDP-716 and SDN-037 for peak sale potential, I believe it is reduced
substantially since the last presentation.

Anil Raghavan: Hi, Ketan. This is Anil. We haven't made projection for PDP-716 or SDN-037 even in the last presentation. Even in this edition, we are not making a forecast for the program and we are working towards NDA submission sometime in early part of 2022 and subsequently launch in 2023. And as we work with the partner, we will try to give market guidance maybe towards the launch.

Ketan Gandhi: Any guidance for Phenobarbital?

Anil Raghavan:Phenobarbital also is early for us to make a guidance. We need to first go through the process of
licensing, the program which we are hopeful we can complete in 2022 and then we will work
with the partner to give guidance in the market.

Moderator: The next question is from the line of Manish Jain from Gormalone. Please go ahead.

- Manish Jain:My first question was on Vodobatinib. What are the scenarios under which we can get maybe
an accelerated approval ahead of the timelines that we have shared in the presentation where the
kind of clinical results if they are far ahead of what we are budgeting?
- Anil Raghavan: On the questions specifically in terms of the possibility for an accelerated approval that I will be stepping into a speculative realm. As you can see, we're doing a fairly well powered clinical study and the idea is to create a reproducible outcome from this PROSEEK program, and also provide definitive proof-of-concept for the c-Abl hypothesis. We hope to have with the positive outcome from this trial, at that point, we need to initiate a conversation with the agency. The agency has been fairly encouraging of new neuroprotective interventions as you've seen in the recent Biogen approval, which also is leading to additional submissions in the pathway in Alzheimer's. So we are going to have a conversation in terms of where we can go with the result. And there are several possibilities. And classically, if you look at a pathway for approvals in these settings, it will require two additional phase-III studies and the rest of it is a matter of negotiation in terms of whether there is a possibility of accelerated or conditional approval, and then following it up with additional studies or getting an approval with one additional study. They are all in the speculative domain. And at this point I need to stay away from that.
- Manish Jain:Chetan, just one clarification that you've mentioned the cash position as of 30th of November
'21. Has this been after the upfront payment receipt of Visiox and the upfront payment after
paying to Biomodifying LLC, has both of these been accounted for?
- **Chetan Rajpara:** Manish, both these payments are yet to be processed. So, this position is before making the payments.



- Moderator: The next question is from the line of Anubhav Agarwal from Credit Suisse. Please go ahead.
- Anubhav Agarwal: A couple of questions. First is on Vibozilimod where we have partner, Sun Pharma. So just a clarity there on phase-II trials, is Sun Pharma going to fund the trial or you guys will fund it and then it will get reimbursed?
- Anil Raghavan:
 No, the clinical program for vibozilimod for phase-II is funded by our licensing partner, Sun

 Pharmaceutical Industries Limited.
- Anubhav Agarwal: So even phase-II, which you are going to start for all the immunology sites will be funded by Sun Pharma?
- Anil Raghavan: Already these studies are on. . They're currently recruiting at the moment.
- Anubhav Agarwal: So, if I see a pipeline, majority of spend for SPARC will largely go towards vodobatinib, right, would that be right understanding?
- Anil Raghavan: We have three studies in Vodobatinib that is Vodobatinib Parkinson's trial, which is a fairly large global program. We have a smaller phase-II program which is the single center study in Georgetown in a form of Parkinsonism called Lew Body Dementia. And then we have multipart study for registration of Vodobatinib in chronic meylogenous leukemia. And then we're also ramping up significantly on SCO-120 which is our estrogen receptor degrader study which is moving now from healthy human volunteer SAD, MAD leg to actual patients which is going to consume resources. And in addition, as Nitin mentioned, we have potential to add two more programs to the clinical pipeline in the medium-term.
- Anubhav Agarwal: When you see over next four, five years, just spend for SPARC, you guys added biologic as a capability. You talked about how significant this can be for the company for growth right? Do you think that would become the significant amount of focus for the company in future when Vodobatinib is commercialized, post that when you see the pipeline between neurology, oncology and immunology areas that you guys doing it, would that become the main focus area?
- Anil Raghavan: I wouldn't characterize as main, but it's certainly a very important area for us. I mean, this whole space in which you can engineer in a modular way multi-specific entities with biologics or a combination of biologics and small molecules is something which we are very excited about. We believe that in several therapeutic areas, that's going to be the future, whether it's going after treatment resistance in oncology or several in autoimmune conditions where there is a need to move the efficacy bar beyond what the field has achieved with single agent therapies. So in that sense, yes, I mean, that's a big platform that we have, and we have been investing in the last few years. And now this is giving us visibility to actual tangible programs in addition to the one that we have disclosed today, there are also other possibilities both on the biologic side as well as on conjugated entities using small molecule or small molecule antibodies as a combination. So as a field, that's something which we will focus on.



- Anubhav Agarwal: The last question is on the in-licensing that you're done for Biomodifying, those antibodies, multispecific antibodies, where this will be more usable, this is more used with your biologic program or what you're doing for this, this is something new completely which will add to the capability of the company? I can understand what you have in-license, but I'm not able to understand how will you fit it in your portfolio.
- Anil Raghavan: So that is again going to the same story, right. If you can actually look at the platform, it becomes either a standalone antibody from the bunch of antibodies that we have licensed or it can also become a warhead or a targeting moiety in other multi-specific combinations using the same platform that we just described. So that's the play. It can actually happen with multiple antibodies and multiple small molecules. So, it gives us a modular platform to plug and play.
- Moderator: The next question is from the line of Sameer Baisiwala from Morgan Stanley. Please go ahead.
- Sameer Baisiwala: Quick question, Anil is who's your manufacturing partner for PDP-716 and SDN-037?
- Anil Raghavan: For both PDP-716 and SDN-037 we have one unit supporting from the Sun System.
- Sameer Baisiwala:
 Just curious, is it Halol or some other site where it's getting down? I asked this obviously as

 Halol has got warning letter.
- Anil Raghavan: It is not Halol.
- Sameer Baisiwala: And the second is for your NCE pipeline vodobatinib, vibozilimod, who's your manufacturing partner for the clinical quantities?
- Anil Raghavan: So currently in Vodobatinib, we have used both internal and external sources and as we go into commercialization as we've committed in the past, we will create multiple options for that product. And in Vibozilimod, it's a Sun program and that will continue to be on the Sun platform and they get to choose the CMC strategy.
- Sameer Baisiwala: Vodobatinib, when you say internal and external, can you qualify that?

Anil Raghavan:Within the Sun network as in we have used Sun as a manufacturing partner and we have a
relationship on the CMC side which is spanning across multiple products. So that is the option
which I refer to as the internal option and external options are non-Sun option.

Sameer Baisiwala: I know this was asked by someone as the first question, but still coming back, because that would be an important dollar inflow when you commercialize these two, PDP-716 and SDN-037 in 2023. So, any guidance can you give? I'm assuming that your royalty would be mid-teens or high teens around that. So in the following year or two, can this be a substantial or a meaningful cash for you to fund your research or any thoughts on this?



Anil Raghavan: I think the structure is correct, I mean, we have, we have upfront, we also have regulatory approval milestones plus royalties. In addition to that, we also get a 10% equity in Visiox as part of this, which gives us access to an additional slice of value. But when I say this, we don't have an agreed target both in terms of revenue and peak sales with the commercial partner. And I would like to have that agreement which we will hope to have, before the launch, before we make disclosure to the market. But let me go to the core of your question, would that be sufficient to make us cash-neutral from funding the R&D process? No. If you look at many of these 505(b)(2) cash flows, they are not going to be substantial contribution to the overall cost, but just not enough to cover that. So, these programs will give us some non-dilutive funding, but not enough to make us cash-neutral.

Moderator: The next question is from the line of Ketan Gandhi from Gandhi Securities. Please go ahead.

Ketan Gandhi: I was looking at the corporate presentation presented in January '21 on the website of the company, where for all these molecules you have said peak sale potentials of \$10 billion and in current presentation, we are mentioning \$20 billion. So, I want to understand which molecules have led to this additional increase of \$10 billion.

- Anil Raghavan: If you look at the main difference in the disclosure that we made in early part of 2021 and now is the disclosure of the ADC program. And that ADC program with tumor antigen which is getting expressed in multiple tumors has a substantial peak sales impact. And we also believe that there could be a potential rerating of the S1P1 class, but we haven't taken much from that. The big differences here is essentially coming from disclosure of an additional program, which can have multiple legs.
- Moderator:
 Thank you. The next question is from the line of Jayesh Gandhi from Harshad Gandhi Securities.

 Please go ahead.
 Please the securities of the line of Jayesh Gandhi from Harshad Gandhi Securities.

Jayesh Gandhi: For our SCD-044 program, can you help me out understanding the market opportunity for psoriasis and atopic dermatitis?

Anil Raghavan: Again, with the caveat that I won't even give you a specific number as a forecast given this is a program currently owned by our commercial partner Sun Pharma. Let me offer some comments broadly in terms of the opportunities that I see in dermatology, autoimmune condition. If we take an indication like say psoriasis, you have a fairly mature set of options on the topical part of the treatment paradigm that is the steroids and nonsteroidal options, which are very mature. And psoriasis also seen a substantial number of biologics entities with very high level of activities on the other end of the spectrum. But if you look at the middle part of the therapeutic continuum, where patients and prescribers are looking for safe, oral options, the option currently is only Apremilast which used to be a Celgene product, which is sold to Amgen for almost \$13 billion. So there's a dearth of really good options on the oral end for both psoriasis and atopic dermatitis. And that's where programs like S1P1 programs, also Tyk-2 programs are trying to position themselves. And this also gets a significant boost due to what happened to JAK



inhibitors, which is emerging as a class choice in atopic dermatitis, as you may know, recently, both Pfizer and Amgen and including Incyte's topical JAK inhibitors got black box warnings, creating a significant safety concern around that class. SCD-044 and S1P1, in general can evolve as a class alternative to JAK inhibitors in dermatology and beyond. So, we believe that it's a substantial opportunity. But at the moment, I don't want to venture into giving a specific number which I think should come from Sun at an appropriate time.

Jayesh Gandhi: Can we envisage a year by which we will be self-funded for all of our programs in future?

Anil Raghavan: The answer is, unfortunately, no. We have fairly robust clinical program and the success of these clinical programs will decide how soon we can be cash neutral, not just a success, it's also a function of how long we want to be keeping these assets. If you see the outcomes that we are projecting for 2023, if we are fortunate to realize those outcomes, they create cash-even and significant cash-even which can make the company cash-neutral. But there is a strategic choice at that point, whether we raise additional capital to run the next leg and capture a substantial part of the value or to settle for encashing the program at this state. Those are significant decisions that we need to take particularly on vodobatinib and in some of these early-stage programs that we're talking about. The timing of when we can become cash-neutral is going to be a function of that. But at the same time, when you look at the valuation of companies like SPARC or earlystage clinical portfolios, with every progressive validation clinically, the probability of success of the program goes up and therefore the discounting of the program should come down. So in that sense, even though it may not result in actual cash coming in if you decide to stay with the asset, it should rerate, based on the incremental value of lower discounting because of higher probability of success.

Jayesh Gandhi: Any company globally, which is having a business model like SPARC?

Anil Raghavan: So, yes, that's an interesting question. I think there are a lot of companies globally on innovation and they are on a spectrum. On one end of the spectrum, you have a single product or a single platform company. This is a binary bet on a program, right. And if you look at most of the bigmoney universe of biotech, majority of those companies are single product or single platform binary bets. There are very few companies which are making a broader system play in terms of creating a translational development system which can come up with a substantial number of products. For example, you have in CNS, there are several companies now coming out, which are the backed companies, Pfizer, recently taken out their CNS portfolio, it has become a Bainsupported company. And there are other companies with substantial number of programs. But if you want to look for a parallel, I think the Chinese pharmaceutical companies are a better parallel, because there are several elements of the SPARC story reflected in those companies like, for example, by Beigene And if you look at Beigene, they are probably ahead of us in terms of when they started and are in the US market with their own innovation, but they have a slightly different model, in the sense, they pursue the Chinese domestic opportunity more aggressively for initial approvals and then take those products to the US. But they have created enormous level of value based on that model and there are other Chinese companies also in that structure.



So, these are ultimately vehicles to negotiate the China-US corridor or China-Europe corridor. And we believe that SPARC is probably the most invested in and mature vehicle from an Indo-US corridor standpoint. And so in that sense they are somewhat of an appropriate comparison.

Moderator: The next question is from the line of Anubhav Agarwal from Credit Suisse. Please go ahead.

Anubhav Agarwal: A couple of questions. One is on vibozilimod only. So in slide 28, you talked about initial signs of efficacy for the molecule where you talked about 55% reduction in SAD and almost 60% reduction in MAD. Very early days, I understand, but just trying to understand the potential from this early efficacy data, or let's say for BMS drug which is going to get approved soon, how would this drug compared to other oral options in the space of psoriasis let's say and then for atopic dermatitis in their case for example?

Anil Raghavan: Let me unpack that question. See, if you look at what is being presented in that slide, is that the lymphopenia, for SCD-044 at certain safe doses goes up to 50% to 60% at therapeutic doses that we are proposing at this point. We cannot use that marker as a comparison with Apremilast or Tyk-2 because mechanistically they are different drugs, right. This is a mechanistic pharmacodynamic marker for the S1P1 mechanism which works through sequestering T-cells in the lymphatic system and then create peripheral lymphopenia as in bringing down the circulating T-cells. Compounds like Apremilast or Tyk-2 don't work through that mechanism,. So if you want to have a direct clinical comparison, we need to wait for the phase-II to see how the lymphopenia translates into say a PASI75 score in a phase-2 setting. If you look at Apremilast's PASI75 score is somewhere in the 30s. Our hope is that a 50% lymphopenia will translate into something better than or substantially better than the 30%, PASI75 score that Apremilast have seen.

- Anubhav Agarwal: Just a second question on this same molecule is when you talk about phase-II read out in two years from now, so when you say 2023, are you referring to early CY'23, fiscal '23 or late '23, what you are talking about there?
- Anil Raghavan: So that's a disclosure that needs to come from Sun. At the moment, we can only say that we expect this to come in calendar 2023.

Anubhav Agarwal:So then just it's a 240 patient trial, phase-II and if you start dosing them, and the PASI75 score
should be clear in let's say six months, so certain time for recruiting patients and then dosing
them. Just trying to understand why is it two years that we're talking about the timeline here.

Anil Raghavan: So some of that is related to COVID and COVID has been a major disruption in terms of getting sites into the trial. And this is also a complex trial, in the sense, it's not just a topical product in dermatology. We have substantial cardiac monitoring that we need to do to ensure that we clearly eke out cardiac safety advantage and profile from the study. So both in terms of the conduct of the study and also COVID as a backdrop we are conservative in terms of projecting our timelines at the moment.



- Anubhav Agarwal: Last question is on your Visiox Pharma deal that you've done on two molecules. Just trying to understand this is a new company for me Visiox Pharma. Can you talk about a little bit here that what kind of resources they are putting on the table that they can deploy behind these two products? Secondly, is, if, let's say, in the agreement between you and Visiox, is there something that in two years after the launch of time period, either sales doesn't ramp up after certain point of time, you can take back molecules, etc.,? It's a new company. I am just trying to understand that you repose a lot of confidence there, you take an equity stake as well. So how is this partnership different from a normal partnership that you will do with an established company?
- Anil Raghavan: So a couple of things, one is they proposed a fairly aggressive marketing plan for this program. We are happy about the commitment and resourcing that they are showing for the program. It's also their pedigree, which is giving us confidence that this group has done something similar and very impressive in the CNS side. We will work very closely with them to ensure aggressive launch for this program and to realize the full potential, and we will review the performance of the collaboration on a regular basis as we usually do with other collaborators and see how it goes.
- Moderator: The next question is from the line of Sameer Baisiwala from Morgan Stanley. Please go ahead.
- Sameer Baisiwala:Just wanted to check maybe I miss your comment, in your next round of fund raising of 1,800
crores, is it just enabling or you are in the process of doing it at the moment?
- Anil Raghavan:
 At the moment, we have an enabling resolution and an enabling resolution allows us to explore our options and we are in that phase, Sameer.
- Sameer Baisiwala: So safe to say it's something real and credible that if markets allow, you will execute over next whatever, four, six months?
- Anil Raghavan: I wouldn't phrase it exactly like that. But we have a shareholder approval for going ahead with exploring this additional raise of Rs.1,800 crores. And we have in that enabling resolution allows us to explore different modalities, not just equity, but also debt and other instruments. So, at the moment, we are studying our options and we will take a call on what is the best way to move forward or whether to exercise this enabling resolution in the future. So I wouldn't frame it quite the way you framed it.
- Moderator: The next question is from the line of Manish Jain from Gormalone. Please go ahead.
- Manish Jain:
 Quite excited to see the kind of progress that we have made in ADC. Just in terms of capabilities set required to take it from the current stage, right through to the market with NDA approval, what are the missing capabilities that you need to create?
- Anil Raghavan:
 Thanks for that question, Manish. I think if I look at the broad spectrum of different phases that generally take this product to clinic and beyond, we have development capabilities internally in exploring these assets and characterizing them preclinically. We can also prepare them for the



	IND and take them into clinic. Those are competencies that we've built over the years. Where we currently do not have the internal competencies are in the CMC side. And we may have to work with external partners in terms of both scaling for IND enabling studies as well as for early clinical studies, and we're in the process of evaluating potential manufacturing options and partners for that. So if I were to look for key gaps in the process in CMC as an area where we need to have collaboration and that's something which is strategic for us as we kind of scale up our intent in this space. We may have to kind of have multiple options there.
Manish Jain:	Extremely helpful. Very, very exciting to see the kind of data that Dr. Nitin Damle presented on pancreatic and ovarian side.
Moderator:	As there are no further questions from the participants, I would now like to hand the conference over to Mr. Jaydeep Issrani for closing comments. Thank you. And over to you, sir.
Jaydeep Issrani:	Thank you, Faizan and thank you everyone for being on the call today. In case you have any follow-on questions, feel free to reach out to us. We will now close the call and I thank you once again for joining with us for the call today. Bye.
Moderator:	Ladies and gentlemen, on behalf of SPARC that concludes this conference. Thank you for joining us and you may now disconnect your lines.