SPARC/Sec/SE/2024-25/058 December 19, 2024

National Stock Exchange of India Ltd.,
Exchange Plaza, 5th Floor,
Plot No. C/1, G Block,
Bandra Kurla Complex,
Bandra (East), Mumbai – 400 051.

Scrip Symbol: SPARC

BSE Limited,
Market Operations Dept.
P. J. Towers,
Dalal Street,
Mumbai - 400 001.

Scrip Code: 532872

Dear Sir/Madam,

Sub: Investor Presentation

Further to our letter SPARC/Sec/SE/2024-25/056 dated December 14, 2024 and pursuant to Regulation 30 of the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015, we enclosed herewith the investor presentation to be held today i.e. December 19, 2024 at 4:00 PM (IST), which we shall be uploading on our website after sending this letter to you.

This conference call will be reachable through an audio dial-in.

Audio conference	**Participants can dial-in on the number below:**
Universal Dial In	+91 22 6280 1278 +91 22 7115 8179
India National Toll Free	1800 120 1221
International Toll Free	
Hong Kong	800964448
Singapore	8001012045
UK	08081011573
USA	18667462133

To participate in the conference call, please dial in the number provided above couple of minutes ahead of the scheduled start time. The operator will provide instructions on asking questions before the call.

Management presentation: The presentation pertaining to this discussion can be accessed through the link given below on the date of audio conference.

https://links.ccwebcast.com/?EventId=SPA191224

This is for your information and dissemination.

Yours faithfully,

For **Sun Pharma Advanced Research Company Ltd.**

KAJAL DAMANIA

Digitally signed by KAJAL DAMANIA
DN: cn=KAJAL DAMANIA, o=SPIL.COM, ou=SPIL, email=kajal.damania@sparcmail.com, c=IN
Date: 2024.12.19 13:24:43 +05'30'

Kajal Damania
Company Secretary and Compliance Officer

Encl: As above

Update on Clinical Programs and R&D Pipeline

December, 19
2024

BSE:532872
NSE: SPARC
BLOOMBERG: SPADV@IN
REUTERS: SPRC.BO
CIN: L73100GJ2006PLC047837

Disclaimer

This presentation and its contents should not be distributed, published or reproduced, in whole or part, or disclosed by recipients directly or indirectly to any other person. Any failure to comply with these restrictions may constitute a violation of applicable laws. Accordingly, any persons in possession of this presentation should inform themselves about and observe any such restrictions. This presentation may include statements which may constitute forward-looking statements. All statements that address expectations or projections about the future, including, but not limited to, statements about the strategy for growth, business development, market position, expenditures, and financial results, are forward-looking statements. Peak sales forecast/potential in the presentation represent potential sales of the product/s for the commercialization partner. Forward-looking statements are based on certain assumptions and expectations of future events. This presentation should not be relied upon as a recommendation or forecast by Sun Pharma Advanced Research Company Limited ("Company"). Please note that the past performance of the Company is not, and should not be considered as, indicative of future results. The Company cannot guarantee that these assumptions and expectations are accurate or will be realized. The actual results, performance or achievements, could thus differ materially from those projected in any such forward-looking statements. The Company does not undertake to revise any forward-looking statement that may be made from time to time by or on behalf of the Company. Given these risks, uncertainties and other factors, viewers of this presentation are cautioned not to place undue reliance on these forward-looking statements.

The information contained in these materials has not been independently verified. None of the Company, its Directors, Promoters or affiliates, nor any of its or their respective employees, advisors or representatives or any other person accepts any responsibility or liability whatsoever, whether arising in tort, contract or otherwise, for any errors, omissions or inaccuracies in such information or opinions or for any loss, cost or damage suffered or incurred howsoever arising, directly or indirectly, from any use of this document or its contents or otherwise in connection with this document, and makes no representation or warranty, express or implied, for the contents of this document including its accuracy, fairness, completeness or verification or for any other statement made or purported to be made by any of them, or on behalf of them, and nothing in this presentation shall be relied upon as a promise or representation in this respect, whether as to the past or the future. The information and opinions contained in this presentation are current, and if not stated otherwise, as of the date of this presentation. The Company undertakes no obligation to update or revise any information or the opinions expressed in this presentation as a result of new information, future events or otherwise. Any opinions or information expressed in this presentation are subject to change without notice. This presentation does not constitute or form part of any offer or invitation or inducement to sell or issue, or any solicitation of any offer to purchase or subscribe for, any securities of the Company, nor shall it or any part of it or the fact of its distribution form the basis of, or be relied on in connection with, any contract or commitment therefor. This presentation document may contain certain UPSI (Unpublished Price Sensitive Information). You are advised to handle this information in a confidential manner and share it strictly on a need to know basis only. Anyone in possession of such UPSI should not trade/deal in the securities of the Company, either directly or indirectly. Pursuant to SEBI (Prohibition of Insider Trading) Regulations 2015, the Company maintains a Structural Digital Database wherein details of sharing this presentation with you are entered. No person is authorized to give any information or to make any representation not contained in or inconsistent with this presentation and if given or made, such information or representation must not be relied upon as having been authorized by any person. By participating in this presentation or by accepting any copy of the slides presented, you agree to be bound by the foregoing limitations. All brand names and trademarks are the property of respective owners.

Agenda

01 UPDATE ON STRATEGY AND PRIORITIES

ANIL RAGHAVAN

02 SHORT-TERM OPPORTUNITIES: IMMUNOLOGY

MUDGAL KOTHEKAR

03 SHORT-TERM OPPORTUNITIES: ONCOLOGY

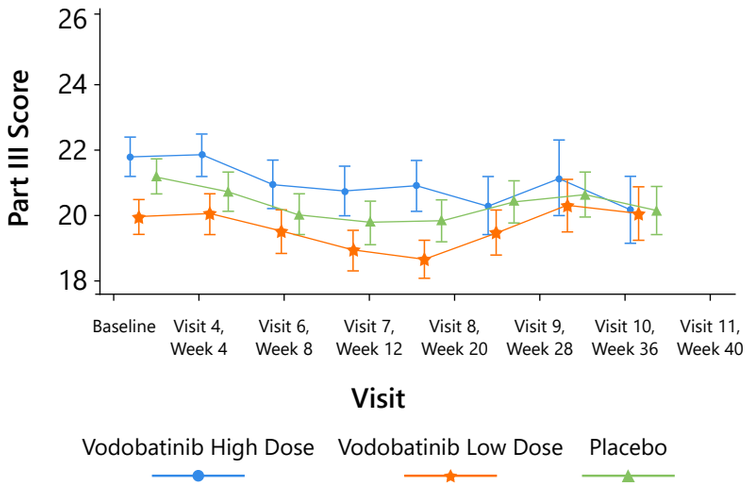
SANDEEP INAMDAR

PROSEEK data analysis completed

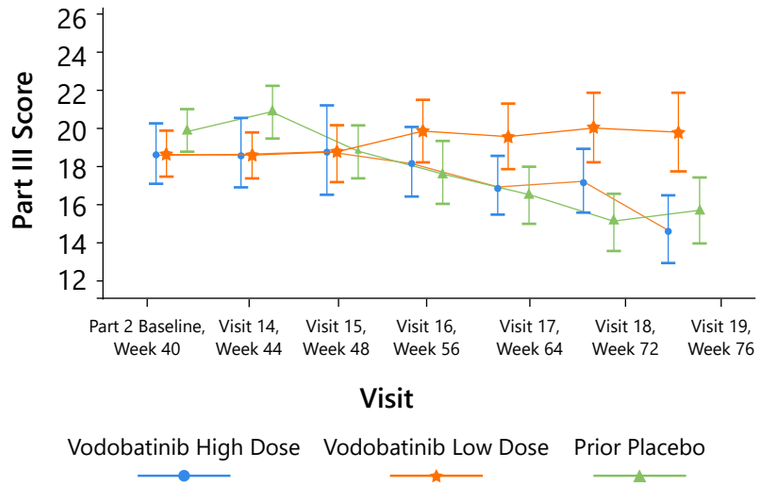
Full data set confirms IA findings

- Study did not meet primary endpoint
  - The placebo response in PROSEEK appears to be an outlier compared to historical data
- Target CSF concentrations of Vodobatinib were achieved in both dosing arms
- Plasma PK consistent with earlier studies and expectations
- Biomarker data showed mixed and inconclusive trends

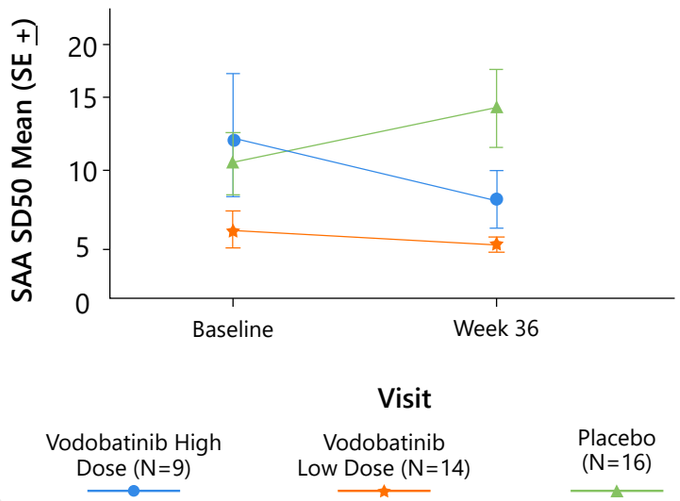
Change in MDS-UPDRS Part III score by week 36



Change in MDS-UPDRS Part III score in long-term extension



Change in CSF α-Synuclein levels by week 36



SPARC will discuss results with scientific advisory board and publish the results

Turning the page – Post PROSEEK priorities

Focus on medium-term clinical PoCs and cash flow

Portfolio optimization

10+
assets under development

- Oncology and Immunology as key TA focus
- Prioritize resourcing for SBO-154 & SCD-153 to achieve meaningful value inflection points

Business model flexibility

7
strategic & commercial partnerships

- Early stage licensing
- Pivoting to smart deals (NewCo. formation, Equity transactions)

Short-term catalysts & costs

4
near-term milestones

- Multiple levers to drive near-term cash events
- Cost reduction through reorganization and execution efficiency

SCD-153 and SBO-154 can become productive platforms upon successful translation

TA: Therapy Area | NewCo.: New Company | PoCs: Proof of Concepts

Turning the page – Post PROSEEK priorities

Focus on medium-term clinical PoCs and cash flow

Portfolio optimization

10+
assets under development

- Oncology and Immunology as key TA focus
- Prioritize resourcing for SBO-154 & SCD-153 to achieve meaningful value inflection points

Business model flexibility

7
strategic & commercial partnerships

- Early stage licensing
- Pivoting to smart deals (NewCo. formation, Equity transactions)

Short-term catalysts & costs

4
near-term milestones

- Multiple levers to drive near-term cash events
- Cost reduction through reorganization and execution efficiency

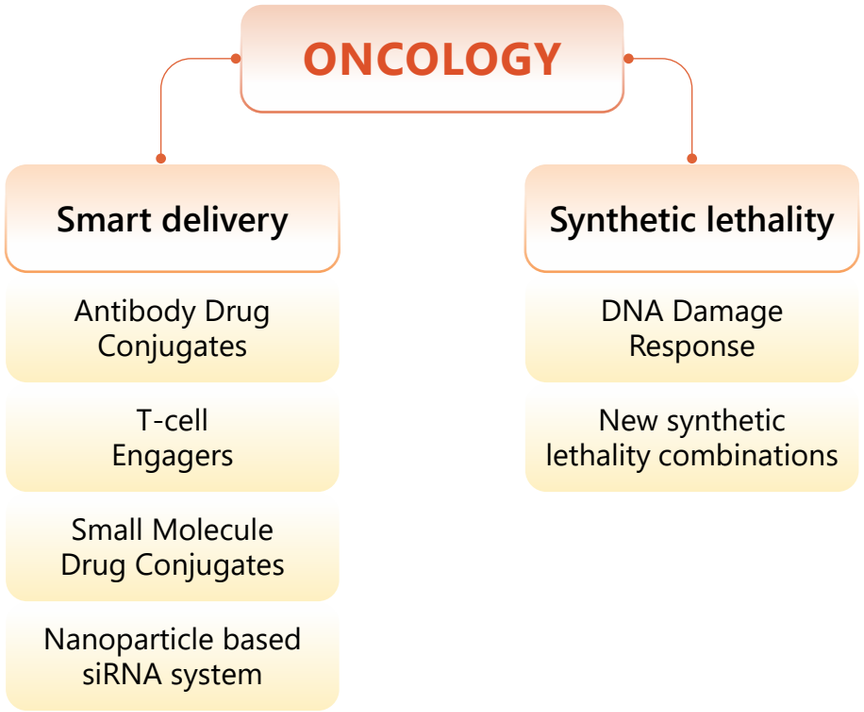
SCD-153 and SBO-154 can become productive platforms upon successful translation

TA: Therapy Area | NewCo.: New Company | PoCs: Proof of Concepts

Narrowing therapeutic area focus

ONCOLOGY

Smart delivery of chemotherapeutics or immune activators using targeting mAbs or small molecule ligands



- Targeting novel antigens and delivery platforms to deliver therapeutic agents

IMMUNOLOGY

Topical delivery of novel agents providing potentially safer treatment options to patients

- Focus on dermatological indications with a potential to work both as monotherapy and in combination with other complementary mechanisms
  - Targeting novel mechanisms for treatment of AA, Vitiligo and other chronic inflammatory dermatological conditions having limited treatment options
  - Developing topical agents to achieve optimal concentration at the site of action without the toxicity challenges associated with systemic agents

mAbs: Monoclonal Antibodies | siRNA: Small Interfering RNA | AA: Alopecia Areata

Potential first-in-class assets as anchors

Prioritized resourcing for SBO-154 and SCD-153

SBO-154

- Delivers proven payload with a novel epitope of tumor targeting antibody and a validated linker
- Key elements of the hypothesis validated in preclinical studies

SCD-153

- Topical agent for treatment of AA and Vitiligo
- Low potential for systemic AEs confirmed in Phase 1a study in healthy volunteers

Both products offer significant product extensions once the primary tenets of the hypothesis get clinically validated

AEs: Adverse Events

SBO-154 leverages the broad success of the modality

15 ADCs approved by USFDA

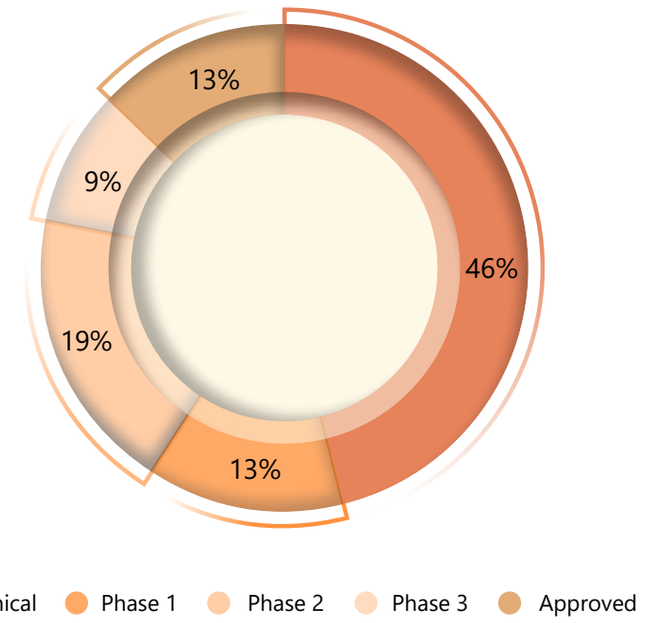
ADC market global forecast to 2028*

Estimated revenue by 2028 **$20 Bn**

CAGR from 2023-2028 **15.2%**

Cumulative deal value in last 5 years **$300 Bn**

ADC deals by development phase#

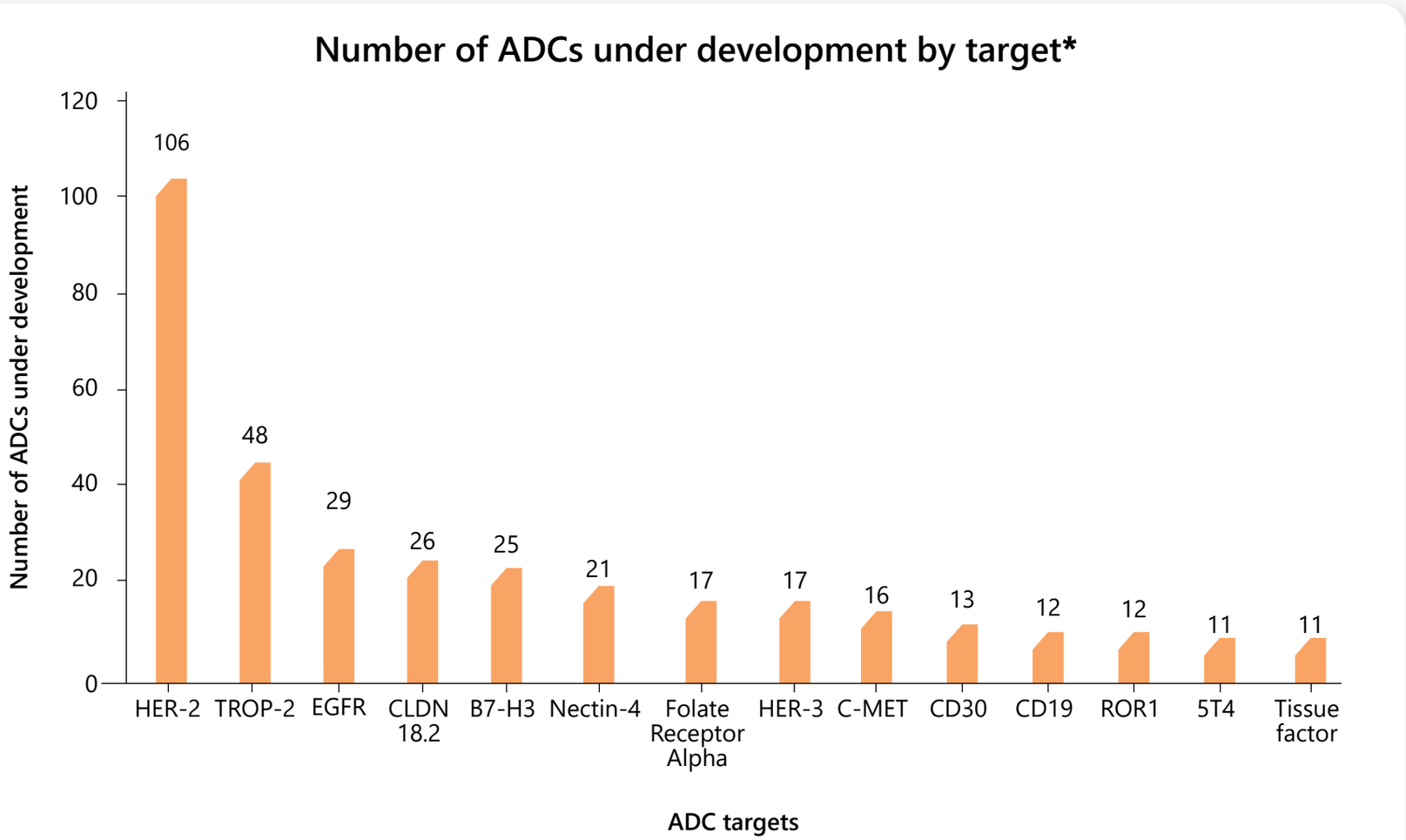


- Notable progress in the development of new ADCs in oncology, making up 9% of the oncology pipeline in 2023
- ADCs have transformed the treatment landscape with their ability to deliver payloads with precision directly to tumor cells providing better cell kill and avoiding off-target side-effects
- Advanced linker technology allows use of both covalent and non-covalent methods to retain the conjugates in circulation while permitting antibody function and cellular internalization

*Markets and Markets; Antibody Drug Conjugates (ADC) Market Published Date: Oct 2023 | #Surge in ADC Deals Drives Oncology Dealmaking; Lucy Haggerty and Taskin Ahmed; September 2024 | Global trends in R&D 2024: Activity, Productivity and Enablers; IQVIA Institute for Human Data Science; Feb 2024 | ADC: Antibody Drug Conjugate | USFDA: United States Food and Drug Administration | CAGR: Compound Annual Growth Rate

SBO-154 offers a distinctive advantage in dynamic ADC space

Binds to a novel epitope of a cancer associated antigen



ADC field centered around select antigens

- ~65% of pipeline assets targeting 5 antigens

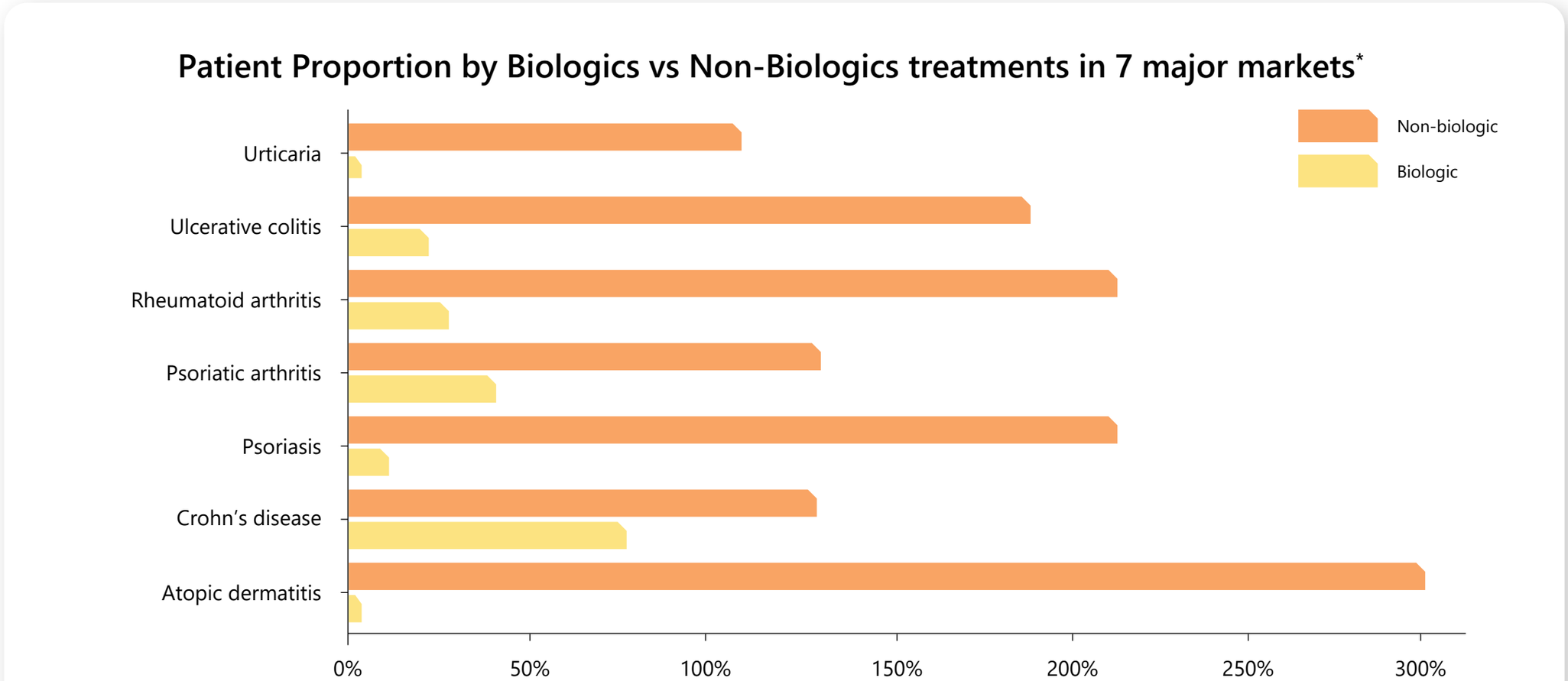
MUC1-SEA domain is an unexplored ADC target

- MUC1 expression confirmed across multiple tumor types providing development opportunities to target several patient sub-types
- SBO-154 has successfully established SEA binding hypothesis in preclinical studies and can be used for multiple constructs using different payloads and linkers

*https://njbio.com/antibody-drug-conjugates/ | SEA: Sea urchin sperm protein, Enterokinase, Agrin

SCD-153 expands pathway & modality options

Addressing the need for safer and convenient alternatives in Immunology



- Expensive biologic treatments are reserved for more severe patients who constitute a much smaller proportion of treated patients
- Adverse events associated with current oral SoC for dermatological indications warrant a different modality for reduced side effects
- The field is expected to evolve towards use of mechanistically independent combinations enhancing effectiveness and provide more comprehensive management of disease

*Graph adapted from Dermatology Drives Autoimmune Market Growth; IQVIA; Aug 2022 | SoC: Standard of Care | The non-biologic patient proportions reach over 100% because patients often take more than one prescription drug over the course of a year. This is not the case for biologic treatments, which are not used in combination.

Turning the page – Post PROSEEK priorities

Focus on medium-term clinical PoCs and cash flow

Portfolio optimization

10+
assets under development

- Oncology and Immunology as key TA focus
- Prioritize resourcing for SBO-154 & SCD-153 to achieve meaningful value inflection points

Business model flexibility

7
strategic & commercial partnerships

- Early stage licensing
- Pivoting to smart deals (NewCo. formation, Equity transactions)

Short-term catalysts & costs

4
near-term milestones

- Multiple levers to drive near-term cash events
- Cost reduction through reorganization and execution efficiency

SCD-153 and SBO-154 can become productive platforms upon successful translation

TA: Therapy Area | NewCo.: New Company | PoCs: Proof of Concepts

Business model flexibility to advance assets and leverage capabilities

EXPAND PARTNERING INTENT

- Openness to explore partnering options at multiple inflection points including IND
- Explore preclinical program/ platform collaborations

EXPLORE NEW STRUCTURES

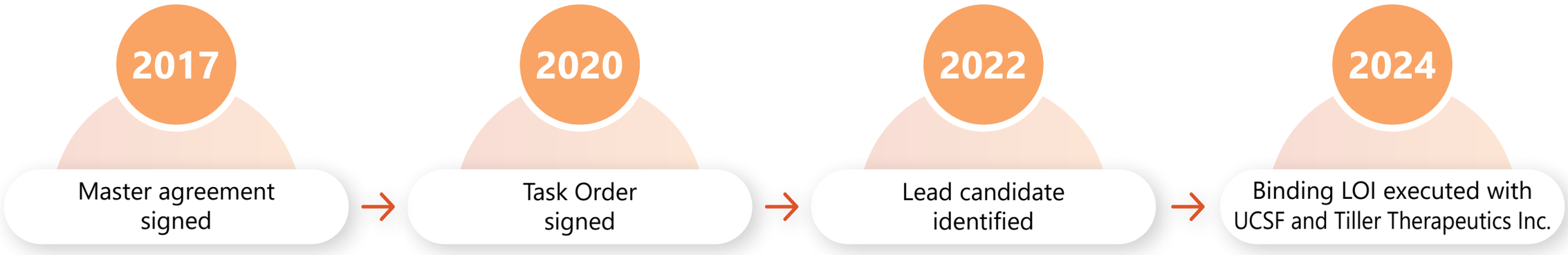
- Beyond traditional licensing arrangements including asset specific NewCos and potential spin-outs
- Opportunities to leverage capability based partnering

Our collaboration with the UCSF and the formation of Tiller Therapeutics illustrates this approach

IND: Investigational New Drug | UCSF: University of California San Francisco

Case in point - A NewCo. to advance Joint IP

Developed in collaboration with UCSF



- Research collaboration with the University of California San Francisco (UCSF) for development of oncology assets
- Fast-track development
  - Lead compound identified within 2 years of initiation of the project
  - Terms finalization and LOI execution within 6 months of NewCo (Tiller Therapeutics) formation

LOI: Letter of Intent | IP: Intellectual Property

SCO-155 enables preferential delivery using a small molecule ligand

Offers potential advantages over RLTs

- SCO-155 is a Small Molecule Drug Conjugate (SMDC) delivering cytotoxic agent targeting prostate-specific membrane antigen (PSMA) as a potential treatment for metastatic Castration Resistant Prostate Cancer (mCRPC)
- PSMA is specifically and highly expressed in prostate cancer
- Opportunities with PSMA directed SMDCs

Durable tumor penetration

Designed for repeat administration and co-administration with other therapies

Convenient administration in community-based infusion centers

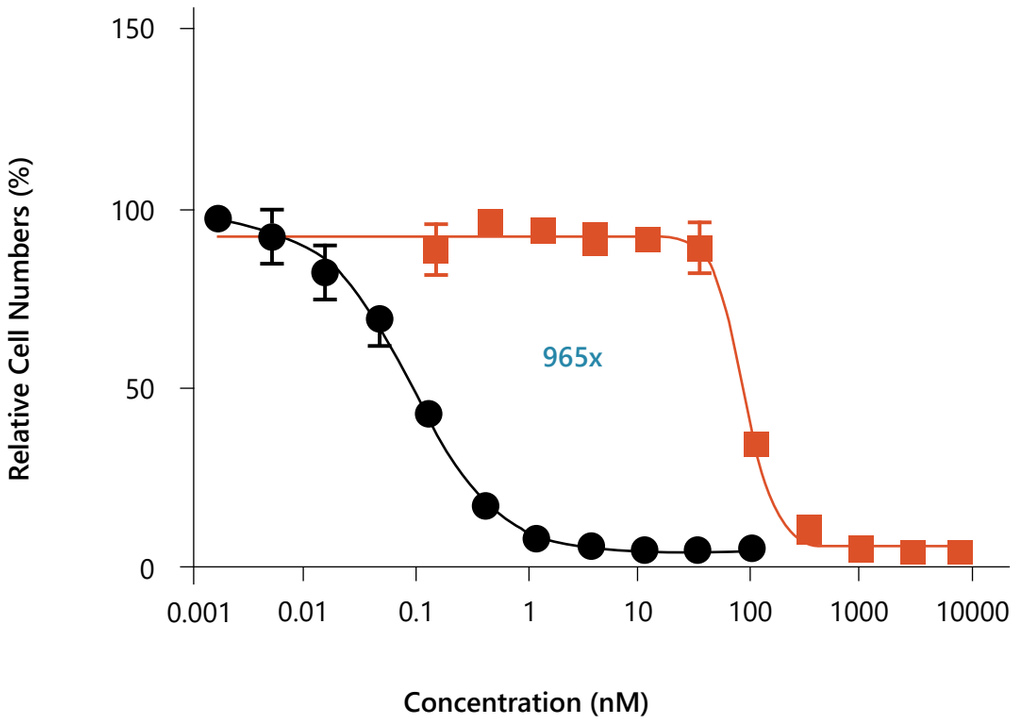
SCO-155 has potential to become standard of care for treatment of Prostate Cancer

RLT: Radioligand Therapy

SCO-155 improves the therapeutic window

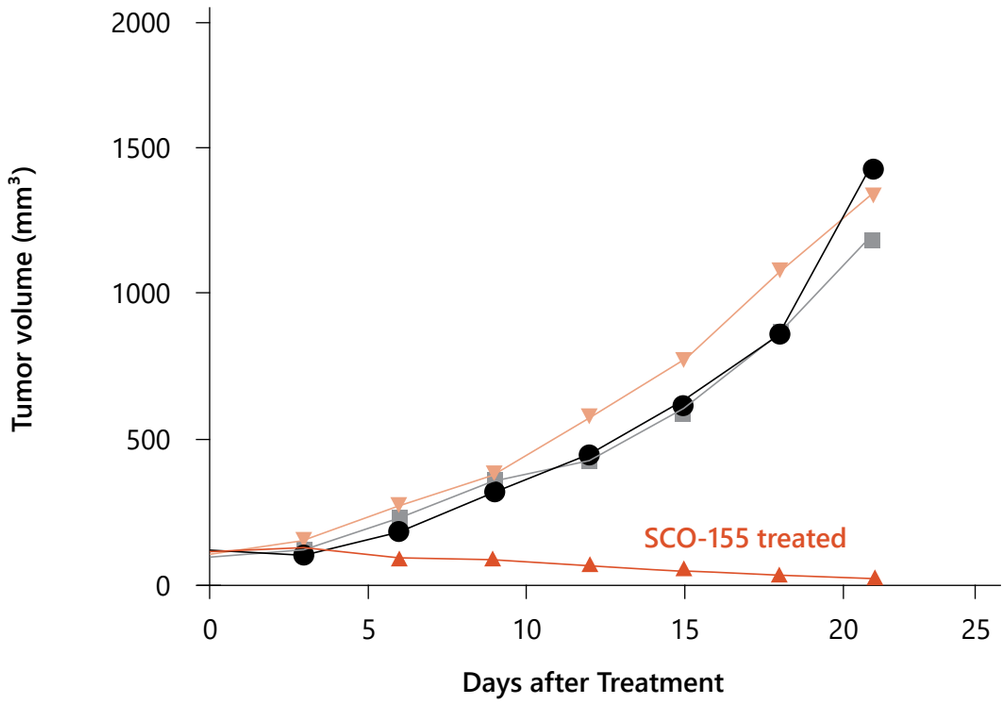
Preclinical PoC established

In vitro cytotoxicity in PC3 Prostate cancer cells



	IC_{50}(nM)
PC3-PIP cells (PSMA over-expressing)	0.09
PC3-FLU cells (vector control)	90.76

In vivo efficacy in Prostate Cancer PC3 Xenograft model



- PC3-FLU cells (vector control) – SCO-155 60 µg/kg
- PC3-PIP cells (PSMA over-expressing) – SCO-155 60 µg/kg
- PC3-FLU cells (vector control) – Vehicle
- PC3-PIP cells (PSMA over-expressing) – Vehicle

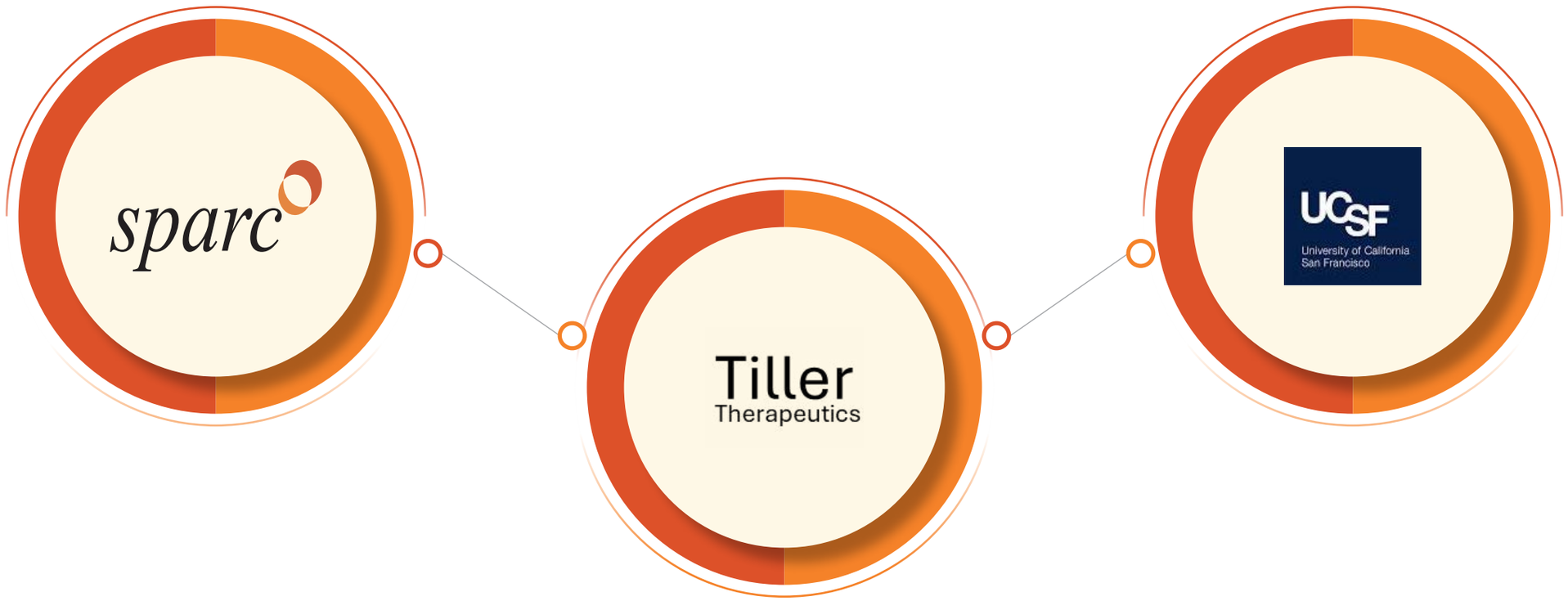
SCO-155 showed selective killing of PSMA over-expressing prostrate cancer cells *in vitro* with around 1000x selectivity over PSMA null cells

SCO-155 showed selective tumor growth inhibition of PSMA over-expressing tumors *in vivo*

Tiller Therapeutics explores smart delivery with a novel approach

SMDCs leveraging synthetic ligands of cancer specific antigens

- SPARC and UCSF have signed **binding LOI** with Tiller Therapeutics Inc. (Tiller) granting exclusive worldwide license to Tiller for preclinical oncology asset along with associated IP



- Upon grant of license, SPARC will receive 55% equity stake in the fully diluted securities of Tiller. The equity will be issued to SPARC in two tranches within 6 months of execution of license agreement
- IND filing expected in FY26

Turning the page – Post PROSEEK priorities

Focus on medium-term clinical PoCs and cash flow

Portfolio optimization

10+
assets under development

- Oncology and Immunology as key TA focus
- Prioritize resourcing for SBO-154 & SCD-153 to achieve meaningful value inflection points

Business model flexibility

7
strategic & commercial partnerships

- Early stage licensing
- Pivoting to smart deals (NewCo. formation, Equity transactions)

Short-term catalysts & costs

4
near-term milestones

- Multiple levers to drive near-term cash events
- Cost reduction through reorganization and execution efficiency

SCD-153 and SBO-154 can become productive platforms upon successful translation

TA: Therapy Area | NewCo.: New Company | PoCs: Proof of Concepts

Focus on near-term catalysts & cost efficiency

PURSUE PROGRAMS WITH CASH VISIBILITY

- Execute on short-term catalysts which can provide non-dilutive capital to reduce external funding

Opportunities with a spectrum of probabilities of success, which will be resolved mostly by end of this financial year

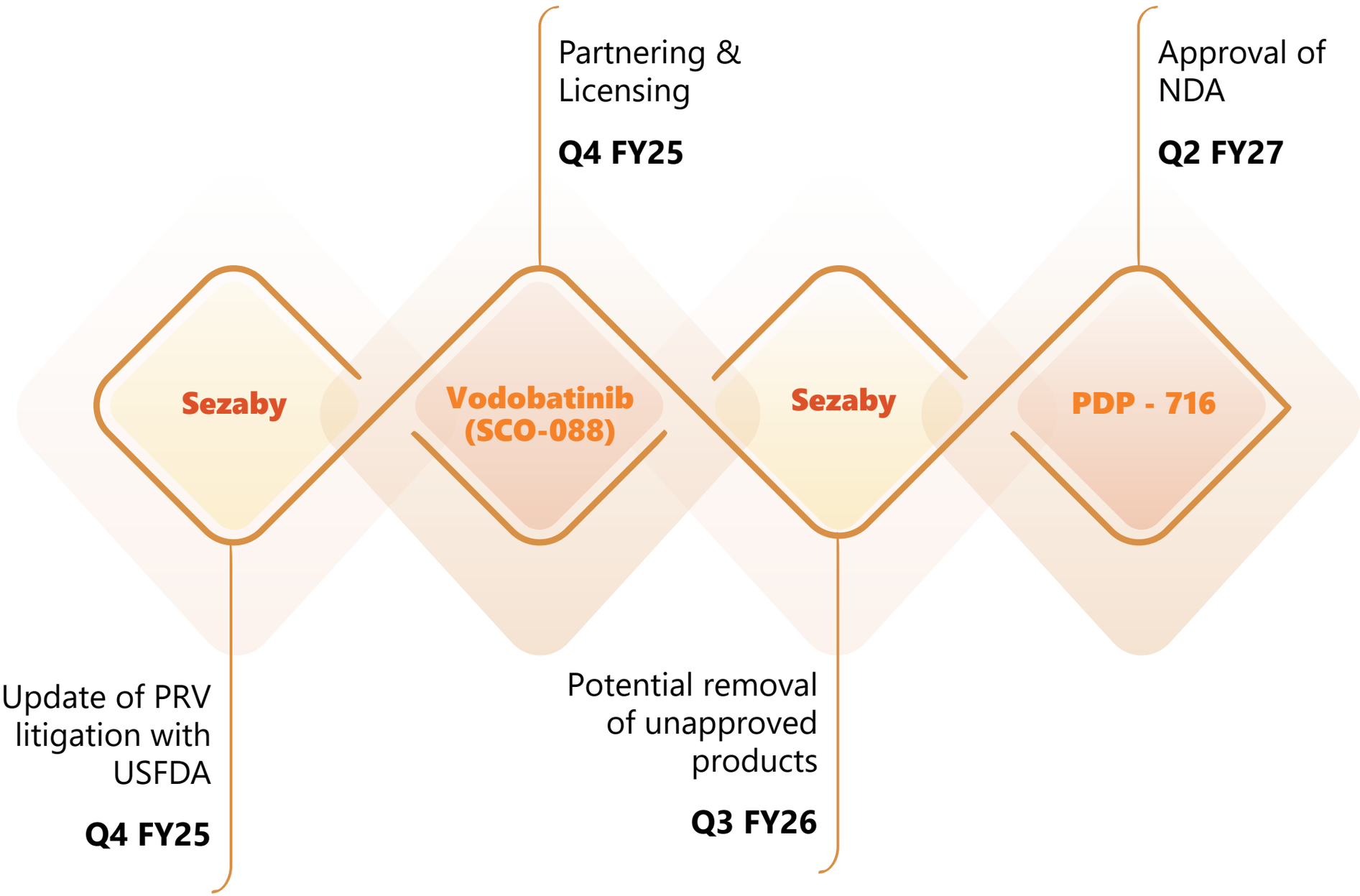
OPTIMIZE CASH BURN

- Reduce cash burn through better alignment of objectives and cost

Clinical capability base and execution cost targeted for optimization

Near-term cash generating milestones

Delivering on actionable drivers of identified milestones is a top operational priority



PRV: Priority Review Voucher | NDA: New Drug Application

Sezaby's eligibility for PRDV

Exploring all available options to ensure PRDV resolution

- USFDA denied SPARC PRDV based on its interpretation of PRDV statute and its requirements
- SPARC believes the agency's interpretation led to an unfair denial of PRDV
- SPARC is committed to exploring all available remedies including litigation in search of a final resolution

Q4 2022 — Approval

USFDA approves Sezaby without PRV

Q1 2024 — In-person meeting

In-person meeting with USFDA for sharing its position and seeking a review of decision

Q2 2024 — SPARC approached US District Court for the District of Columbia

USFDA did not provide any feedback. SPARC sued USFDA for resolution of matter

Q1 2025 — Court opinion

- Priority review vouchers have recently been traded for value in excess of $100 mn

Ipsen announces sale of Priority Review Voucher for $158m

Partnering * 27 August 2024

Acadia Pharmaceuticals Enters Into an Agreement to Sell its Rare Pediatric Disease Priority Review Voucher for $150 Million

November 06, 2024 04:05 PM Eastern Standard Time

If granted, PRV can provide an income in excess of $100 mn for SPARC

PRDV: Pediatric Rare Disease Review Voucher

Enforcing Sezaby's orphan drug exclusivity

Unapproved phenobarbital injectable formulations may cause serious adverse events in neonates

- Sezaby is the only approved phenobarbital injectable formulation by the USFDA
- USFDA stated in a recent guidance that excipients with known toxicity should not be used in neonates (e.g.propylene glycol, benzyl alcohol)
- Unapproved phenobarbital injectable formulations currently marketed contain propylene glycol and benzyl alcohol that presents specific safety concerns for neonates

Communication with USFDA

- Filed Citizen's Petition with USFDA. National coalition of Infant Health provided support to Citizen Petition
- Ongoing communication with the USFDA for acting on manufacturers' unapproved injectable formulations

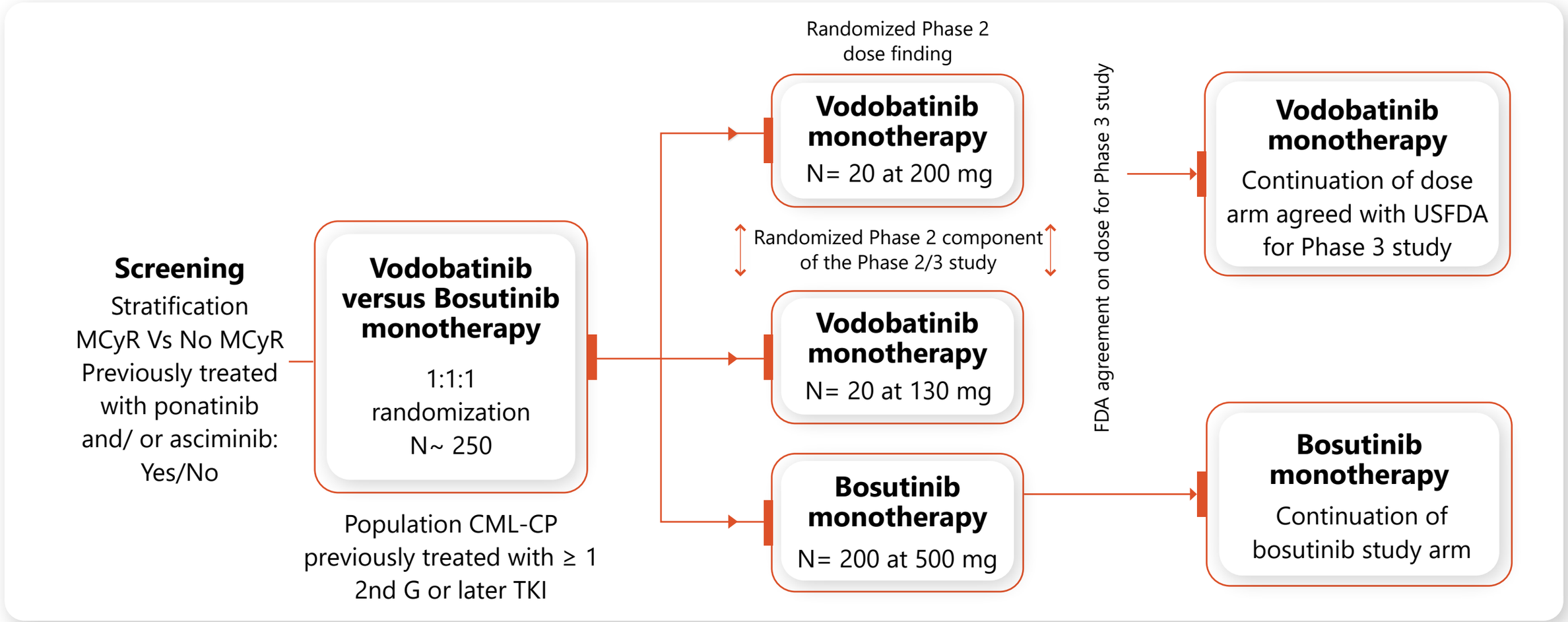
Engaged manufacturers of unapproved injectable formulation

- Sent notification letters to voluntarily withdraw the unapproved injectable formulation
- Sent cease & desist letters

Significant efforts ongoing to potentially secure the removal of unapproved injectable formulations from the market

Vodobatinib in Chronic Myelogenous Leukemia

Phase 3 design agreed with the agency



Registration path

- Significant activity in last line CML patients demonstrated in Phase 2 study
- Registration study requirement was reset by USFDA; aligned with new requirements
- State of readiness for initiation of Phase 3

Licensing

- Initial outreach completed through an Investment banker
- Expected to close by end of FY25, however, CML being niche area, licensing process may require longer time

MCyR: Major Cytogenetic Response | CML-CP: Chronic Myelogenous Leukemia - Chronic Phase | TKI: Tyrosine Kinase Inhibitor

Vibozilimod Phase 2 outcomes later this year

Both studies achieved enrolment closure in Q2 FY25

SOLARES-AD-1

- 240 patients across three dose levels and placebo
- Primary endpoint – Proportion of patients with EASI-75 response at week 16
- Enrolment completed: Jul 2024; 250 patients enrolled
- Topline (16-week) results: Q4 FY25

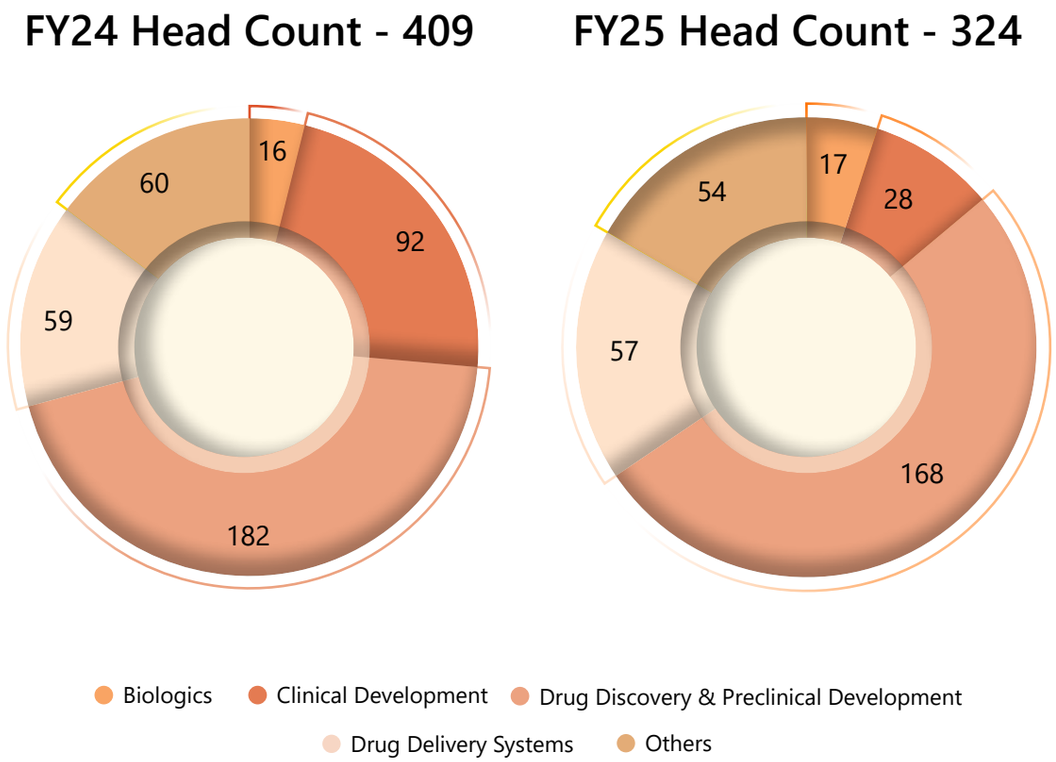
SOLARES-PsO-1

- 240 patients across three dose levels and placebo
- Primary endpoint – Proportion of patients with PASI-75 response at week 16
- Enrolment completed: Aug 2024; 263 patients enrolled
- Topline (16-week) results: Q1 FY26

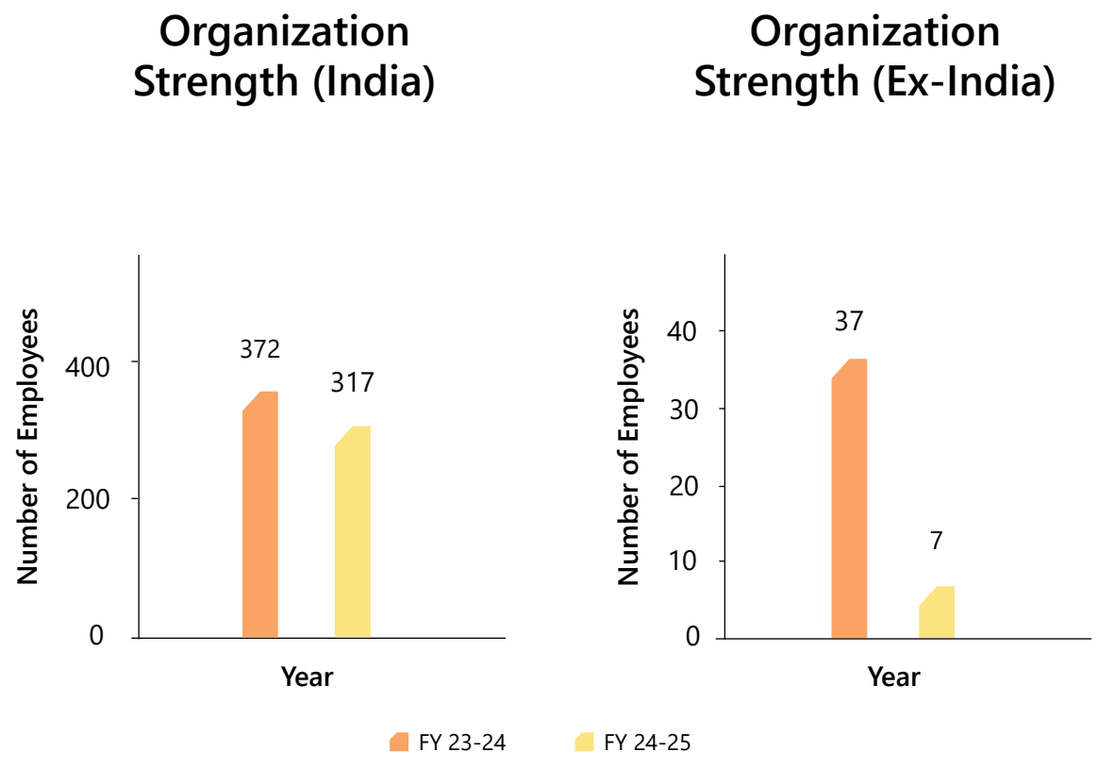
EASI = Eczema Area and Severity Index | PASI = Psoriasis Area and Severity Index

Leaner organization to drive cost optimization

Manpower expense expected to be reduced by ~30%



- Reorganized teams based on current stage of pipeline assets
- 21% reduction in manpower



- Scaled down ex-India headcount to optimize resource allocation

- Available debt and cost optimization measures can provide runway upto May 2025
- Expected milestones defer the imminent need of fundraise

FY25 HC as on 30th Sep 2024 | FY24 HC as on 31st Mar 2024

Key execution priorities for next 24 months

Q4 FY25

Vodobatinib (SCO-088)
Partnering & Licensing

SBO-154
IND filing

Q1 FY26

Sezaby
PRV litigation outcome

SCO-155
Execution of definitive agreement

Vibozilimod
SOLARES-AD-1 topline data

Q2 FY26

PDP-716
Refiling of NDA

Q3 FY26

Sezaby
Potential removal of unapproved products

Q3 FY27

SBO-154
Phase 1b Initiation

Q4 FY27

SCD-153
Phase 2 IND filing

SCD-153
Phase 1b FPI

SBO-154
Phase 1a Initiation

Vibozilimod
SOLARES-Pso-1 topline data

AD: Atopic Dermatitis | Pso: Plaque Psoriasis

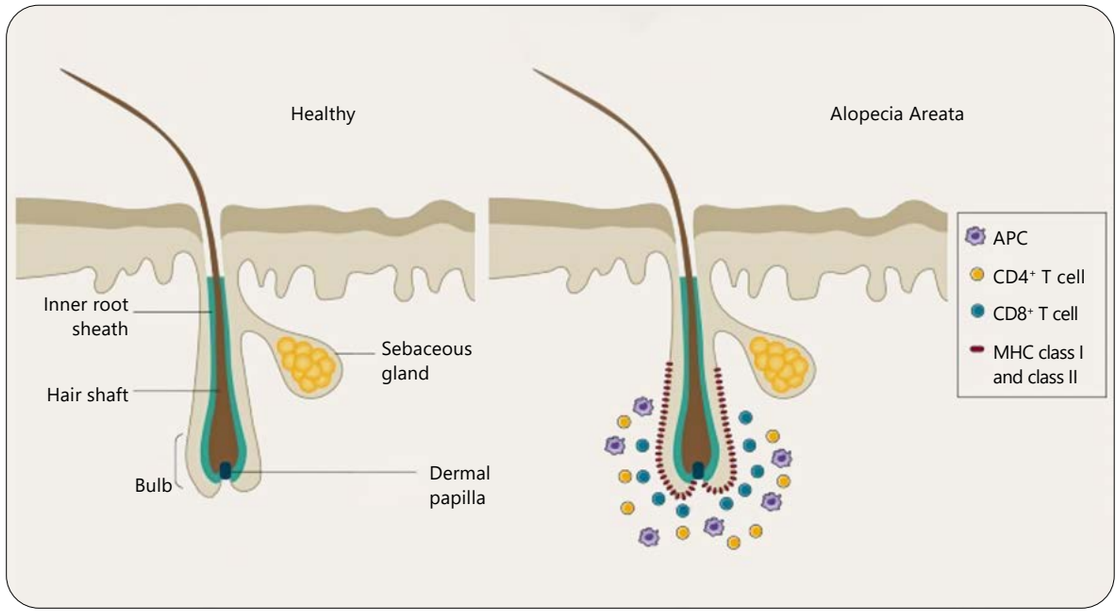
SCD-153
For treatment of Alopecia Areata

Alopecia Areata: Autoimmune disease causing spontaneous hair loss

Current approved oral drugs carry risk of long-term serious side effects

Clinical manifestations of AA[#]

Perifollicular infiltrations of inflammatory cells in AA patients[*]



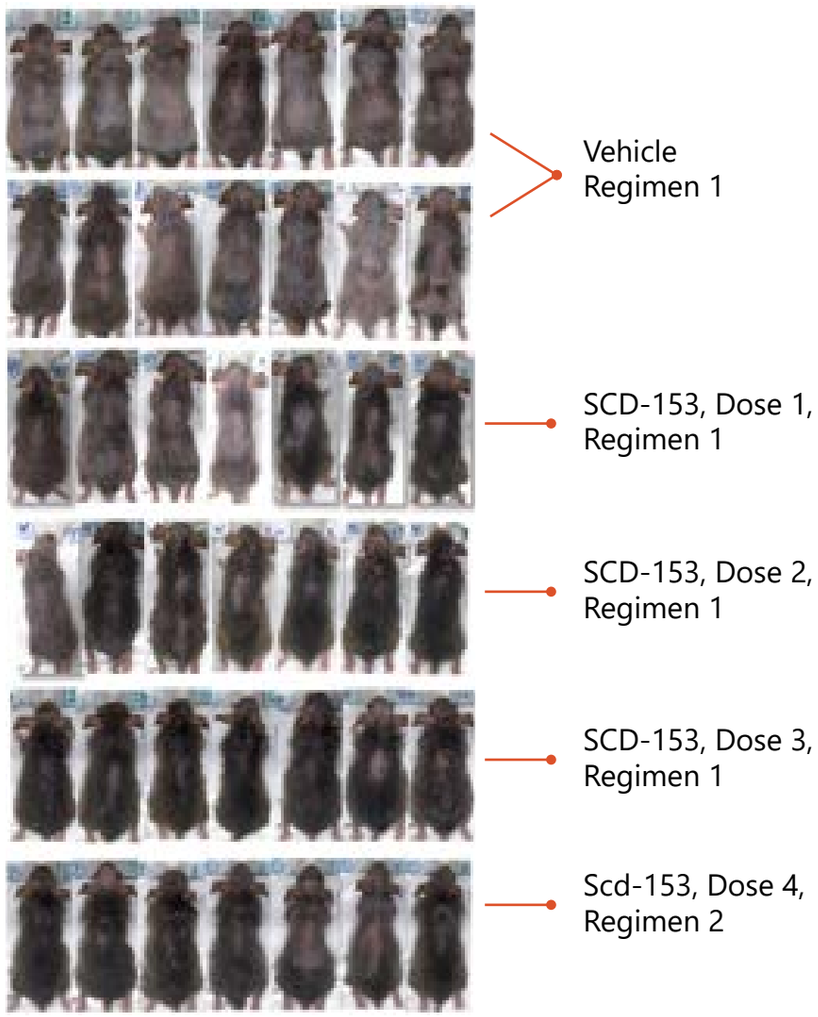
- Alopecia Areata affects 2% of global population
- After first episode ~50% patients spontaneously recover in one year. Relapse rate is up to 85%, reaching 100% in long-term
- Chronic treatments are needed; disease relapses on withdrawal of treatment
- Approved oral JAK inhibitors and off-label steroids carry significant risk on long-term use

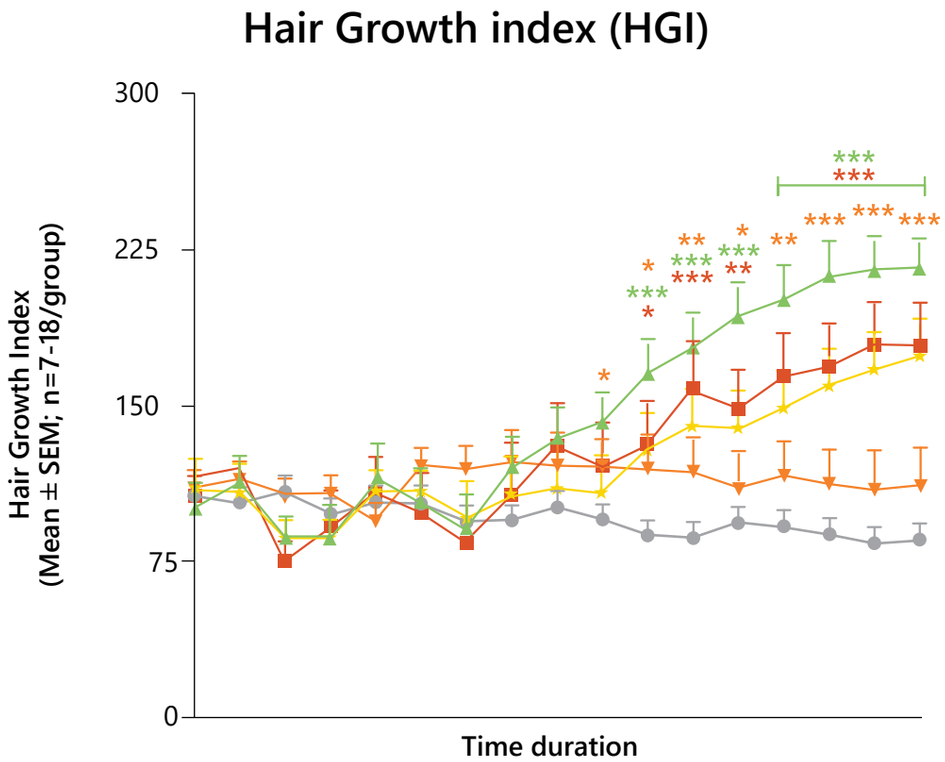
- In AA, CD8+ T cells at the base of follicle secrete inflammatory cytokines, leading to hair loss

[#] Sibbald C. J Cutan Med Surg. 2023 May-Jun;27(3):241-259. | [*] Adapted from Nature Reviews. Disease Primers. 3:17011, 2017 | JAK: Janus Tyrosine Kinase | CD8+: Cell Differentiation 8+ | APC: Antigen Presenting Cells | MHC: Major Histocompatibility Complex

SCD-153 induces hair growth in AA disease-relevant C3H/HeJ mouse model

Potential first-in-class agent for Alopecia Areata





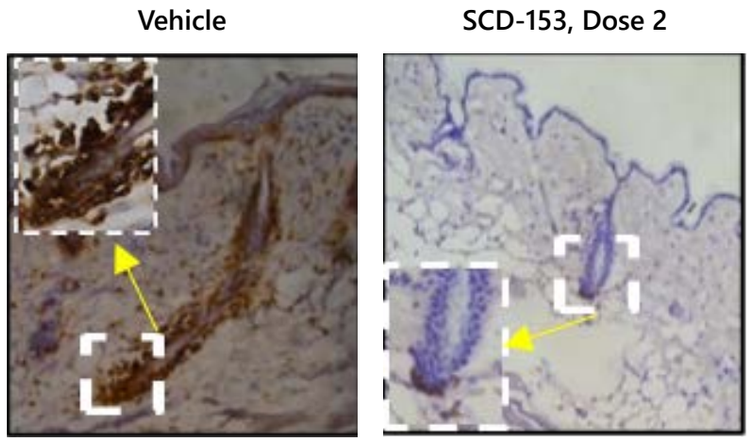
Spontaneous alopecic female C3H/HeJ mice; treated topically on dorsal side only; DMSO formulation used in study. Data were analyzed using 2 way ANOVA followed by Bonferroni's multiple comparisons test *p < 0.05, **p < 0.01, ***p < 0.001 vs Vehicle

SCD-153 treatment shows robust dose-dependent increase in hair growth

SEM: Standard Error of Mean

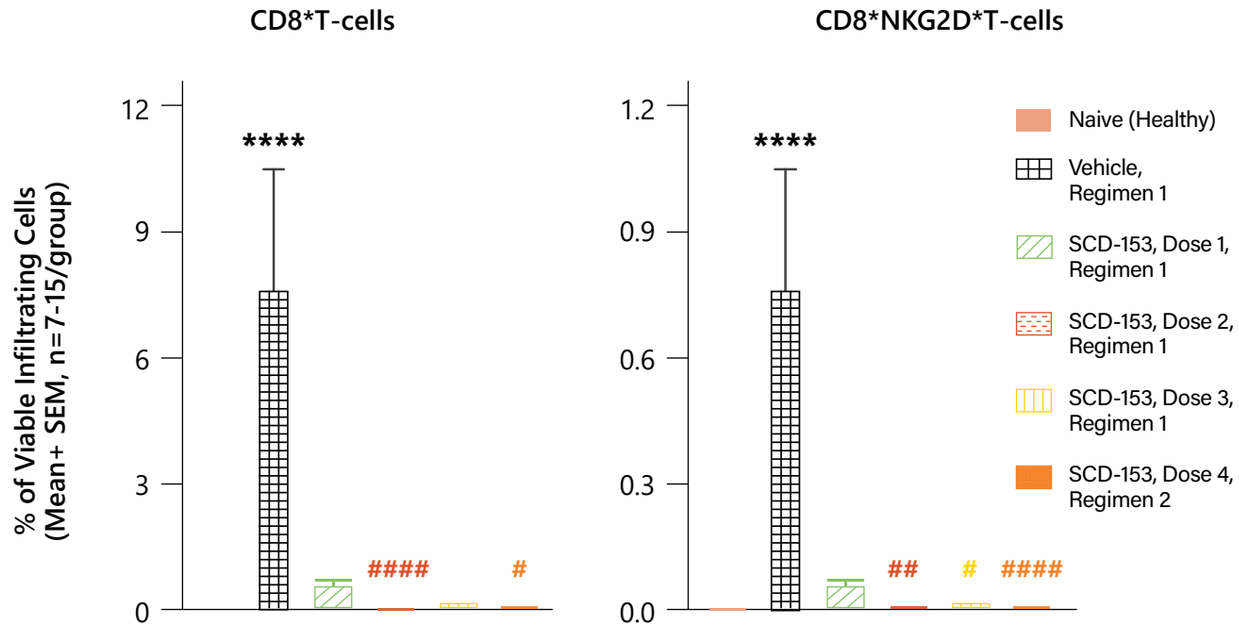
SCD-153 acts by reducing number of cytotoxic CD8+ T-cells in skin of AA diseased mice

IHC readout



Brown stain shows CD8+ T-cells

Flow cytometry readout



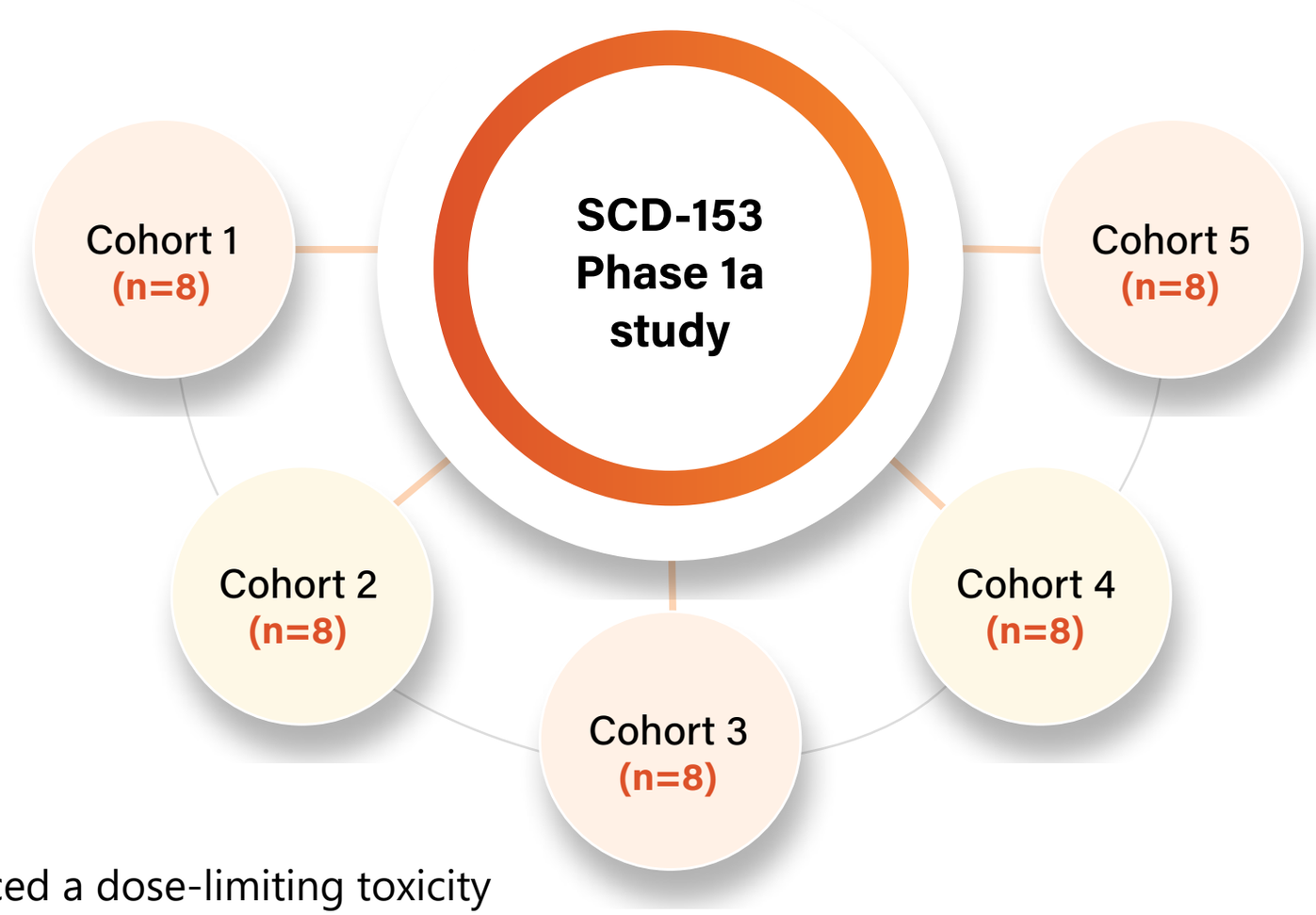
Data are represented as mean ± SD; n=7–15/group. Data were analyzed using Kruskal-Wallis test with post-hoc Dunn's multiple comparison test. **** $p < 0.0001$ vs naïve; # $p < 0.05$, ## $p < 0.01$, #### $p < 0.0001$ vs vehicle

- CD8+ T-cells are the immune cell type associated with AA
- In particular, CD8+ NKG2D+ T-cell is the established disease-causative subtype in AA
- SCD-153 reduces both CD8+ T-cells and CD8+ NKG2D+ T-cells in skin and thereby improves hair growth

IHC: Immuno Histo Chemistry

SCD-153 safe & well-tolerated in Phase 1a study

Study Title: A Randomized, Double-Blind, Vehicle-Controlled, Study to Evaluate the Safety, Tolerability, and Pharmacokinetics of topically applied SCD-153 in Healthy Volunteers



- No subject experienced a dose-limiting toxicity
- Measurable concentration detected in dermis and epidermis
- The maximum safe dose was not reached

SCD-153, at all strengths, is safe and well-tolerated

No systemic AEs related to SCD-153 observed in Phase 1a study

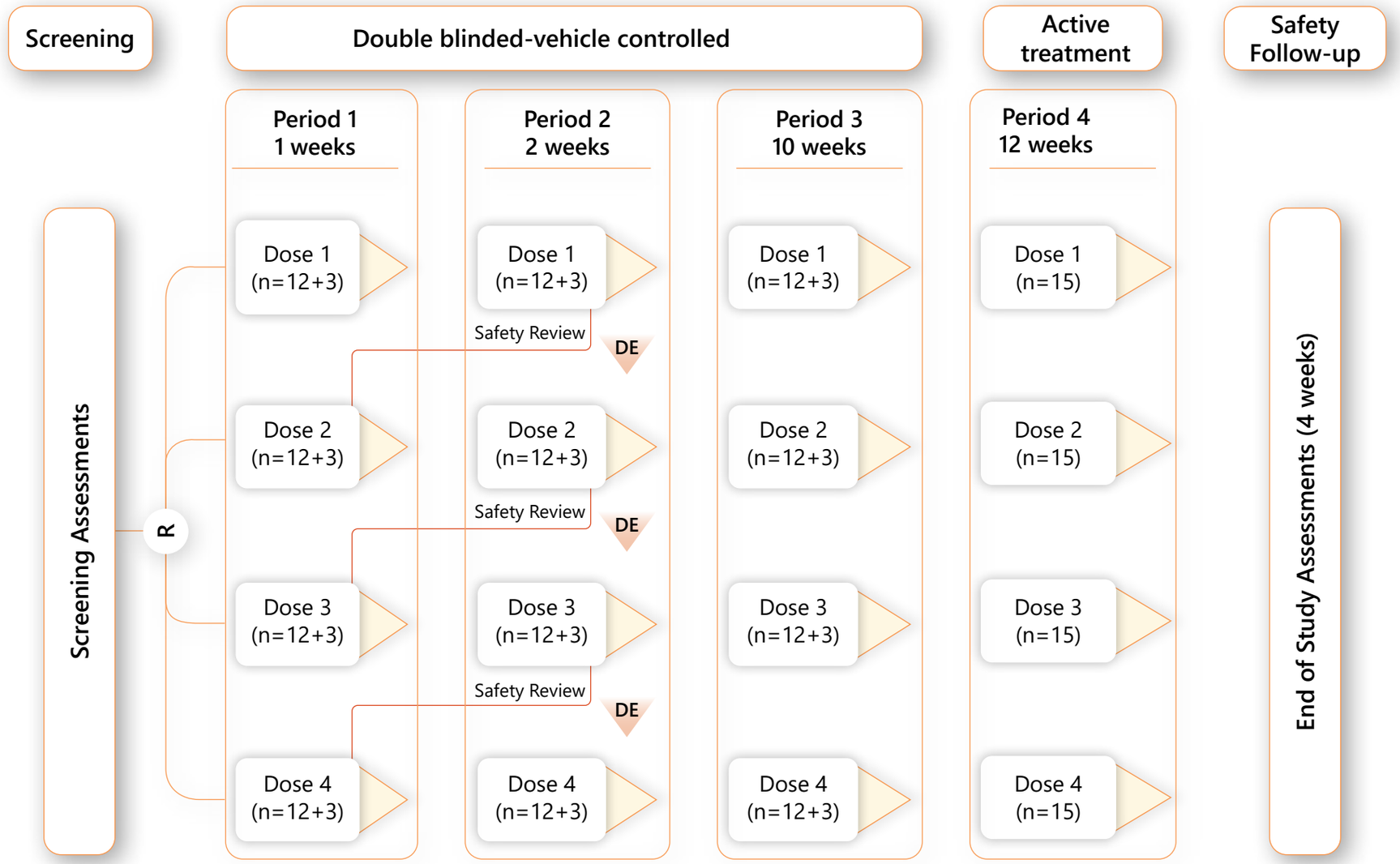
Summary of subjects with drug related AEs (N=40)

Doses	Adverse Events
Dose 1	None
Dose 2	None
Dose 3	None
Dose 4	2 (related: Erythema; score 2 and Burning sensation; n=1)
Dose 5	3 (related: Erythema; score 2; n=2, Burning sensation ; n=1)

All AEs were mild in severity and were resolved without treatment

Phase 1b study in Alopecia Areata patients

- A Randomized, Double-Blind, Vehicle-Controlled Study to Evaluate the Safety, Tolerability, Pharmacokinetics, and Efficacy of Topically Applied SCD-153 in Patients With Alopecia Areata (AA)
- Primary Objective: To determine the maximum safe dose of topical SCD-153 in patients with AA
- Secondary Objective: To evaluate the safety and local tolerability of multiple ascending doses of topical SCD-153 in patients with AA



R: Randomization; DE: Dose Escalation; n=12 (active treatments) + 3 (vehicle)

SCD-153 expands pathway & modality options

Addressing the need for safer and convenient alternatives in Immunology

- SCD-153 employs a new mechanism of action to address complex pathogenesis and diverse range of clinical manifestations
- Topical administration of SCD-153 offers possibilities to be used either in combination or as maintenance treatment with SoC
- Multiple formulation options provide opportunities to expand indications and cater to a large patient pool

Topical SCD-153 addresses the limitations of current treatments and offers a class alternative

Next Steps for SCD-153

Q1 **FY26**
Phase 1b
study Initiation

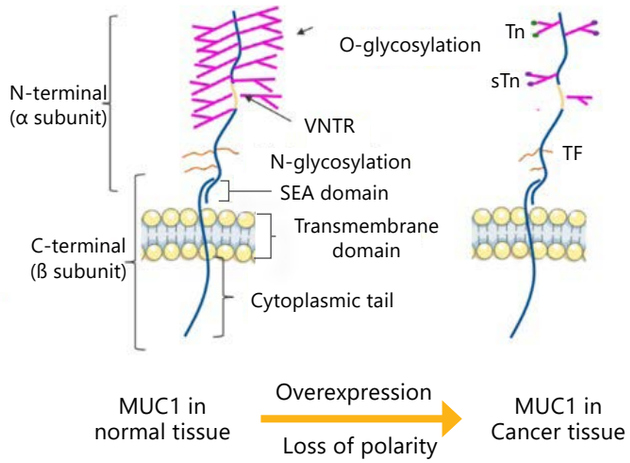
Q1 **FY27**
Phase 1b study
Interim Readout

Q4 **FY27**
Phase 2 IND

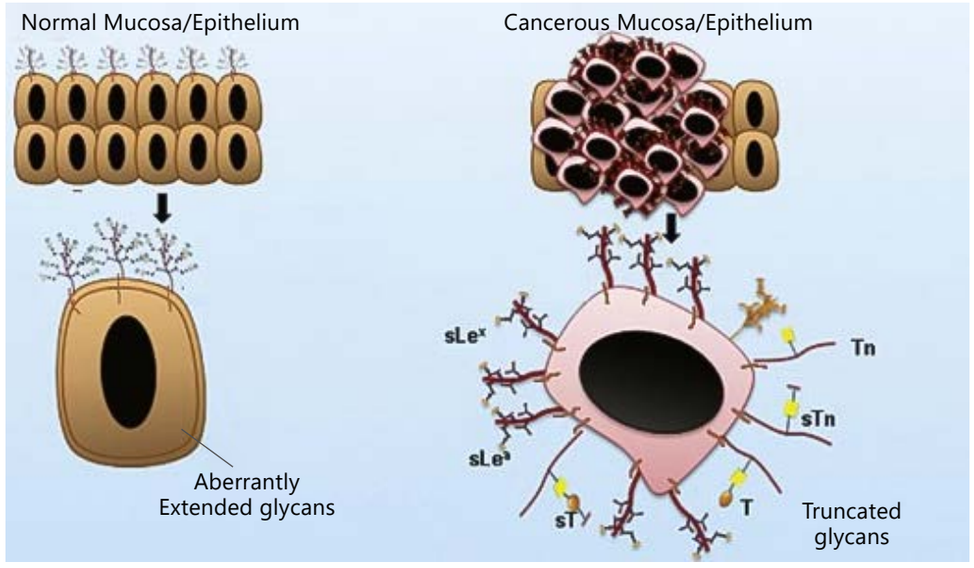
SBO-154
For treatment of multiple tumor types

MUC1 offers an excellent opportunity to preferentially target tumor cells

Structure of MUC1 in normal and cancer cells



Translocation of MUC1 from apical surface (normal cell) to circumferential display (cancer cell)*



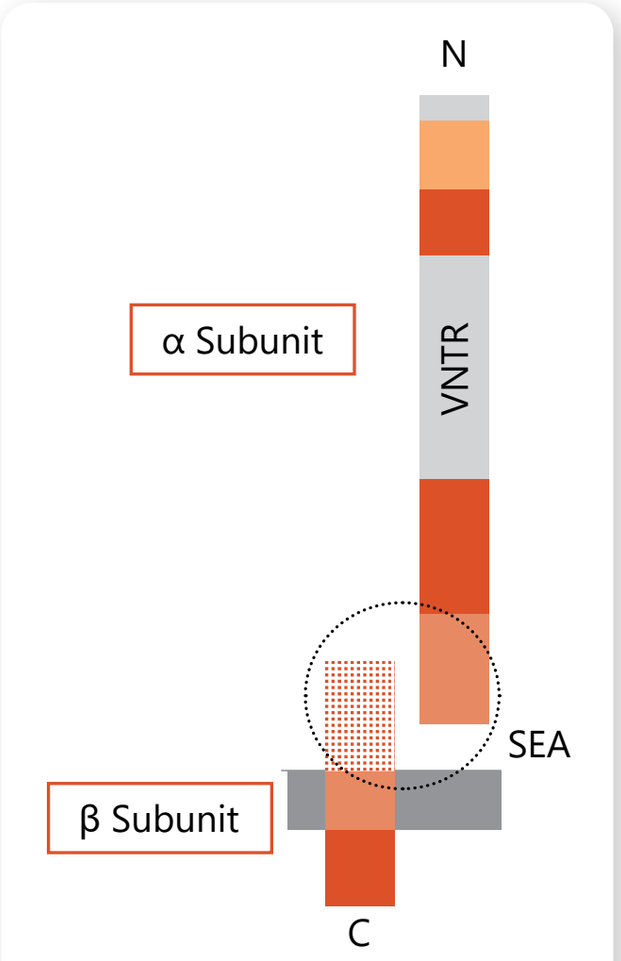
- MUC1 is normally expressed exclusively on the apical surface of glandular epithelial cells
- In cancer cells such polar expression is lost and MUC1 expression occurs across the entire membrane

*Pathobiological implications of mucin glycans in cancer: Sweet poison and novel targets; Seema Chugh et al; Aug 28, 2015

SBO-154 targets the membrane proximal SEA domain of MUC1

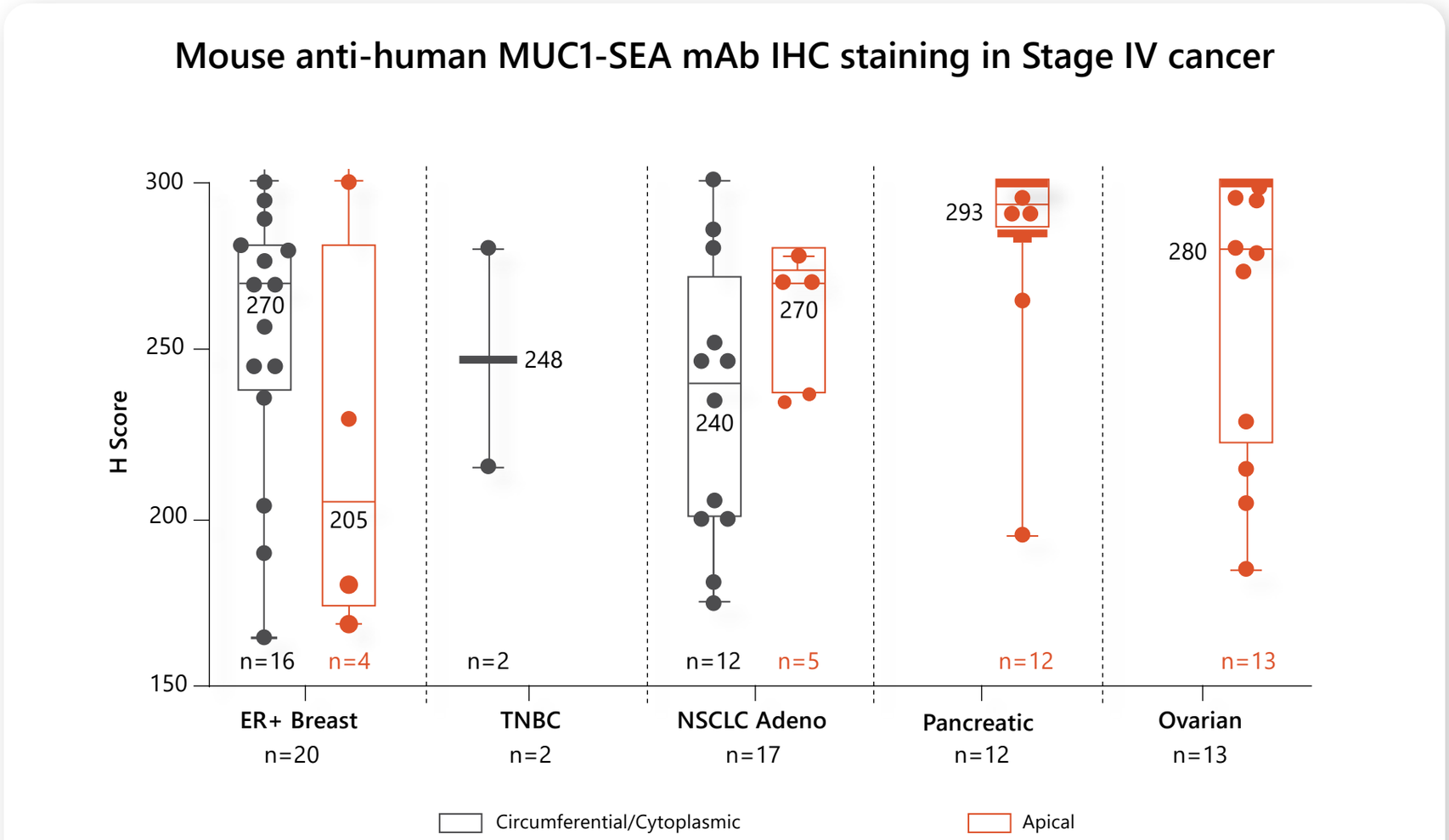
Novel targeting approach makes SBO-154 unlikely to be subject to a sink effect in plasma

- MUC1, the glycoprotein antigen on the cell surface consists of two parts - the α & β subunit
- The junction of α subunit (outside the membrane) & the β subunit (partly embedded) makes the SEA domain
- Drug targeting at SEA domain has higher potential of therapeutic efficacy compared to MUC1-α subunit
- SBO-154 may represent a first-in-class MUC1-SEA-targeted therapeutic agent to be developed for use in cancer therapy



MUC1: Structure, Function, and Clinic Application in Epithelial Cancers; Wenqing Chen et al.; Int. J. Mol. Sci. 22 (12), 6567, 2021

High MUC1-SEA expression level in human tumors of highly prevalent cancers

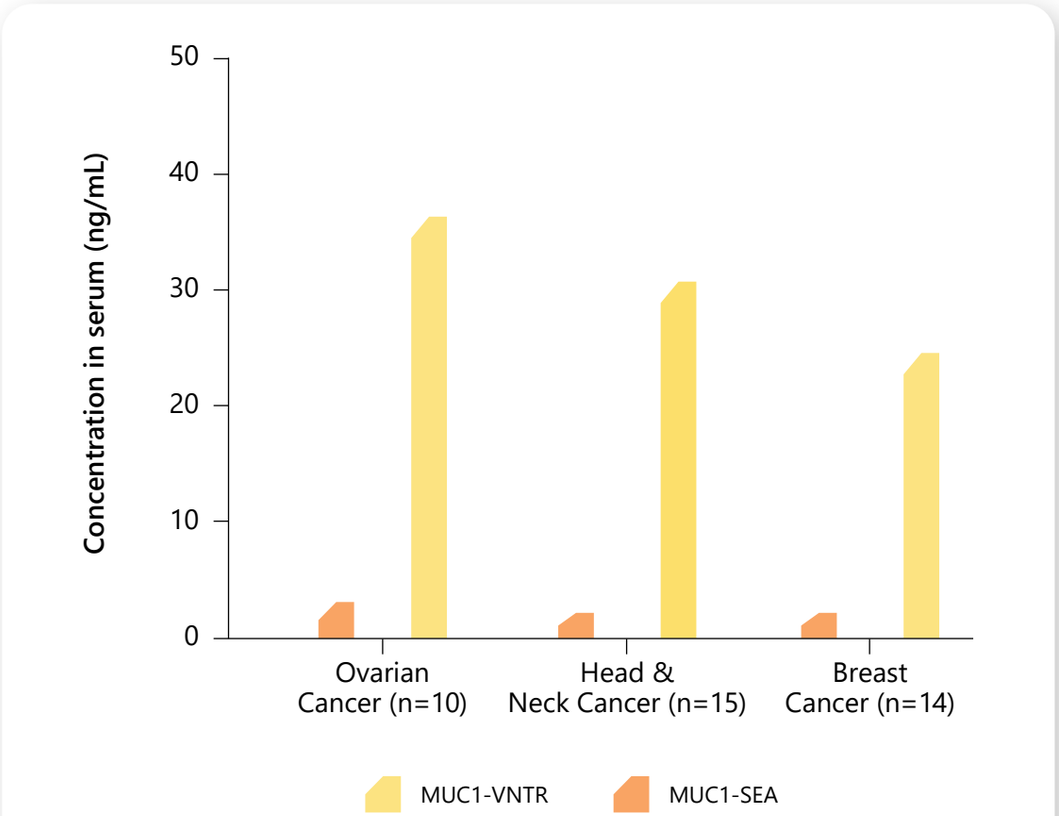


- High MUC1-SEA expression (IHC-H score > 200) in ER+ breast cancer, non-small cell lung adenocarcinomas, ovarian and pancreatic carcinomas
- Expression increases as the stage of the tumor advances
- Preclinical studies further corroborate suitability of MUC1-SEA as an ADC target and establish relevance of antigen expression level

ER: Estrogen Receptor | H score: Histochemical score | TNBC: Triple Negative Breast Cancer | NSCLC: Non-Small Cell Lung Carcinoma

SBO-154: Hypothesis validated

SEA targeting ADC relatively unaffected by shed antigen, retains function of tumor-targeting



MUC1-SEA: sandwich ELISA using MUC1-SEA targeted Ab for coating and detection
MUC1 VNTR: ELISA using MUCI-SEA targeted Ab for coating, and MUC1-VNTR Ab for detection

- Almost all patients with MUC1+ tumors have levels of shed MUC1-VNTR antigen in the plasma
- This shed MUC1-VNTR binds to therapeutic ADCs, acting as a "sink" in the peripheral blood, and may be responsible for the lack of anti-tumor activity of the 1st generation MUC1 targeting ADCs
- Very low levels of MUC1-SEA in plasma of patients with MUC1 expressing tumors, compared to MUC1-VNTR

Finding consistent with the hypothesis that SBO-154 may not lose activity due to the "sink" effect

VNTR: Variable Number Tandem Repeat

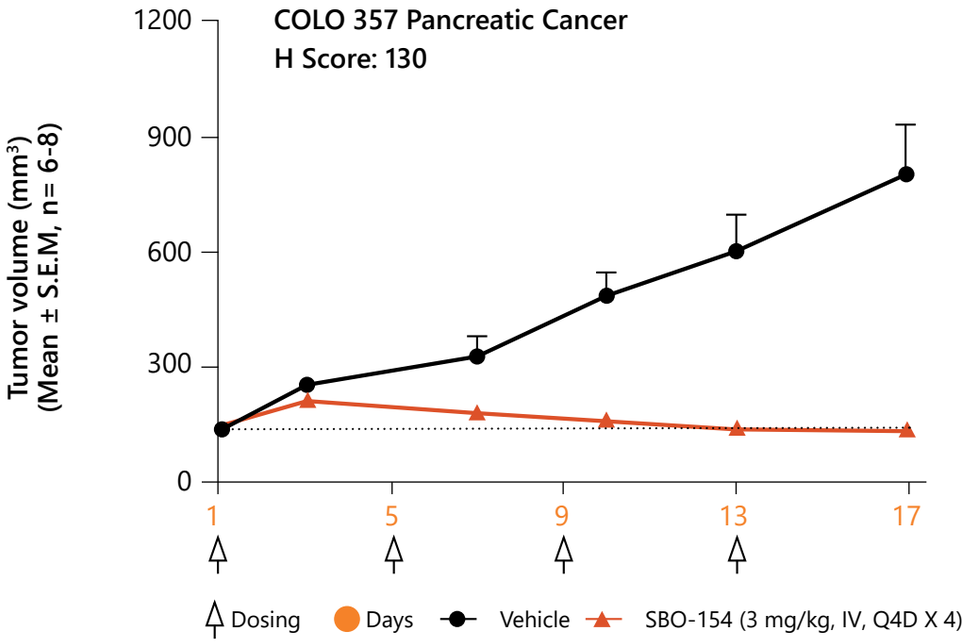
Preclinical efficacy of SBO-154 correlates with MUC1-SEA expression level

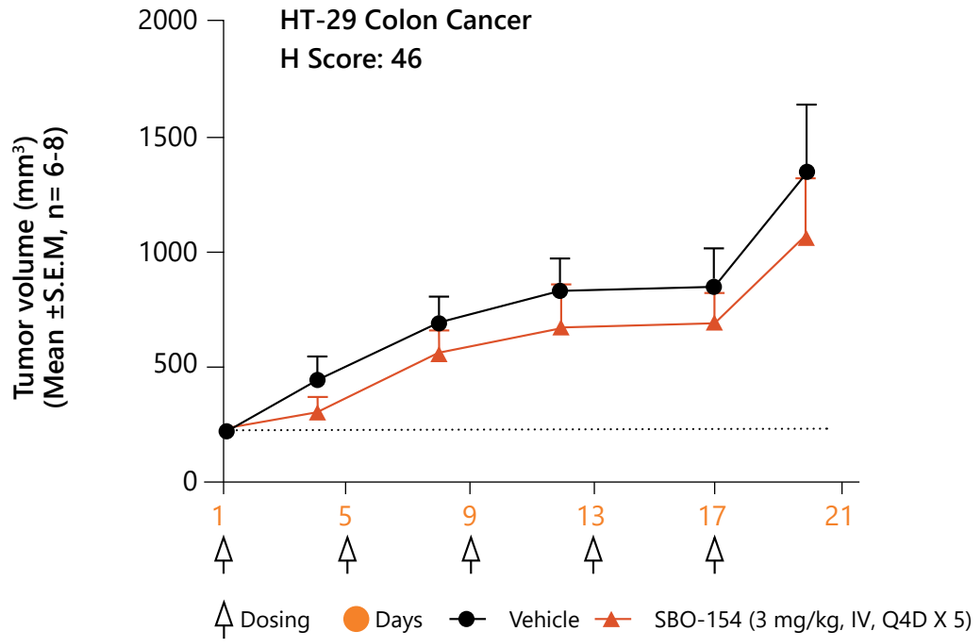
In vitro cytotoxicity studies

Carcinoma cell line	Expression level (by flow cytometry)	SBO-154 ADC IC_{50} (µg/mL)	Anti-CD20 ADC (unrelated ADC) IC_{50} (µg/mL)
Colo-357 (Pancreatic)	+++	0.05	3.45
MCF7 (ER+ve Breast cancer)	++	0.07	>10
HT29 (Colon)	+/-	>10	>10

SBO-154 ADC shows high potency in cells where MUC1 expression is high

In vivo mouse xenograft studies





SBO-154 ADC shows higher activity *in vivo* against tumors where MUC1 expression is high

IV: Intravenous | IC_{50}: Half-maximal Inhibitory concentration

Preliminary NHP Tox suggests SBO-154 is well-tolerated with toxicity profile comparable to other MMAE-based ADCs

NHP exploratory 7 week DRF study

Doses	1, 3, 6 mpk of SBO-154
Dosing schedule	Q3W x 3; Dosing Days: 1, 22 and 43
Results	• No mortality or clinical signs • No effect on body weight and feed consumption at any dose • Hematology data showed reduced RBC, WBC and neutrophil count at 3 mpk and 6 mpk. Expected based on known effects of MMAE • Histopathology: Minimal to moderate, decreased hematopoietic cellularity (all lineages) in sternal bone marrow was observed in males at 3 mpk and in females at ≥ 3 mpk • HNSTD: 6 mg/kg, Q3W x 3, IV; 7-week study
Toxicokinetics	Dose-proportional increase in exposure with no gender difference and accumulation following Q3W X 2, IV administration

Up to 6 mg/kg IV dose was generally well-tolerated (n=1M+1F/group)

HNSTD: Highest Non-Severely Toxic Dose | NHP: Non Human Primate | DRF: Dose Range Finding | MMAE: Monomethyl Auristatin E

SBO-154 development update

Preparedness for Phase 1 study

- **Pre-IND meeting**
  - USFDA response received at the end of Nov 2024 indicates broad agreement with SPARC's proposed IND data package with no significant barriers to planned IND submission
- **Phase 1 study**
  - Global Phase 1 study planned to include the United States and India

Phase 1 study design

Key inclusion & exclusion criteria

- ≥ 18 years
- Measurable disease via RECIST 1.1
- ECOG 0-1
- Life expectancy of ≥ 3 months
- Pre-existing sensory or motor neuropathy (≥ Grade 2)
- Uncontrolled CNS metastases

Dose escalation (N=30)

Advanced or meta-static solid tumors, relapsed/ not eligible to receive SoC

Dose expansion (N=30 per cohort)

- Cohort 1: ER+ breast cancer
- Cohort 2: Non small cell lung cancer
- Cohort 3: Ovarian cancer

Endpoints

- Primary endpoints
  - Safety
  - PK
- Secondary endpoints
  - Immunogenicity
  - Anti-tumour activity

ECOG: Eastern Cooperative Oncology Group | CNS: Central Nervous System

Timelines & Milestones

Q4

FY25

IND Filing

Q1

FY26

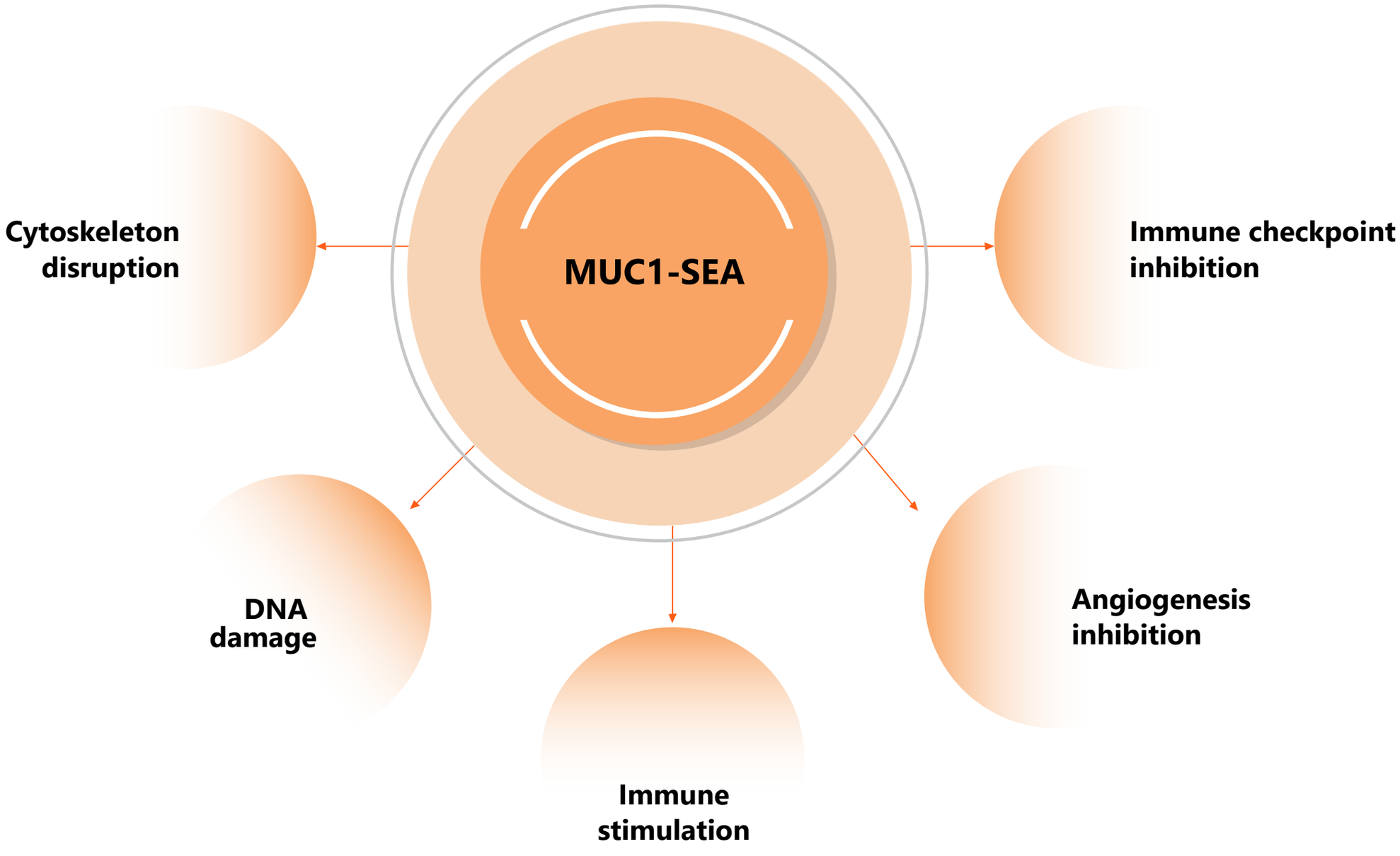
Phase 1a Initiation

Q3

FY27

Phase 1b Initiation

Modular platform which can deliver multiple products to the pipeline



Pipeline summary - Multiple first-in-class assets under development

Asset / Program	MoA	Indication	Discovery	Preclinical	Phase 1	Phase 2	Phase 3	Registration	Approved	Commercialization Partner
PDP-716	α2 adrenergic agonist	Glaucoma								Ocuvex Therapeutics
SDN-037	Phospholipase A2 inhibitor	Ocular Pain & Inflammation								Ocuvex Therapeutics
Vodobatinib	BCR-ABL Inhibitor	Refractory CML								
Vibozilimod	Selective S1PR1 agonist	Psoriasis								SUN PHARMA
		Atopic Dermatitis								SUN PHARMA
SCD-153	Itaconate derivative	Alopecia Areata								
SCO-155	Small Molecule Drug Conjugate	Prostate Cancer								Tiller Therapeutics
SBO-154	Anti-MUC1 ADC	Solid Tumors								

Small Molecules Biologics

MoA = Mechanism of Action |S1PR1 = Sphingosine-1-Phosphate Receptor 1

sparc

THANK YOU