



*Novel **succinate-modulating** first-in-class therapy for **Inflammatory Bowel Disease***

*- NON-CONFIDENTIAL DECK -
[WITH SUPPORTING DATA]*

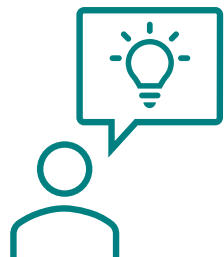
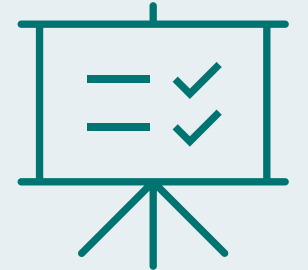
A spin-off company from





Company → **SUCCIPRO** is a biotech spin-off from Institut d'Investigació Sanitaria Pere Virgili (IISPV) and Universitat Rovira i Virgili (URV), incorporated in **Barcelona (Spain)** in March 2022, aiming to exploit the **succinate-metabolic-inflammatory axis** to create novel, first-in class therapeutics for inflammatory and metabolic diseases. Headquarter in **Barcelona**, with research facilities in Tarragona (at the IISPV).

Mission → to leverage on cutting-edge unique scientific knowledge on **succinate biology** to develop novel therapeutic agents that **reduce excess succinate levels**, promoting a **healthy microbiome**, reducing intestinal and systemic **inflammation**, and preventing **fibrosis**. **SUCCIPRO** plans to advance its lead program to early-stage clinical development for **Inflammatory Bowel Disease (IBD)**, as well as to explore additional indications of the technology in other diseases that present with elevated levels of succinate, such as MAFLD, T2D or cancer.



Vision → **succinate-modulation therapies** will provide novel safe and effective **therapeutic alternatives** for patients living with chronic **illnesses** with a strong **chronic inflammatory** component, having a bold positive **impact** on the long-term **health** and **quality of life** of the overall population.



Isabel Huber, PhD, MBA
CEO & Co-founder

*Pharmacist
PhD in Biochemistry & MBA
Former Scientific Manager of
Mosaic Biomedicals
2 patents*



Sonia Fernández-Veledo, PhD
CSO & co-founder

*Principal Investigator at DIAMET
Research Team
+90 scientific articles
16 competitive research grants
3 patents
KOL in succinate biology*



Joan Vendrell, MD
Medical Adv. & co-founder

*Full Medicine Professor at URV
Principal Investigator at DIAMET
Research Team
Clinical Endocrinologist
+ 300 scientific articles
24 competitive research grants
8 clinical trials
6 patents*



EXTERNAL ADVISORS



Carolina Salcedo, PhD
Drug Development Dir.

*+35 years of experience in pre/clinical
drug development. Over 20 research
projects from early preclinical to NDA
(4 molecules on the market).
Former CSO at Sanifit Laboratoris*



Manuel Barreiro, MD
Clinical advisor

*Former President of the Spanish
Working Group on IBD
Member of the European Chron's
and Colitis Organization (ECCO).
KOL in IBD*



JM Fernández-Real, MD
Scientific Advisor

*Clinical Endocrinologist
+470 articles
+20 research projects
Coordinator of the European
ThinkGut project*



Vicenç Tur, MBA
Chief Business Officer

*+20 years of experience as CEO, CFO
and CBO. Former co-founder and
CEO of Laminar Pharma*



Cesyen Cedeño, PhD
CMC (biologics manufacturing)

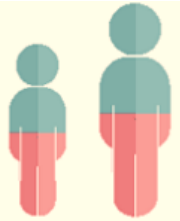
*5+ years of experience in GMP
biologics manufacturing,
regulatory compliance, and
quality management systems*



Maribel Berges, MSc, MBA
Business advisor

*+30 years in Innovation
Previous founder & CFO
of Spherium BioMed
CEO of AffirmaBio*

CD, an incurable Inflammatory Bowel Disease



AVERAGE AGE AT DIAGNOSIS:
15-35 YEARS OLD



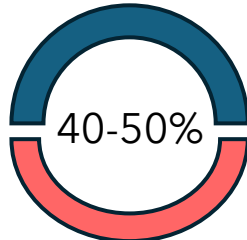
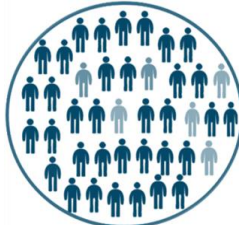
>7M IBD CASES GLOBALLY

MULTI-CAUSAL

CHRONIC



INCURABLE



NON-RESPONDERS



SERIOUS TOXICITY ISSUES OF CURRENT THERAPIES



PREVALENCE INCREASING AT A YEARLY RATE OF 3%



URGENT NEED OF SPECIFIC BIOMARKERS

Source: Caviglia GP, Garrone A, et al. J Clin Med. 2023 Jan 13;12(2):641.



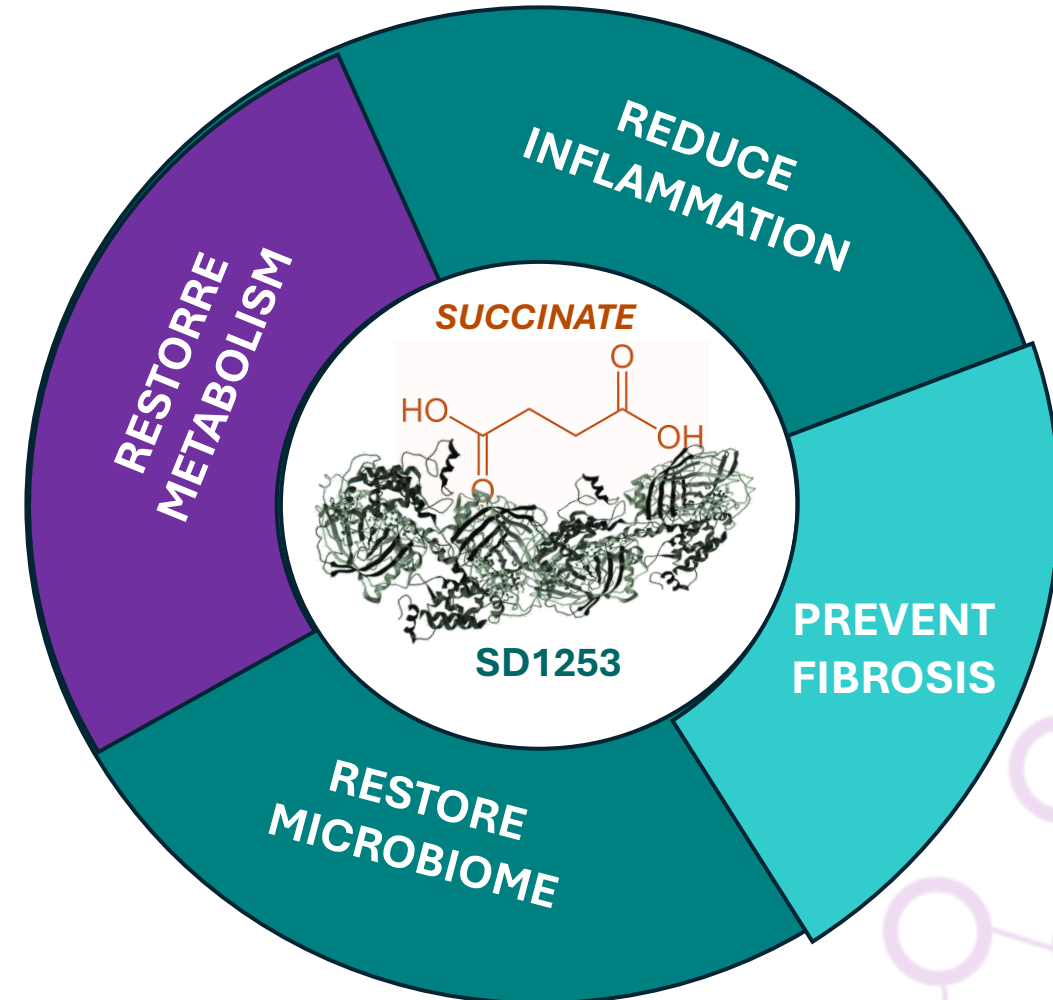
By selectively depleting the excess intestinal succinate, **SD1253** provides a **multi-dimensional approach** to treat the disease

PROBLEM

- **HIGH SUCCINATE** PROMOTES **DYSBIOSIS** AND **INFLAMMATION**, AND DRIVES **FIBROSIS**
- NO SUCCINATE-MODULATING DRUGS AVAILABLE
- DIFFICULT TO TARGET

- ✓ IN SILICO-DESIGNED **SUCCINATE-MODULATING** THERAPY FOR INFLAMMATORY AND METABOLIC DISORDERS
- ✓ FIRST INDICATION: **INFLAMMATORY BOWEL DISEASE**

SOLUTION



SUCCINATE MODULATION: A POTENTIAL DISEASE-MODIFYING STRATEGY (II)

Barrier Disruption

Succinate induces **fibrotic markers**
Increased SUCNR1 expression in human fibroblasts.

Macías-Ceja et al., *Mucosal Immunol* 2019

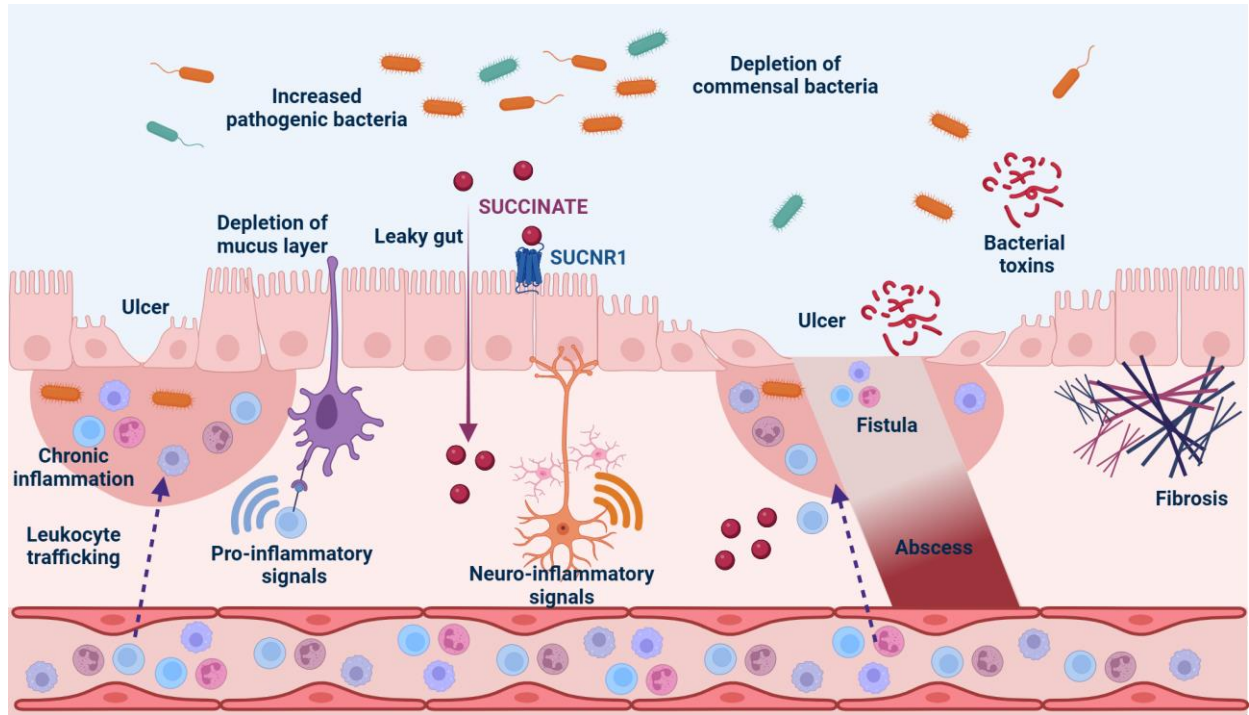
Chronic Inflammation

Succinate induces **proinflammatory markers**

Macías-Ceja et al., *Mucosal Immunol* 2019, Connors et al., *Nutrients* 2019, Monfort-Ferre et al., *J Crohn Colitis* 2022

Inflammation is perpetuated by **increased transporter-mediated succinate uptake into macrophages**

Fremder et al., *Cell Rep* 2021



Microbial Dysbiosis

Gut microbiota-produced succinate promotes **C. difficile** infection

Ferreira et al., *Cell Host Microbe* 2014

Succinate-metabolizing bacteria altered in IBD patients, Prognostic value by succinotype

Connors et al., *Nutrients* 2019
Fremder et al., *Cell Rep* 2021
Anthamatten et al., *Microbiome* 2024
O'Sullivan et al., *Gut Microbes* 2025

Fistulas-Abscesses-Fibrosis

Succinate and its receptor SUCNR1 are up-regulated around **CD-fistulas**
Wnt signalling and EMT activated in intestinal epithelial cells.

Ortiz-Masiá et al., *Mucosal Immunol* 2019

Why depleting Intestinal Succinate will make a difference in CD?



- **CD** is characterized by **chronic inflammation**, **dysbiosis**, and **metabolic imbalances in the gut**, with **elevated succinate levels** playing a central role in disease progression.



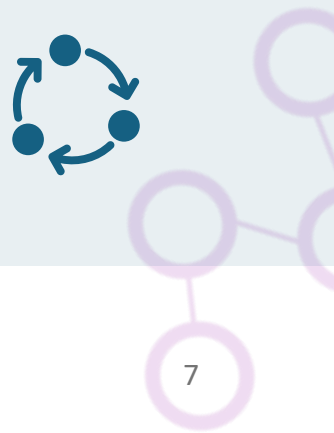
- **Succinate** acts as a **signaling metabolite** that **activates immune cells via the SUCNR1 receptor**, promotes **fibrosis**, and fuels **inflammatory** responses.



- **Current therapies**, including biologics and small molecules, **focus on downstream inflammation control** but **do not address the metabolic trigger fueling persistent immune activation**



- By depleting excess intestinal succinate, **SD1253** provides a **disease-modifying approach** that **restores metabolic homeostasis, improves microbiome's balance, reduces inflammation at its source**, and **prevents fibrosis**.



Elevated circulating levels of succinate in human obesity are linked to specific gut microbiota. Serena et al. **The ISME Journal**. **IF: 9.5**

Impaired Succinate Response to a Mixed Meal in Obesity and Type 2 Diabetes Is Normalized After Metabolic Surgery. Astiarraga et al. **Diabetes Care**. **IF: 16.019**

Crohn's Disease Increases the Mesothelial Properties of Adipocyte Progenitors in the Creeping Fat. Madeira et al. **International Journal of Molecular Sciences**. **IF: 5.924**

Rethinking succinate: an unexpected hormone-like metabolite in energy homeostasis. Fernandez-Veledo et al. **Trends in Endocrinology & Metabolism**. **IF: 12.015**

Preoperative Circulating Succinate Levels as a Biomarker for Diabetes Remission After Bariatric Surgery. Ceperuelo-Mallafre et al. **Diabetes Care**. **IF: 16.019**

Gut microbiota-derived succinate: Friend or foe in human metabolic diseases? Fernandez-Veledo et al. **Reviews in Endocrine and Metabolic Disorders**. **IF: 6.19**

Orally administered *Odoribacter laneus* improves glucose control and inflammatory profile in obese mice by depleting circulating succinate. Huber-Ruano et al. **Microbiome**. **IF: 16.837**

SUCNR1 signaling in adipocytes controls energy metabolism by modulating circadian clock and leptin expression. Villanueva-Carmona et al. **Cell Metabolism**. **IF: 31.373**

SUCNR1 controls an anti-inflammatory program in macrophages to regulate the metabolic response to obesity. Keiran et al. **Nature Immunology**. **IF: 20.5**

Crohn's Disease Disturbs the Immune Properties of Human Adipose-Derived Stem Cells Related to Inflammasome Activation. Serena et al. **Stem Cell Reports**. **IF: 7.765**

The Gut Microbiota Metabolite Succinate Promotes Adipose Tissue Browning in Crohn's Disease. Monfort-Ferré. **Journal of Crohn's and Colitis**. **IF: 10.020**

The role of microbial succinate in the pathophysiology of inflammatory bowel disease: mechanisms and therapeutic potential. Fernandez-Veledo et al. **Current Opinion in Microbiol.** **IF: 7.5**

...and more...

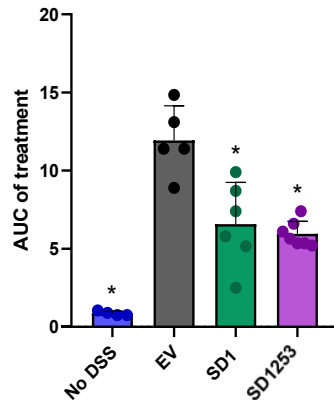
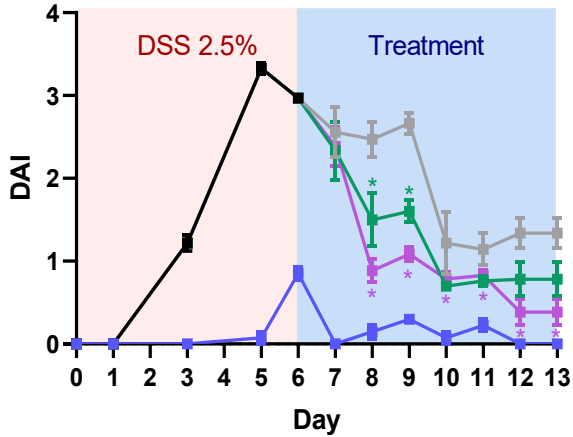
The collage features several scientific articles:

- ISME Journal**: "Elevated circulating succinate in human obesity is linked to specific gut microbiota." (Serena et al., IF: 9.5)
- Diabetes Care**: "Impaired Succinate Response to a Mixed Meal in Obesity and Type 2 Diabetes Is Normalized After Metabolic Surgery." (Astiarraga et al., IF: 16.019)
- International Journal of Molecular Sciences**: "Crohn's Disease Increases the Mesothelial Properties of Adipocyte Progenitors in the Creeping Fat." (Madeira et al., IF: 5.924)
- Trends in Endocrinology & Metabolism**: "Rethinking succinate: an unexpected hormone-like metabolite in energy homeostasis." (Fernandez-Veledo et al., IF: 12.015)
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- Journal of Crohn's and Colitis**: "The Gut Microbiota Metabolite Succinate Promotes Adipose Tissue Browning in Crohn's Disease." (Monfort-Ferré, IF: 10.020)
- Current Opinion in Microbiol.**: "The role of microbial succinate in the pathophysiology of inflammatory bowel disease: mechanisms and therapeutic potential." (Fernandez-Veledo et al., IF: 7.5)

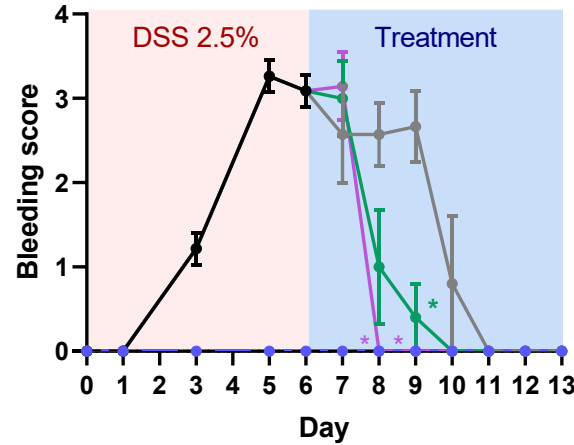
SD1253, A THERAPEUTIC ENZYME WITH COMPELLING EFFICACY IN ANIMALS



DISEASE ACTIVITY

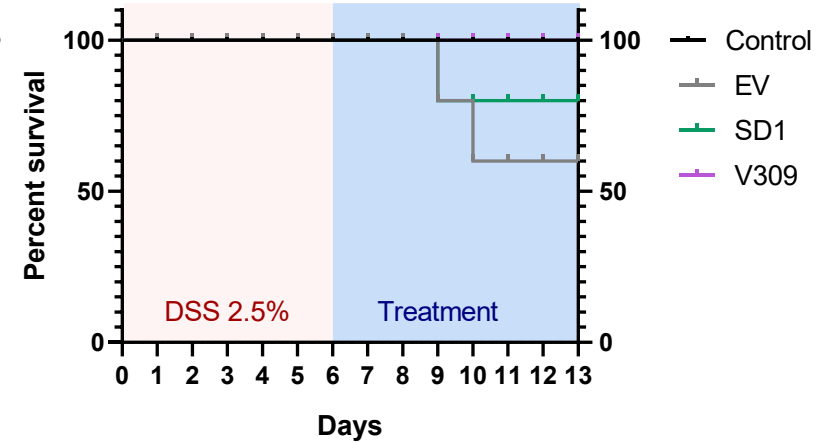


RECTAL BLEEDING



- No DSS
- DSS
- EV
- SD1
- SD1253

Survival Curve

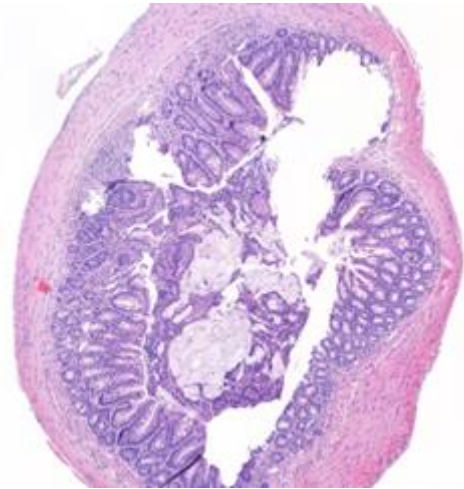


No DSS = healthy controls (animals without DSS-induced colitis)
 EV = disease animals + Empty Vector (Control)
 SD1 = disease animal + non-optimized lead
 SD1253 = disease animal + final optimized lead

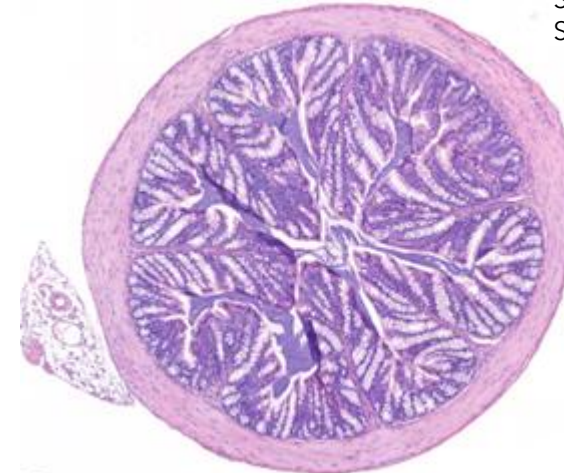
HEALTHY CONTROL



DISEASE + VEHICLE

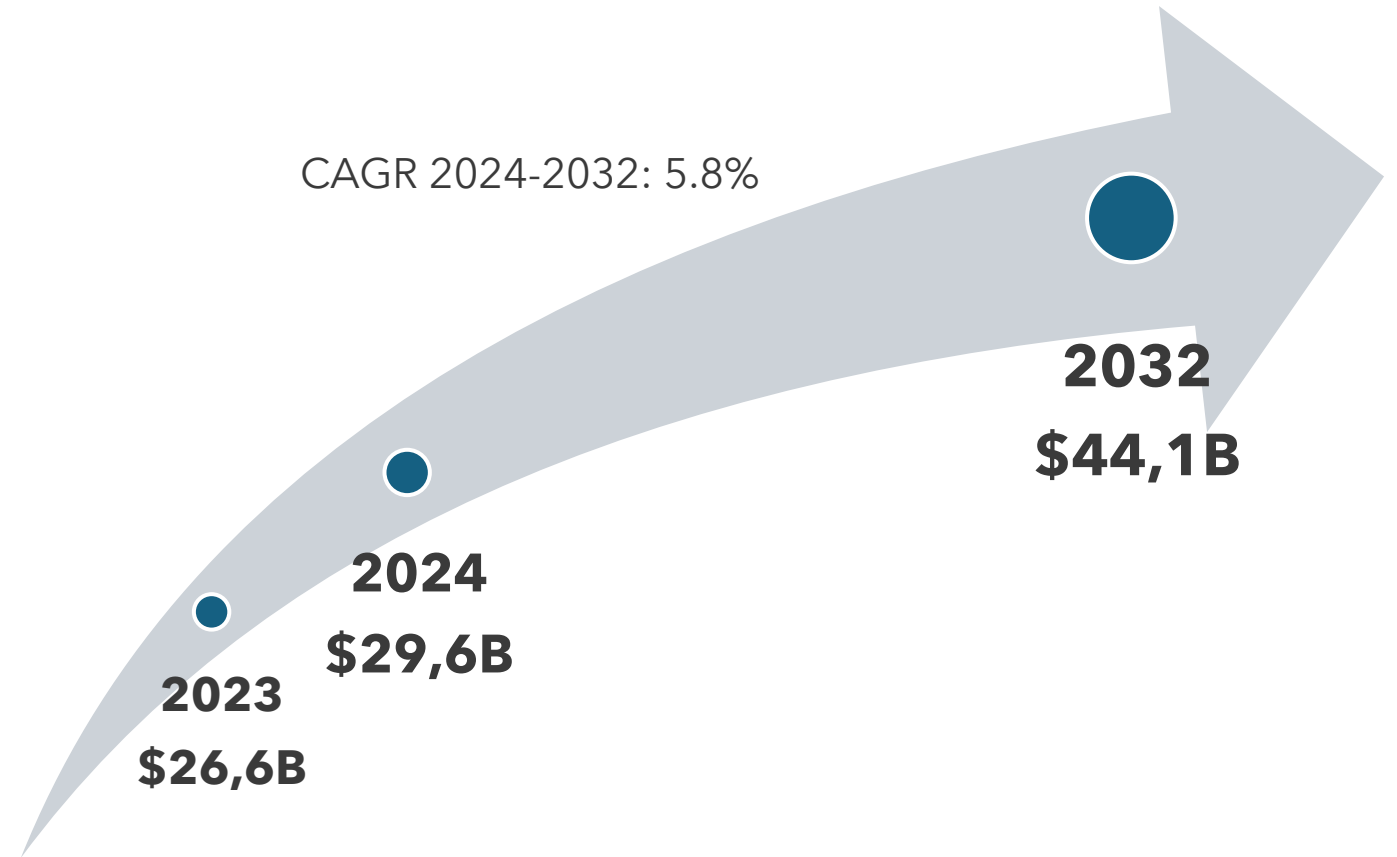
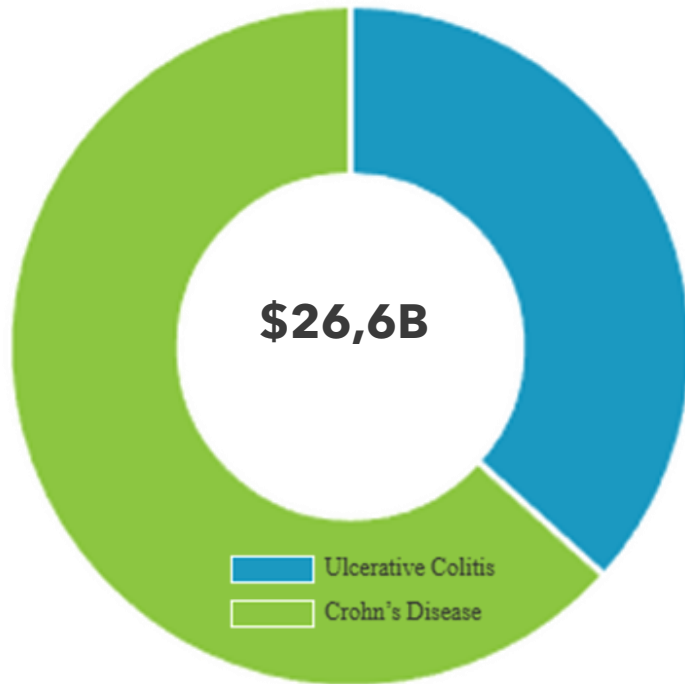


DISEASE + SD1253



IBD, A multibillion \$ market with sustained growth projections

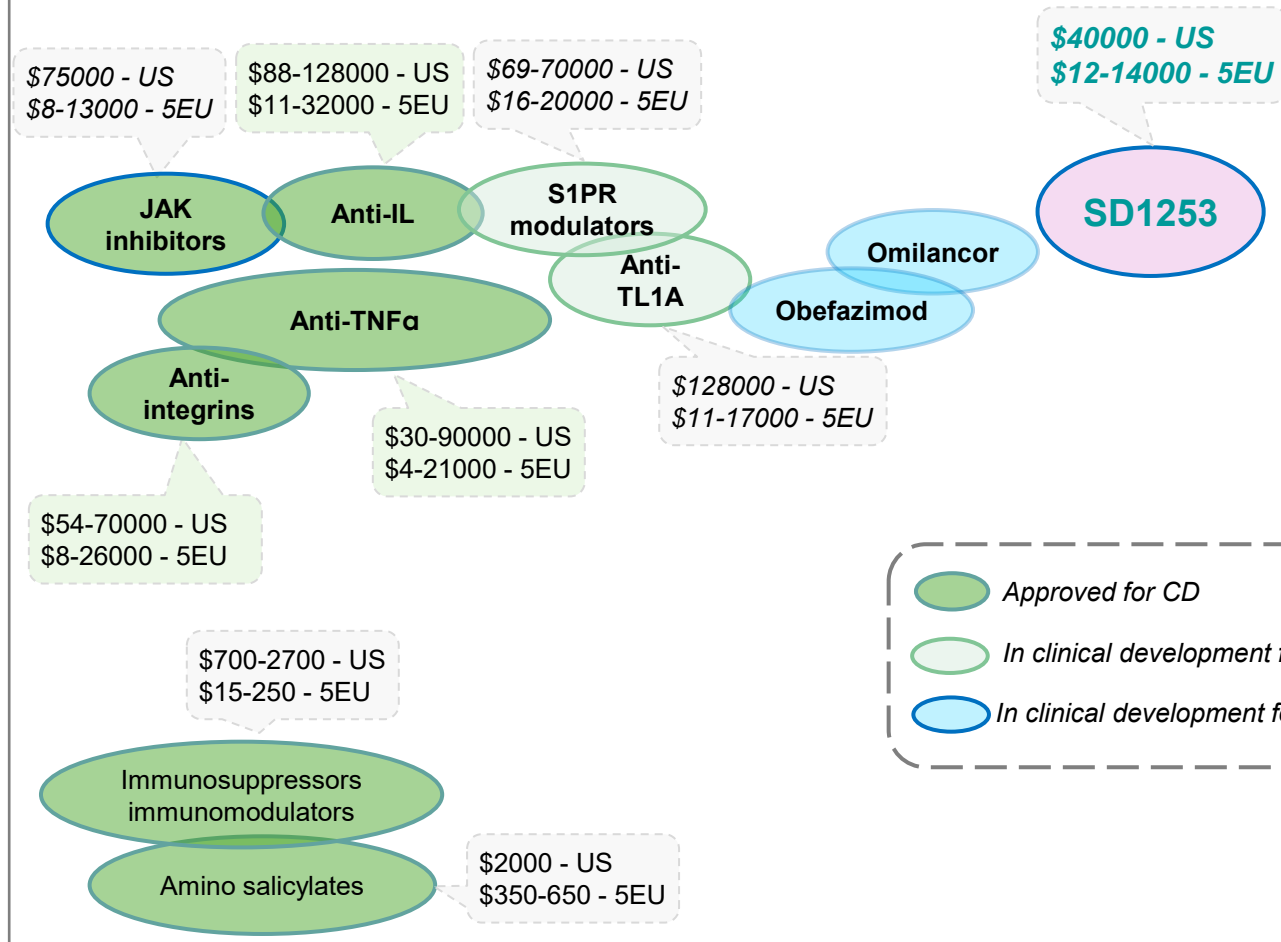
Global Inflammatory Bowel Disease Treatment Market Share, by disease indication, 2023



The global inflammatory bowel disease treatment market size was valued at USD 26.55 billion in 2023 and is projected to grow from USD 29.57 billion in 2024 to USD 44.08 billion by 2032, exhibiting a CAGR of 5.8% during the forecast period (2024-2032). Source: Fortune Business Insights

ANTICIPATED COMPETITIVE POSITIONING IN CD

EFFICACY



Competitive positioning of SUCCIPRO'S **SD1253**. Annual Cost of Treatment (**ACOT**) for therapeutic interventions used in the management of Crohn's Disease (CD) & main products in development

- Approved for CD
- In clinical development for CD (biologics)
- In clinical development for CD (Oral)

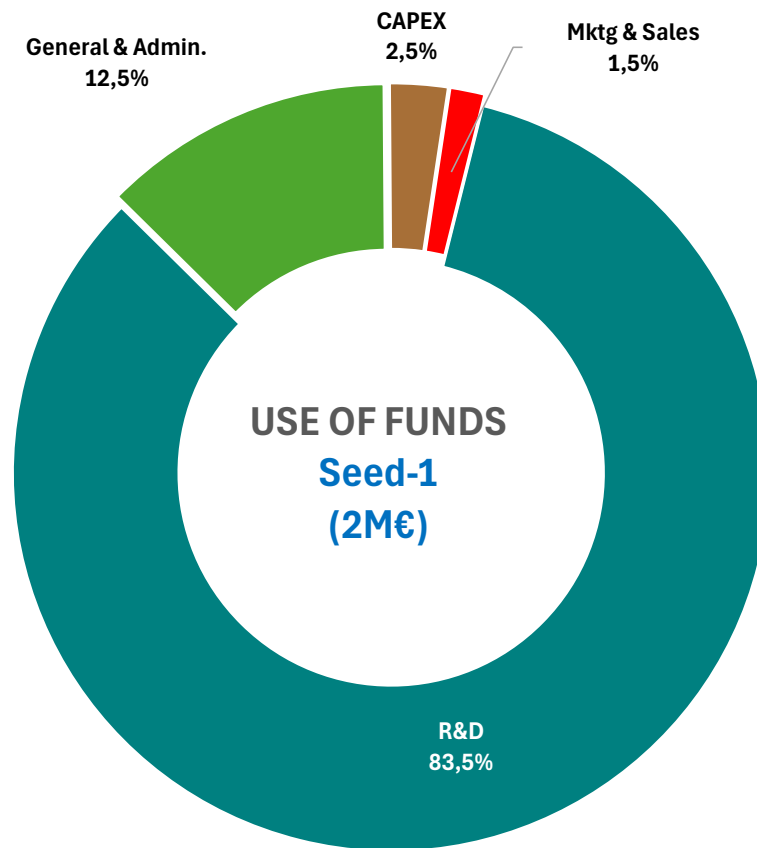
SAFETY





Source: own estimations, Alira Health market research & GlobalData

CURRENT INVESTMENT OPPORTUNITY: 2M€ SEED-1 ROUND (*~1,6M€ already secured*)

X20 +
Expected return



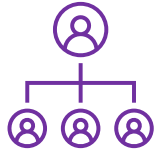
4 M€
Pre-money valuation

 **>1,7M€ already in place** (in equity & non-dilutive funding).
 **~0,3M€ available in equity** for investors.

2030
Expected exit

> 2,6 M€
Funding already secured
(including 1,7M€ in this seed-1)

We have already raised >2,6M€ in equity & non-dilutive funds, and plan to raise some further ~30M€ to advance SD1253 until completion of a Phase 2a trial in patients with IBD (Crohn's Disease, CD). In this current **seed-1 round** we aim to raise ~**2M€** (as part of a total **seed round of 5,5M€**). **>1,7M€ already secured** in non-dilutive (~1,4M€ for 2025-2027) and equity. **~0,3M€ in equity available for new investors within Q1-2026**. Proceeds of this seed-1 will allow us to advance the **CMC development** (obtention of an **engineering batch**) and initiate the **regulatory preclinical package** (until pivotal tox studies).



MULTI-DISCIPLINARY
TEAM OF EXCELLENCE



CUTTING-EDGE SCIENCE TO
ADDRESS A SERIOUS MEDICAL
NEED



TECHNOLOGY PATENTED
GLOBALLY



HUGE POTENTIAL MARKET,
WITH AN STEADY GROWTH



20X+ EXPECTED RETURN
[+ 50% TAX CREDIT FOR
PRIVATE INVESTORS]



A PROJECT WITH IMPACT
[SOCIAL, MEDICAL,...]



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COMO EMPRESA
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DE INDUSTRIA,
COMERCIO Y
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Isabel.huber@succipro.com



ANNEX.

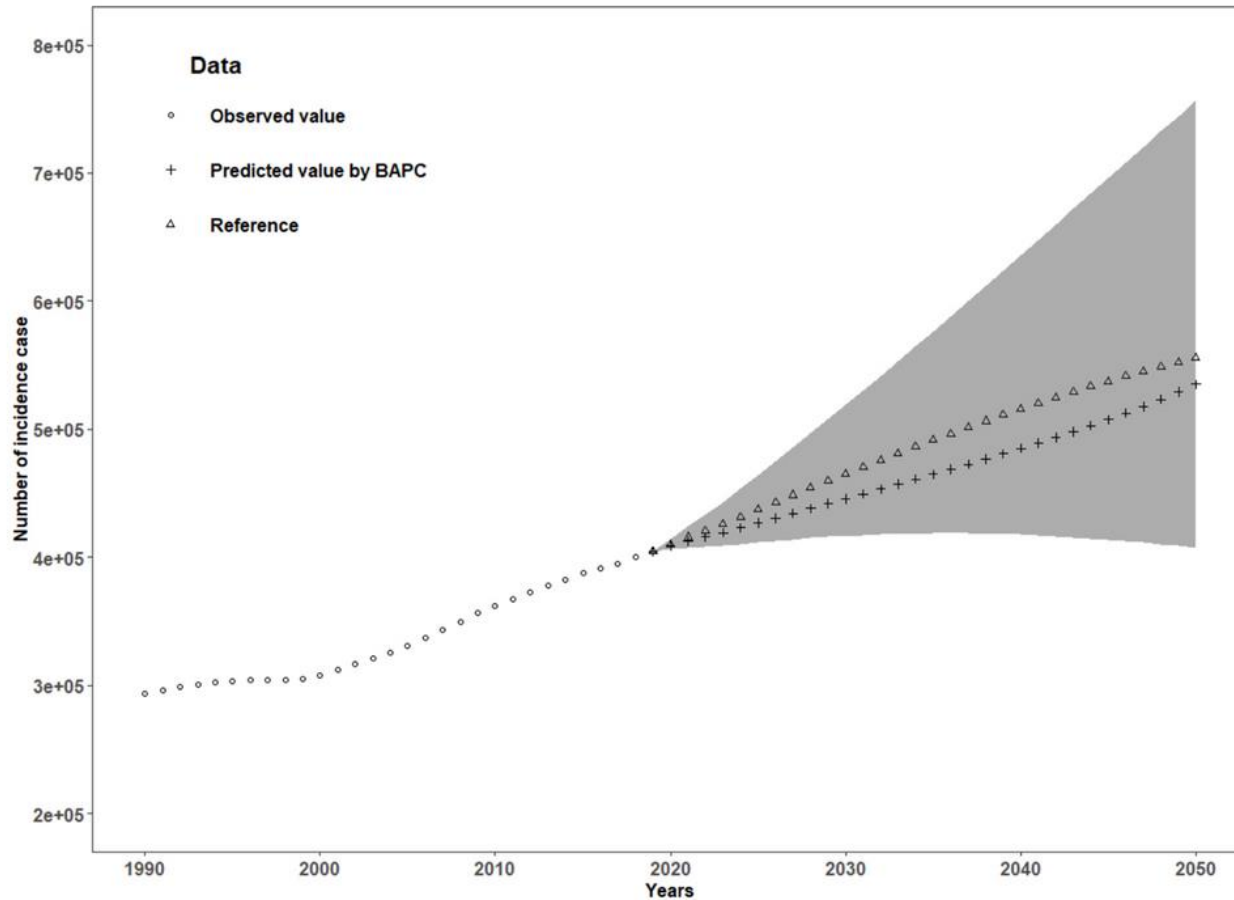
SUPPORTING DATA

EXECUTIVE SUMMARY

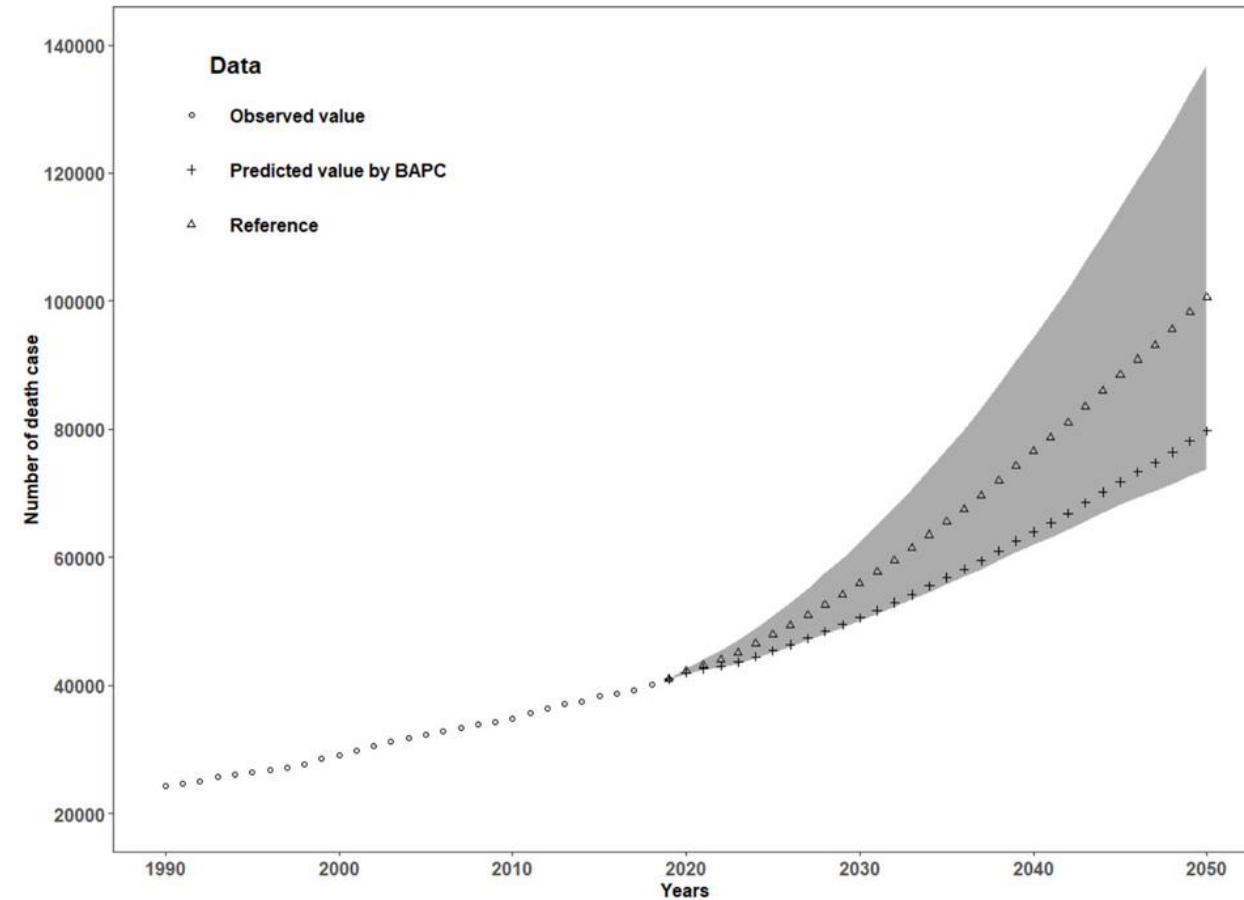
- 
SUCCIPRO, a pioneering biotech startup, incorporated in **Barcelona** in March 2022, aimed at translating cutting-edge science on succinate biology into first-in-class therapeutic products for metabolic, inflammatory & autoimmune diseases with serious medical needs unmet.
- 
 Motivated, well balanced, multidisciplinary and experienced **founder** and **management team**.
- 
 Solid **scientific rational** establishing the critical role of **intestinal succinate** as a key player to restore the **healthy microbiome**, reduce **inflammation** and prevent **fibrosis**.
- 
 Lead candidate: **SD1253**, an **oral, gut-restricted, biomarker-driven, intestinal succinate modulator**, first-in-class **enzyme** therapy for **IBD**.
- 
 State-of-the-art **in silico, AI-powered** tools used in the **lead identification** process. **Lead optimization** completed in March-2025. Compelling **in vitro** and **in vivo** data already generated with non-optimized SD1 product and with final **SD1253** candidate.
- 
 Anticipated **main indication: Crohn's Disease (CD)**. **CD global Market** projected to surpass **\$25B** by **2032**. CD is an incurable Inflammatory Bowel Disease (IBD) with growing prevalence and **critical medical needs unmet**: ~50% of CD patients do **not respond** to currently available advanced therapies (biologics & targeted small molecules), which also come with **serious safety issues**.
- 
Business model focused on advancing the lead candidate (SD1253) **up to Phase 2b-ready** status in patients with IBD (**CD**). Partnering & M&A activity in IBD market is currently "on fire"
- 
>2,6M€ raised in dilutive & non-dilutive funding so far. Currently raising a **seed round** structured in two phases: seed-1 (**2M€** in **25/26**, of which >1,7M€ already in place) to advance CMC and non-clinical package until pivotal tox studies; and **seed-2 (3,5M€** in **26/27)** to complete IND-enabling package and manufacture cGMP DS and DP for FIH trial. **Exit multiplier** expected for investors in this current seed-1 round -> **20X+**. Additional **~25M€ series A (2027)** round planned to complete initial P2 trials in patients with CD. **Exit expected in 2030**

Although **incidence** rates in developed countries is slightly declining, the total annual number of **new IBD cases** worldwide is projected to growth from 405,000 in 2019 to **450.000 in 2030**, and to over **500.000 cases in 2045**

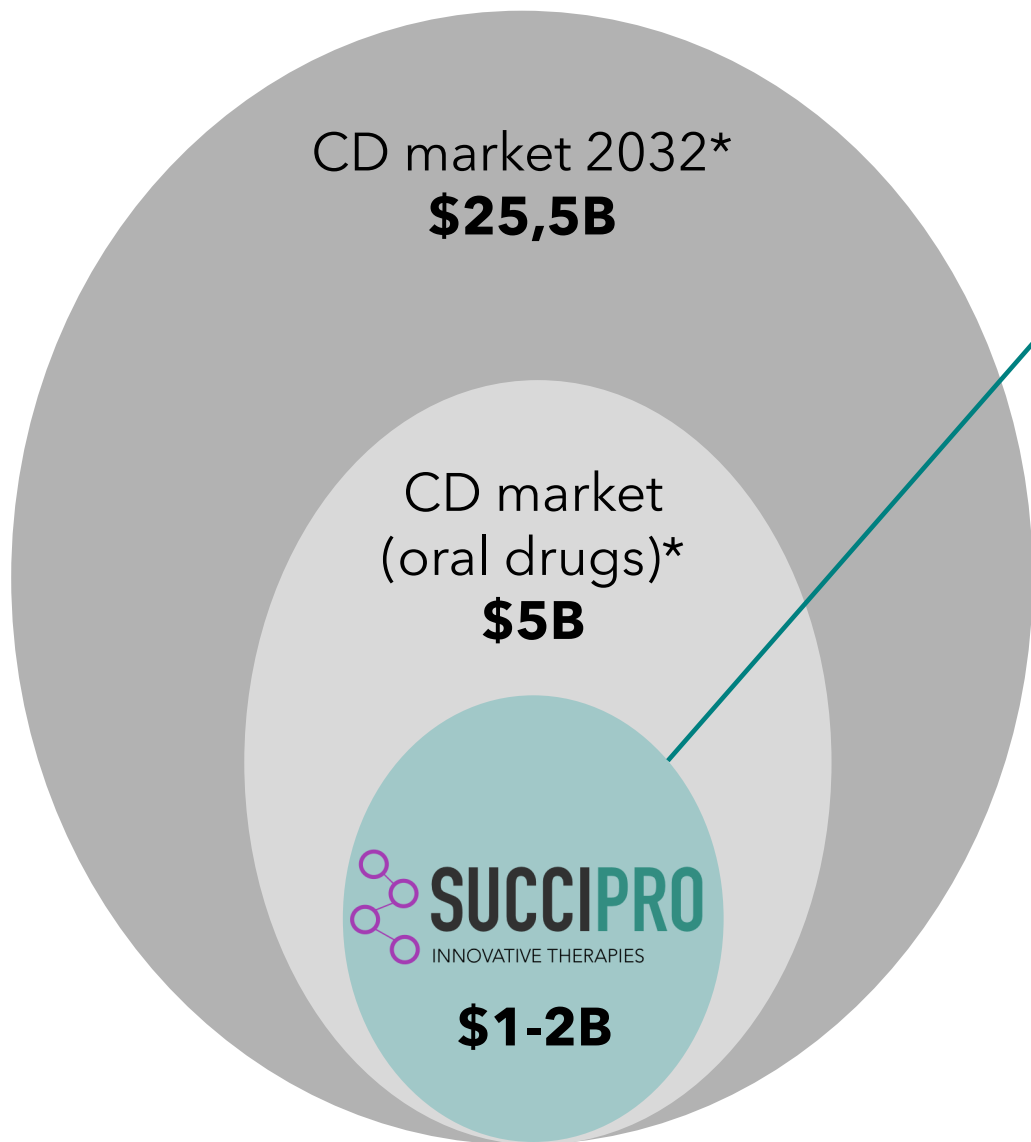
A



B



Predictions for inflammatory bowel disease in next 30 years. Trends in observed ("o" lines) and predicted ("+" lines) Inflammatory bowel disease in number of incidence cases (A) and deaths (B). Scalloped gray shading lines indicates if the rate remained stable (baseline reference), decreased by 1% per year (optimistic reference, lower limit), and increased by 1% per year (pessimistic reference, upper limit) based on the observed rate in 2019 ("Δ" lines). 2023, Zhou. BMC Public Health



SD1253 aims to become the **first line therapy** for mild-to-moderate Crohn's Disease (20% of CD Patients)**



Upside business opportunity in **more advanced stages of CD, in Ulcerative Colitis** and in other diseases with elevated succinate and strong **inflammatory component**, such as Type 2 **Diabetes, MASH**, certain **cancers** or *Clostridium difficile* **infections**.

ANTICIPATED PRODUCT POSITIONING

Chron's Disease

First line therapy in mild-to-moderate CD patients, and in combination with other therapies

Ulcerative Colitis (upside)

Treatment for mild to moderate UC patients after the failure of 5-ASA and before starting the treatment with biologics and other expensive therapies (e.g., JAKi)

* Global market estimations by 2032 (GlobalData)

**Assumptions based on 3 interviews to US KOLs, 2029 GlobalData forecast reports and Navlin

PRODUCT POSITIONING: SUMMARY OF KOL'S PRIMARY RESEARCH

SD1253 is perceived as an attractive treatment alternative covering some of the current unmet needs, like the need for **safer** and **less costly therapies**, compared with current targeted therapies and biologics.

COVERED UNMET NEEDS

- KOLs have appetite for new drugs like **SD1253**, which provide:
 - New mechanism of action that broadens the treatment options
 - Safety profile that can avoid **serious safety issues** of other therapies such as **severe infections, cardiovascular** events, **cancer, blot clots**,...
 - Reduction of complications (fistulas) solving an unmet need for CD patients under biologic therapies
 - Less costly and **safer** (no immunosuppression) drug than biologics
 - **Biomarker** that can predict drug response and patients' adherence to oral treatment

- An **oral drug** is an advantage for CD, facilitating administration and compliance, Vs biologics which are given SC or IV

Novel MoA ✓

Need of safer drugs ✓

Delay use of biologics ✓

Lack of Biomarkers ✓

Oral RoA ✓

TARGET PRODUCT PROFILE & COMPETITIVE POSITIONING (ORAL DRUGS)

SD1253. A novel first-in-class gut restricted, biomarker-driven oral therapy for mild-to-moderate CD

- Very good anticipated **safety profile** (gut-restricted)
- No **immunosuppressive** effects
- Multi-effect: restores **healthy microbiome**, decreases **inflammation** and prevents **fibrosis**
- **Biomarker-driven**

PRODUCT	MOA	ORAL	GUT-RESTRICTED	ABSENCES OF DIRECT IMMUNOSUPPRESSION	MONITORABLE THROUGH A BIOMARKER	SYSTEMIC EFFICACY*	EXPECTED SAFETY **	DEVELOP. STAGE / APPROVED
SD1253 (SUCCIPRO)	Succinate modulator	✓	✓	✓	✓	✓	+++	PRECLINICAL
OMILANCOR (BT-11) (NIMMUNE Biopharma)	LANCL2 agonist	✓	✓	✗	✗	✗	++	P2 - CD P3 - UC
OBEFAZIMOD (ABX464) (ABIVAX)	miR-124 expression enhancer	✓	✓	?	✗	✓	++	P2 - CD P3 - UC
ATH-063 (Athos Therapeutics)	G9A inhibitor	✓	✓	?	?	✓	++	P2 - UC
OZANIMOD [Zeposia®]*** (BMS)	S1PR modulator	✓	✗	✗	✗	✓	+	P3 - CD APPROVED - UC
UPADACITINIB*** (Abbvie)	JAK inhibitor	✓	✗	✗	✗	✓	+	APPROVED UC & CD

* Despite being gut-restrictive (=lack of systemic distribution), direct systemic effects are observed for SD1253, as it also causes a decrease in circulating succinate

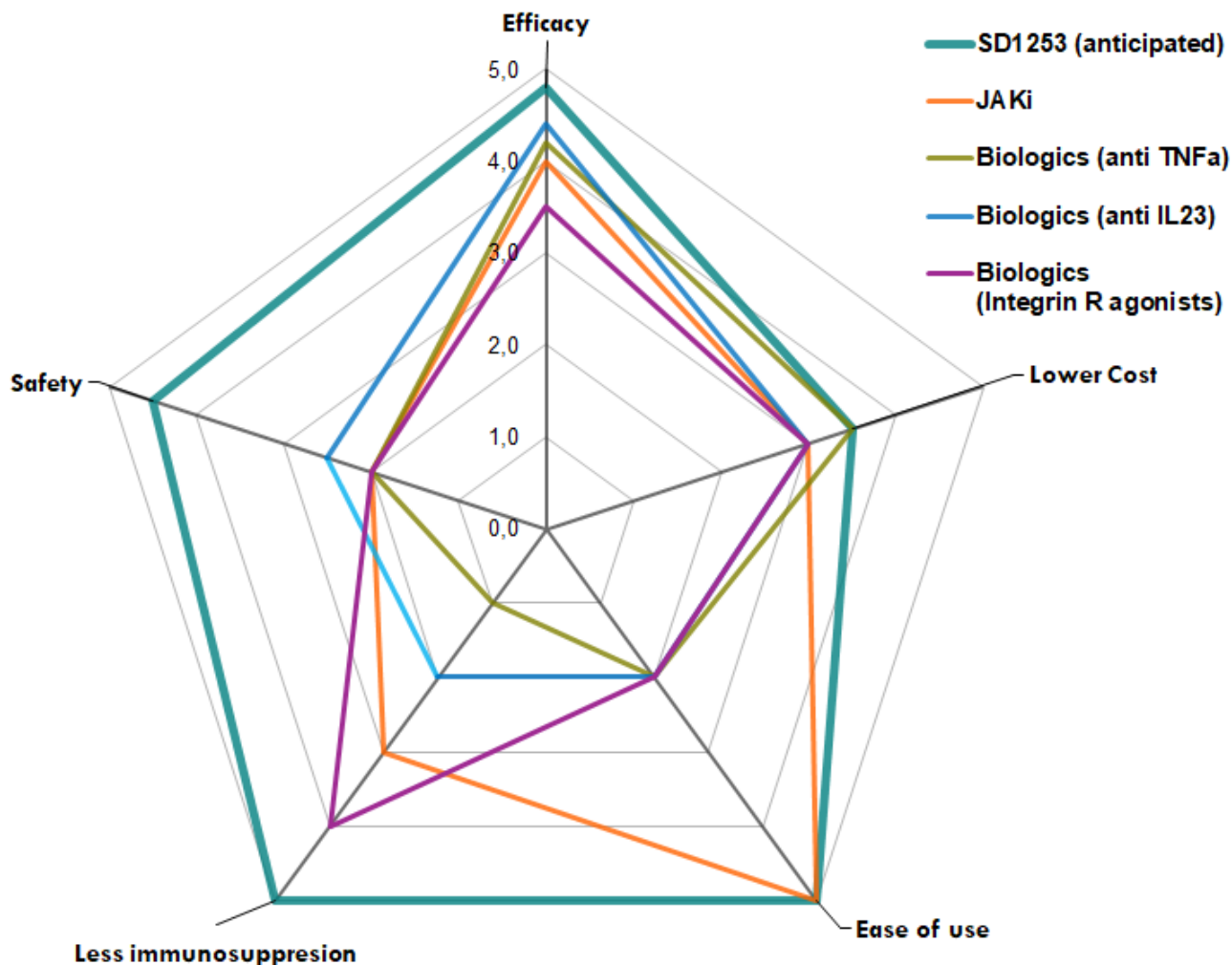
** Expected safety in comparison to current marketed products and selected therapies in development

*** For simplicity, only one member of the JAK inhibitors (upadacitinib) and S1PR modulators (ozanimod) shown

****P2 IN UC (NCT05785715) terminated by AbbVie in June 2025. An interim analysis showed NX-13 did not meet primary endpoints for endoscopic improvement as a monotherapy in UC.

ANTICIPATED COMPETITIVE POSITIONING IN IBD

SD1253. Oral, gut-restricted enzyme therapy. Better or similar efficacy than JAKi or biologics, but with no immunosuppressive effects and a much better safety profile



Radial competitor positioning map. For each attribute 0=worst position; 5=best position

Black Box Warning

- Medical studies indicate that the drug carries a significant risk of serious or even life-threatening adverse effects

FDA Boxed Warning

- ⚠ **JAK-inhibitors:** -> Serious heart-related events, cancer, blood clots and death
- ⚠ **Anti TNFa:** -> serious infections and cancer
- ⚠ **Integrin Receptor agonists:** -> progressive multifocal leukoencephalopathy (PML)

FDA label: main warnings

- ⚠ **Anti IL23:** -> Hypersensitivity reactions, serious infections, hepatotoxicity

Development focused on main lead candidate with a derisking diversified pipeline in place

ENZYMES



SD1253 → ORAL, GUT-RESTRICTED, BIOMARKER-DRIVEN FIRST-IN-CLASS ENZYME THERAPY ABLE TO DECREASE INTESTINAL SUCCINATE AND REACH A HEALTHY HOMEOSTATIC STATUS

**LEAD OPTIMIZATION COMPLETED
GMP MANUFACTURING PROCESS INITIATED**

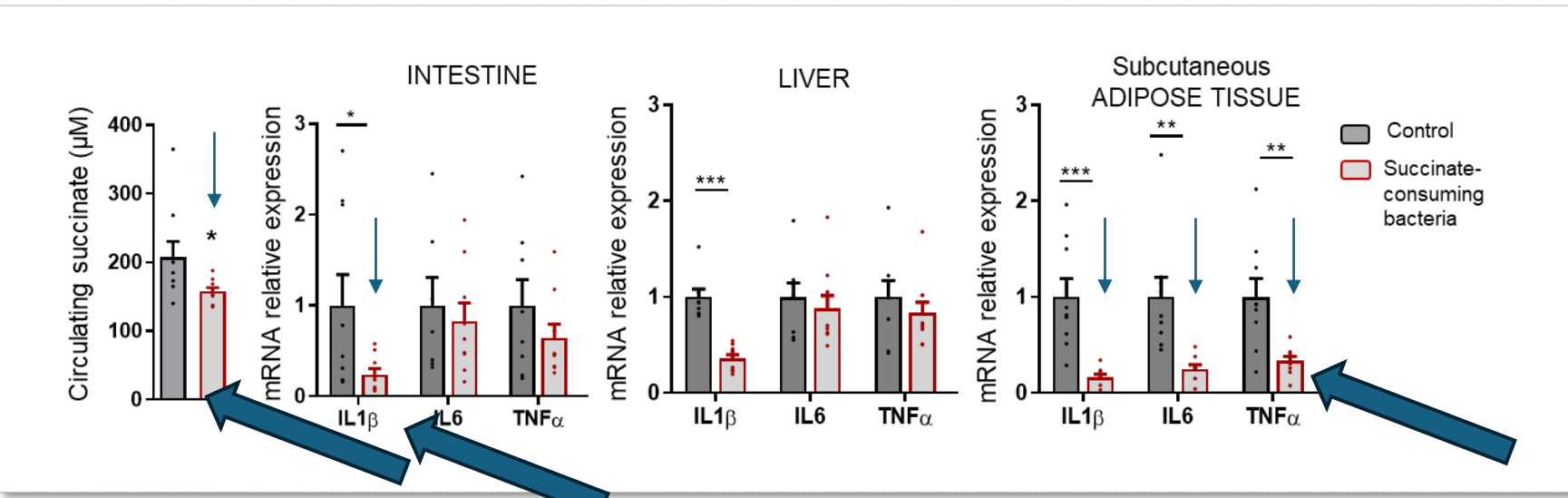
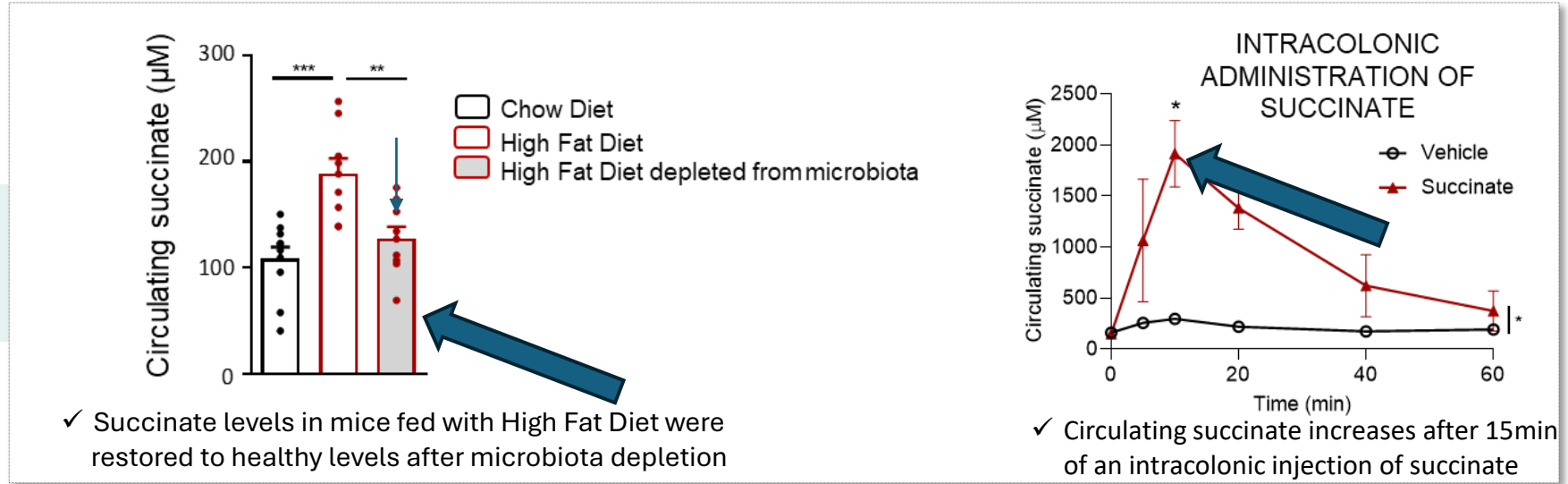
BLOCKING PEPTIDES



SUCCINATE **BLOCKING PEPTIDES** ABLE TO BLOCK EXCESSIVE SUCCINATE LEVELS

**SEVERAL HITS IDENTIFIED
HIT-TO-LEAD PHASE ONGOING**

✓ Intestinal succinate is a relevant source of circulating succinate
(Huber-Ruano et al., Microbiome, 2022)

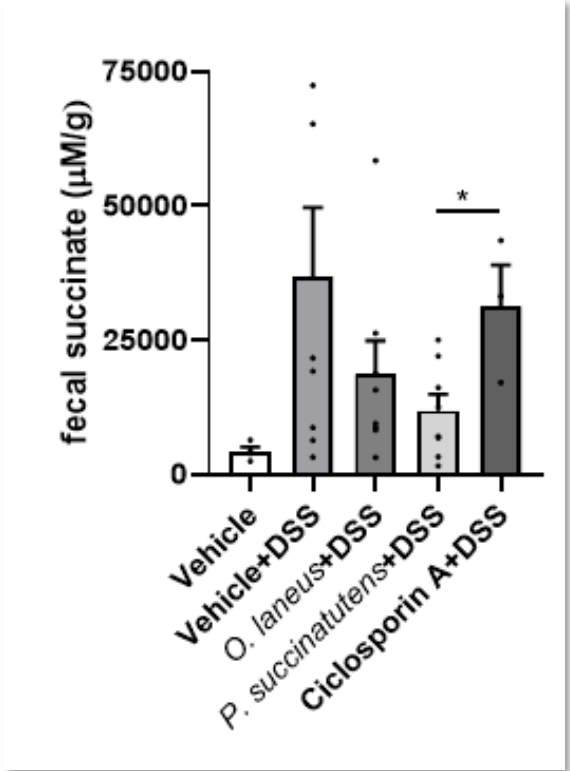
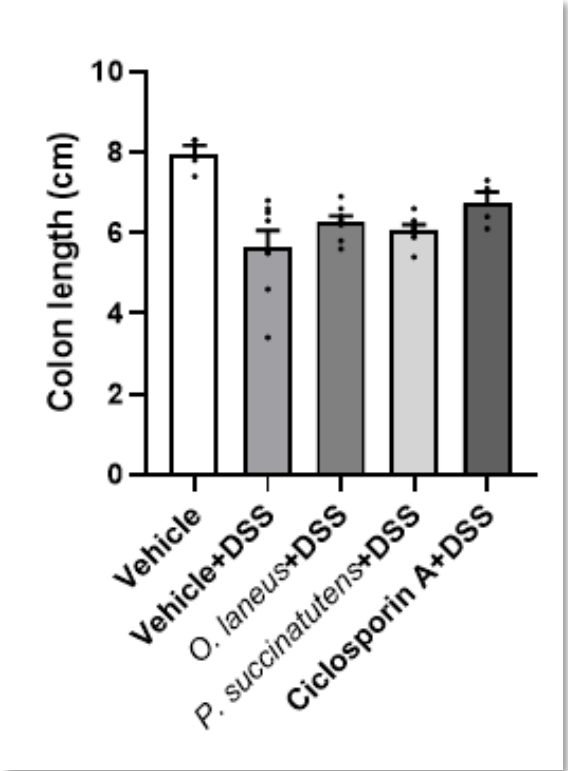
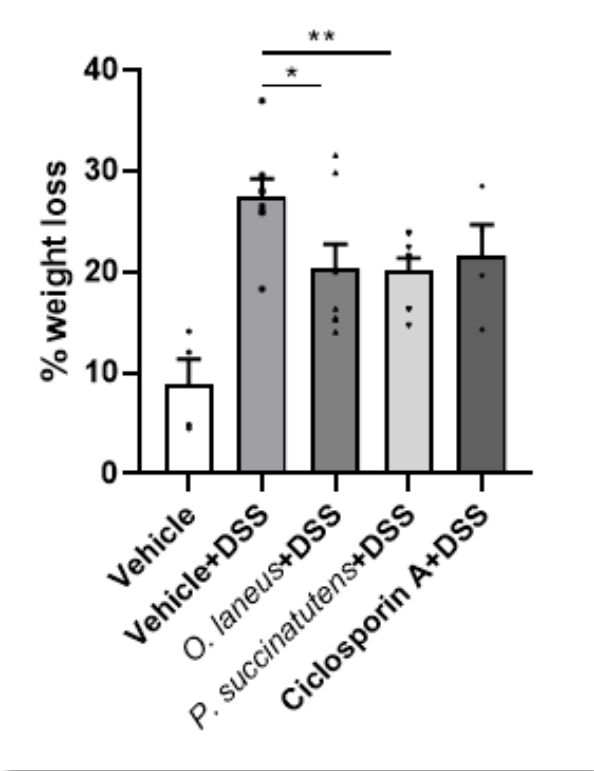
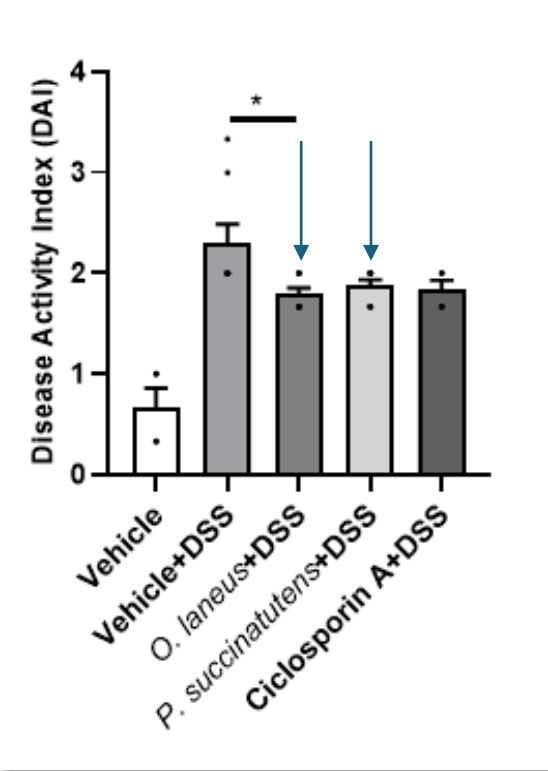


✓ A reduction in intestinal succinate decreases circulating succinate and improves intestinal and systemic inflammation *in vivo* in obese diabetic mice
(Huber-Ruano et al., Microbiome, 2022)

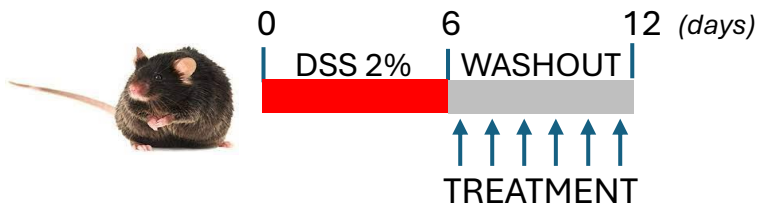


IN VIVO PROOF OF CONCEPT STUDIES WITH SUCCINATE-CONSUMING BACTERIA

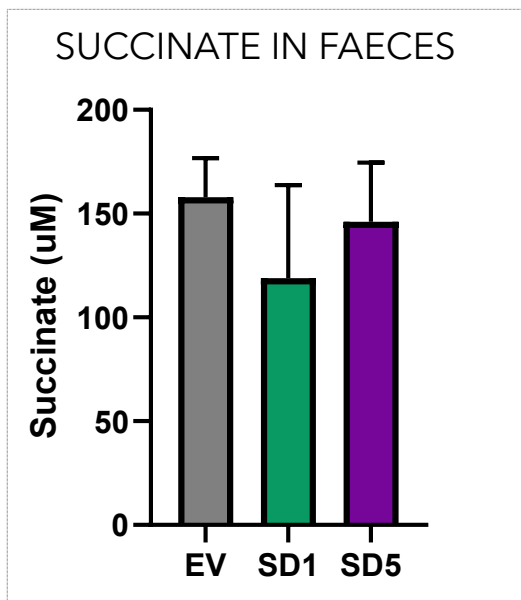
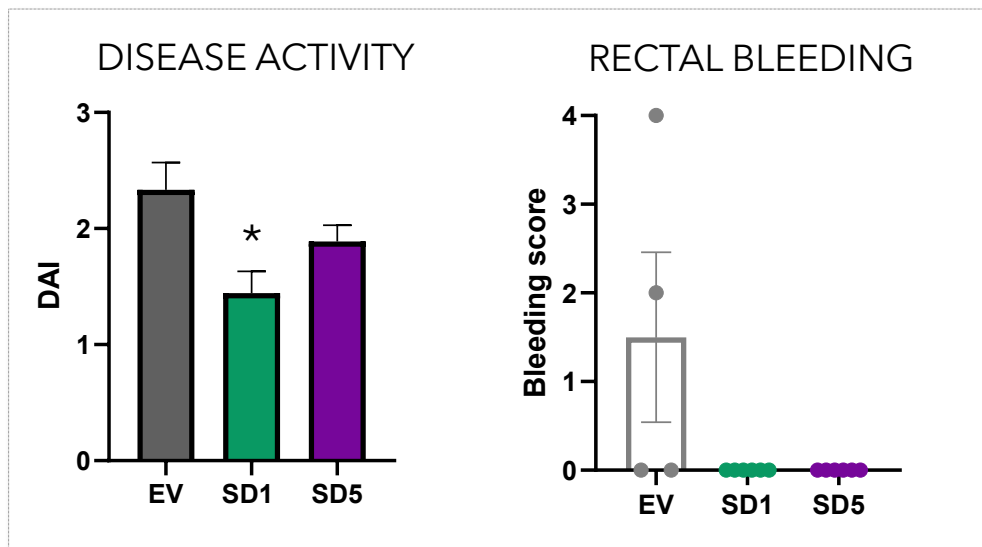
✓ Treatment with succinate-decreasing bacteria improves DSS-induced murine colitis (*Unpublished data*)



IN VIVO EFFICACY SCREENING STUDIES IN ACUTE DSS-INDUCED COLITIS



✓ SD1 can attenuate Disease Activity Index (DAI) and abolishes rectal bleeding in a DSS-induced colitis mice model in only 48 hours (Unpublished data)

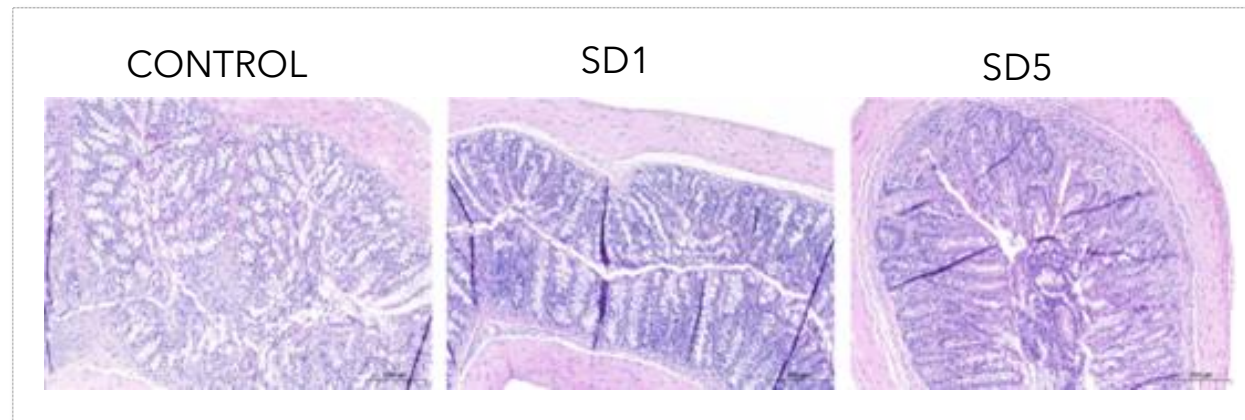


SD1 IDENTIFIED AS THE LEAD (NOT-OPTIMIZED) CANDIDATE

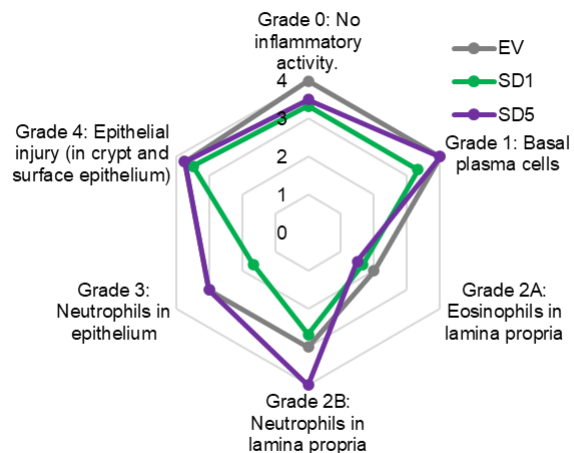
✓ After a week of treatment, SD1 reduced the DSS-induced increase of succinate in feces (Unpublished data)



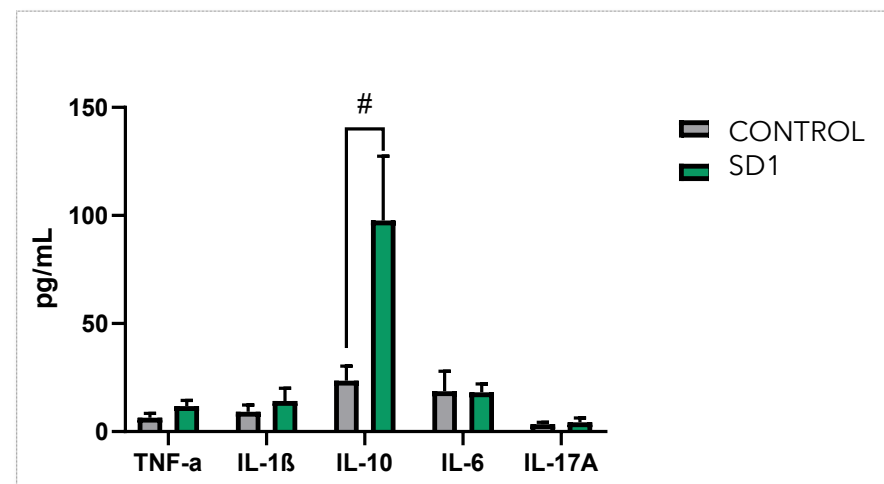
✓ **SD1** significantly reduces colon damage and improves mucosal healing
(Unpublished data)



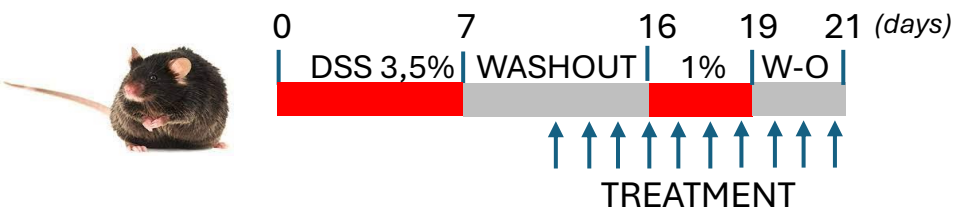
GEBOES HISTOLOGICAL SCORE



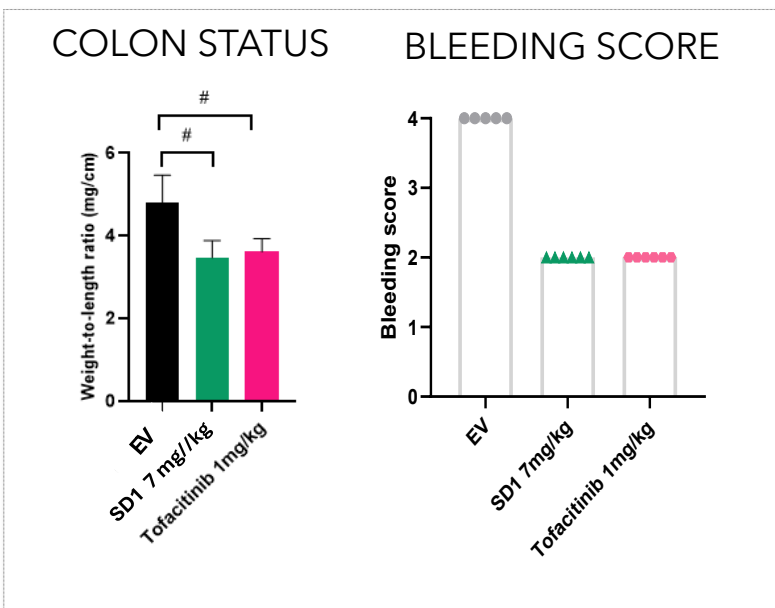
✓ **SD1** promotes anti-inflammatory IL10 cytokine secretion to circulation
(Unpublished data)



COMPARATIVE EFFICACY *in vivo* STUDY

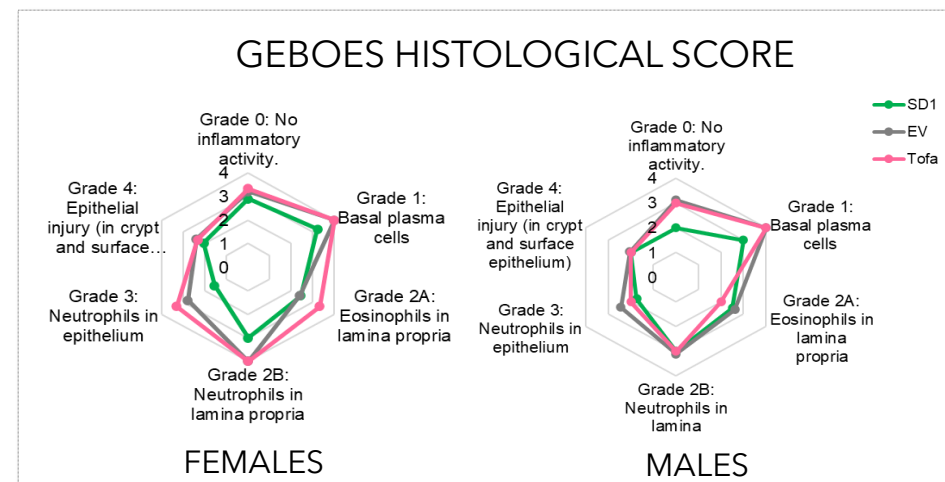
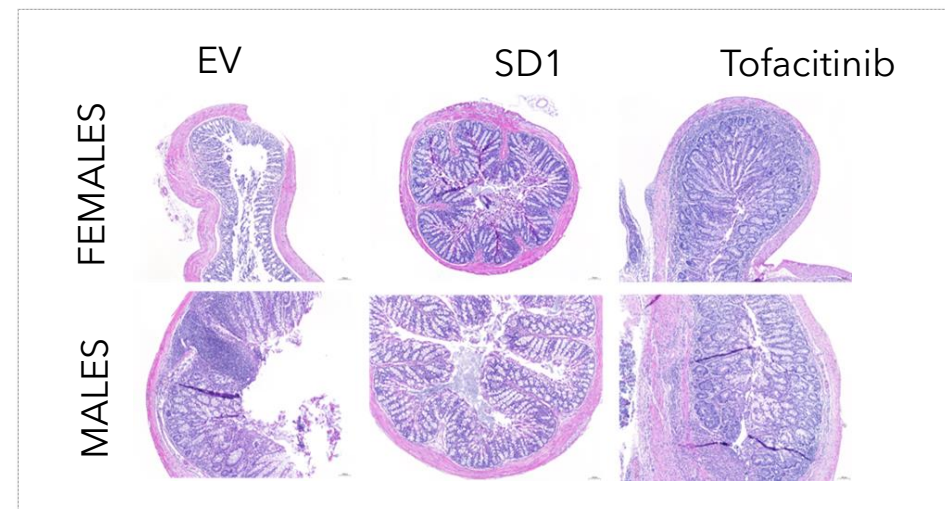


✓ SD1 clearly improves histological inflammation and mucosal healing



✓ SD1 improves colonic health and decreases rectal bleeding

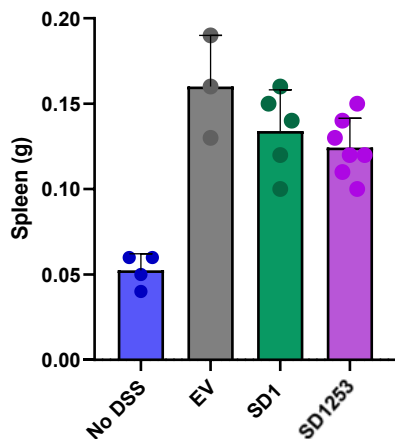
EV = Disease animals (DSS) treated with placebo
 SD1/SD5 = Disease animals (DSS) treated with SD1
 Tofacitinib- Disease animals (DSS) treated with tofacitinib



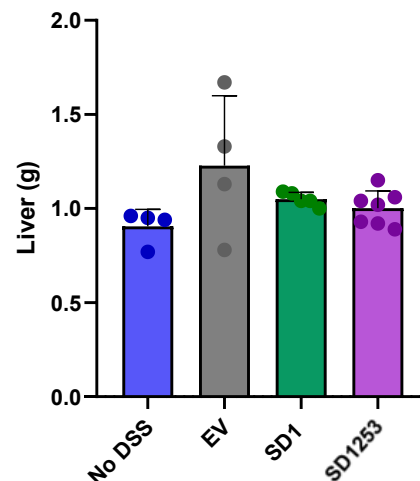
SD1 has comparable efficacy to tofacitinib (JAKi) but with improved effects on mucosal healing

LEAD OPTIMIZATION *in vivo* STUDY. Preliminary safety evaluation confirms expected clean profile of SD1253

SPLEEN WEIGHT



LIVER WEIGHT

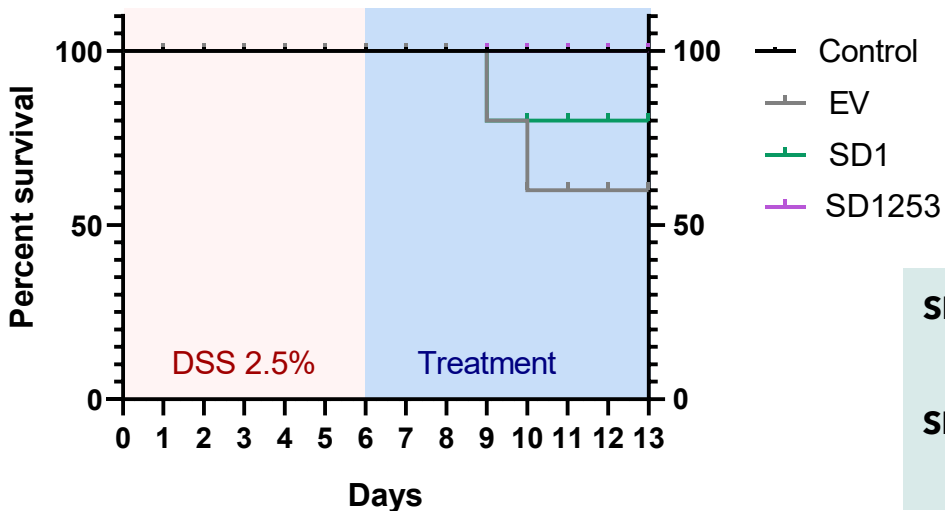


HEPATIC & RENAL BIOCHEMISTRY

Test	Control	EV	SD1	SD1253	Reference ranges for C57BL/6 mice
AST (U/L)	103.6 ± 51.3	105.2 ± 25.9	77.7 ± 4.3	157.5 ± 54.1	46-221
ALT (U/L)	<u>17.4 ± 3.3</u>	24.0 ± 7.4	<u>18.2 ± 2.3</u>	30.2 ± 10.1	22-133
Creatinine (mg/dL)	0.28 ± 0.01	0.27 ± 0.03	0.32 ± 0.00	0.3 ± 0.02	0.1-1.8

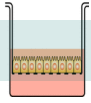
Underlined: lower than reference range. **Bold**: Higher than reference range

Survival Curve



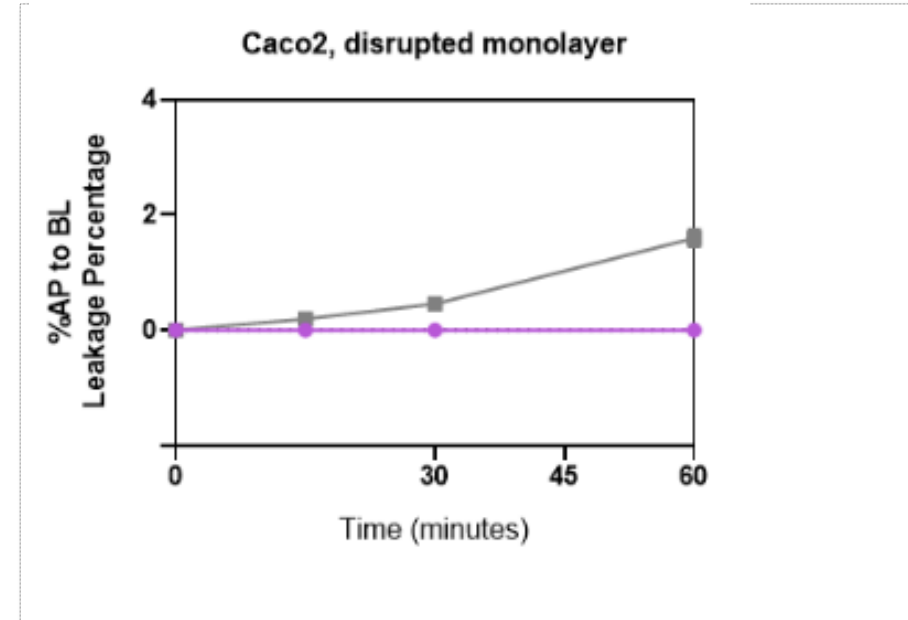
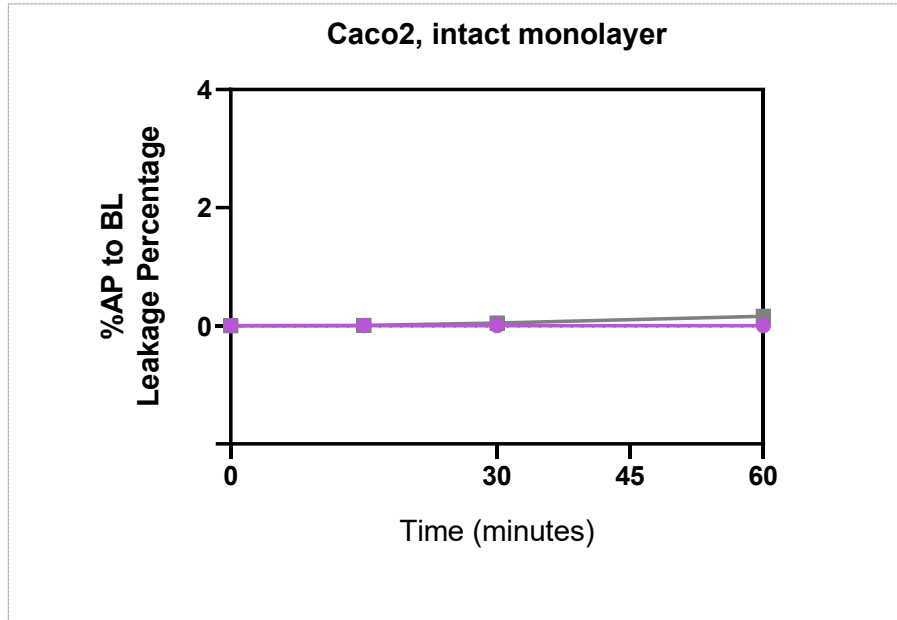
No DSS/Control = Healthy animals, with no DSS-induced colitis
EV = Empty Vector (Disease animals treated with placebo)
SD1 = non-optimized lead (Disease animals treated with SD1)
SD1253 = final optimized lead (Disease animals treated with SD1253)

SD1253 can prevent **mortality** and shows no alteration in **hepatic** or **renal** toxicity biochemical parameters, alongside a normalization in **liver weight**, suggesting a positive safety profile.
SD1253 shows also a slight reduction in **spleen weight** compared to EV, suggesting a potential protective effect against inflammation (unpublished data)



ABSORPTION ASSAY in POLARIZED INTESTINAL CELLS

- SD1253
- Lucifer Yellow (permeability tracker)



Disrupted monolayer with 2mM EDTA pretreatment of 30 minutes

SD1253 was **unable to cross a monolayer of differentiated Caco-2 cells** in a Transwell assay, consistent with a **gut-restricted absorption profile**.



Patent filed in 2018 (WO2019141780)



Main claim covering "A product for use in the prevention and/or treatment of a disease associated with increased levels of circulating succinate, wherein the product decreases the ratio of succinate-producing bacteria to succinate-consuming bacteria in the intestinal tract of the patient, wherein the product is selected from the group consisting of a pharmacological product, and a probiotic product."

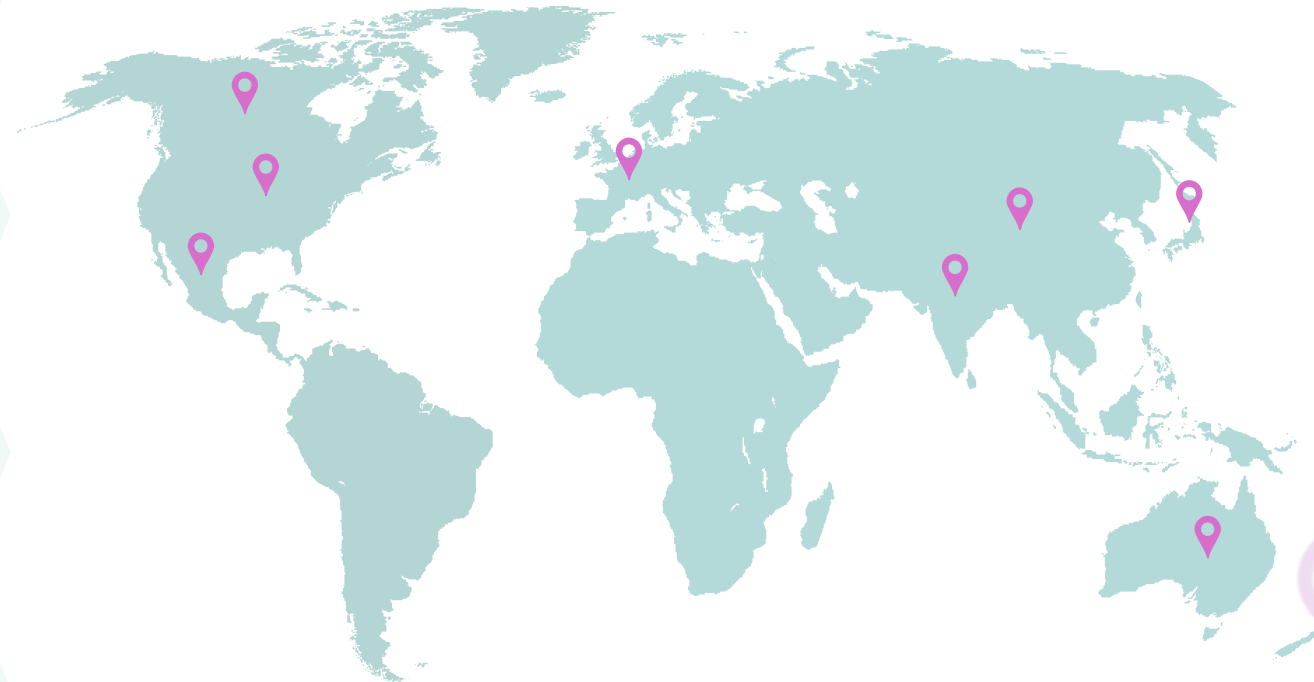


In national phases in US, Europe, Canada, India, Japan and Mexico



New product patent covering SD1253 and related compounds filed in October 2024. International applications ongoing.

Additional product patents under preparation



MILESTONES ACHIEVED

2018

2019

2020

2021

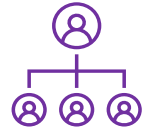
2022

2023

2024

2025

2026



Identification of the Mechanism of action
Patent filled

In vivo validation of the Mechanism of action

AI-powered design of new compounds

SD1253: optimized **Lead candidate designed** (Q1-25)

GMP manufacturing process development initiated (Q4-2025)

In vivo PoC data with enzyme candidate (SD1)

~500K€ equity funding + ~2,1M€ in non-dilutive funding



YEAR	ACQUIRER /INVESTOR	LICENSOR /GRANTEE	MAIN ASSET	DEVELOPMENT PHASE	TYPE OF DEAL	DEAL VALUE
2026-01	Formation Bio [Kenmare Bio] <i>[AI-native drug development]</i>	Jiangsu Chia Tai Feng Hai Pharmaceutical Co., LTD. (CTFH)	FHND5032 [miR-124 activator]	Preclinical	License deal [ex Greater China]	\$500M + royalties (undisclosed upfront)
2026-01	Eli Lilly	Ventyx Biosciences	Tamuzimod [S1P1R modulator] for UC VTX958 [TYK2 inhibitor] for CD NLRP3 inhibitors for pericarditis & Parkinson's disease	P2	Adquisition	\$1,2B in cash
2025-04	Sanofi	Earendil Labs <i>[IA-driven R&D of novel biologics]</i>	HXN-1002 [mAb against α4β7 & TL1A] HXN-1003 [mAb against TL1A & IL23]	Preclinical	License deal	\$1,72B (\$125M upfront)
2024-07	Eli Lilly	Morphic Tx	MORF-057 [oral α4β7 integrin inhibitor]	P2	Adquisition	\$3,2B in cash
2024-06	Abbvie	FutureGen	FG-M701 [mAb against TL1A]	Preclinical	License deal	\$1,7B (\$150M upfront)
2024-05	Abbvie	Landos Biopharma	NX-13 [oral NLRX1 agonist]	P2	Adquisition	\$212,5M (\$137,5M upfront)
2024-06	Abbvie	Celsius Therapeutics	CEL383 [mAb anti-TREM1]	P1	Adquisition	\$250M in cash
2024-04	Takeda	Engitix	ECM discovery platform [novel products for fibrostenotic IBD]	Research	Research collaboration	Up to \$300M in future milestones and royalties
2023-10	Sanofi	Teva	TEV547 [duvakitug] [mAb against TL1A]	P2	R&D collaboration & licensing deal	\$1,5B (\$500M upfront)
2023-10	Roche	Telavant (Roivant)	RVT-3101 [mAb against TL1A]	P2	Adquisition	\$7,25B (\$7,1B upfront, in cash)
2023-06	Merck (MSD)	Prometheus Biosciences	PRA-023 - MK-7240 [mAb against TL1A]	P2	Adquisition	\$10,8B in cash
2021-12	Pfizer	Arena Pharmaceuticals	etrasimod [oral SP1R modulator]	P3	Adquisition	\$6,7B in cash
2021-05	LianBio (CN - US)	Landos biopharma (US)	omilancor (BT-11) [gut-restricted LANCL2 agonist] NX-13 [gut-restricted NLRX1 agonist]	BT-11 -> P2 NX-13 -> P1	Regional License deal [CN+other Asian markets]	\$218M + royalties (\$18M upfront)
2021-03	Amgen	Rodeo Therapeutics	RTX-1688 [15-PGDH inhibitor]	Preclinical	Adquisition	\$721M + royalties (\$55M upfront)
2021-02	Merck (MSD)	Pandion Tx	PT101 [engineered IL-2 mutein + protein backbone - Tregs activator]	P1	Adquisition	\$1,85B in cash

Source: own research, public information facilitated by involved parties