



CORPORATE PRESENTATION | JULY 2024 | NASDAQ: SCNI

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SAFE HARBOR STATEMENT

This communication contains forward-looking statements within the meaning of the Private Litigation Reform Act of 1995. Words such as “expect,” “believe,” “intend,” “plan,” “continue,” “may,” “will,” “anticipate,” and similar expressions are intended to identify such forward-looking statements. All statements, other than statements of historical facts, included in this communication regarding strategy, future operations, future financial position, future revenue, projected expenses, prospects, plans and objectives of the management of Scinai Immunotherapeutics Ltd. ("Scinai") are forward-looking statements. Examples of such statements include, but are not limited to, statements regarding the therapeutic and commercial potential of nanosized antibodies (NanoAbs); the pipeline market potential; and the timing of NanoAb proof-of-concept studies and clinical trials. These forward-looking statements reflect management’s current views with respect to certain current and future events and are subject to various risks, uncertainties and assumptions that could cause results to differ materially from those expressed or implied by such forward-looking statements. Such risks and uncertainties include, but are not limited to, those related to: the possibility that the therapeutic and commercial potential of NanoAbs will not be met; potential changes in the pipeline market potential; a delay in the preclinical and clinical data for NanoAbs, if any; Scinai’s ability to maintain its listing on Nasdaq and its ability to secure additional capital on attractive terms, if at all; Scinai’s ability to acquire rights to additional product opportunities; Scinai’s ability to enter into collaborations on terms acceptable to Scinai or at all; timing of receipt of regulatory approval of Scinai’s manufacturing facility in Jerusalem, if at all or when required; the manufacturing facility will not be able to be used for a wide variety of applications and other pharmaceutical technologies; and those inherent in drug development, which involves a lengthy and expensive process with uncertain outcomes. More detailed information about such risks and uncertainties can be found in the Company's filings with the Securities and Exchange Commission (the "SEC"), including those set forth in the section entitled “Risk Factors” in the Company's Annual Report on Form 20F filed with the SEC on May 15, 2024. Scinai undertakes no obligation to revise or update any forward-looking statement.

2024: BUILDING ON 2023'S MOMENTUM

PIPELINE DEVELOPMENT

- Licensed anti-IL-17 NanoAb
- Completed ex-vivo study: Potential psoriasis treatment
- COVID-19 NanoAb: In-vivo studies: Prophylactic & Therapeutic

- Anti-IL-17 NanoAb in-vivo psoriasis study
- Ready for first-in-human clinical trial
- Strengthen pipeline

2023

2024

BUSINESS DEVELOPMENT

- Launched Scinai Bioservices CDMO
- Capital infusions
- New name, new brand

- More CDMO clients
- Pursue partnerships

TWO COMPLEMENTARY BUSINESS UNITS

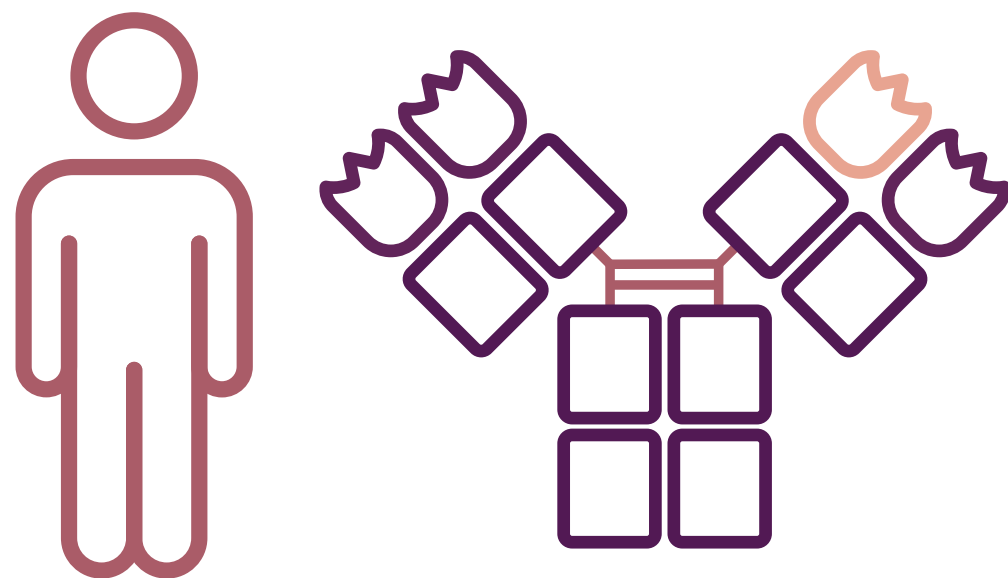


Development of inflammation and immunology (I&I) biological therapeutic products beginning with pipeline of nanosized VHH antibodies (NanoAbs) targeting diseases with large unmet medical needs

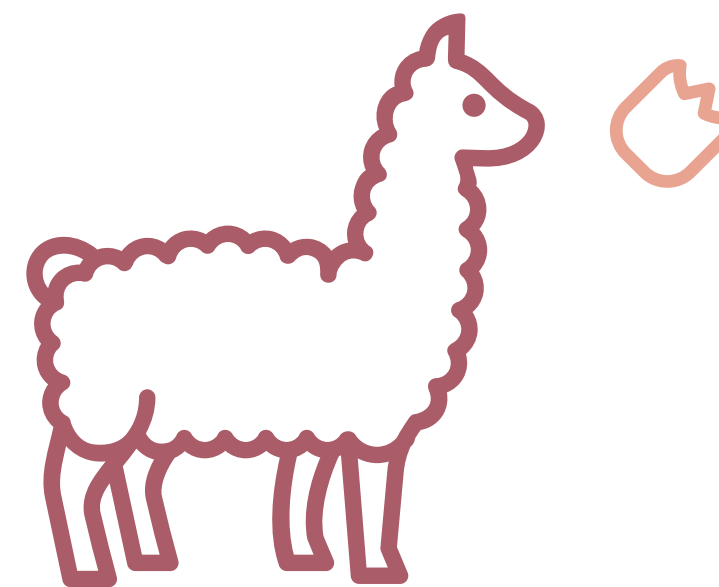


End-to-end boutique CDMO services to help bring products to market by leveraging Scinai's GMP and non-GMP drug development and manufacturing capabilities

NANOSIZED ANTIBODY PIPELINE: HUGE OPPORTUNITY



HUMAN ANTIBODY (mAb)



ALPACA-DERIVED ANTIBODY (NanoAb)

Alpaca-derived nanosized antibodies (NanoAbs) are also known as VHH antibodies or nanobodies¹
mAb therapeutic market size is ~\$205 billion² including Cosentyx for psoriasis \$4.8 billion (2022)³

NanoAbs: Human monoclonal antibody (mAb)'s biobetter

1. VHH antibody is trademarked by ABLYNX N.V., a wholly owned subsidiary of Sanofi, as Nanobody. Scinai has no affiliation with and is not endorsed by Sanofi.

2. <https://www.researchandmarkets.com/reports/5791212/monoclonal-antibody-therapeutics-market-source> (accessed 14.Aug.2023)

3. <https://www.reporting.novartis.com/2022/novartis-in-society/performance-in-2022/financial-performance.html> (Accessed 7.Jan.2024)

MAX PLANCK, UMG, SCINAI COLLABORATION

Covering discovery and initial characterization of NanoAbs aimed at predefined list of molecular targets.

Designed to create significant clinical and commercial advantages.

Scinai brings...

- Recombinant protein drug development experience from lab to Phase 3 clinical trial
- Manufacturing, quality, international regulatory experience
- GMP biologics manufacturing facility
- Best-in-class equipped labs
- Top-tier big pharma & biotech leadership expertise

The Max Planck Institute & UMG¹ bring...

- World-class science & access to leading scientists
- NanoAb platform for the development of promising potent therapeutics
- Patents covering NanoAbs & their manufacturing



Professor Dr Dirk Görlich

Director of Max Planck Institute for Multidisciplinary Sciences
Winner of inaugural World Laureates Association (WLA) Prize in Life Sciences or Medicine



Professor Dr Matthias Dobbelstein

Fellow at Max Planck Institute for Multidisciplinary Sciences
UMG Head of Department

1. Max Planck Institute for Multidisciplinary Sciences and the University Medical Center Göttingen (UMG)

PLATFORM VALUE PROPOSITION

NanoAbs' unique physicochemical attributes can generate multiple crucial advantages vs human monoclonal antibodies (mAbs)



Manufacturing

- 10-times more active pharmaceutical ingredients (API) per gram of manufactured protein vs. mAbs
- Faster and lower cost production in yeast (pichia) vs mammalian cells



R&D

- Quicker antibody discovery and optimization due to massive libraries
- De-risked pipeline development leveraging approved mAb targets



Product

- Hyper-thermostable = longer shelf life, easier storage & distribution
- Superior specificity & affinity to target potentially enables lower dose, fewer adverse events, lower cost
- Adaptable half life






Patient Safety & Convenience

- Multiple, easier routes of administration
- Lower immunogenicity
- Fewer contraindications
- Potentially safer & lower dose

DERISKED DRUG DEVELOPMENT

NanoAbs feature a favorable path to market compared to risks associated with traditional drug development

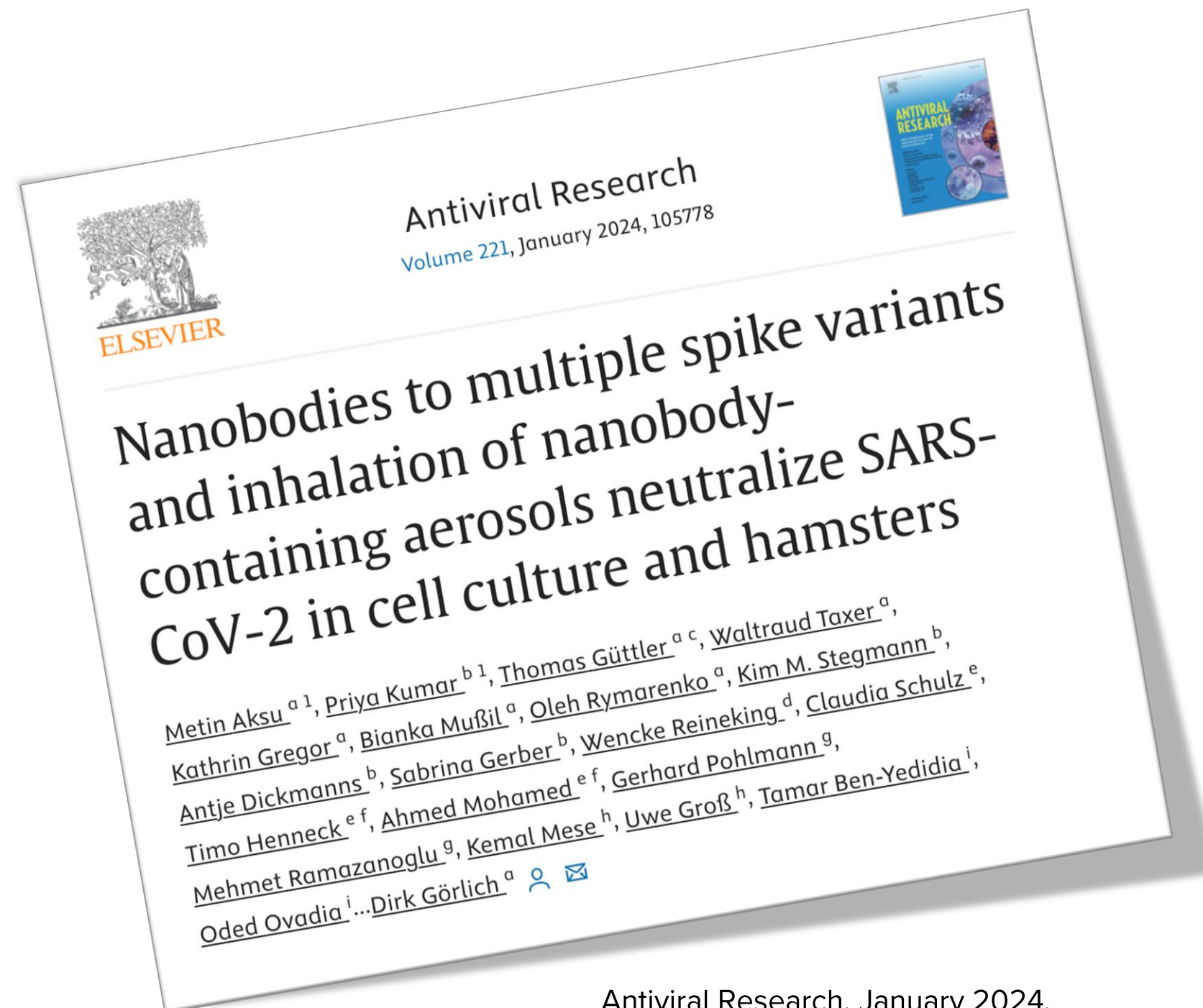
Source of Risk	NanoAb	
Molecular Target		Validated by existing but sub-optimal mAb therapies
Mechanism of Action		Well understood
Composition of Matter	TBD	Assessing safety & efficacy of alpaca-derived NanoAbs
Commercial		Strong demand for available mAbs and underserved populations

Validated Therapeutic Use

First commercial VHH-antibody is blood disorder therapy Caplacizuma – by Ablynx, a company acquired by Sanofi in 2018 for \$4.8B

SUPERIOR ROUTES OF ADMINISTRATION

Proof-of-concept: Aerosolized NanoAbs for treatment and prevention of viral infectious diseases



Paper covers several aspects of Scinai's anti-COVID-19 NanoAbs, including:

- Structure
- Mechanism of action
- Neutralization of a wide range of SARS-CoV-2 variants including Omicron
- Production in yeast
- Formulation into aerosols

Describes in vivo studies indicating that “exposing hamsters to these aerosols, before or even 24 h after infection with SARS-CoV-2, significantly reduced virus load, weight loss and pathogenicity,” concluding that these results show the significant potential of aerosolized NanoAbs for the prevention and treatment of coronavirus infections.

Antiviral Research. January 2024.
<https://doi.org/10.1016/j.antiviral.2023.105778>

PIPELINE MOLECULAR TARGETS



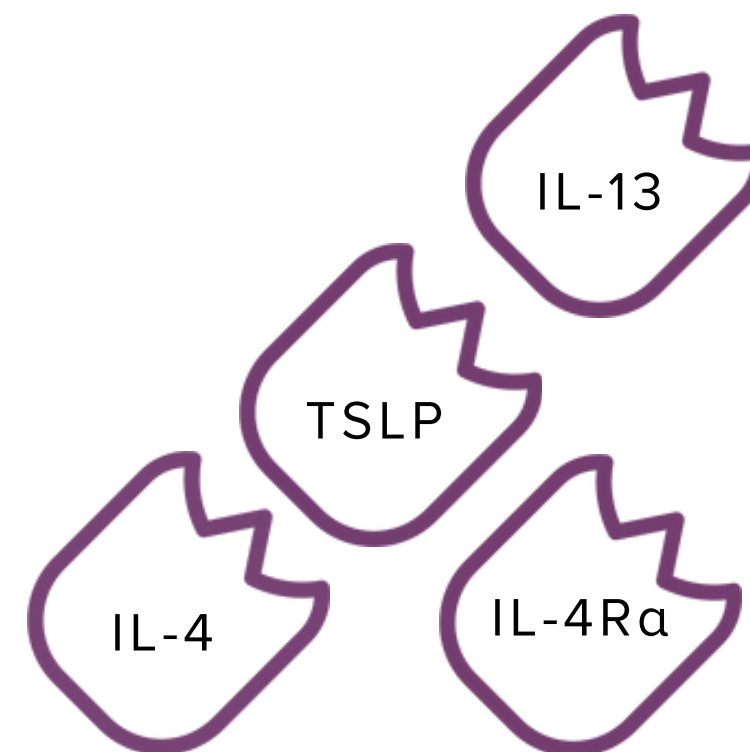
COVID-19

- Strong in vivo data for inhaled therapeutic and prophylactic in a challenge study conducted with Fraunhofer ITEM and TiHO



PSORIASIS, PSA,
HS

- Single compound targeting IL-17A and IL-17F and IL-17AF
- Novel local use
- Larger target population than the one addressed by mAbs such as Cosentyx or Taltz and Siliq



ASTHMA,
ATOPIC DERMATITIS

- Potential for various bi-specific combinations
- Potential for novel routes of administration (e.g. Inhalation or ID) in addition to systemic SC
- Huge potential for best in class
- Larger target population than SOC



WET AMD

- Targets well-validated
- Limited development competition
- Large commercial opportunity

PIPELINE ADDRESSING LARGE MARKETS WITH UNDERSERVED NEEDS

Autoimmune

- Validated targets of existing mAb treatments
- Short time to value generation, lower risk than mAbs
- Large markets growing at attractive CAGRs

Market Sizes

Psoriasis

\$17.4B

Psoriatic arthritis

\$8.1B

Atopic Dermatitis

\$9.2B

Asthma

\$10.4B

Macular
Degeneration (AMD)

\$6.9B

Respiratory Infectious Diseases

- Common diseases (e.g. COVID-19, Influenza)
- Platform potential for response to emerging pandemic pathogens

Source: GlobalData, 7 major markets (US, 5EU, Japan) 2023 estimates

PIPELINE DEVELOPMENT: STATUS & UPCOMING MILESTONES

Anti-IL-17 psoriasis treatment in-vivo proof-of-concept in 2024, clinical trial H1 2025

Indication	Molecular Target	Drug Discovery (Max Planck)						Toxicology	Clinical Phase 1/2
		Alpacas Immunized	VHH Antibody Selected	Clones Generated	Manufacturing Process & Analytical Method Development	In vitro / Ex vivo	In Vivo Proof-of-Concept		
Covid-19 Therapeutic	RBD	<div></div>						Ready for Partnering	
Covid-19 Prophylactic	RBD	<div></div>						Ready for Partnering	
Psoriasis, PSA, HS	IL-17A, F, AF	<div></div>						Est. H1 2025	Est. H2 2025
Asthma, Atopic Dermatitis	IL-4Ra IL-13 IL-4 TSLP	<div></div>							Est. 2025/6 Est. 2025/6 Est. 2025/6
Wet AMD	VEGF-A ANG-2	<div></div>							TBD TBD

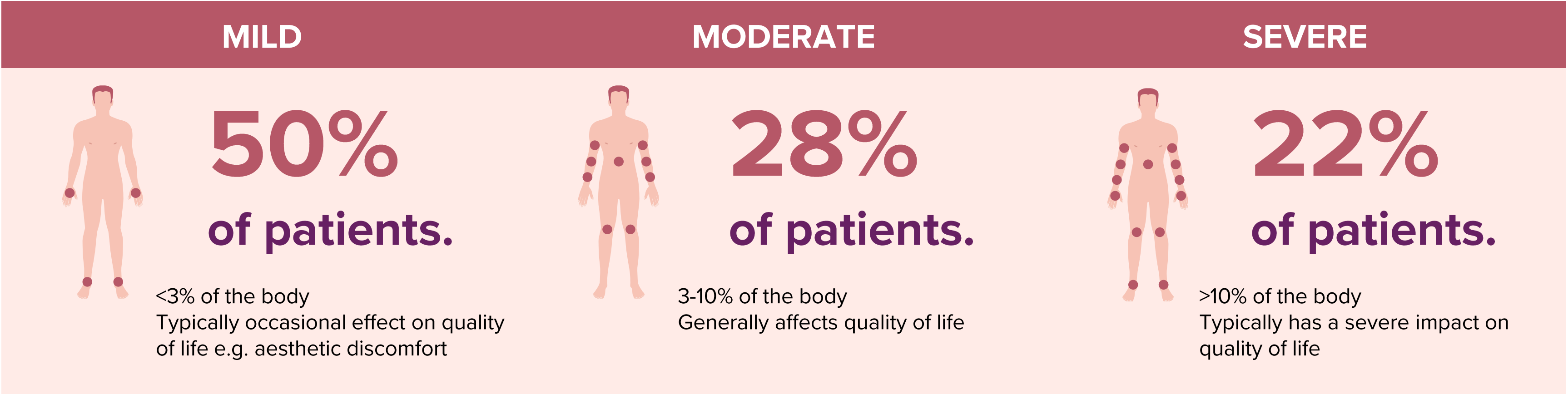
Est. – Estimated timing

PSORIASIS: 78% UNDERSERVED POPULATION

Mild to moderate patients underserved by current treatments

- 125 million patients, including 15.7 million in the 7 major markets (US, EU5 and Japan); 80-90% is plaque psoriasis
- Current biological therapies targeted only to moderate & severe patients, administered systemically
- Mild patients may suffer from considerable and visible lesions which may be uncomfortable, painful, and impact social and mental well-being
- Mild patients are ineligible for biological treatments; and moderate psoriatic patients are often reluctant to receive systemic biological treatments due to side effects and costs

Psoriasis prevalence and severity



Sources: Canadian Psoriasis Network; National Psoriasis Foundation; <https://link.springer.com/article/10.1007/s13555-021-00518-8>

CURRENT PLAQUE PSORIASIS TREATMENTS

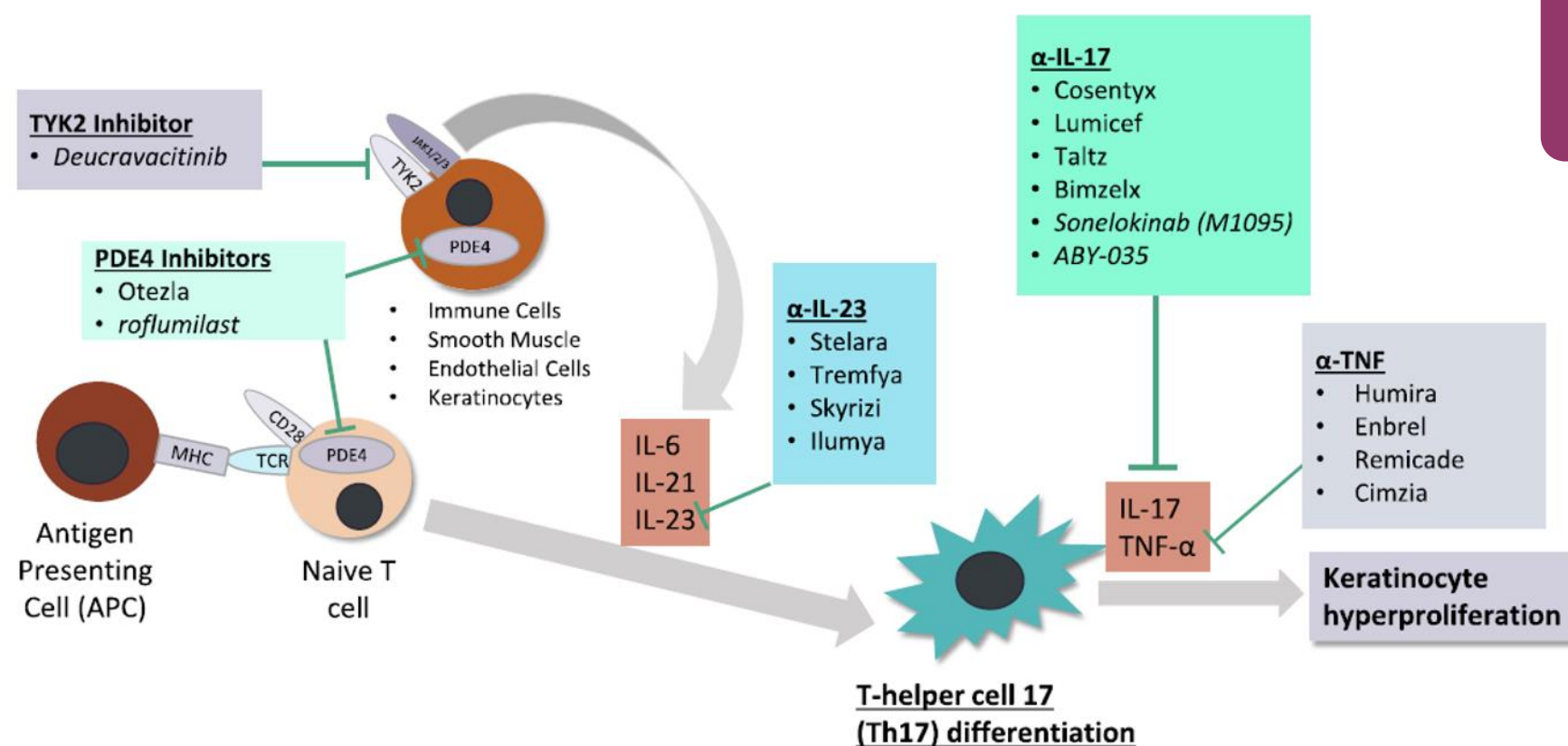
Corticosteroid creams, vitamin E+A,
vitamin D derivatives

Phototherapy

1st line systemic immunosuppressants
(Methotrexate and Cyclosporine) &
Immunomodulators (Otezla)

2nd line systemic Immunomodulators
(e.g. Sotyktu)

Injectable biologics (anti- TNF α , IL-17,
IL-23)



NANOABs ADDRESS UNMET NEED

Designed to be
convenient, safe,
affordable, effective
biologic for mild and
moderate patients

Current treatment shortcomings

Corticosteroids

- Side effects include:
 - Skin thinning (bruising) & Lightening of skin color
 - Development of tolerance

Phototherapy

- Requires 20-35 sessions, 3 times a week

1st line systemic immunosuppressants & Immunomodulators

- E.g. Methotrexate (5.8M prescriptions in the USA in 2020) and Cyclosporin (2.2 million prescriptions) come with concerns for health risks and adverse effects. Otezla (PDE4 Inhibitor) has limited efficacy and requires daily dosing.

2nd line systemic Immunomodulators (e.g. Sotyktu)

- Expensive
- Limited efficacy (lower than Biologics)
- Systemic and chronic, with systemic side effects

Injectable Biologics (mAbs)

- Limited to moderate-to-severe patients
- Very expensive
- Systemic and chronic; Increased risk of developing side effects such as psychological illness (suicidal thoughts) and inflammatory bowel disease.

Why do we need more?

Credit:

Prof. Michael P. Schön, Department of Dermatology, Venereology and Allergology
Lower Saxony Institute of Occupational Dermatology, University Medical Center Göttingen, Germany
<https://hautklinik.umg.eu>

- Not all patients achieve complete clearance (PASI90 or PASI100) and some suffer from recalcitrant lesions that do not respond adequately
- Some patients have psoriasis in difficult-to-treat areas such as hands, feet, scalp, genitals...
- Even mild patients can suffer considerable burden of disease when they have lesions in visible or sensitive areas still cause. Yet, they are not eligible for systemic therapy (biologics and JAK inhibitors - only moderate-to-severe disease)
- Individual preferences

Hard-to-treat lesions: scalp

Credit:

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Hard-to-treat lesions: scalp

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<https://hautklinik.umg.eu>



Visible areas with high burden of disease: face

Credit:

Prof. Michael P. Schön, Department of Dermatology, Venereology and Allergology
Lower Saxony Institute of Occupational Dermatology, University Medical Center Göttingen, Germany
<https://hautklinik.umg.eu>



Hard-to-treat lesions: hands

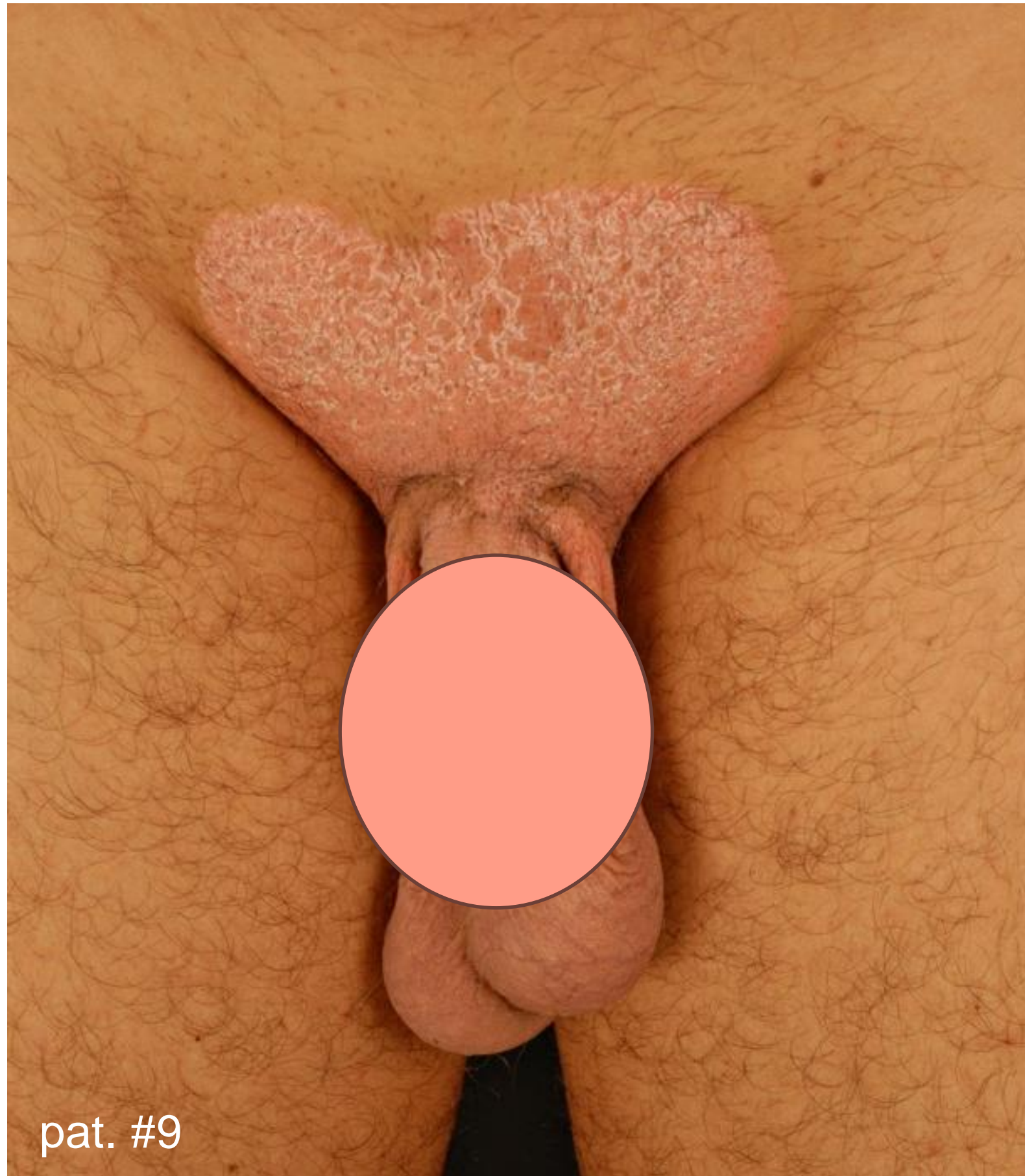
Credit:

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Lower Saxony Institute of Occupational Dermatology, University Medical Center Göttingen, Germany
<https://hautklinik.umg.eu>



Sensitive areas with high burden of disease: ano-genital region

Credit:
Prof. Michael P. Schön, Department of Dermatology, Venereology and Allergology
Lower Saxony Institute of Occupational Dermatology, University Medical Center Göttingen,
Germany
<https://hautklinik.umg.eu>



Special locations: navel and nipples

Credit:
Prof. Michael P. Schön, Department of Dermatology, Venereology and Allergology
Lower Saxony Institute of Occupational Dermatology, University Medical Center Göttingen, Germany
<https://hautklinik.umg.eu>



Recalcitrant isolated lesions

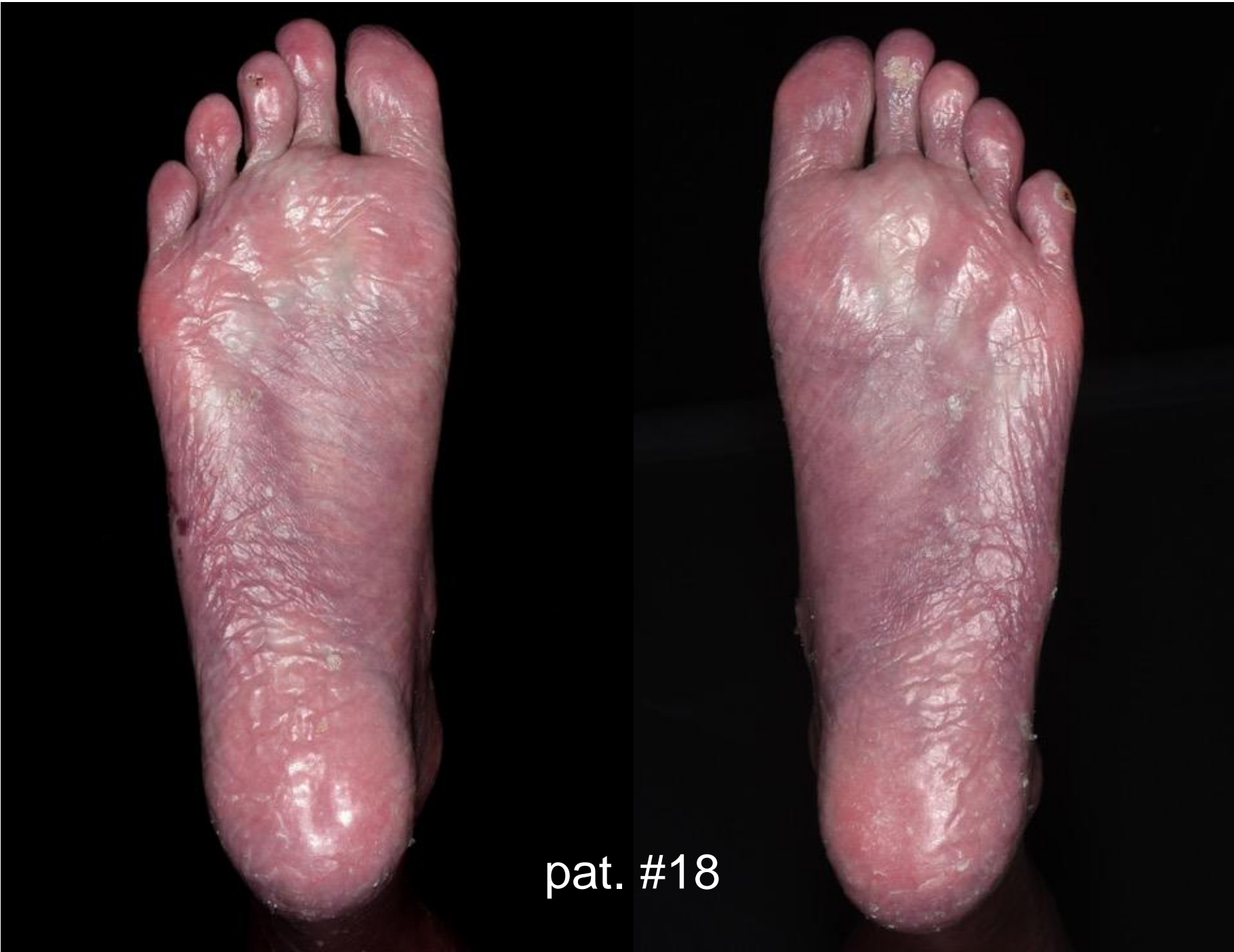
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Pretreated lesions with therapy side effects: soles

Credit:
Prof. Michael P. Schön, Department of Dermatology, Venereology and Allergology
Lower Saxony Institute of Occupational Dermatology, University Medical Center Göttingen, Germany
<https://hautklinik.umg.eu>



After treatment with Corticosteroids



Before treatment with Corticosteroids

WHY DEVELOP AN ANTI-IL-17 NANOAB?

Strong business and clinical potential for development and commercialization

Success Factor	Rationale
IL-17 is a well-established psoriasis target	IL-17 as a molecular target in psoriasis is well understood and validated by existing therapies, e.g., Cosentyx, Siliq, Taltz and Bimzelx.
Antibodies targeting IL-17A and IL-17F isoforms are more effective in treating plaque psoriasis	IL-17 F is highly expressed in the skin. UCB’s Bimzelx and MoonLakes’ Sonelokimab both target IL-17A and F showed superior PASI 90 scores vs. anti-IL-17A only antibodies
There is clinical evidence of IL-17 being responsive to nanobodies in treating psoriasis	MoonLake’s Sonelokimab showed positive Phase II results in treating patients with moderate to severe psoriasis
Specific physicochemical characteristics of our drug candidate make it optimal for treatment of mild to moderate psoriasis (78% of patients)	Most novel oral and biological treatments tend to focus on moderate to severe psoriasis segment, are administered every two weeks systemically (not locally); Mild to moderate patients seek local treatments that are specific, efficacious and safe and that do not require chronic use.

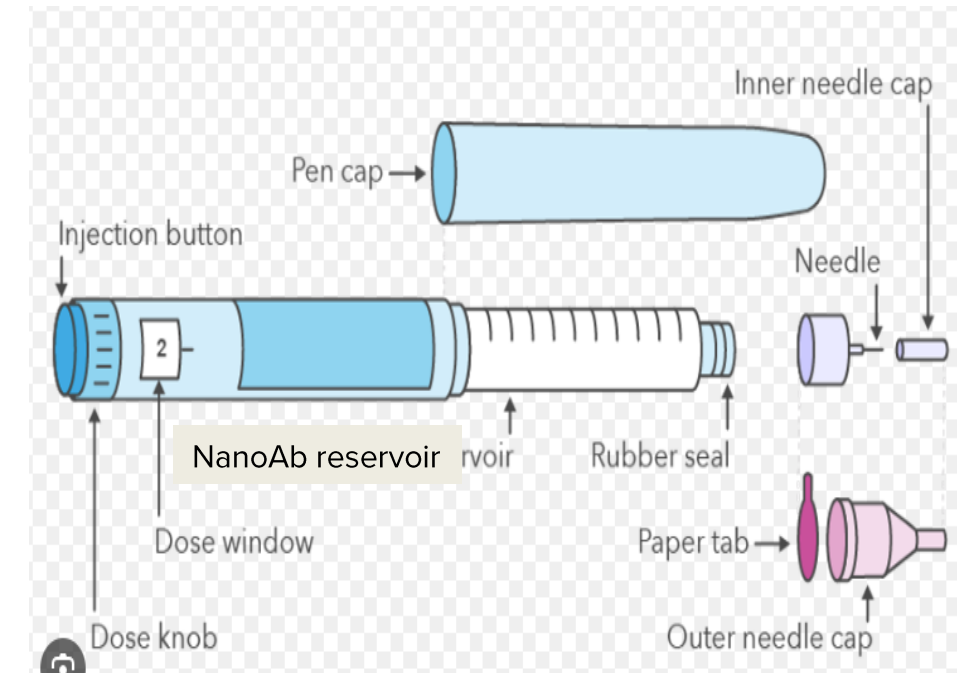
Local ID injection of Anti-IL-17A/F VHH antibody fragment

- **A novel way to using VHH antibodies** - Most other entities working with VHHs (nanobodies®) aim to mimic mAbs “playbook” and hence are competing for the same patient populations and are using the same routes of administration.
- **Making biologics available for the mild to moderate patients:** Current biologics treatments are approved only for moderate to severe psoriasis patients since they are provided systemically and come with associated risks for severe adverse effects (e.g. infections, exacerbation of IBD, heart diseases). Scinai’s nanoAb is for local administration for local action. No systemic impact
- **Improves patient’s convenience** by sparing the need for twice a day application of creams and ointments that makes day to day activities cumbersome (e.g. wearing cloths after application or getting into bed without getting bed sheets dirty) or the need to attend three times a week a phototherapy center for 10 weeks long.

The product

An intradermal pen filled with a liquid formulation of Scinai's anti-IL-17A/F nanoAb given every 3 to 6 months at the doctor's office.

- Upon a patient's visit, a pen injector with a sterile cartridge filled with 1.5 to 3ml of Scinai's formulated nanoAb drug will be dispensed by the physician.
- A disposable and sterile ID needle of 1-3mm long will be mounted onto the pen
- The physician (or nurse) will apply the drug in aliquots of 30 microliters each (per "click") per 7 sq/cm.
- A pen will therefore be sufficient for 50/100 aliquots (50/100 clicks on the pen) depending whether a 1.5 or a 3ml pen was used covering up to 350/700 sq cm of skin.
- As the needle is short the injection will be painless.
- A session will be up to three pens per patient covering up to 10% of the skin surface of an adult's body.
- Such a session will last 5-10 minutes and will be required every 3 to 6 months depending on the clinical results



Generating incentives for the customers – the three P's

Patients: Mild to moderate plaque psoriasis patients.

- Currently treated with corticosteroids and are unhappy :
 - Inconvenience of use (e.g. twice a day, use of ointments/creams).
 - Development of tolerance
 - Development of side effects – thinning of the skin and changes in color of the skin.
- Cannot do phototherapy:
 - Location of lesion
 - Low compliance with phototherapy schedule
- Are pushing the physician to receive biologics
- Do not want to take daily systemic orals (Otezla or Sotyktu)
- Prefer a local, non painful treatment 2-3 times per year that saves daily treatments and at lower costs than once a month systemic biologics and without the risks of systemic immunosuppressants.

Providers

- Dermatologists
- Don't want to prescribe biologics off label to mild patients (risks).
- Prefer a solution that would allow them to charge for the visit, the drug dispensing and the injection.

Payers

- Prefer lower costs vs. systemic biologics especially when used off label
- Provide their clients a superior solution vs. corticosteroids and safer than systemic biologics at a lower deductible to the patient.

Where is the money?

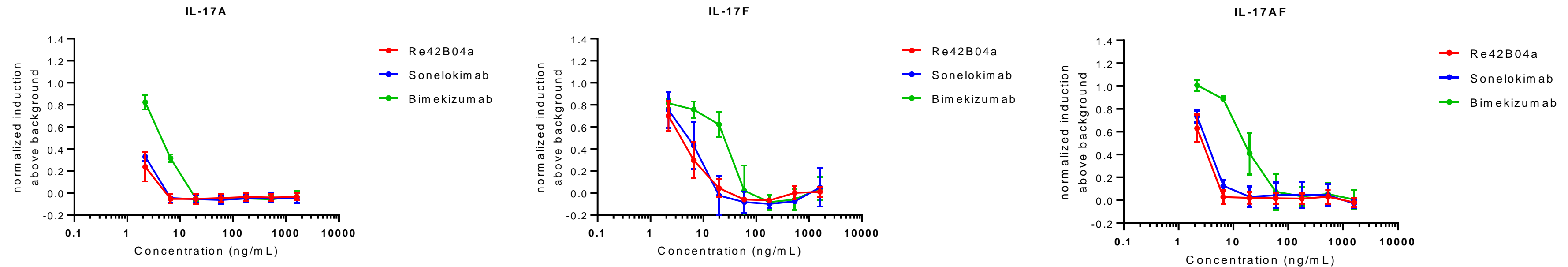
	2030	CAGR (2020–2030)
Drug Sales, Mild PsO (\$m)	\$ 1,841,500,335.5	12.1%
TNF inhibitors	\$ 123,915,881.2	0.4%
Enbrel (etanercept)	\$ 21,197,962.4	-5.2%
etanercept biosimilar	\$ 17,987,481.0	31.2%
Humira (adalimumab)	\$ 31,022,633.0	-8.8%
adalimumab biosimilar	\$ 50,177,132.4	58.9%
Remicade (infliximab)	\$ 1,940,221.9	-3.4%
infliximab biosimilars	\$ 900,856.4	8.4%
Cimzia (certolizumab pegol)	\$ 307,903.1	-0.5%
certolizumab biosimilars	\$ 381,690.9	N/A
IL-12/IL-23 inhibitors	\$ 92,770,995.3	0.2%
Stelara (ustekinumab)	\$ 43,015,881.4	-7.2%
ustekinumab biosimilars	\$ 49,755,113.9	N/A
IL-23 inhibitors	\$ 540,126,396.7	19.7%
Tremfya (guselkumab)	\$ 395,863,978.0	26.8%
Ilumya (tildrakizumab)	\$ 44,223,187.6	9.9%
Skyrizi (risankizumab)	\$ 100,039,231.0	10.9%
IL-17 inhibitors	\$ 269,947,325.1	17.5%
Cosentyx (secukinumab)	\$ 63,619,131.3	3.8%
secukinumab biosimilars	\$ 32,516,667.7	N/A
Taltz (ixekizumab)	\$ 28,460,732.8	11.9%
ixekizumab biosimilars	\$ 6,159,350.6	N/A
Siliq (brodalumab)	\$ 1,514,817.9	8.0%
Bimzelx (bimekizumab)	\$ 63,359,429.7	N/A
sonelokimab (M1095)	\$ 42,537,922.2	N/A
izokibep/ABY-035	\$ 31,779,272.9	N/A
PDE4 inhibitors	\$ 233,629,627.9	10.3%
Otezla (apremilast)	\$ 141,509,024.3	4.9%
generic apremilast	\$ 86,829,302.6	N/A
roflumilast	\$ 5,291,301.0	N/A
AhR Agonists	\$ 4,511,596.3	N/A
tapinarof	\$ 4,511,596.3	N/A
Kinase inhibitors	\$ 259,505,982.9	N/A
Deucravacitinib (BMS-986165)	\$ 259,505,982.9	N/A
NF-kappa B inhibitors	\$ 63,077,343.7	N/A
tepilamide fumarate/PPC-06	\$ 63,077,343.7	N/A
Other Systemic therapies	\$ 130,772,138.5	14.2%
Methotrexate	\$ 1,537,772.3	-0.6%
Cyclosporine	\$ 34,459,452.4	0.5%
Piclidenoson	\$ 94,774,913.9	N/A
Topical therapies	\$ 123,243,047.9	0.9%
Wynzora (calcipotriene + betamethasone dipropionate)	\$ 1,253,390.2	N/A
generic calcipotriene + betamethasone dipropionate	\$ 15,497,482.0	0.9%
Rx Topical Corticosteroids	\$ 60,251,381.7	0.8%
Rx Vitamin D derivatives	\$ 31,849,172.6	0.8%
Rx Vitamin A/Retinoid derivatives	\$ 14,391,621.4	0.6%

- Total sales of drugs in the 7MM for mild psoriasis expected to be \$1.8B in 2030
- \$1.3B is expected to come from prescription of biologics and \$259M from TYK2 inhibitor
- This is the market where the topicals and phototherapy do not help.
- This is the unmet need, which represents approx. 300K monthly prescriptions of expensive drugs not planned for use with mild patients
- Pay attention that topicals and immunosuppressants sell altogether \$250M annually in the 7MM.

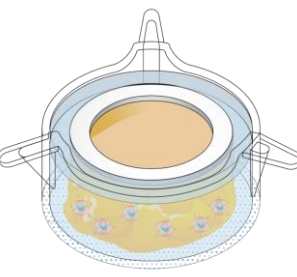
Source: GlobalData

Anti-IL-17 Nanoab: A better neutralizer

Single nanoAb neutralizes IL-17 A, F, and AF complex



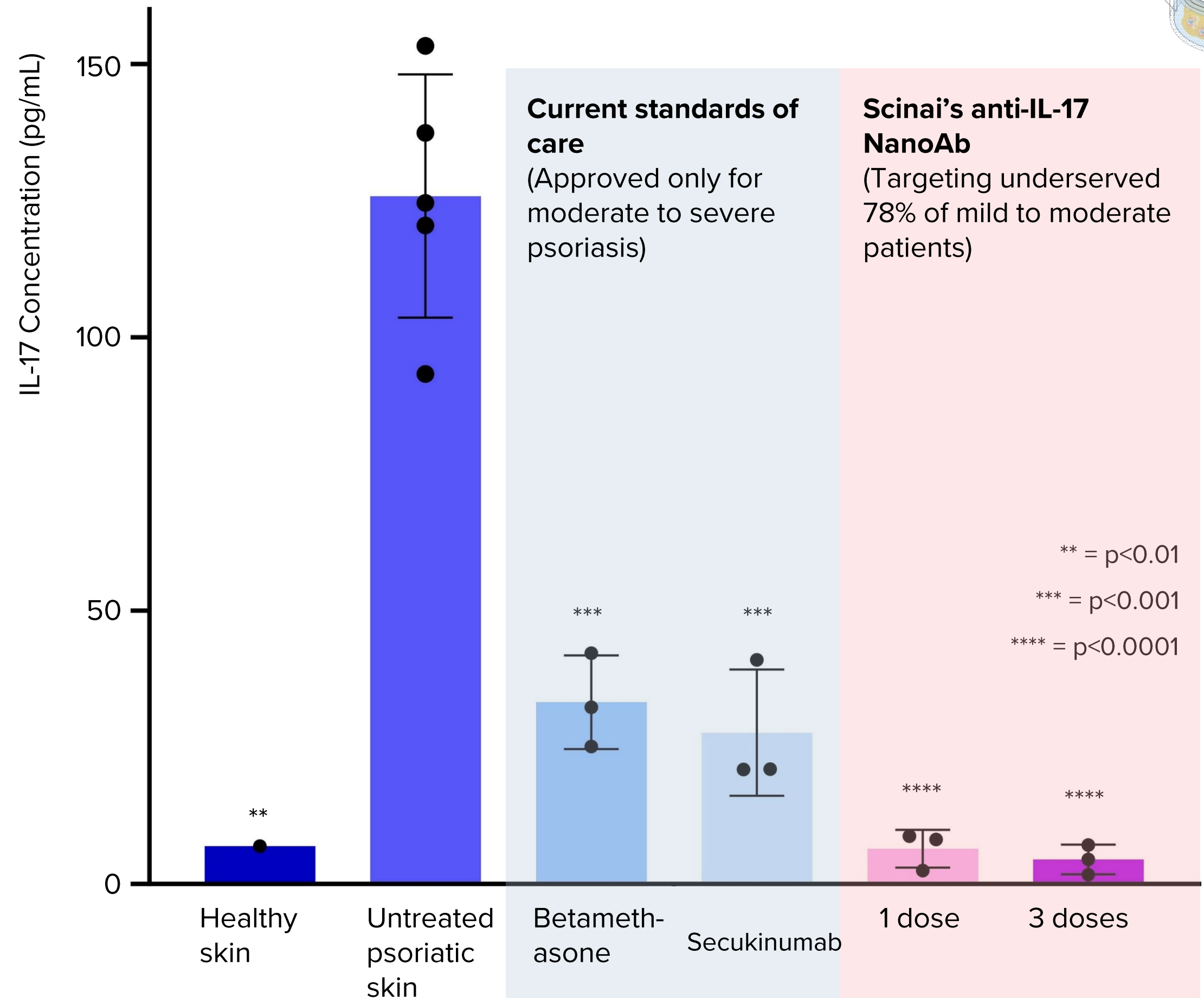
- Neutralization of IL-17 isomers by SCN-1 (Re42B04a) and other antibodies against IL-17;
- SCN-1 neutralizes IL-17A at concentrations of ~1 nM; IL-17F at ~10 nM and at ~1 nM for IL-17AF;
- Neutralization was determined by the extent of eliminating the expression of the reporter gene upon blocking the induction by the IL-17 isoforms (<https://www.invivogen.com/hek-blue-il17>).



EX-VIVO PROOF OF CONCEPT: NANOABS SHOWN TO BLOCK IL-17

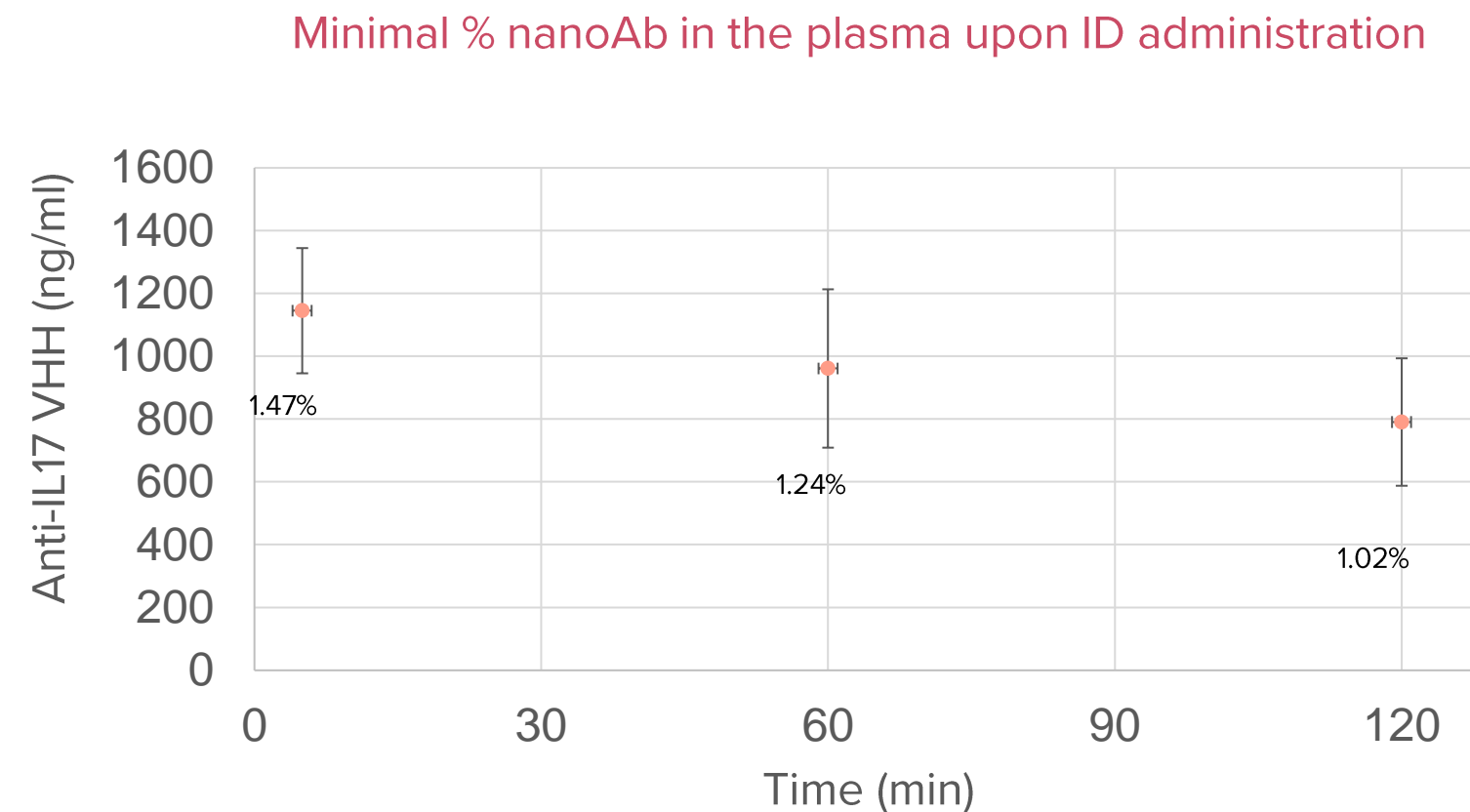
Impact of ID injected nanoAb in
comparison to current leading
treatments Betamethasone and
Secukinumab

Designed to be local, less
frequent use, safer, more
convenient and more affordable



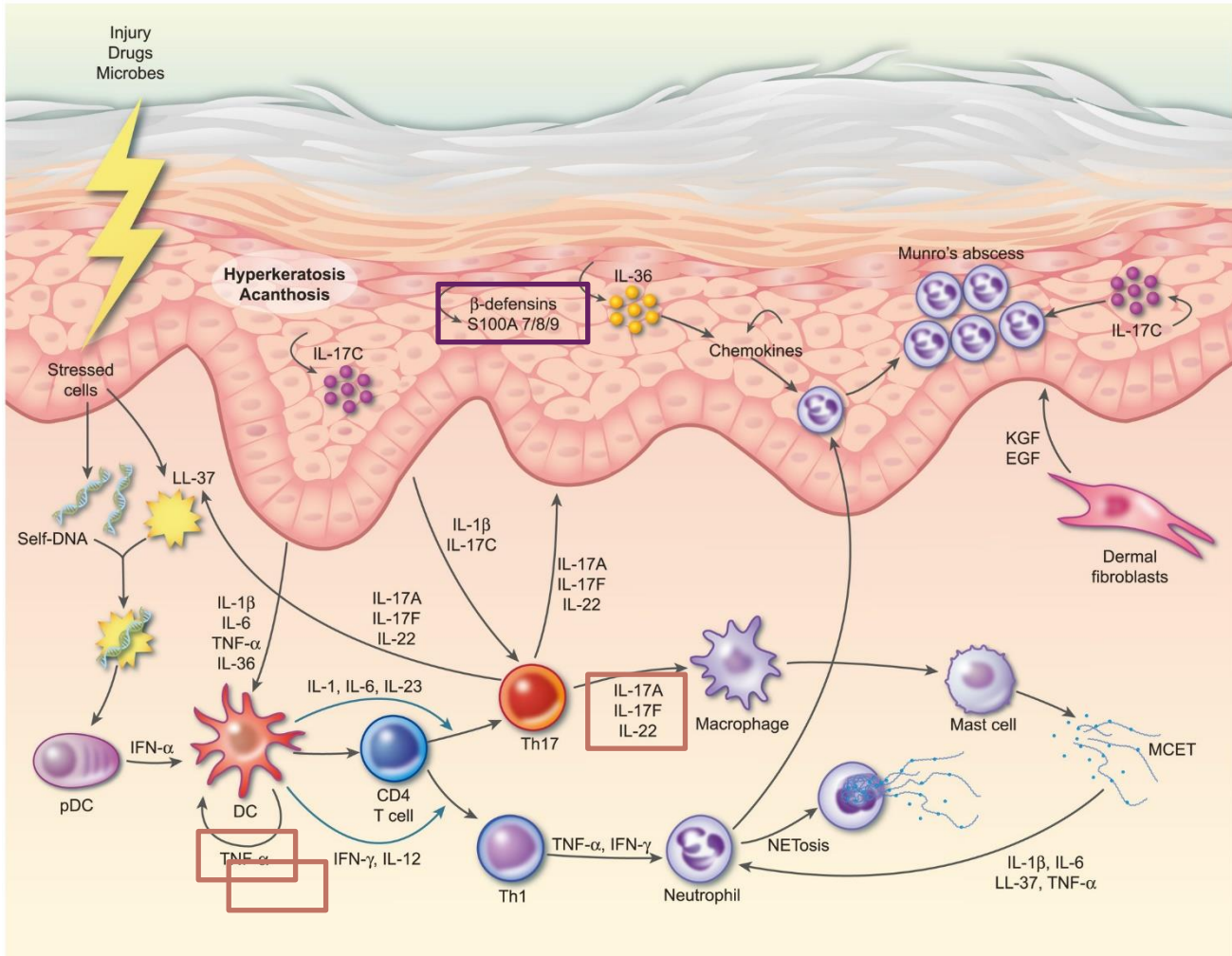
SCN-1 is expected to show limited systemic exposure

- Literature¹ indicates an estimated t_{1/2} in the blood following systemic injection of ~2 hrs;
- After ID-injection systemic exposure was less than 1.5% of administered drug after 2 hrs.



1: Jovčevska, I., Muyldermans, S. The Therapeutic Potential of Nanobodies. BioDrugs 34, 11–26 (2020).

In vivo PoC: Human xenograft skin



Source: IL-17 in inflammatory skin diseases psoriasis and hidradenitis suppurativa - Fletcher - 2020
- Clinical & Experimental Immunology - Wiley Online Library

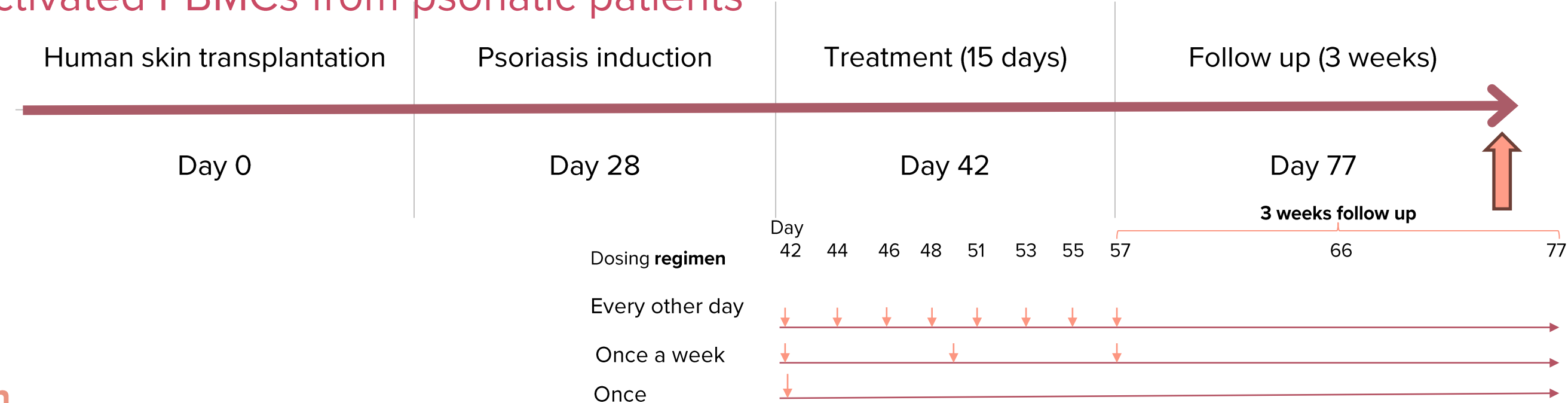
What is being studied? The impact of local psoriasis treatments by efficacy parameters:

- ✓ Clinical evaluation by medical photographs.
- ✓ Macroscopic evaluation, epidermis thickness scoring & Histological analysis.
- ✓ IHC analysis for Ki-67, (proliferative marker of keratinocytes).
- ✓ IHC analysis: HLA-DR (High DR characterizes Psoriasis), epidermal human beta-defensin-2 (BD-2 serum levels correlate with IL-17A and PASI, it is decreased after IL-17A blockade).
- ✓ Psoriasin (S100A7), CD8 & CD4 (increase in inflammation), IL-17, TNF-a, CD31 (angiogenesis marker)
- ✓ Results expected in Q2 2024



In vivo PoC: Human xenograft skin

Animal model: Normal human skin engrafted into SCID BEIGE mouse and disease induced by injection of IL-2 activated PBMCs from psoriatic patients



Study design

#	Role	Compound	Route	Dose	Frequency	Follow up	N
1	Negative control	Irrelevant VHH	ID	0.35 mg/injection	Once a week × 3	3 weeks	8
2	Positive control - model	Dexamethasone	Topical	2 mg/day	Twice/day for 5 weeks	NA	8
3	Positive control – comparable antibody	Secukinumab	SC	0.15 mg /injection	Once a week × 3	3 weeks	8
4	Positive control – standard of care for mild to moderate	Betamethasone	Topical	180 mg/day	Twice/day for 3 weeks	3 week	8
5	Test item	SCN-1	ID	0.35 mg/injection	Every other day	3 weeks	8
6	Test item	SCN-1 (350mcg/injection)	ID	0.35 mg/injection	Once a week × 3	3 weeks	8
7	Test item	SCN-1 (350mcg/injection)	ID	0.35 mg/injection	Once	3 weeks	8

Study endpoints

- Epidermal thickness scoring
- Macroscopic evaluation
- Analysis of psoriasis markers

Parameters evaluated during the PoC – Psoriasis markers

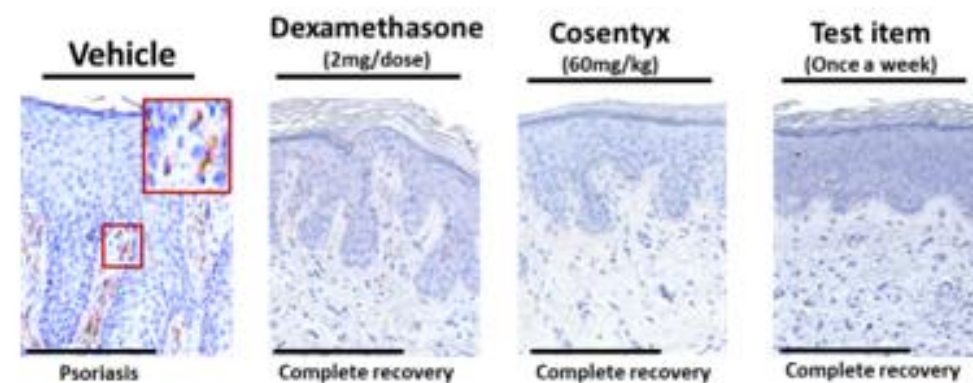
Marker	Function	Level in psoriasis
Psoriasin (S100A7)	Regulates cell proliferation and differentiation	Overexpressed
HBD-2	Antimicrobial peptide	Overexpressed
IL-17A, IL-17F	Pro inflammatory cytokine	Overexpressed
TNF- α	Pro inflammatory cytokine	Overexpressed
Ki-67	Marker for proliferation	Overexpressed
HLA-DR	Expressed by keratinocytes	associated with increased genetic susceptibility to psoriasis
CD4, CD8	Indicate of active inflammation	abundant due to high level of lymphocytes
CD31	Role in angiogenesis and vascular integrity	Increases in Psoriasis

Expression of markers in skin xenografts: IL-17 isoforms

IL-17A expression (red frame)

Observed in the negative control

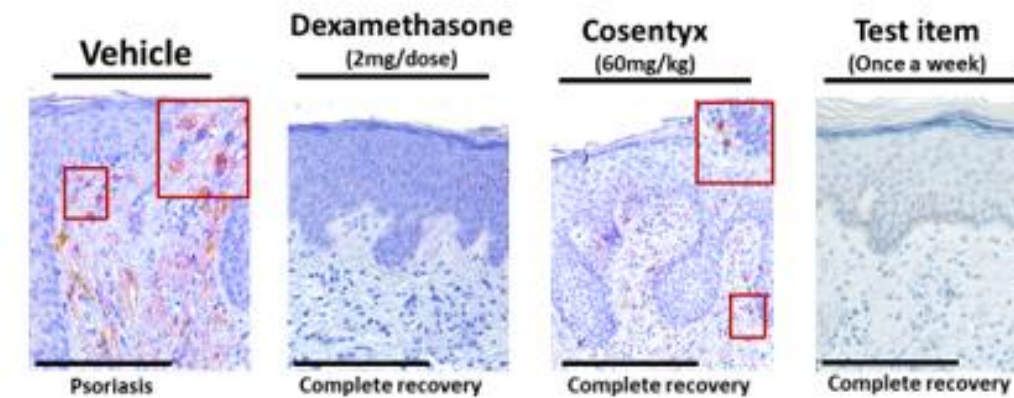
Blocked by NanoAb and the other therapies



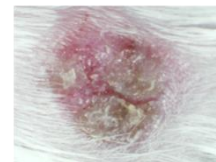
IL-17F expression (red frame)

Observed in the negative control and in Secukinumab

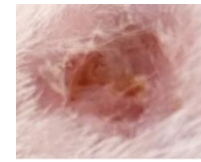
Blocked by NanoAb and the steroid treatment



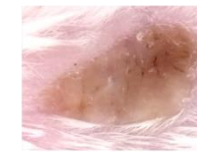
Negative control



Secukinumab



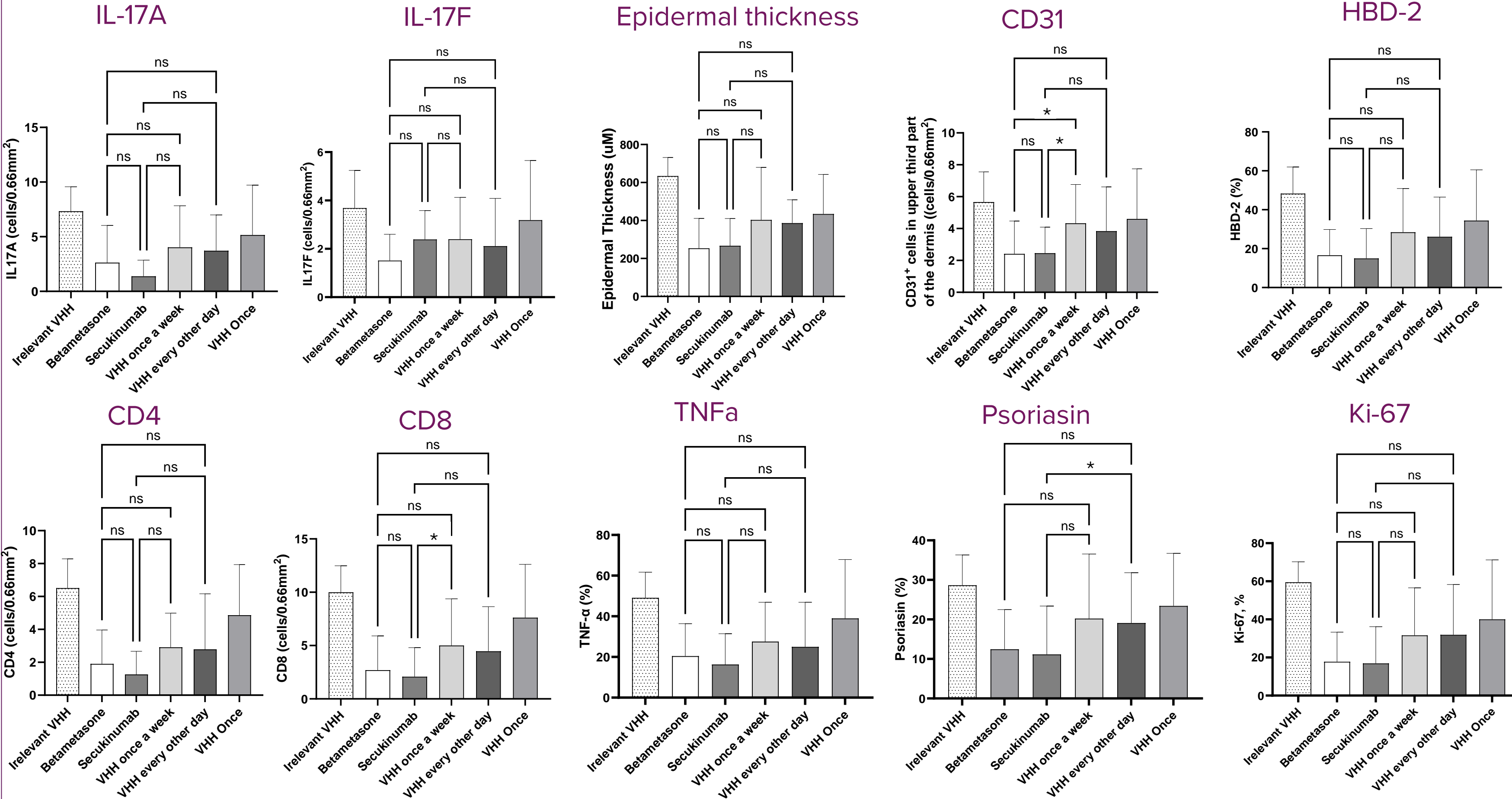
NanoAb (Once a week)



At study termination, samples from mice transplanted with skin from the same donor show scales and psoriatic appearance in the Negative control and healed lesions in the Secukinumab and NanoAb treatments.

Psoriasis markers: mostly comparable to Secukinumab & Betamethasone

*p≤ 0.05



Take aways from in vivo Poc

1. MoA is clarified: **The NanoAb blocks IL-17A, F and disrupts the whole psoriatic cascade**
2. Local administration of the NanoAb into the lesion leads to **significant therapeutic effect vs. negative control**
3. A single administration is inferior to multiple administrations (but still has some effect)
4. Consider treatment initiation/induction (in the same way as done with Secukinumab)
5. Consider further increasing the dose or extend T1/2 (or both) to prolong even further the therapeutic effect.

Next steps

1. Test increased dose and consider moving directly to TOX
2. Develop t1/2 extension to be used with other pipeline products
3. Fine tune the administration schedule
4. Asses the durability of the therapeutic effect for more than 3 weeks and up to 3 months

IL-17 nanoAb program summary

- There is a need for a better treatment for patients with mild to moderate Psoriasis and for specific lesions that are hard to treat with current therapies.
- Biological drugs are the safest and most efficient, yet – they are administered systemically and are expensive.
- Blocking IL-17A and IL-17F isoforms is an effective mechanism to control Psoriasis
- Scinai's NanoAbs, administered locally ID already showed superior neutralization of IL-17 in cell culture, and ex-vivo in human Psoriatic skin.
- In Scinai's in vivo study, the NanoAb was comparable to Secukinumab anti IL-17A mAb and Betamethasone in reducing multiple inflammatory parameter
- Next steps: Optimize schedule of administration by extending the T1/2

IP STATUS ANTI IL-17 NANOAB



Status

- Priority patent application: Filed Dec. 28, 2022
- International patent application (PCT): Filed December 27, 2023

Covers

- The patent application encompasses novel VHH antibodies directed against IL-17 isomers and their use for therapeutic and diagnostic applications. The VHH antibodies, characterized by specific sequences, can block the IL-17A and -F that are on the critical path for Psoriasis and other diseases.

Exclusive license

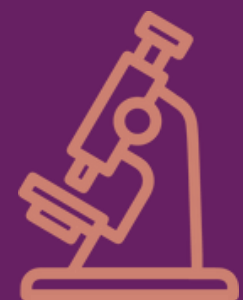
- Scinai has exclusive license from the Max Planck Society for worldwide development and commercialization.

BOUTIQUE CDMO SERVICES

De-risking Scinai's internal R&D investments by leveraging internal capabilities



**ASEPTIC GMP
MANUFACTURING
SUITES**



**STATE-OF-THE-ART
R&D AND QC
LABORATORIES**



**PHARMA CMC
EXPERIENCE**

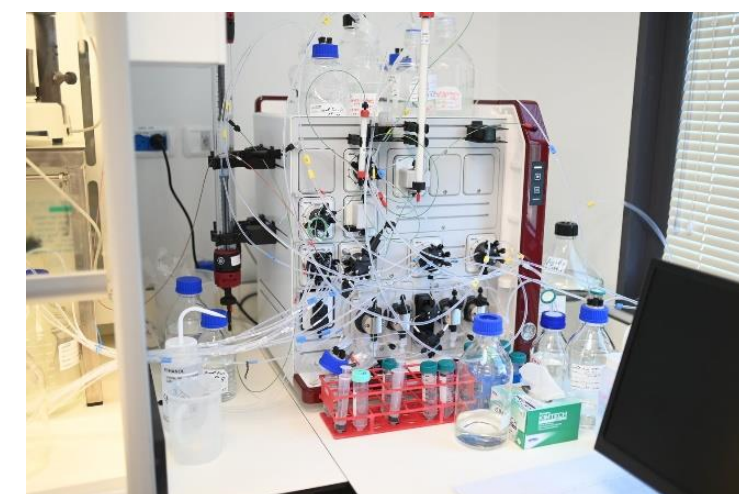


GMP MANUFACTURING AND R&D LABS

Industry standard
aseptic facility:
Labs, cleanroom,
warehouses, offices

- Analytical methods development combined with best-in-class **QC capabilities** and equipment
- Labs for **manufacturing process development** and scale-up allow for the implementation of quality by design and design of experiment principles
- **cGMP suites** for upstream fermentation, downstream purification, media and buffer preparations, formulation and aseptic automated filling of PFS & vials
- Designed to meet **FDA and EMA** regulatory standards
- Single-use equipment enables:
 - Adaptable manufacturing processes for a pipeline of different products
 - Quicker lead times
 - Faster time-to-market for new products

Scinai's 1850m² (20,000 sq.ft)
cGMP Biologics Manufacturing Facility | Jerusalem



CDMO STRATEGIC GUIDING PRINCIPLES

Scinai's CDMO value proposition:

Experienced and professional team available to execute drug development projects at high-speed while adhering to high (EU) quality standards using new and modern equipment located in a well-maintained site, offered at competitive pricing attractive to young biotech start-ups

- Focus on serving Israel, Europe and USA
- Target services: Early-stage biopharma drug development projects from preclinical studies to clinical phase 2
- Target customers: Early-stage biotech companies at pre-clinical stage

DEEP PHARMA EXPERIENCE & CAPABILITIES

30 STAFF MEMBERS

- 5 PhDs
- Manufacturing, engineering, technical R&D, upstream & downstream process development, QC, QA, clinical and non-clinical, procurement
- Outsourced finance, legal, regulatory



AMIR REICHMAN – CEO

Senior global pharma leadership positions: Pharmaceutical engineering & supply chain at GSK Vaccines, Belgium; Large projects building vaccine manufacturing sites in Belgium, Italy, Germany, Hungary & US; NeuroDerm (R&D); Novartis Vaccines (Global Supply Chain).



DR. TAMAR BEN-YEDIDIA – CSO

Co-invented and guided vaccine candidate through 8 clinical trials including pivotal Phase 3. PhD from Department of Immunology, Weizmann Institute of Science.



ELAD MARK – COO

Led scale-up, tech transfer, manufacturing of recombinant proteins in China, mAbs for Novartis Singapore. Principal bioprocess engineer; Novartis (Technical Project Manager – Process).



DR. DALIT WEINSTEIN-FISCHER – VP TECHNICAL R&D

Leadership roles at Merck kGaA Israel. Directed Biological Processes at NanoSpun Technologies Ltd. and CTO at VAYU Sense AG, specializing in improving bio-based fermentation processes with an AI-based controller. Led the Natural Biotechnology Systems Department at Sigma Aldrich. PhD Molecular Genetics and Microbiology.

SELECT FINANCIALS & CAP TABLE

Nasdaq: SCNI

ORDINARY ADS OUTSTANDING	837,358
\$50 warrants (Expire 16 Dec 2025)	14,000
\$6.5 warrants (Expiry 2027)	292,000
\$8.1 warrants (Expiry 2027)	8,760
\$14.5 warrants (Expiry 2028)	6,879
\$6.5 warrants (Expiry 2029)	241,310
\$8.1 warrants (Expiry 2029)	6,879
ESOP Options + RSUs	90,025
SHARES + WARRANTS + OPTIONS	1,485,199

- \$5M cash as of March 31, 2024
- €24M European Investment Bank (EIB) loan payable Dec 31, 2031 in negotiations to be mostly converted to equity - [LINK](#)

BOARD BRINGS SIGNIFICANT EXPERTISE

NORTH AMERICA

Mark Germain, Chairman

Aentib Group (Managing Director). Founder, director, chairman, and/or investor in over 20 biotech companies including Alexion, Incyte, Neurocrine, Ariad, ChromaDex.

Samuel Moed, Director

Bristol Myers Squibb (NYSE: BMY) (Senior Vice President, Corporate Strategy)

Adi Raviv, External Director

Experienced in Wall Street investment banking; Capacity Funding LLC (Principal)

Jay Green, External Director

Glaxo SmithKline (NYSE: GSK) Global Vaccines (Senior Vice President Finance and CFO), Gavi (Advisor for COVAX)

ISRAEL

Amir Reichman, CEO

NeuroDerm Ltd (Senior Scientist), Novartis Vaccines USA (R&D and Global Supply chain), GSK Vaccines Belgium (Global Supply Chain and Global Engineering)

Morris C. Laster, Director

BioLineRx (CEO, Director), OurCrowd (Partner), Clil Medical (CEO), Vital Spark (CEO), Kitov Pharmaceuticals (Co-founder, Director)

Yael Margolin, PhD, External Director

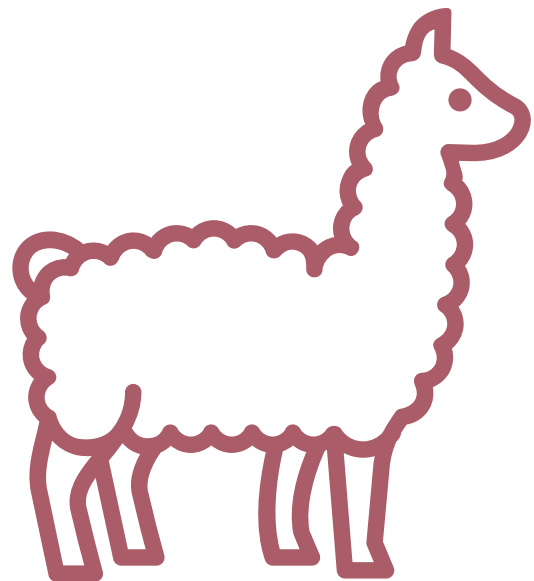
Gamida Cell Ltd. (Nasdaq: GMDA) (President, CEO, Director), Denali Ventures LLC (VP)

Avner Rotman, PhD, Director

Biodar (CEO), Rodar (Founder)

SIGNIFICANT POTENTIAL FOR VALUE CREATION

- > Pipeline of NanoAb-based drugs
- > Promising preclinical results
- > Preparing for first-in-human clinical trial of anti-IL-17 NanoAb
- > Collaboration with Max Planck Society and UMG, Germany
- > Targeting diseases with large underserved needs and attractive commercial opportunities
- > CDMO business unit buffers R&D risk



NASDAQ: SCNI

www.scinai.com

July 2024

scinai

IMMUNOTHERAPEUTICS

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ir@scinai.com

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