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MoonLake Immunotherapeutics

R&D Day Webcast

Presentation Document – Results MIRA trial

June 26th 2023

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Welcome to our R&D Day

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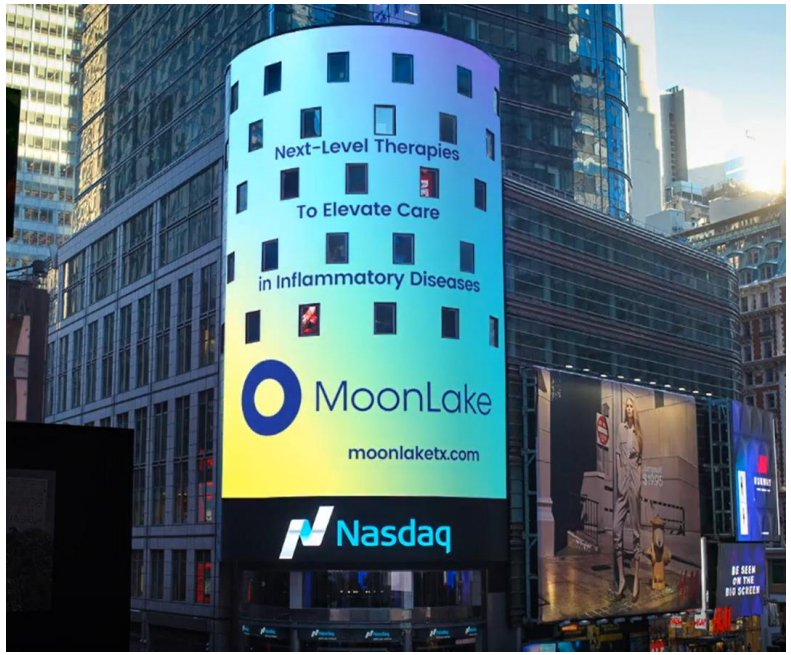
Cowen conference (March 6-8) | **AAD** (March 18) | 10-K filing (March 20) | HCW & Guggenheim meetings (Mar 30/Apr 5-6) | **Capital Markets Day** (April 19) | Kempen conference (April 25-26) | 10-Q + S3 filing (Mid- May) | EULAR (May 31- Jun 3) | AGM (Jun 7) | Jefferies conference (Jun 7-9) | **HS data R&D Day** (today)

Date: June 26th, 2023
Time: 8am EDT
Location: Webcast



Topic	Sub-topics	Lead	Timing
Intro	- Key messages	Jorge Santos da Silva	5 mins
HS – MIRA trial Primary Endpoint Readout	- MIRA's pivotal profile, incl. baseline - Efficacy data at primary endpoint - Safety data & other secondaries - Discussing what it means for HS & Derm	Kristian Reich	30 mins
Moving Forward	- Conclusions - Overall value of MLTX - Path forward	Jorge Santos da Silva	10 mins
Q&A		Matthias Bodenstedt	To end

Source: MoonLake Corporate

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Instructions for this session

Please **take note of the disclaimer** on the following page

You can **submit your questions** through the Q&A function in the **bottom left** – questions are only visible to the moderators – we will address **as many questions as possible** at the end of this session

The presentation and a **replay** will be made available on our IR website

For any **technical issues** during the webcast, please also use the Q&A function to request support

Other requests should be directed to ir@moonlaketx.com or media@moonlaketx.com

Source: MoonLake Corporate

Disclaimer

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Certain information contained in this presentation relates to or is based on studies, publications, surveys and our own internal estimates and research. In this presentation, we rely on, and refer to, publicly available information and statistics regarding market participants in the sector in which we compete and other industry data. Any comparison of us to any other entity assumes the reliability of the information available to us. We obtained this information and statistics from third-party sources, including reports by market research firms and company filings. In addition, all of the market data included in this presentation involve a number of assumptions and limitations, and there can be no guarantee as to the accuracy or reliability of such assumptions. Finally, while we believe our internal research is reliable, such research has not been verified by any independent source and we have not independently verified the information.

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Source: MoonLake Corporate

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Introduction

Guidance: Meet or beat Bimekizumab on HiSCR75 end of June

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		Primary Analysis	HiSCR75 (Delta of best dose to PLC, ppt)[1]		
			Trial A	Average	Trial B
1	**Bimekizumab** (Bimzelx)	ITT-mNRI (All-ABX) (mNRI-HS-ABX)	**15** (22) BE HEARD I	**17.5** (22.5) WEEK 16	**20** (23) BE HEARD II
2	**Adalimumab** (Humira)	ITT-NRI	**11** PIONEER I	**16** WEEK 12	**21** PIONEER II
3	**Secukinumab** (Cosentyx)	ITT-mNRI	- SUNSHINE	-	- SUNRISE
	Sonelokimab (SLK)	ITT-NRI (+ITT-mNRI)		**> 20** MIRA WEEK 12	

Other expectations:

- ⊕ Monthly Dosing
- ⊕ Higher Primary Endpoint
- ? No new safety signals
- ? Lower Thrush (*Candida*)

Note: Data is not based on Head-to-Head comparisons. 1 HiSCR75 response for best dose and placebo, respectively: Bimekizumab (320mg Q2W/Q2W), 40% and 18% (BE HEARD I), 39% and 16% (BE HEARD II); Adalimumab (40 mg), 25% and 14% (Pioneer I), 35% and 14% (Pioneer II); Secukinumab, no HiSCR75 responses available

Source: MoonLake Corporate

The key messages

MLTX's MIRA trial is a SUCCESS – Setting a new bar in HS

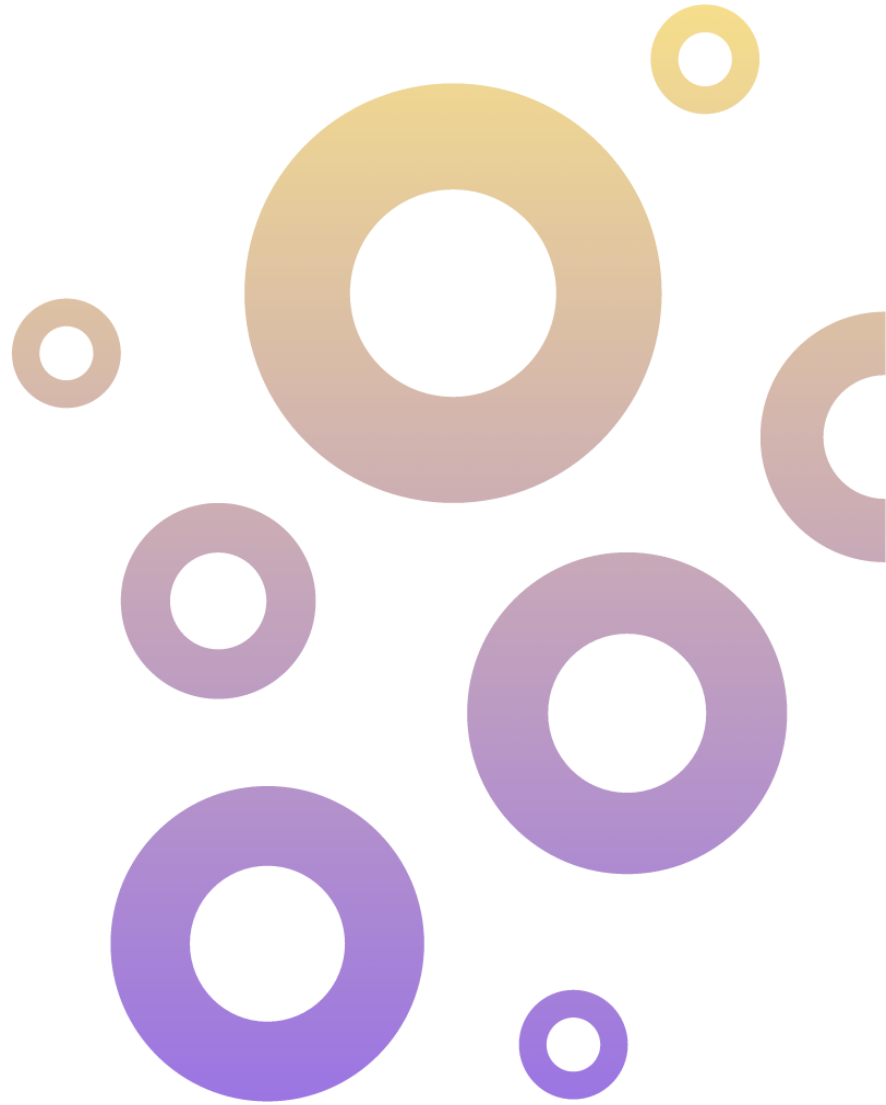
- HiSCR75 at wk 12 primary end point met – *first time ever, "Beat" scenario, landmark data*
- Other end points met at wk 12, early wk16 data promising – *impact of SLK for HS patients is clear*
- No new safety signals – *continued favorable safety profile*

MLTX's SLK Nanobody® opens a new era in therapy

- SLK reaches high clinical goals deep in tissue, with its unique MoA
- Our view: SLK now leading asset in HS, a multi-bn market ($10bn+)
- Remember: leading efficacy/safety in PsO ($25bn+)
- And: PsA trial progressing well and we believe trial de-risked (~$10bn)

MLTX becomes a leader in I&I

- Soon Ph3-ready in 3+ TAs – planning launch in 2027 with price first in HS
- A wealth of potential indications to further pursue ($30bn+)
- Solid financial position allows Phase 3 to be prepared on MLTX's terms



Source: MoonLake Corporate

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MIRA Trial
Results

Today's focus is on HS, a devastating and high prevalence disease

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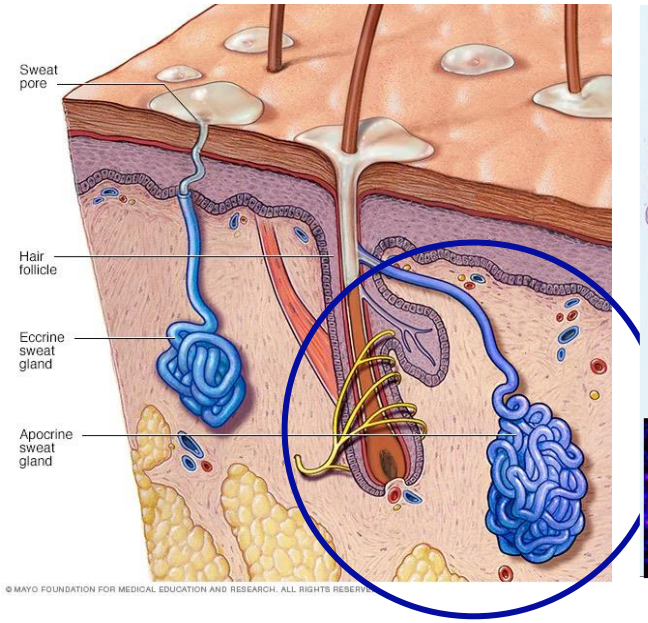
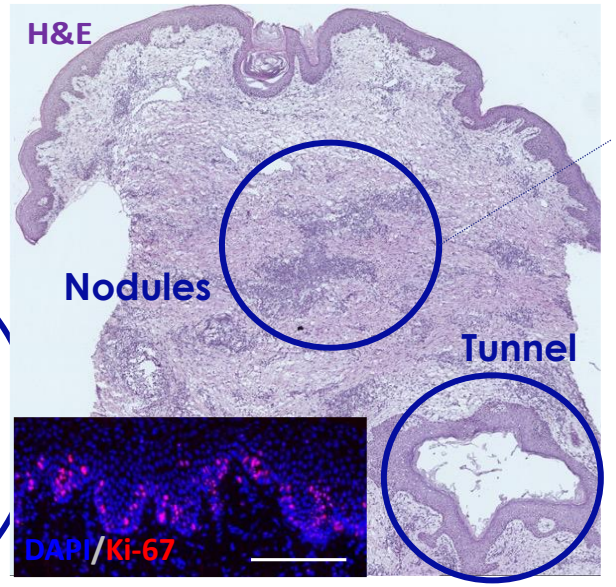
Blockage of aprocrine glands…



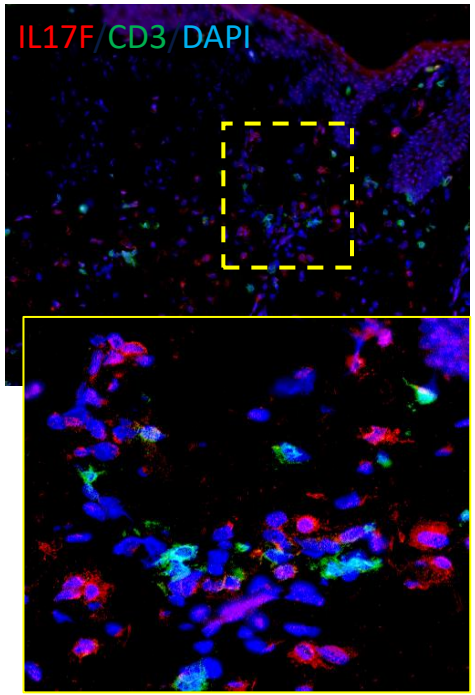
(essentially an "apocrinitis")

…creates deep tissue lesions…

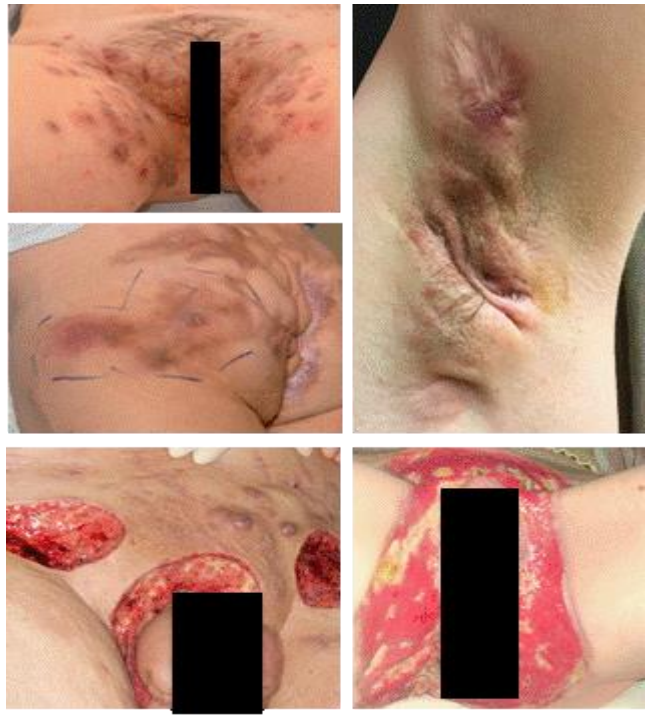


(vicious circle between IL-17 release and keratinocyte proliferation and activation)

…rich in IL-17F…



…and causing devastating damage



Market size

2%+ Global prevalence

7 avg # of years to diagnosis, globally

10+ USD billion sales by 2035

Unmet Needs

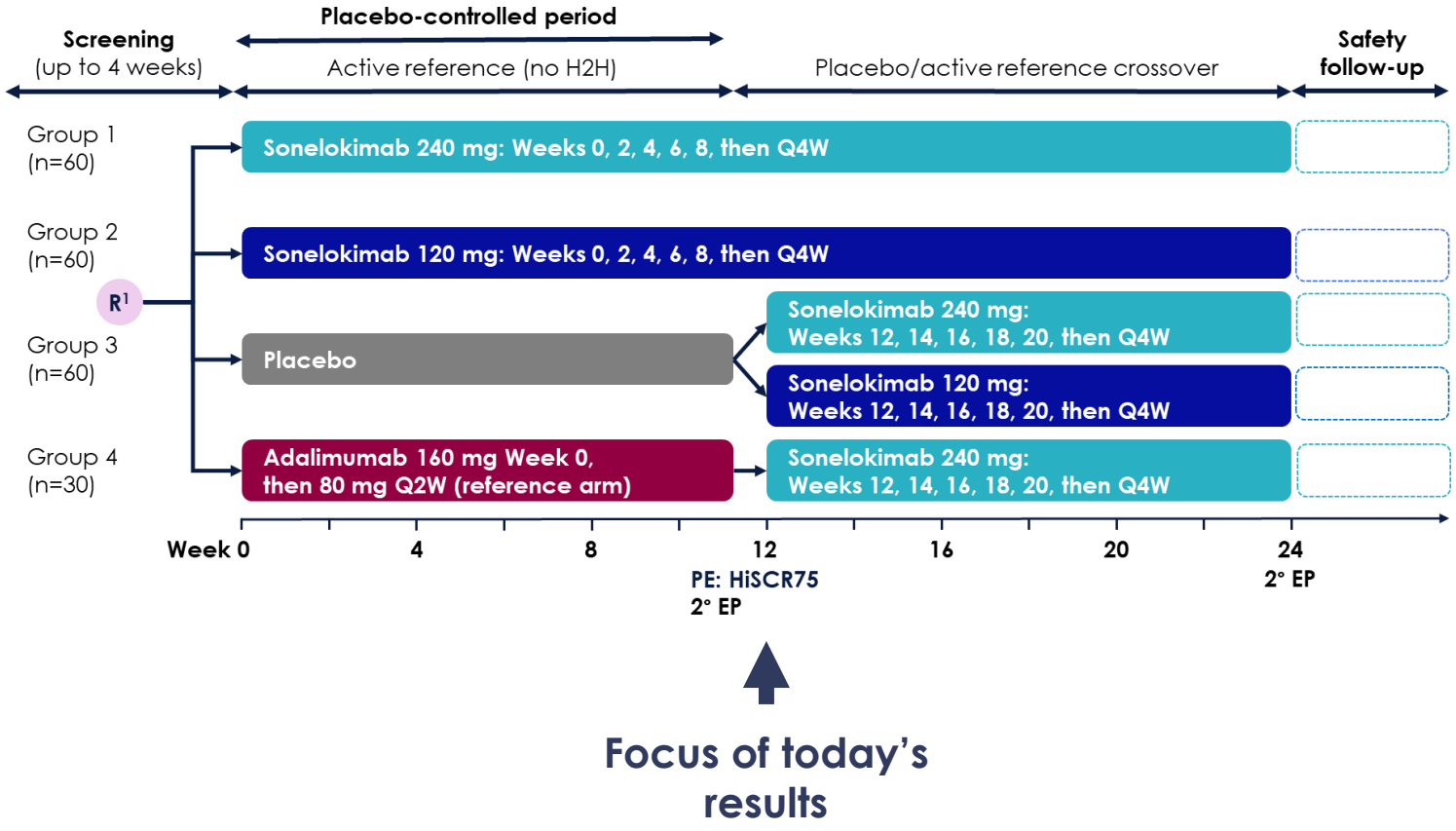
1 Drug approved (Humira)

50% Improvement for half of pts only

Picture from https://plasticsurgerykey.com/the-folliculopilosebaceous-unit-the-normal-fpsu/; Accessed December 2022; von Laffert M et al. Br J Dermatol 164:367-71, 2011; Navrazhina K, et al. J Allergy Clin Immunol 2021;147:2213–24

Source: MoonLake Corporate

The MIRA trial in HS has the design of a pivotal study



Focus of today's results

Key design elements of MIRA

- Global study (North America and Europe) with approx. 60 sites
- Double-blind, placebo-controlled, active reference arm
- N=234 patients randomized
- Moderate-to-severe HS (≥ 5 lesions, Hurley 2 and 3, previous biologic use)
- HiSCR75 as primary endpoint
- ITT-NRI as primary analysis, secondary analyses include mNRI, logistic regression with MI, as observed
- Antibiotic use for HS imputed as NR
- Stratification for Hurley stage and previous biologic use

Source: MoonLake Clinical

Key MIRA design elements are comparable to pivotal HS trials

Study element	PIONEER I / II[1] *(Humira®)*	SUNSHINE/ SUNRISE[2] *(Cosentyx®)*	BE HEARDI / II[3] *(Bimzelx®)*	MIRA *(Sonelokimab)*
Stage	Phase 3	Phase 3	Phase 3	**Phase 2**
Size	n=307 / n=326	n=541 / n=543	n=505 / n=509	**n=234**
Design	R, DB, PC	R, DB, PC	R, DB, PC	**R, DB, PC (AR)**
Dose arms	1 ADA, placebo	2 SEC, placebo	3 BKZ, placebo	**2 SLK, placebo (ADA)**
Key inclusion criteria - Baseline AN count - Hurley stage	 ≥3 II and III	 ≥5 I, II and III	 ≥5 II and III	 **≥5** **II and III**
Primary endpoint	HiSCR50 W12	HiSCR50 W16	HiSCR50 W16	**HiSCR75 W12**
Stratification	Hurley stage and concomitant ABX (PII)	Region, concomitant ABX, and body weight	Hurley stage and concomitant ABX	**Hurley stage and prior biologic use**
Primary analysis	ITT-NRI Cochran-Mantel-Haenszel[a]	ITT-mNRI (MI) Logistic regression[b] (Hurley stage, baseline AN)	ITT-mNRI (MI) Logistic regression[a]	**ITT-NRI** **Cochran-Mantel-Haenszel[a]**
Previous biologic use	not allowed	allowed	allowed	**allowed**
Concomitant ABX	not allowed / allowed	allowed	allowed	**allowed**
Handling of new ABX - any ABX - for HS	 included NRI	 included Data handling rules[c]	 NRI (2° included)[d] NRI	 **incl.** **NRI**

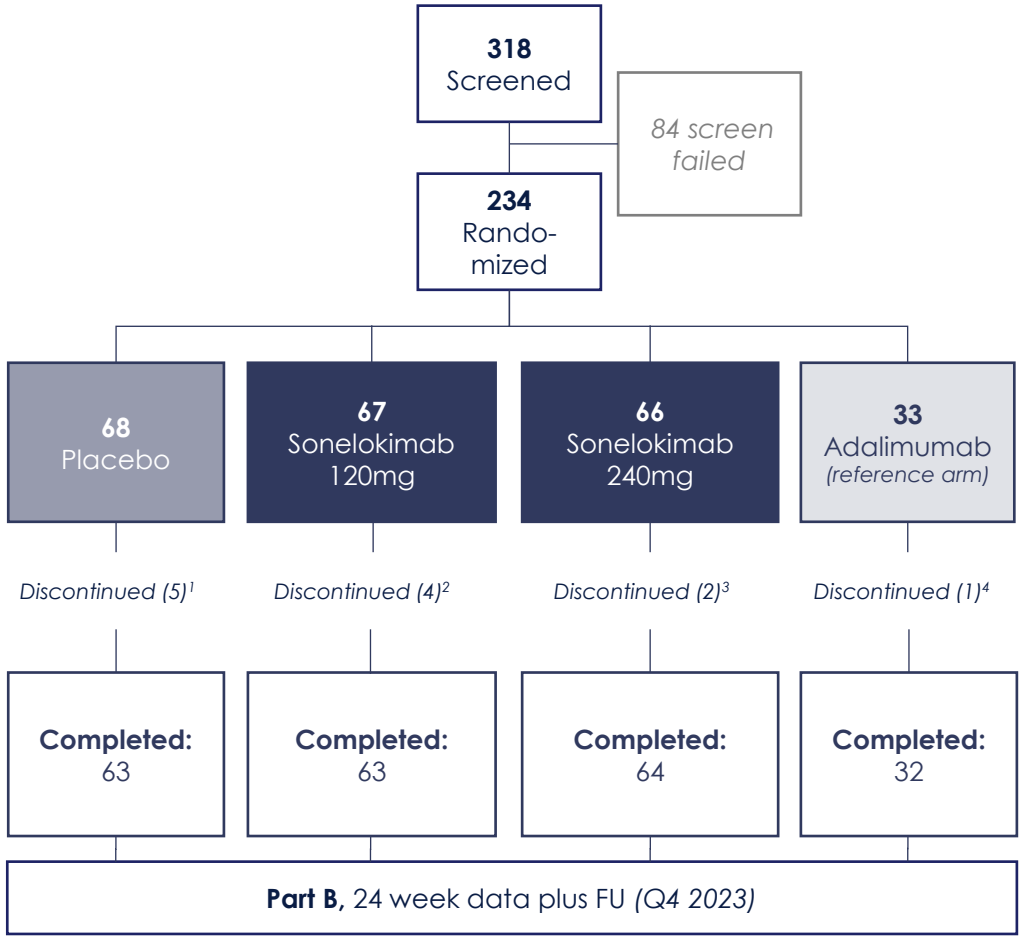
Notes: [a] including the stratification factors; [b] including the stratification factors and other covariates; [c] only NRI if AN count ≥50% compared to baseline; [d] primary analysis mNRI ALL-ABX, secondary analysis mNRI HS-ABX; A=abscess, ABX=antibiotics, AR=active reference, DB=double-blind, DT=draining tunnel, ITT=intention-to-treat, PC=placebo-controlled, N=nodule, NRI=non-responder imputation, mNRI=modified NRI (only patients with missing data due to lack of efficacy or safety), R=randomized

1 Kimball AB, et al. N Engl J Med. 2016; 375:422-34; 2 Kimball AB, et al. Lancet. 2023; 401:747-7613; 3 Kimball AB et al. Late-breaker AAD 2023

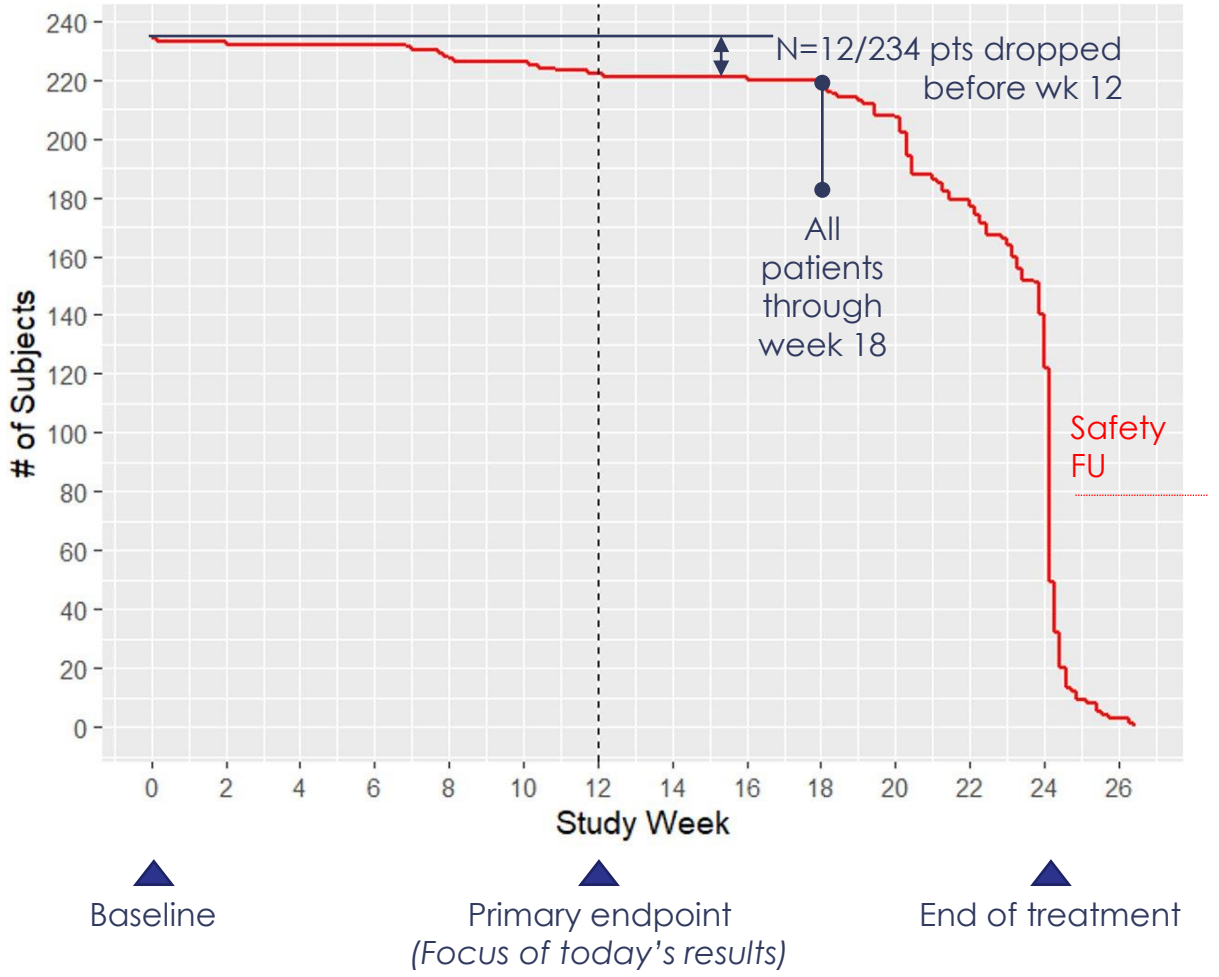
Source: MoonLake Clinical

Current status of patient exposure & disposition of the MIRA trial

Disposition



Patient exposure



Notes: Exposure on 20 June 2023 (MoonLake Data on File); AE =Adverse Event, Phy Dec = Physician Decision, Wdw by S = Withdrawal by Subject, Prot. Viol = Protocol Violation; Completed = received the study treatment at Week 10 or a later visit; 1 AE (1), Phy Dec. (1), Wdw by S (2), Prot. Viol (1) 2 Lost to FU (1), Phy Dec. (1), Wdw by S (2) 3 Lost to FU (1), Wdw by S (1) 4 Prot. Viol (1)

Source: MoonLake Clinical

The MIRA baseline characteristics are comparable to pivotal HS trials

Patient characteristic	PIONEER I / II[1]	SUNSHINE / SUNRISE[2]	BE HEARD I / II[3]	MIRA
Age (years), mean	34.9 – 37.8	35.5 – 37.3	36.7 / 36.6	**37.6**
Gender, female, **%**	59.5 – 69.3	54 – 57	63.0 / 50.7	**59.8**
Race, White, **%**	75.8 – 87.7	74 – 81	77.8 / 81.5	**85.0**
BMI, kg/m^2, mean	31.3 – 34.5	31.4 – 32.8	33.8 / 32.3	**33.7**
Smoking, current, %	52.9 – 67.3	50 – 58	43.0 / 48.1	**46.6**
Duration of HS, years, mean	8.8 – 9.9	6.6 – 8.2	9.0 / 7.0	**8.5**
Lesions, mean				
- AN count	10.7 – 14.4	12.6 – 13.9	16 / 16.5	**14.0**
- DT	3.0 – 4.6	3.2 – 3.6	3.8 / 3.4	**3.5**
Hurley stage, %				
- I	0	2 – 6	0	**0**
- II	52.3 – 54.6	51 – 60	50.3 / 61.1	**63.7**
- III	45.4 – 47.7	28 – 46	49.7 / 38.9	**36.3**
DLQI, mean	14.1 – 16.3	*not given*	12.0 / 10.8	**12.0**
Prior biologic use, %	0	20 - 26	25.0 / 13.2	**17.5**
Concomitant ABX use, %	0 / 19	10 - 14	7.9 / 9.0	**10.7**

1 Kimball AB, et al. N Engl J Med. 2016; 375:422-34; 2 Kimball AB, et al. Lancet. 2023; 401:747-7613; 3 Kimball AB et al. Late-breaker AAD 2023; Data based on MoonLake Clinical Data on file

Source: MoonLake Clinical

All arms of the MIRA trial are **well balanced**

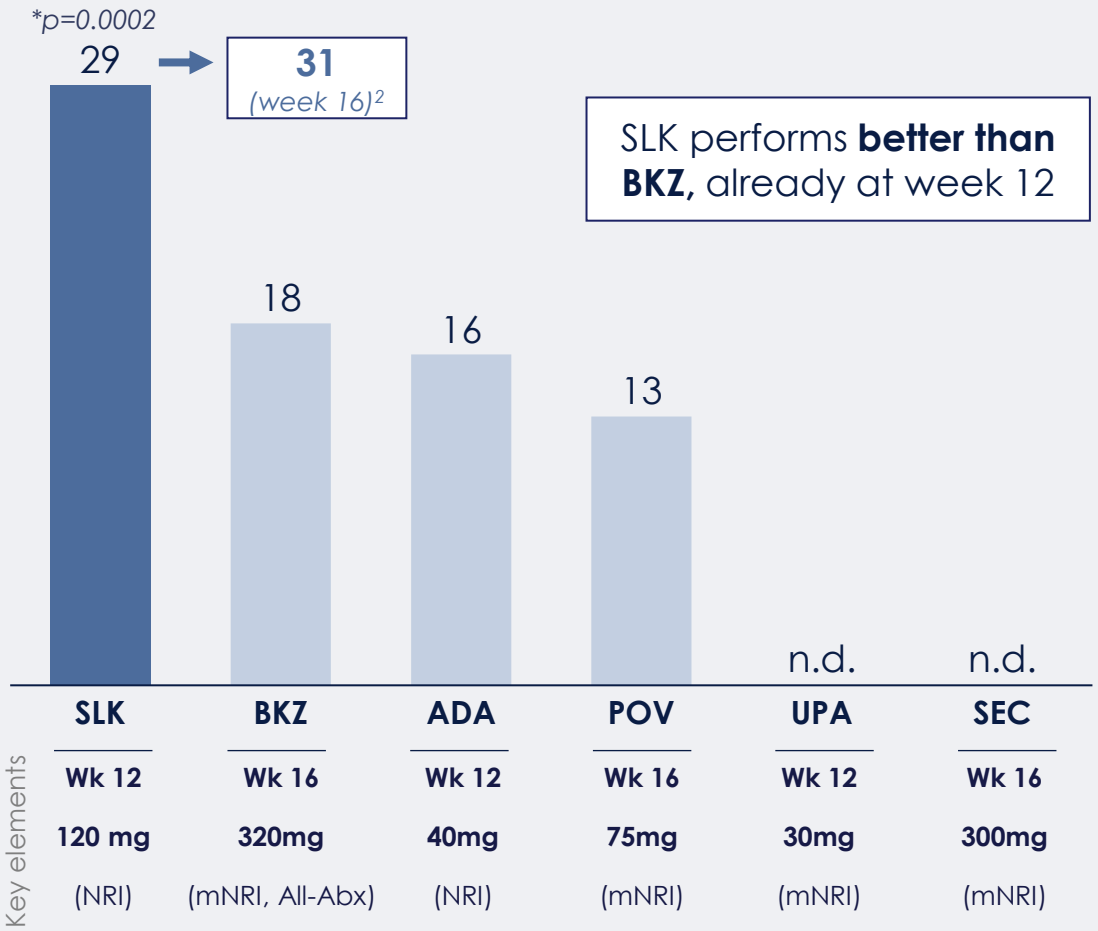
Patient characteristics	Overall MIRA (n=234)	Main arms: Placebo (n=68)	Main arms: Sonelokimab 120mg (n=67)	Main arms: Sonelokimab 240mg (n=66)	Active reference: Adalimumab (n=33)
Age, yrs, mean (SD)	**37.6**	39.3 (13.1)	37.6 (10.5)	36.2 (11.6)	37.1 (10.6)
Gender, female, n (%)	**59.8**	36 (52.9%)	42 (62.7%)	42 (63.6%)	20 (60.6%)
Race, White, n (%)	**85.0**	59 (86.8%)	57 (85.1%)	54 (81.8%)	29 (87.9%)
BMI, kg/m^2, mean (SD)	**33.7**	32.7 (7.2)	35.0 (7.8)	33.5 (6.8)	33.9 (8.4)
Smoking, current, n (%)	**46.6**	37 (54.4%)	26 (38.8%)	29 (43.9%)	17 (51.5%)
Duration of HS, yrs, mean (SD)	**8.5**	8.3 (8.5)	8.8 (8.7)	8.4 (8.3)	8.3 (8.4)
Lesions, mean (SD)					
- AN count	**14.0**	14.6 (11.6)	14.5 (11.9)	12.3 (8.8)	15.2 (13.4)
- DT	**3.5**	3.7 (3.4)	3.7 (4.4)	2.9 (3.4)	3.6 (3.9)
Hurley stage, %					
- I	**0**	0 (0%)	0 (0%)	0 (0%)	0 (%)
- II	**63.7**	42 (61.8%)	44 (65.7%)	42 (63.6%)	21 (63.6%)
- III	**36.3**	26 (38.2%)	23 (34.3%)	24 (36.4%)	12 (36.4%)
DLQI, mean (SD)	**12.0**	10.8 (6.4)	12.3 (6.7)	12.7 (6.9)	12.8 (7.0)
Prior biologic use, n (%)	**17.5**	12 (17.6%)	13 (19.4%)	12 (18.2%)	4 (12.1%)
Concomitant ABX use, n, (%)	**10.7**	5 (7.4%)	9 (13.4%)	8 (12.1%)	3 (9.1%)

Source: MoonLake Clinical

SLK reaches the **highest** scores vs other molecules, including in **HiSCR75**

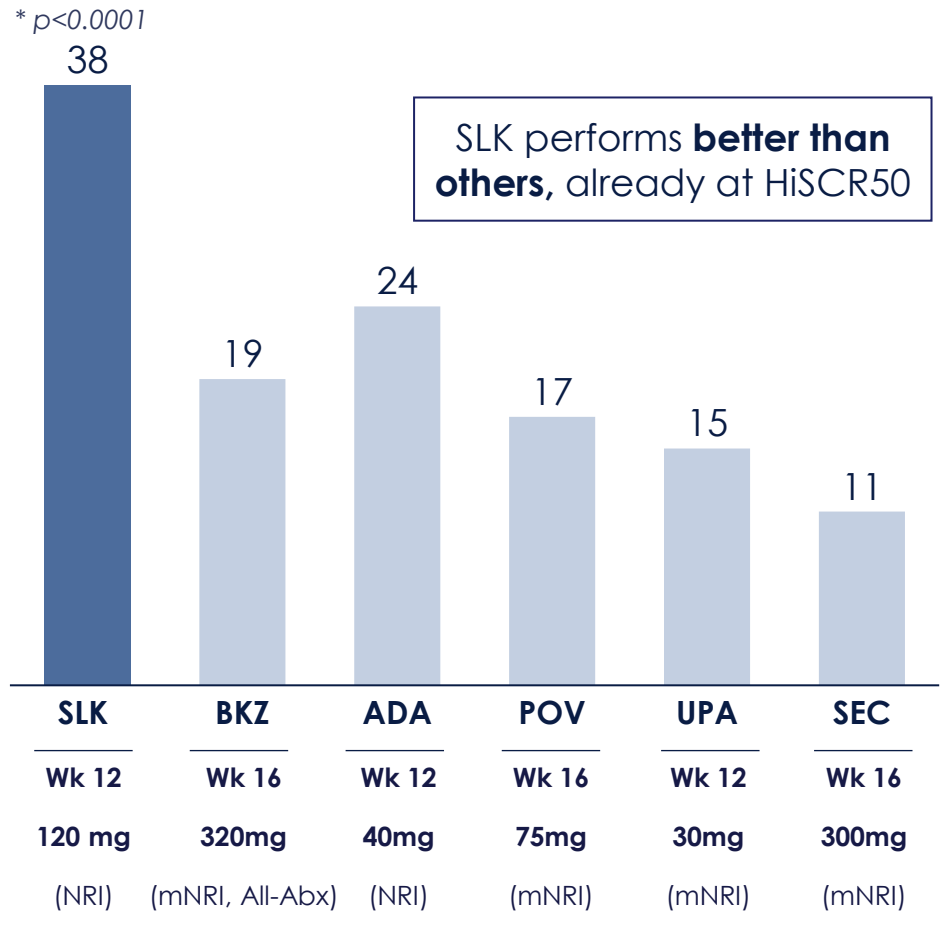
HiSCR75 delta to PLC (Primary endpoint for SLK)

Percent delta for best doses, primary analysis



HiSCR50 delta to PLC (Primary endpoint for others[1])

Percent delta for best doses, primary analysis



Note: This is a comparison across trials, with inherent limitations. No head-to-head trials. 1 POV used mean AN count reduction as primary endpoint 2 Estimation of HiSCR75 delta to PLC at wk 16 using the avg. response of the 2 crossed-over groups from PLC to SLK doses at wk 12 (PLC plateaus already from week 8) and the wk 16 response for the 120mg arm; PLC, Placebo; SLK, Sonelokimab (MIRA study); BKZ, Bimekizumab (pooled BE HEARD I/II); ADA, Adalimumab (pooled PIONEER I/II); POV, Povorcitinhib (NCT04476043); UPA, Upadacitinib (NCT04430855); SEC, Secukinumab (pooled SUNRISE/SUNSHINE)

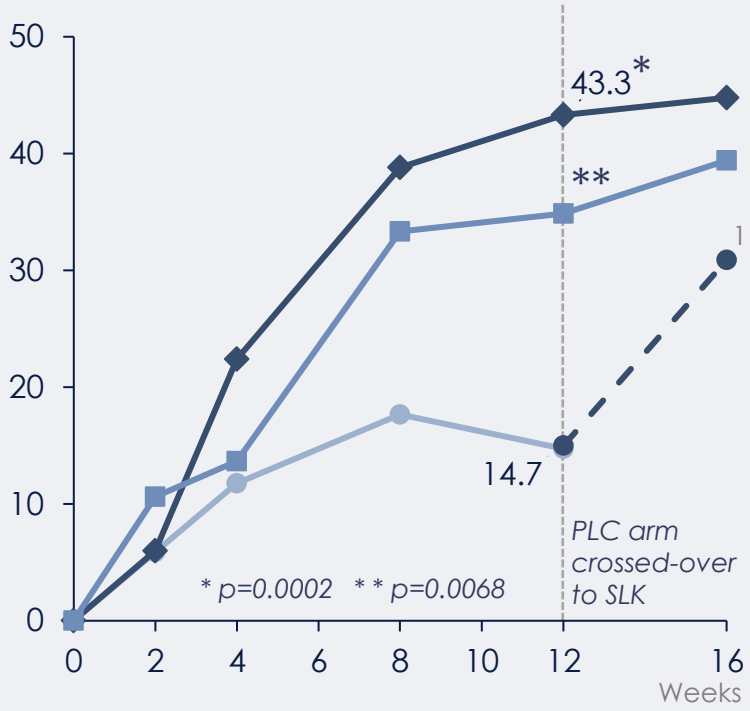
Source: MoonLake Clinical

SLK reaches high response rates across **all HiSCR endpoints**

PLC | SLK 120mg | SLK 240mg | PLC -to- SLK cross-over

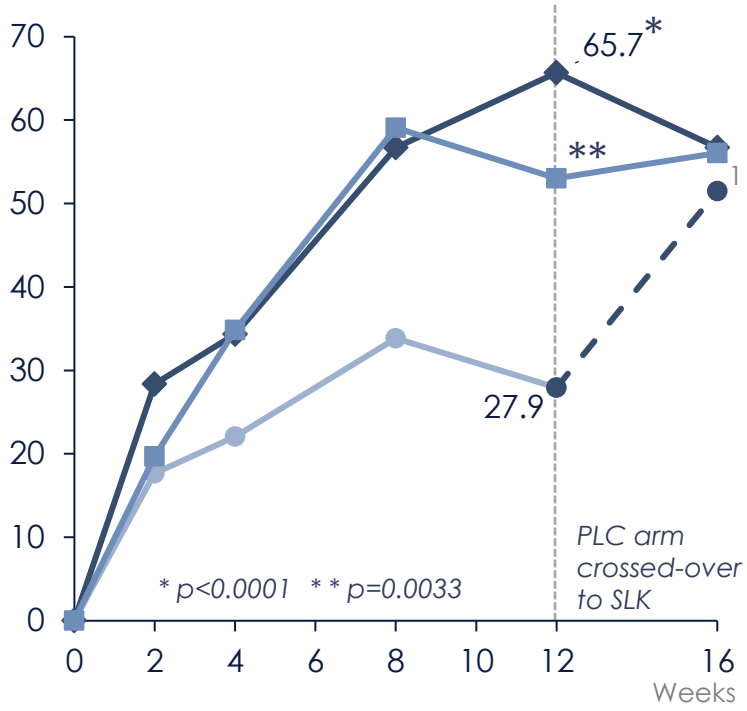
HiSCR75 response (Primary endpoint)

Percent (%) pts reaching score, ITT-NRI



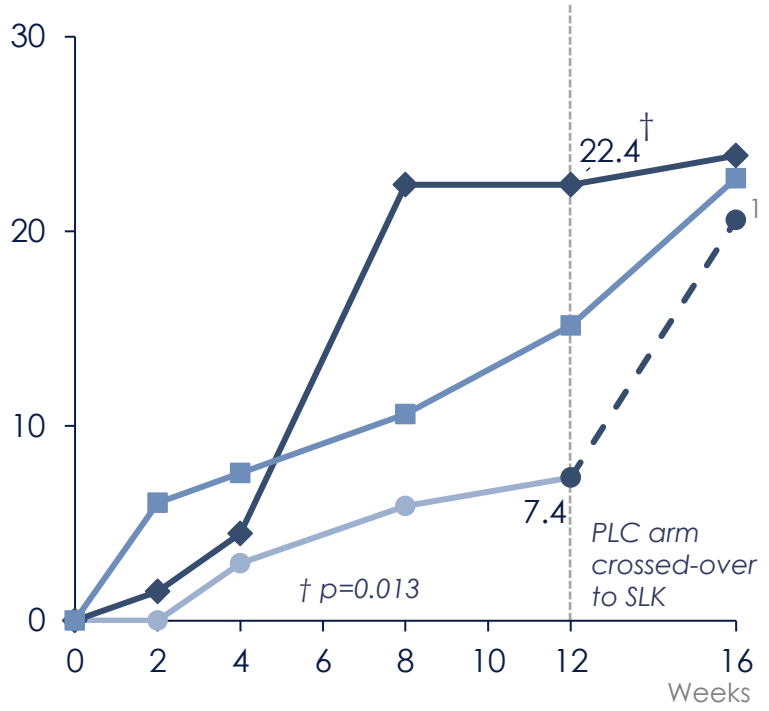
HiSCR50 response

Percent (%) pts reaching score, ITT-NRI



HiSCR90 response

Percent (%) pts reaching score, ITT-NRI



Both doses perform similarly well, depending on treatment goal, time point etc. – the Psoriasis dose (SLK 120mg) is sufficient to rapidly achieve highest scores in HS, emphasizing the likely **size advantage of SLK** over other molecules including BKZ

1 Week16 data for PLC arm crossed over to SLK 120mg or 240mg; data not yet formally validated

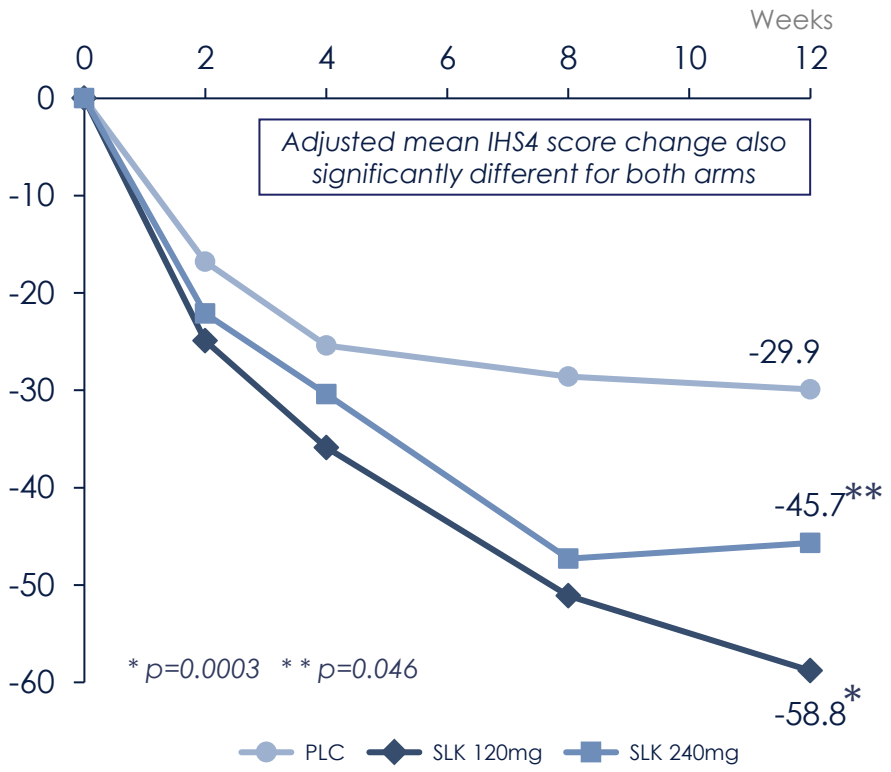
*, ** multiplicity-controlled p-values and † nominal p-value from a Cochran-Mantel-Haenszel test stratified by Hurley Stage and prior biologic use

Source: MoonLake Clinical

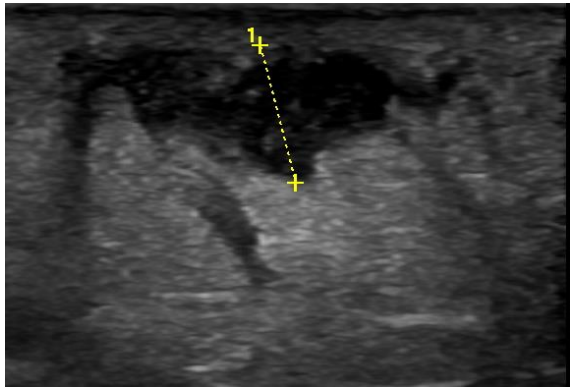
SLK significantly **improves IHS4** and **changes morphology** of tunnels

IHS4 adjusted mean change

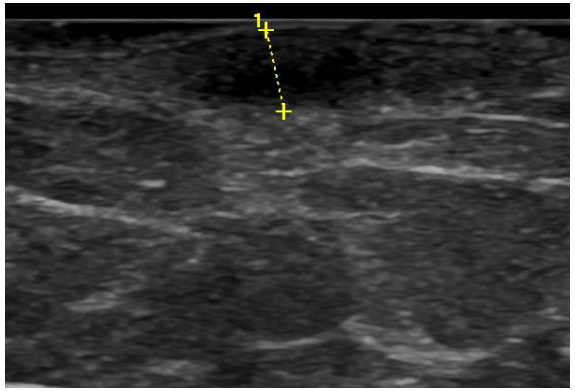
Percent (%) change from baseline over time, ITT



Direct evidence of DT changes



Deep dermal tunnel at baseline *(before treatment)*



Week 12 *(120mg sonelokimab)*

- Case from ultrasound sub-study
- Confirming reduction of tunnel activity and morphology in patients receiving sonelokimab
- Reduction of lumen observed, as well as disappearance of neutrophil influx ("pus")

SLK **improves the IHS4**, a weighted composite score that quantifies **changes in tunnels, nodules and abscesses** – indicates that SLK reduces draining tunnels in patients, the **most complex inflammatory lesion** in HS

1 IHS4 score is calculated as ∑ (n of nodules x1, n of abcesses x2, n of draining tunnels x4)

*, ** nominal p-values, from MMRM including co-variates: baseline IHS4; Hurley Stage; prior biologic use; visit; treatment and visit-by-treatment interaction

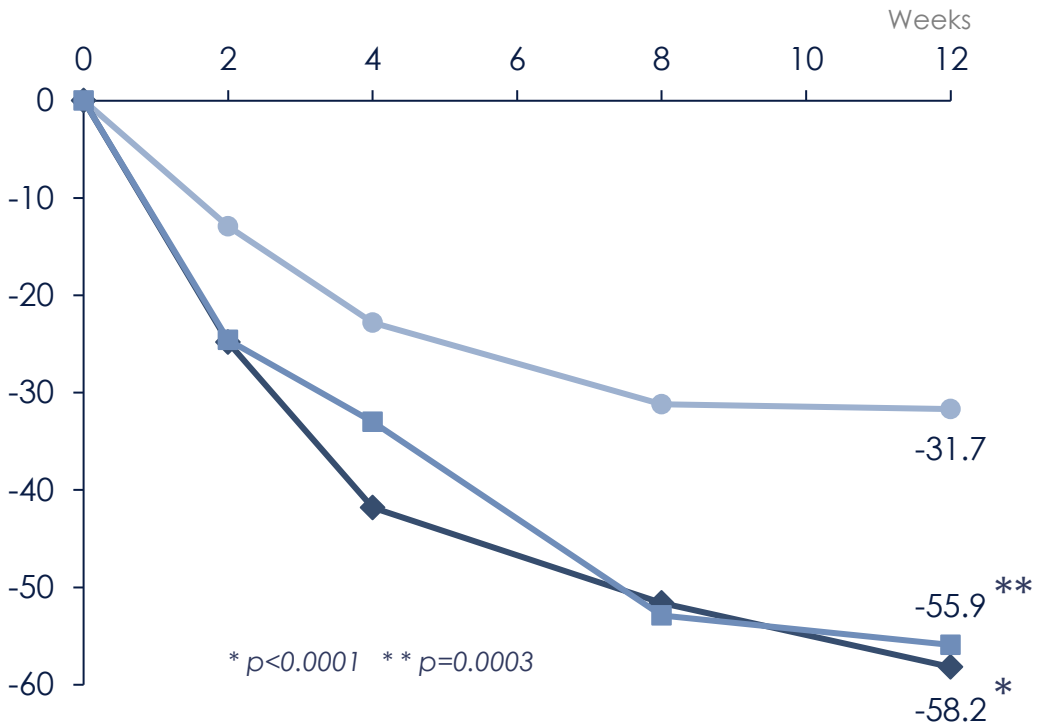
Source: MoonLake Clinical

SLK efficiently **reduces HS lesions**, including **draining tunnels**

PLC SLK 120mg SLK 240mg

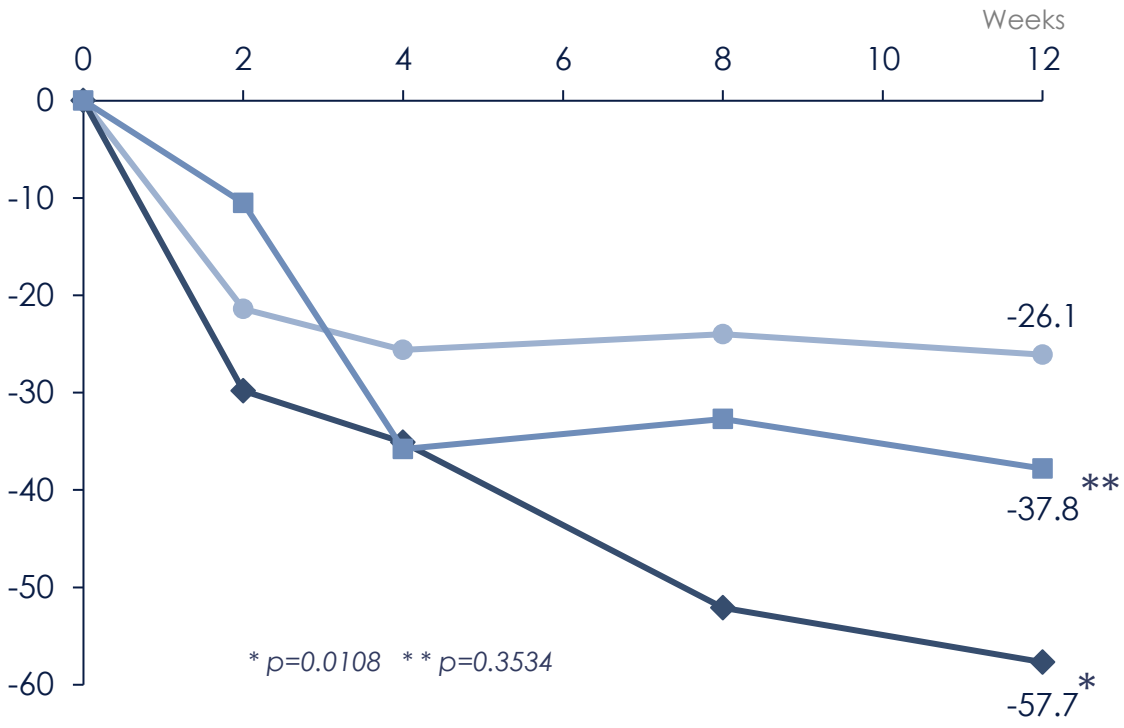
Change in AN counts

Percent (%) change, baselined to week 0



Change in DT counts[1]

Percent (%) change, baselined to week 0



Looking beyond the composite scores, **SLK reduces individual lesions** at week 12, especially **reducing draining tunnels by half**

*, * * - p values are nominal from MMRM including co-variates: baseline lesion count; Hurley Stage; prior biologic use; visit; treatment and visit-by-treatment interaction 1 In subjects with at least one draining tunnel at baseline

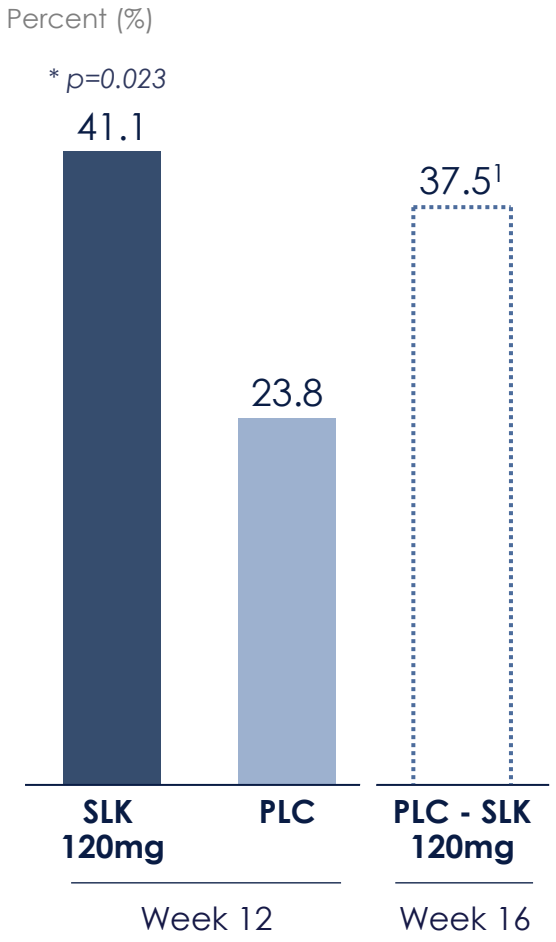
Source: MoonLake Clinical

SLK produces **high level of inflammatory remission** already at week 12

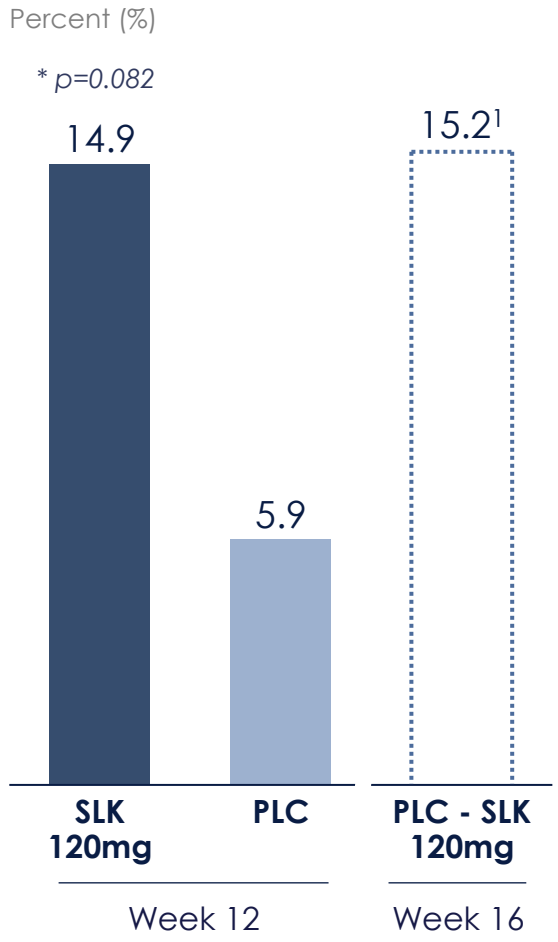
Lesion counts as a measure of remission

- **"Inflammatory remission"** best measured by direct counts of relevant lesions that should be "cleared", such as draining tunnels (DT100), and Abcesses and Nodules (AN100)
- **HiSCR measures reduction of AN count**, with no increase in abscess count and no increase in draining tunnels **vs baseline**
- HiSCR100 is therefore **not "clearance"** as even if AN count is down to zero vs baseline, tunnels can be present (even in high number)
- **Confusion** about "HiSCR100" – misleading perception of "clearance" in HS

Patients reaching DT100



Patients reaching AN100



1 Week16 data for PLC arm crossed over to SLK 120mg or 240mg; data not yet formally validated

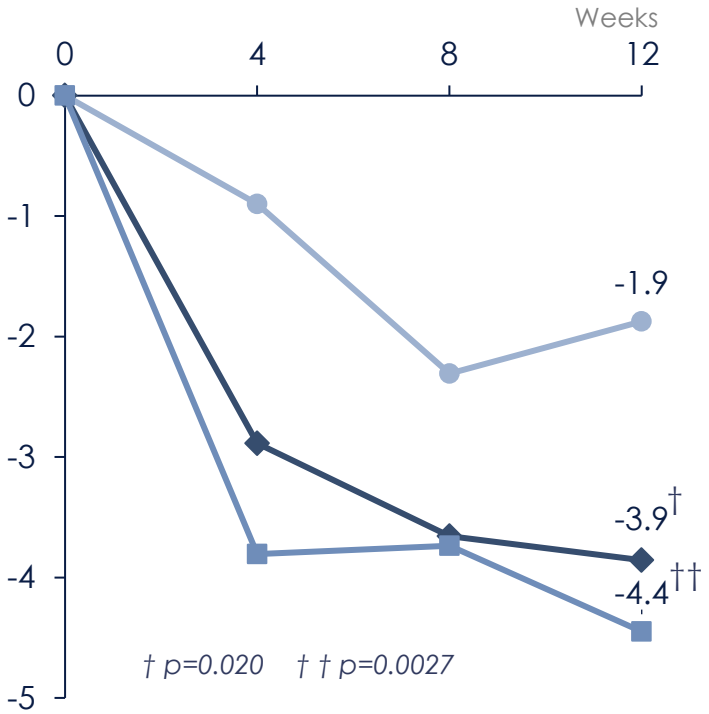
* Nominal p-value from a Cochran-Mantel-Haenszel test stratified by Hurley Stage and prior biologic use

Source: MoonLake Clinical

Patient reported **outcomes are improved** significantly with SLK

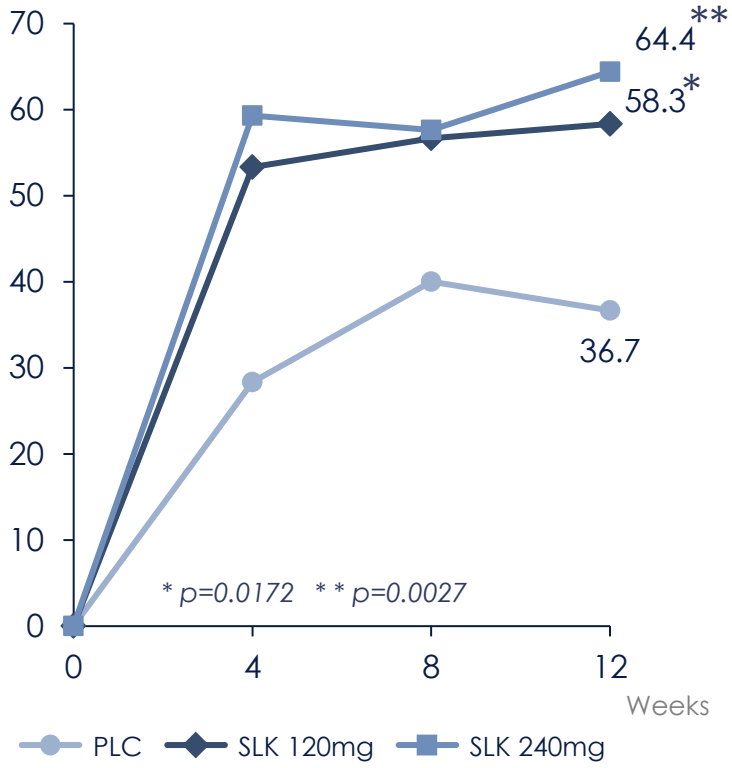
DLQI adjusted mean

Score change from baseline, ITT



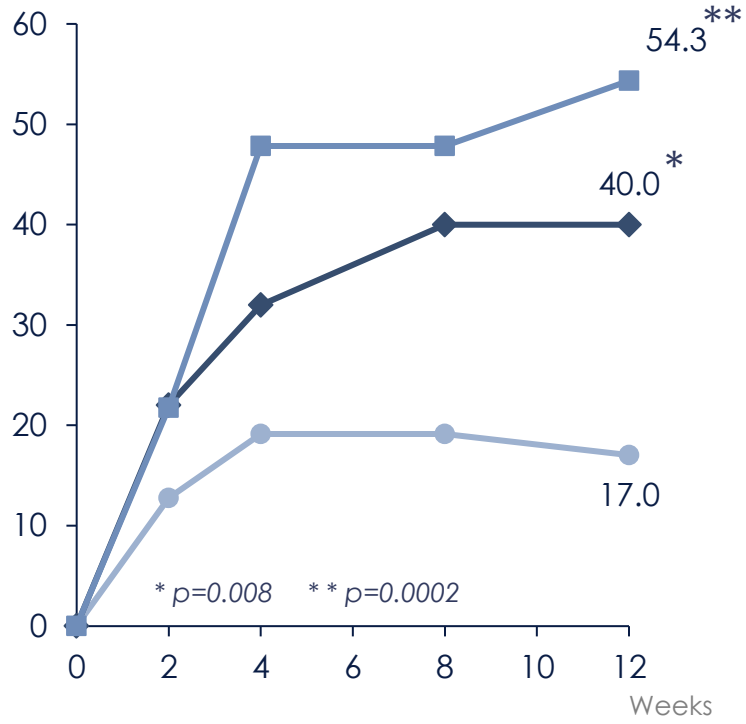
DLQI improvement ≥ 4 points[1]

Percent (%) responders per arm, ITT-NRI



PtGA Pain NRS30 response rates

Percent (%) responders per arm, ITT-NRI



*Important **improvements in pain in ~ 50%** of patients and in health-related **quality of life in ~ 60%** of patients*

1 Absolute DLQI ≤ 5 response rate was also a secondary endpoint, with SLK 120mg reaching 27% and SLK 240mg reaching 34% at week 12, and placebo reaching 22% (no statistically significant difference). For DLQI improvement ≥ 4 points only patients with baseline DLQI ≥ 4 were included. For PtGA pain NRS30 only patients with baseline NRS ≥ 3 were included. *, * * nominal p-value from a Cochran-Mantel-Haenszel test stratified by Hurley Stage and prior biologic use † , † † p values are nominal from MMRM including co-variates: baseline DLQI; Hurley Stage; prior biologic use; visit; treatment and visit-by-treatment interaction

Source: MoonLake Clinical

Safety: **no new signals,** underlining SLK's **favorable benefit-risk profile**

MoonLake

	Main arms			Active reference
Patients with events[1], n (%)	**Placebo** (N=68)	**Sonelokimab 120 mg** (N=67)	**Sonelokimab 240 mg** (N=66)	**Adalimumab** (N=33)
Any TEAE	45 (66.2)	53 (79.1)	52 (78.8)	27 (81.8)
Any SAE	2 (2.9)	2 (3.0)	1 (1.5)	0 (0.0)
Any TEAE Leading to Treatment Discontinuation	1 (1.5)	3 (4.5)	0 (0.0)	0 (0.0)
Fatal TEAE	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Infections & Infestations				
Nasopharyngitis	10 (14.7)	10 (14.9)	6 (9.1)	2 (6.1)
Upper respiratory tract infections	3 (4.4)	4 (6.0)	7 (10.6)	4 (12.1)
Oral Candidiasis	0	4 (6.0)	8 (12.1)	0
Oropharyngeal Candidiasis	0	0	0	0
Oesophageal Candidiasis	0	0	0	0
Vulvovaginal Candidiasis	0	2 (3.0)	0	0
Skin Candidiasis	0	0	1 (1.5)	0
Genital Candidiasis	0	1 (1.5)	0	0
Cardiac disorders				
Atrial fibrillation	0	0	0	1 (3.0)
Cardiac failure chronic	1 (1.5)	0	0	0
Gastrointestinal disorders				
IBD	0	0	0	0
Diarrhoea	1 (1.5)	1 (1.5)	2 (3.0)	2 (6.1)

All Candida cases were mild to moderate, no case led to treatment withdrawal

1 All terms in the table are system organ classes (SOCs) and preferred terms (PTs) as per MEDRA (v26), selected SOCs and PTs are shown

Source: MoonLake Clinical

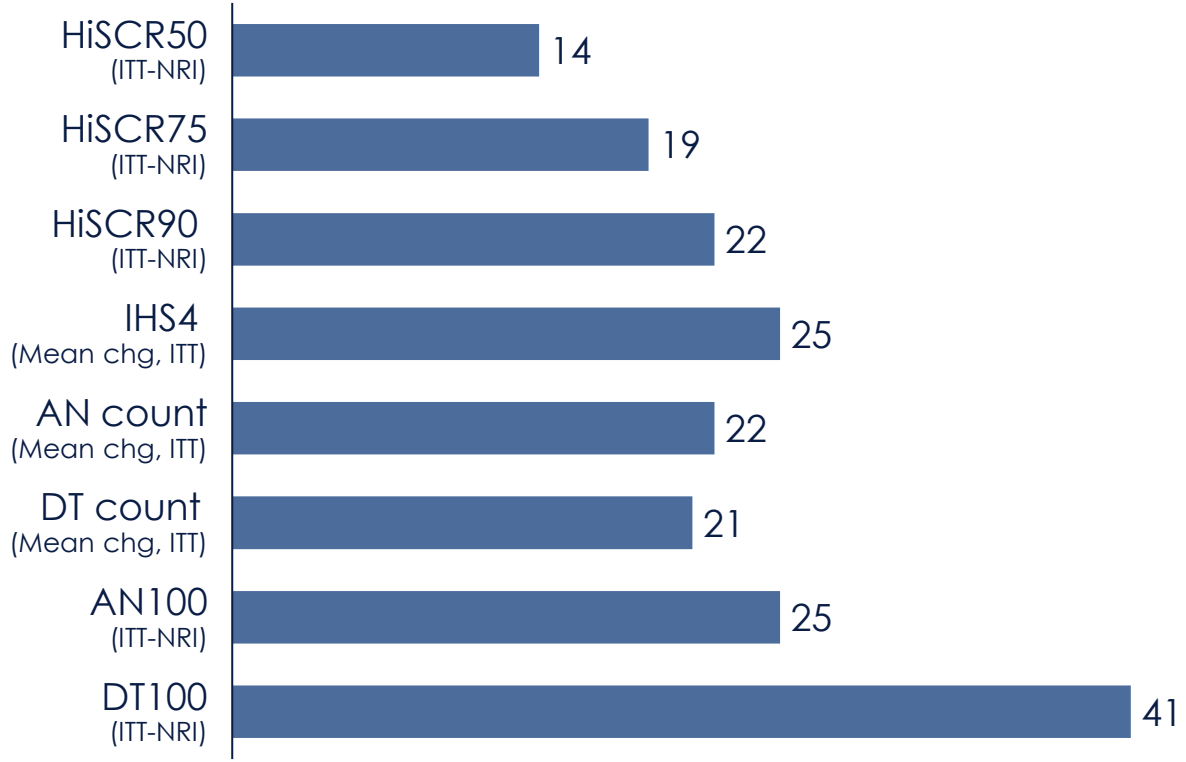
Reference arm **validates SLK results**, provides important info for Ph3

Reference arm performance

- A small (n=33) patient arm was run in parallel with the main arms to
  - **Control placebo** responses for HiSCR responses and other endpoints
  - Test adalimumab **in our hands to collect information** for Phase 3 (incl. a potential superiority Ph 3 trial)
- While small and not built for any statistical analysis, **adalimumab seemed to behave as expected** from the 2015 Pioneer trials
- Values (placebo, HiSCRs) **are similar to Pioneer**, which is closest to MIRA from a baseline perspective

Difference in response between SLK and ADA

Percent (%) improvement for each score, between SLK 120mg main arm and ADA 80mg Q2W active reference arm, the ADA active reference arm scores represent the baseline (0)

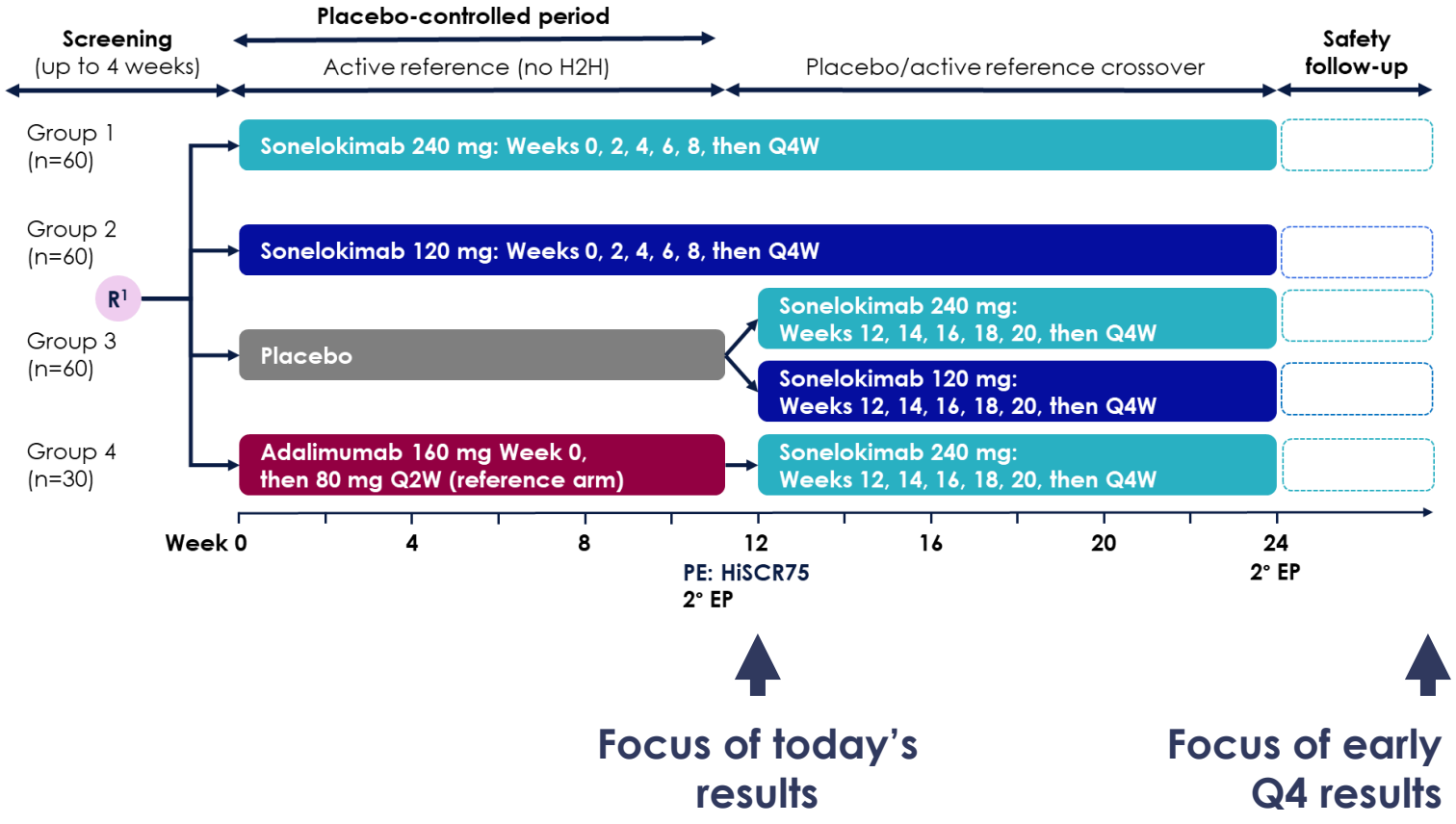


Shows how many more % of patients reach the goal with SLK

MLTX will continue collecting data from Part B in HS, as well as the ARGO trial (PsA), to define detailed plan for Phase 3

Source: MoonLake Clinical

Guidance: What to expect from the second part of the MIRA trial



24-week results planned for early Q4

- Early unverified data from Week 16 suggests **cross-over of patients from placebo elevates responses** across different end-points – this and its extent will be analyzed in Part B
- Similarly, for the **adalimumab cross-overs,** albeit with a small n (only qualitative information will be collected, especially around TNF-IR due to small n)
- It appears the **responses on the SLK arms are either maintained or improved** at week 16 – this will be analyzed to week 24 in Part B
- Results will be shared either through a presentation like today – as of **early Q4 this year** – or through a conference
- A **peer-reviewed publication** is expected in due course

Source: MoonLake Clinical

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Research & Clinical Summary

A new bar, a new era

The scientific rationale for a unique molecule

- SLK has unique IL-17F and A binding properties, a key inflammation MoA
- SLK has enhanced tissue penetration, reaching where mAbs cannot

What MIRA shows – clinical validation of the Nanobody® concept

- HiSCR75 and HiSCR50 deltas to PLC above all other trials
- Significant effects on the deepest inflammatory lesions, the tunnels
- Impact on what matters to patients: pain, quality of life, drainage
- Favorable safety tolerability profile, as observed previously

Optimal outcome for fast clinical development

- Winning dose regimen and endpoints now known for phase III
- Builds on winning PsO data and de-risks next MLTX trials (incl. PsA)

Source: MoonLake Clinical

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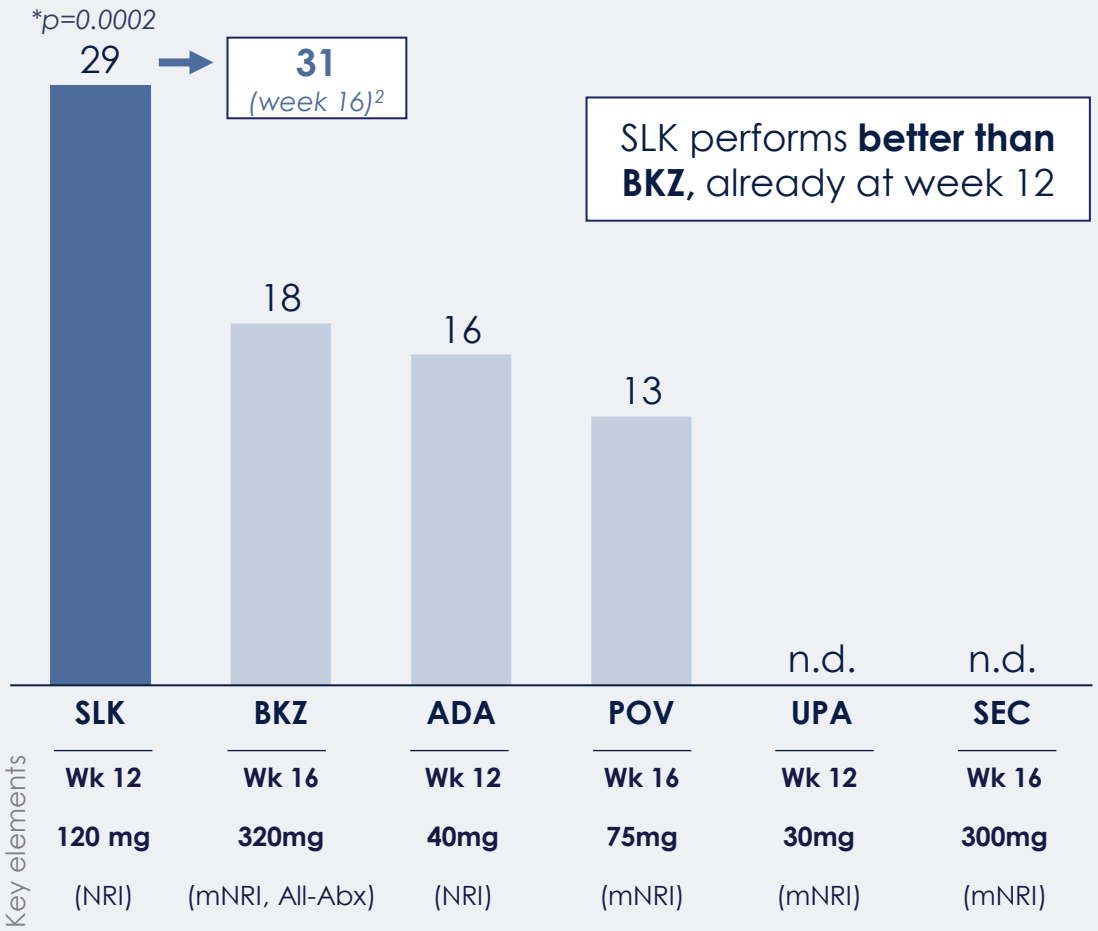
Moving Forward

Setting a new bar in HS

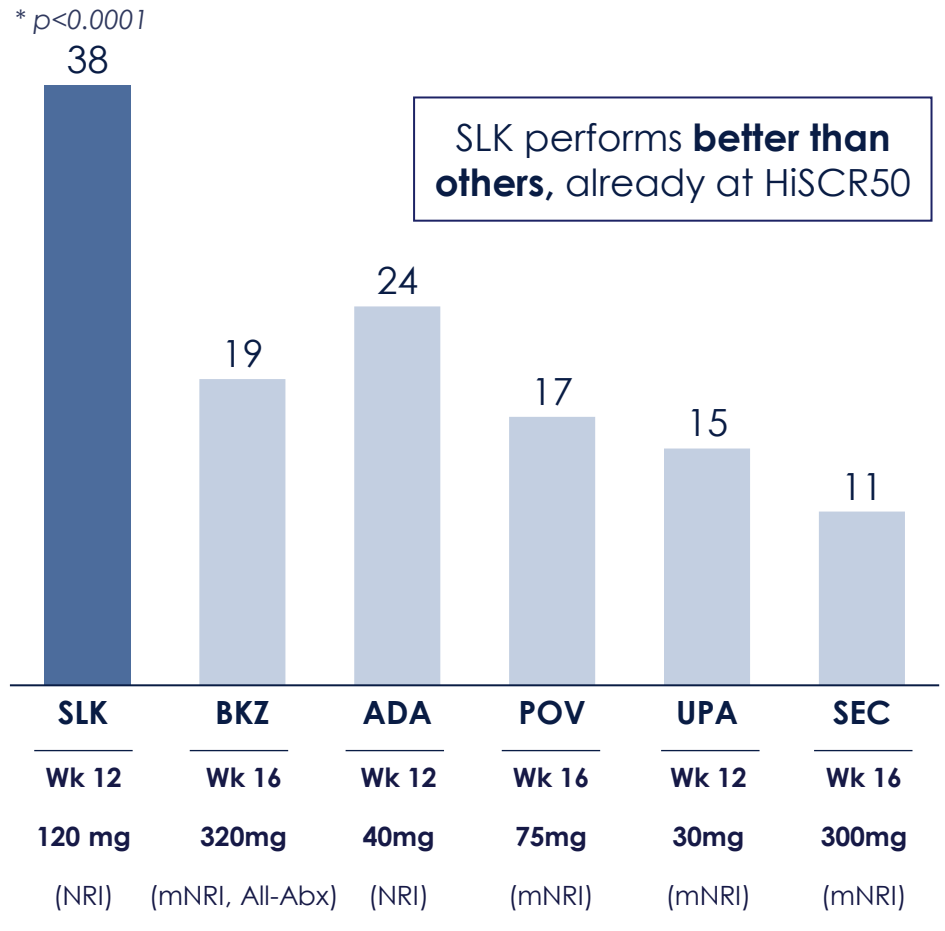
HiSCR75 delta to PLC (Primary endpoint for SLK)

Percent delta for best doses, primary analysis



HiSCR50 delta to PLC (Primary endpoint for others[1])

Percent delta for best doses, primary analysis



Note: This is a comparison across trials, with inherent limitations. No head-to-head trials. 1 POV used mean AN count reduction as primary endpoint 2 Estimation of HiSCR75 delta to PLC at wk 16 using the avg. response of the 2 crossed-over groups from PLC to SLK doses at wk 12 (PLC plateaus already from week 8) and the wk 16 response for the 120mg arm; PLC, Placebo; SLK, Sonelokimab (MIRA study); BKZ, Bimekizumab (pooled BE HEARD I/II); ADA, Adalimumab (pooled PIONEER I/II); POV, Povorcitinhib (NCT04476043); UPA, Upadacitinib (NCT04430855); SEC, Secukinumab (pooled SUNRISE/SUNSHINE)

Source: MoonLake Clinical

Beat Scenario: SLK is now a potentially leading asset in HS

MoonLake

		Primary Analysis	HiSCR75 (Delta of best dose to PLC, ppt)[1]
1	**Sonelokimab** (SLK)	ITT-NRI	**29** MIRA (WEEK 12)
2	**Bimekizumab** (Bimzelx®)	ITT-mNRI (All-ABX) (mNRI-HS-ABX)	**17.5** (22.5) BE HEARD (WEEK 16)
3	**Adalimumab** (Humira®)	ITT-NRI	**16** PIONEER (WEEK 12)
4	**Secukinumab** (Cosentyx®)	ITT-mNRI	- SUN x

SLK:

- ⊕ Monthly Dosing
- ⊕ Higher Primary Endpoint
- ⊕ Favorable safety profile

Note: Data is not based on Head-to-Head comparisons. 1 HiSCR75 response for best dose and placebo, respectively: Bimekizumab, 40% and 18% (Be Heard I), 39% and 16% (Be Heard II); Adalimumab, 25% and 14% (Pioneer I), 35% and 14% (Pioneer II); Secukinumab, no hiSCR75 responses available

Source: MoonLake Corporate

The HS biologics market to be USD 10bn+ in the US alone

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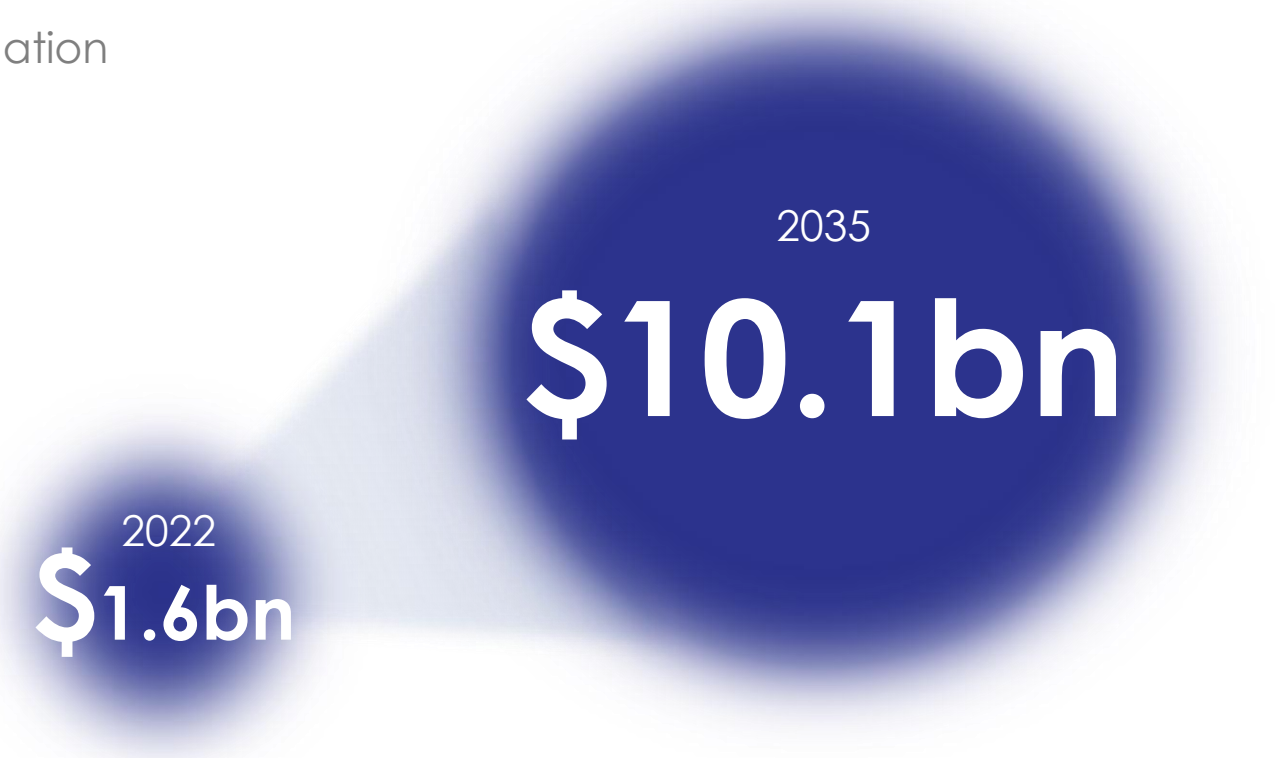
US HS Biologics Market estimation



Key drivers			
Overall HS True Prevalence	2.1%	2.1%	*(can be up to 4%, esp. in the US)*
Proportion with Mod-to-Severe disease	~55%	~55%	*(as per literature[1])*
Proportion of Mod-to-Severe with HS Diagnosis	~7%	~19%	*(growth as per current US claims)*
Biologics Use	~7%	~13%	*(as psoriasis over the last 12 years)*

1 For example, 'Hurley III Hidradenitis Suppurativa Has an Aggressive Disease Course', Annika et al., Dermatology 2018, doi: 10.1159/000491547

Source: MoonLake Corporate, DRG/Clarivate, academic journals, CBO

Differentiation: SLK combines properties like no other asset

MoonLake

A winning MoA…

- **Highest efficacy**

  *IL-17A & F inhibition showed **highest & most durable responses** (BKZ & SLK)*

- **Safer inhibition**

  ***Long history of consistent safety** for IL-17, where Candida ("thrush") is most complicated adverse event – vs. TB, cancer, infections, CV events, death… (with TNFa or JAK1)*

- **Only 2 molecules**

  SLK & BKZ – top 2 typically get 2/3 of indication bio sales (avg. $4bn+)[1]

… and a differentiated molecule

- **Elevated Efficacy**

  SLK shows highest performance at elevated treatment goals, HiSCR75 (or PASI100), as well as additional key outcomes for patients

- **Higher goals**

  *Highest primary clinical endpoint with **HiSCR75**, with comparisons to gold-standard Humira® (or Cosentyx® on PASI100)*

- **Improved convenience**

  *Candida ("thrush") at **lower rates** vs BKZ and **monthly injections** vs. biweekly BKZ (in HS)*

1 Based on analysis of 2023 sales of 11 indications (PsO, RA, Asthma, AD, AxSpA, CU, SLE, PsA, COPD, CD, UC) – 2030 ranges are even higher

Source: DRG, MoonLake Corporate

Size matters: IL-17A & F is the most attractive MoA in deep inflammation

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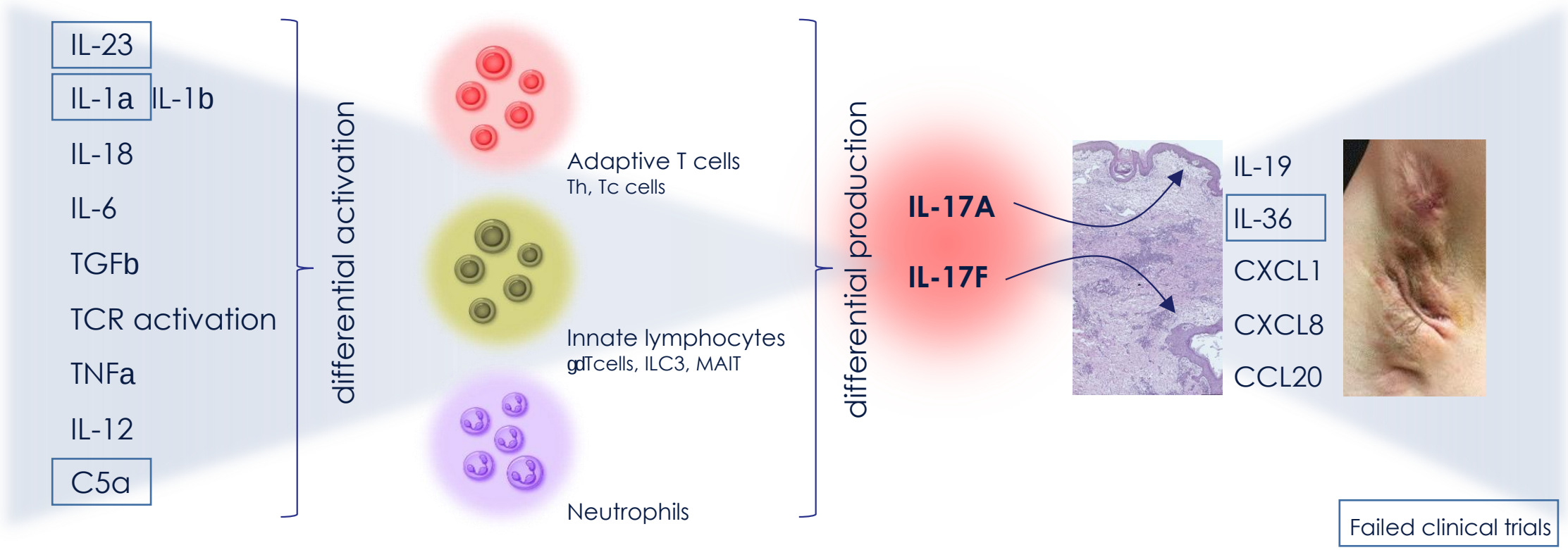
Multiple stimuli induce subsets of immune cells to produce IL-17A and F

Different cell types preferentially produce IL-17 A and/or F

IL-17A and F as "bottleneck" in deep pathology

IL-17A and F induce multiple pro-inflammatory effectors, e.g. activation of keratinocytes



Source: MoonLake Clinical

SLK rapidly becoming a leading asset across inflammation

	Trial	Patients (n)	Leading MoA	SLK leading asset
 **HS**	Phase 2b (MIRA)	234	IL-17A & F TNF	✓ **Highest** ever primary endpoint (HiSCR75), **largest** delta to placebo at HiSCR75 and 50
 **PsO**	Phase 2b	313	IL-17A & F IL-23	✓ **Largest** delta vs market leader Cosentyx™ at PASI100, compared to BKZ, IL-23, etc.
 **PsA**	Phase 2b (ARGO)	200+	IL-17A & F TNF	○ IL-17A & F inhibition shows **best** ACR/PASI data incl. TNF-IR pts
 *Other Rheum & Derm*	TBA	TBA	IL-17A & F Other	○ IL-17A & F inhibition **best** data in AS, nr-AxSpA, enthesitis…

PsA primary endpoint data for SLK expected to be announced in the coming months

Source: MoonLake Corporate

There are MANY opportunities for SLK

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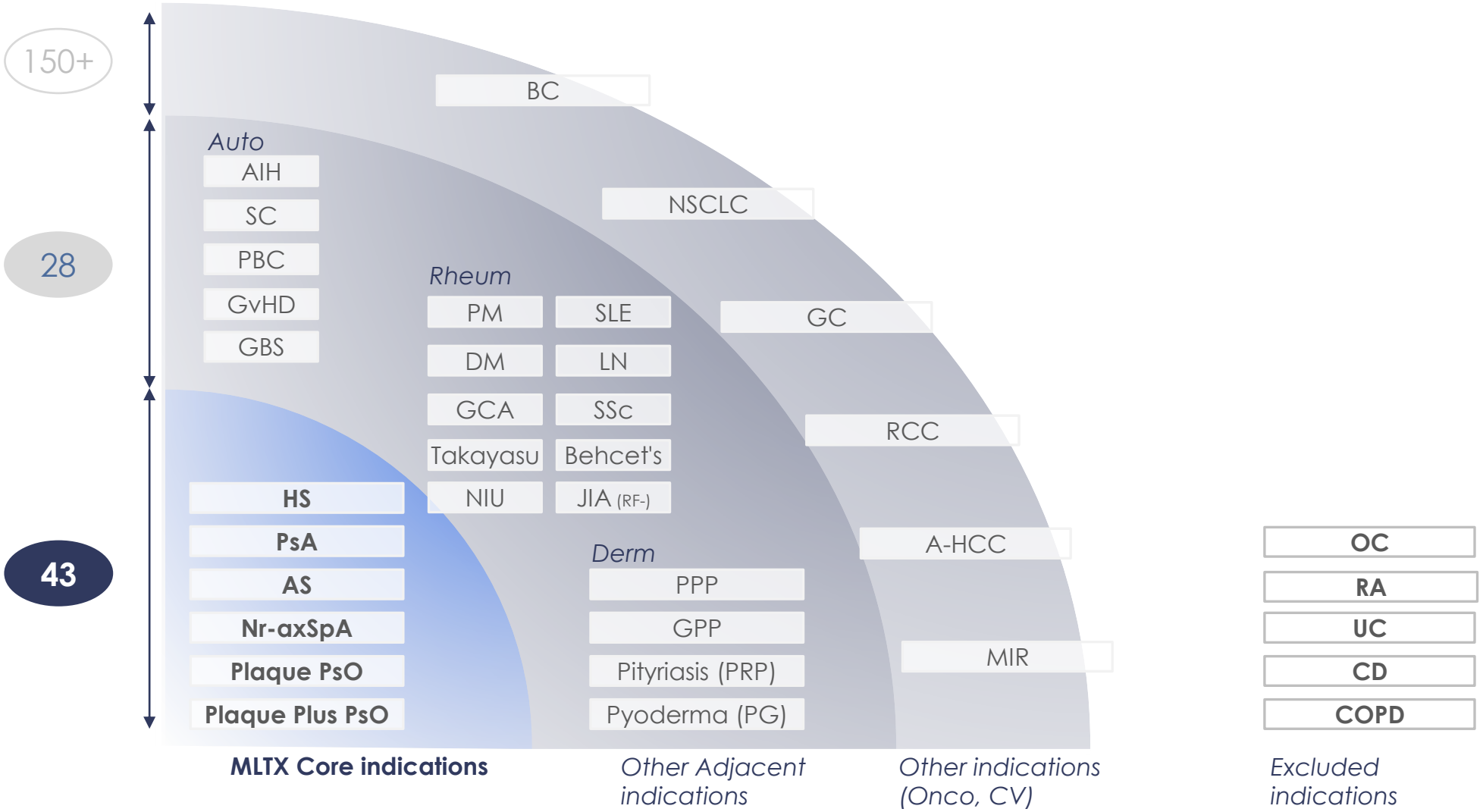
Addressable Market Size

USD bn



Source: MoonLake Corporate

SLK a potential leading drug in Type 3 diseases

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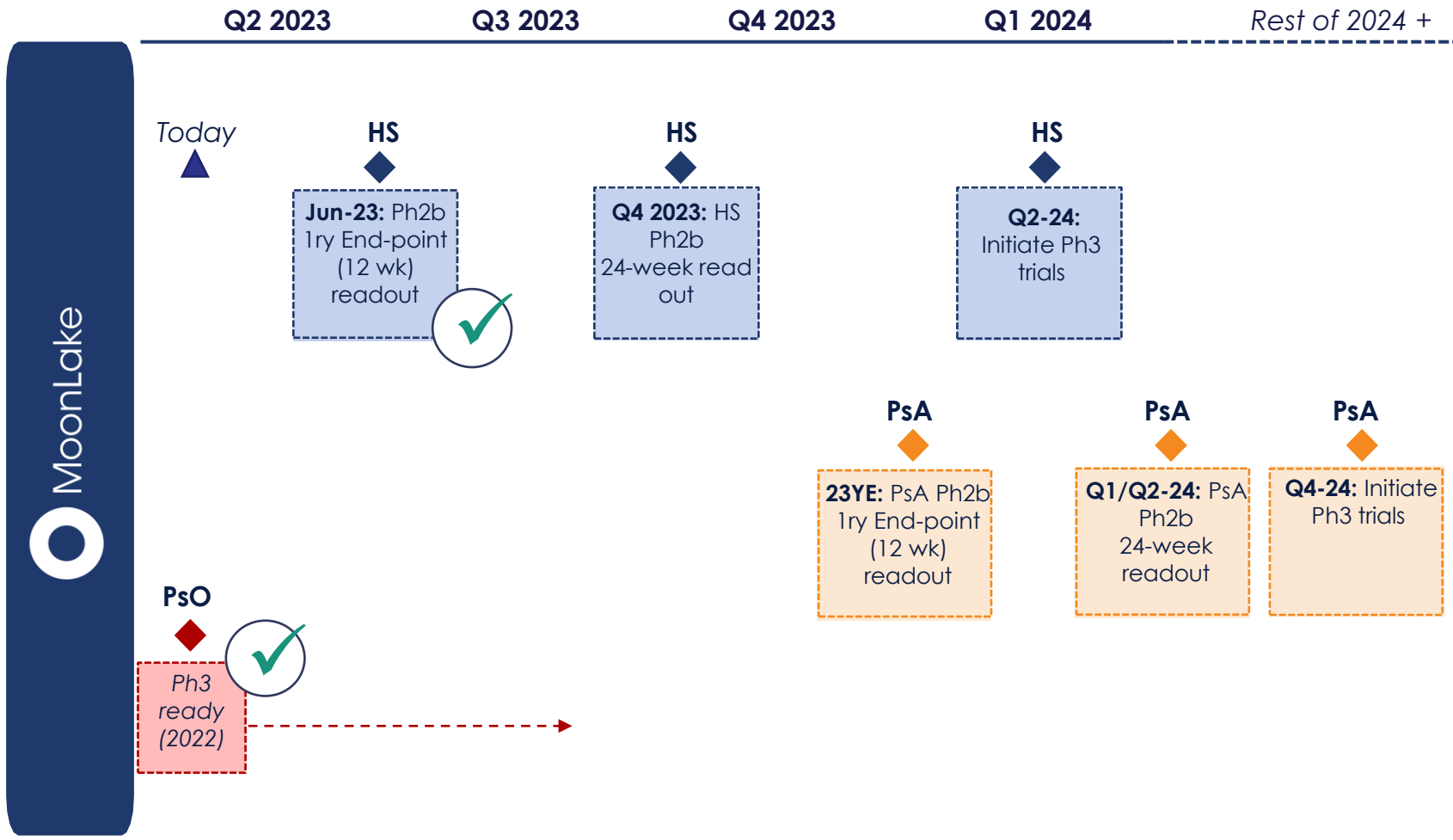
Inflammatory Pathway	Other	Type 1	Type 2	Type 3
		E.g., Prometheus' aTL1A	*E.g., Dupixent*	*E.g., Sonelokimab*
Primary immune cells[1,2]	B cell	Macrophage; Th1, ILC1, NK	Th2 cell, ILC2, Mast cell; T_{fh}, Basophil, Eosinophil	Neutrophil; Th17, Th22, ILC3
Key cytokines[1-3]	IL-1, IL-36	IFNγ, TNF, IL-6, IL-12, IL-2	IL-4, IL-5, IL-13, IL-31	IL-17, IL-22, IL-23
Diseases related to dysregulated immunity *(examples)*[4,6]	B cell dominated: **Pemphigus, ITP**	**SLE**, **Rheumatoid** Arthritis, CED	Atopic dermatitis, Allergic asthma, CRSwNP, Eosinophilic esophagitis, Food allergy, **BP**	PsO, PsA, HS, NR & R Ax-SpA, GPP, PPP, PG, GCA, SSc, Myositis, AIH, Cholangitis, Glomerulosis, A-HCC etc.
	Autoinflammatory: CAPS, DIRA			

Note: Simplified depiction based on key published information, not meant to be exhaustive in nature. AD, atopic dermatitis; IFNγ, interferon gamma; IL, interleukin; ILC, innate lymphoid cell; NK, natural killer; Tfh, follicular helper; Th, T helper.

1 Kaiko GE, et al. *Immunology*. 2008;123:326-338 2 Eyerich K, Eyerich S. *J Eur Acad Dermatol Venereol*. 2018;32:692-703 3 Raphael I, et al. Cytokine. 2015;74:5-17 4 Nakayama T, et al. *Annu Rev Immunol*. 2017;35:53-84 5 Coates LC, et al. *Semin Arthritis Rheum*. 2016;46:291-304 6 Gandhi NA, et al. *Expert Rev Clin Immunol*. 2017;13(5):425-437.

Source: MoonLake Corporate

Our time: Important anticipated catalysts in the short-term



Additional views

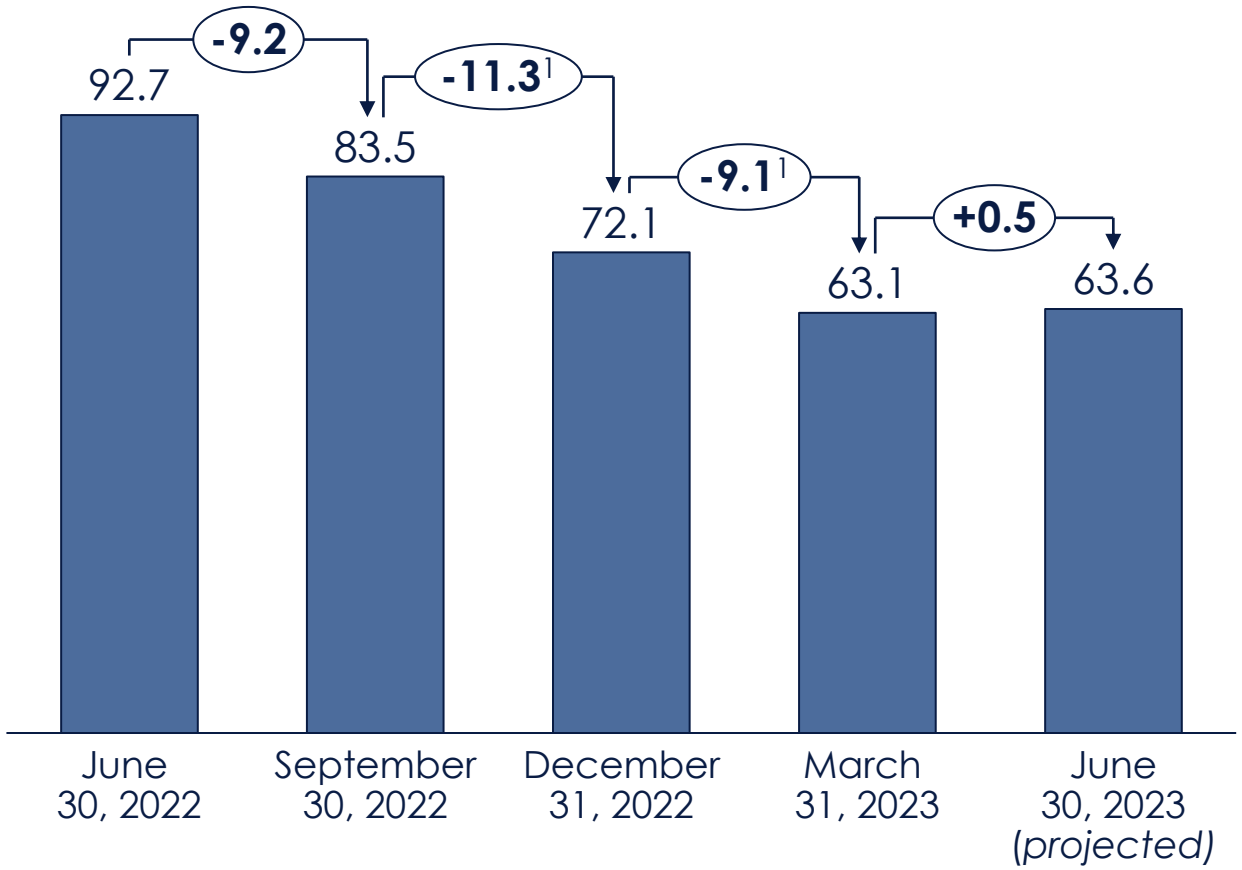
- Thus far, all MLTX trials delivered **on or ahead** of schedule
- All planned MLTX trials are **pivotal designs**
- Expect **multiple Ph3 options** at end of 2023 (excl. "direct to Ph3")
- Cosentyx® launched in Europe – market sizing as ours and expected to drive **market formation**
- BKZ launches depending on **FDA approval PSO and sBLA filing**

Source: MoonLake Corporate

MLTX operates from a position of strength

Cash, cash equivalents & short-term marketable securities

USD M



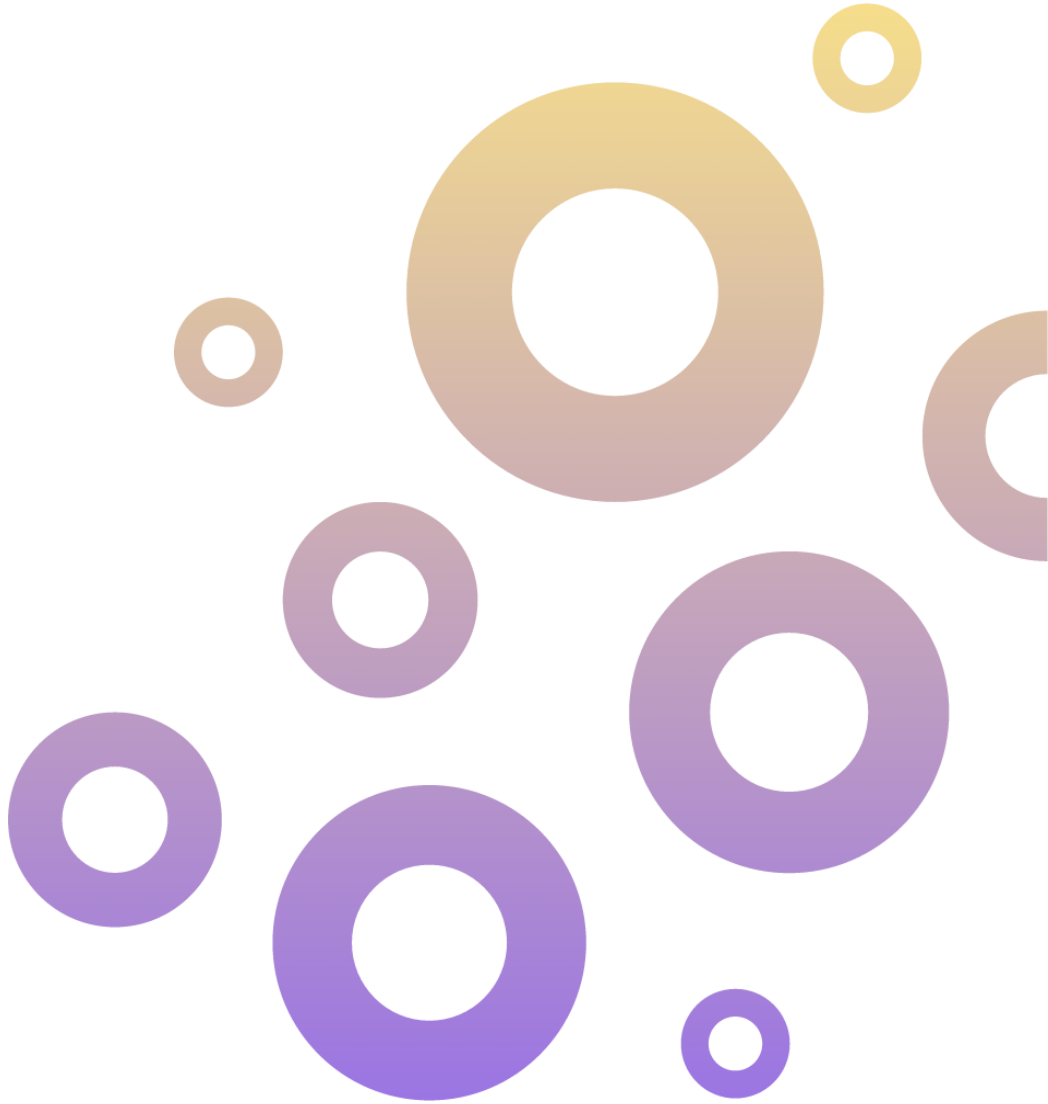
- **Discipline –** Cash burn demonstrating cost-efficient set up and focus of MLTX
- **Strength –** Runway until the end of 2024, i.e. HS readout +18 months, covering:
  - Completion of ongoing Ph2 programs in HS and PsA
  - Preparation of Ph3s, End-of-Phase 2 meetings, etc.
  - All other base spend
- **Optionality** – MLTX controls path forward to raise for its Phase 3 programs along several catalysts

1 Differences may not add up due to rounding

Source: MoonLake Finance

MLTX becomes a leader in I&I

- **Best in class** – SLK is a unique molecule among all "next gen IL-17s", as now shown in HS and PsO
- **Rarefied air** – only two molecules can inhibit all IL-17 pro-inflammatory dimers, only SLK combines that MoA with unique molecular characteristics
- **MLTX = Robust trials** – comparing apples-to-apples is critical, esp. in diseases like HS, PsA, PsO & others, and only pivotal-like designs provide differentiating insight
- **Multi Bn drug** – SLK may impact very large markets that are growing fast now, with potential over $70bn, as a leading asset in Type 3 inflammation
- **Our year** –MLTX has all key readouts among "next gen IL-17s" to end of 2023, and operates from a position of financial stability and strength



Source: MoonLake Corporate

MoonLake

Q&A

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