



Accelerating Medicines to Transform Patients' Lives

Corporate Overview
February 15, 2024



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“ACELYRIN Is A Leading Clinical-Stage Biopharma Company
Focused On Identifying, Acquiring, And Accelerating
The Development And Commercialization Of
Transformative Medicines In Immunology”

Creating An Industry Leading Immunology Company

- ✓ **Team of veteran biopharma executives** who together bring exceptional track records of developing some of the most successful medicines within immunology and beyond
- ✓ **Building a portfolio of potential new medicines that we think have the opportunity to provide clinically meaningfully differentiated benefit to patients**
 - › **We seek “diamonds in the rough”** where, based on molecule characteristics, our collective experience and expertise, and the evolving scientific and medical understanding, we can test hypotheses around clinical differentiation for patients
- ✓ **Robust pipeline of clinical programs** across several indications representing multi-billion-dollar opportunities in the aggregate
 - › **Izokibep is a “pipeline-in-a-program”** in late-stage development for multiple immunological indications including psoriatic arthritis (PsA), hidradenitis suppurativa (HS), axial spondyloarthritis (AxSpA) and uveitis
 - › **Lonigutamab is in a proof-of-concept trial** as a subcutaneously delivered therapy for thyroid eye disease (TED) with the goal to improve upon efficacy, safety as well as convenience for patients
 - › **SLRN-517 is in early clinical development** targeting mast cell-driven diseases
- ✓ **Well-capitalized** having secured more than \$1 billion in private and public capital since founding in 2020

Experienced Leadership Team

Successful Track Record of Delivering Some Of The Most Transformative Medicines For Patients



Shao-Lee Lin | MD, PhD
Founder and CEO



Melanie Gloria
COO



Mina Kim
CL&AO



Gil Labrucherie
CFO



Agnes Lee
SVP, IR & Communications



Ken Lock
CCO



Shep Mpofu | MD, MRCP, FRCP
SVP, Development



Ron Oyston
CPO



Patricia Turney
CTO

Leaders In Immunology

AMGEN

abbvie

HORIZON

NOVARTIS

NEKTAR

GILEAD

zymergen



Pfizer

HUMIRA
adalimumab

Skyrizi
risankizumab-rzaa

TEPEZZA
teprotumumab-trbw

Cosentyx
(secukinumab)

RINVOQ
upadacitinib

Enbrel
etanercept

SILIQ
(brodalumab) injection

KRYSTEXXA
pegloticase

Board of Directors

Shao-Lee Lin

Bruce C. Cozadd

Dan Becker

Alan Colowick

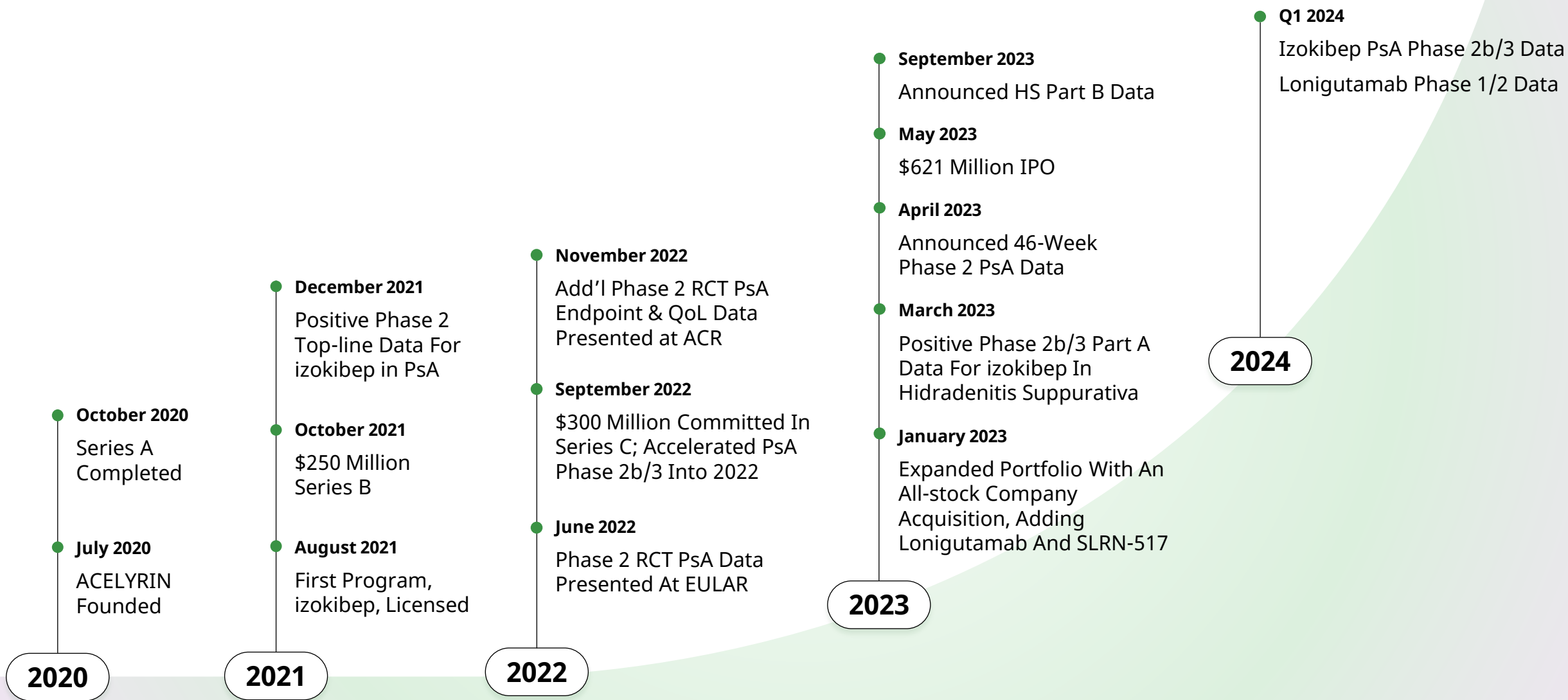
Henry Gosebruch

Patrick Machado

Beth Seidenberg

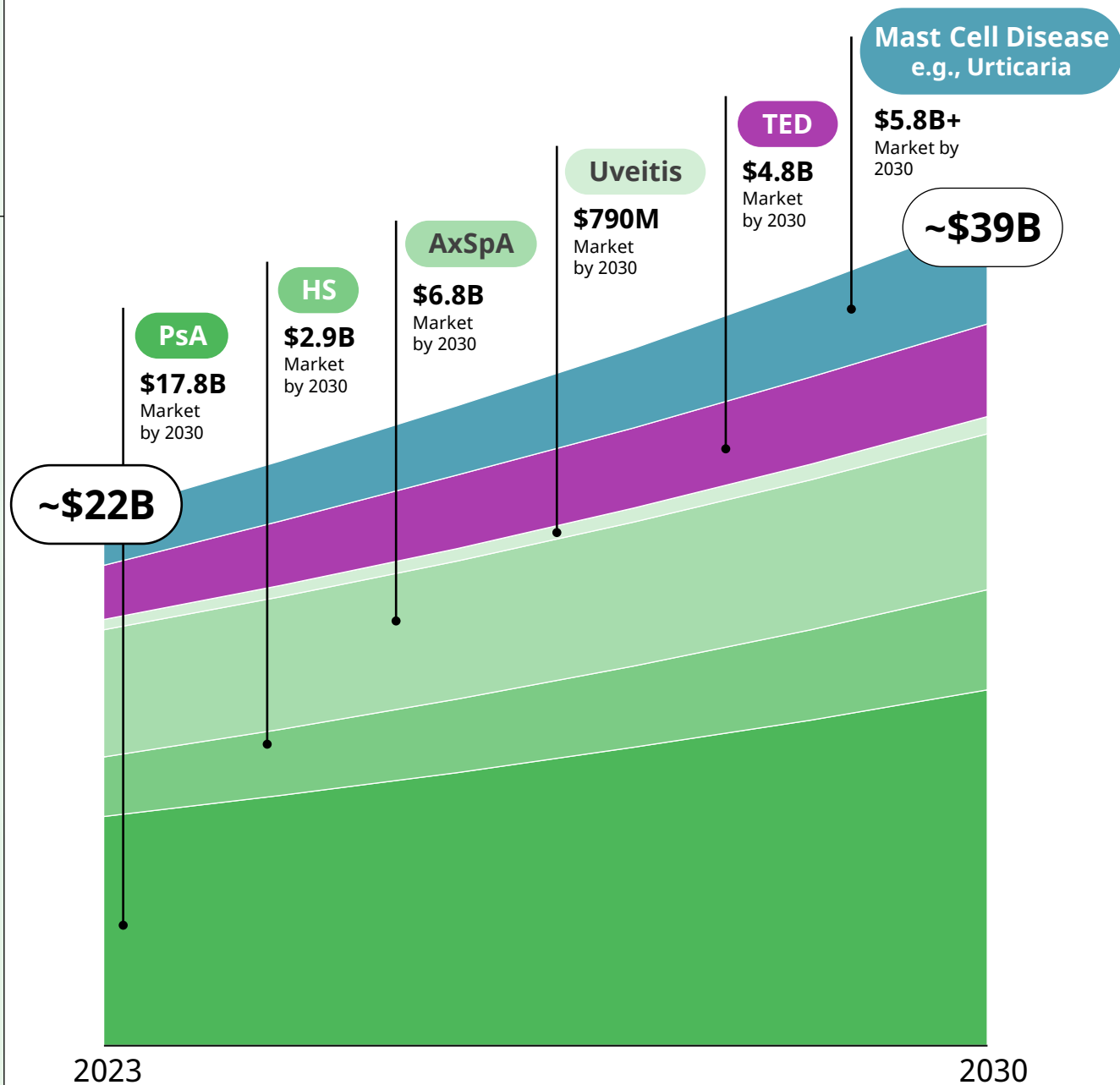
Dawn Svoronos

Executing With A Sense Of Urgency For Patients

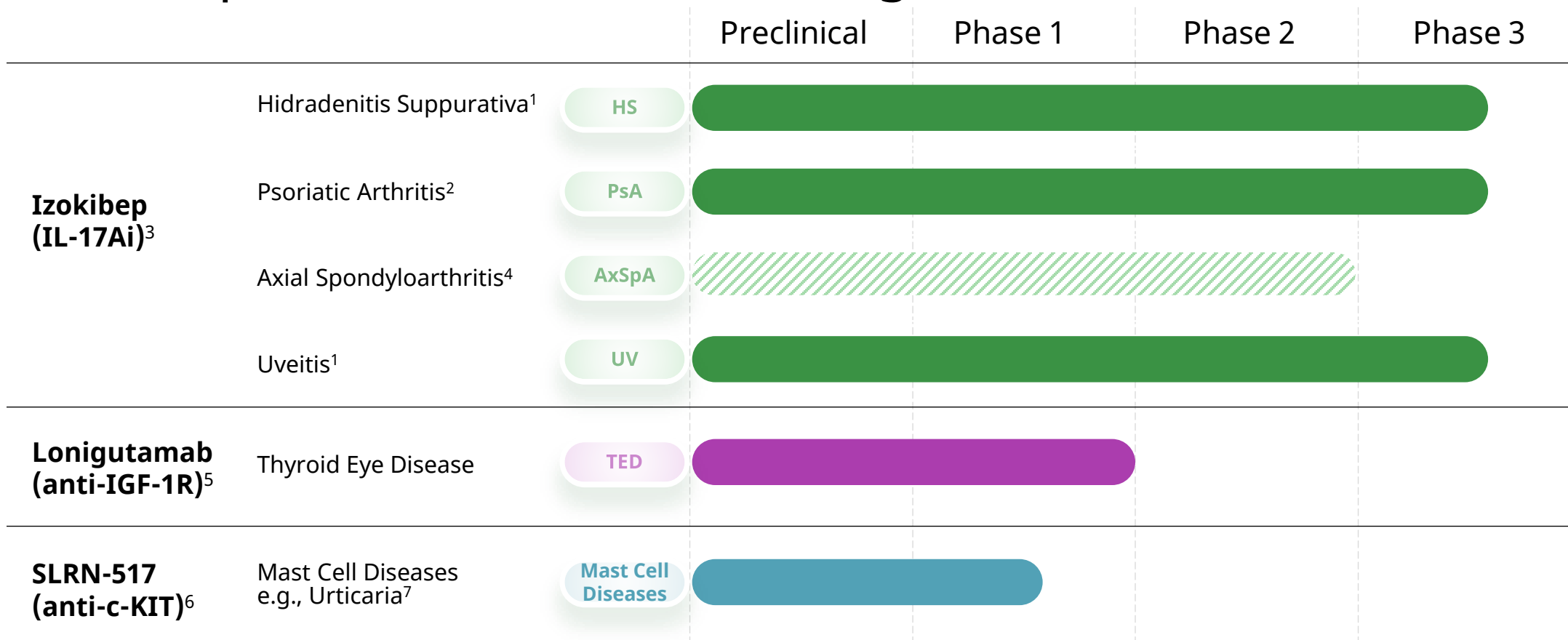


Total Addressable Markets Are Significant And Growing

- ✓ Psoriatic Arthritis is the largest of the indications we are currently pursuing for izokibep with Phase 2b/3 top-line data expected by end 1Q 2024
- ✓ Initial proof-of-concept data for lonigutamab in Thyroid Eye Disease also anticipated by end 1Q 2024
- ✓ Strong financial position of \$788 million in cash on September 30, 2023 expected to fund operations through key value-driving milestones across our portfolio.



Robust Portfolio Of Clinical Programs With Multiple Indications In Late Stage



¹ Phase 2b/3 trial in moderate to-severe hidradenitis suppurativa (HS) and uveitis. Planned inclusion into registrational package for HS and non-infectious uveitis (as applicable) if granted orphan drug designation and following consultation with relevant health authorities. We have not previously completed any clinical trials for uveitis and are currently conducting our first Phase 2b/3 trial.

² Phase 2b/3 trial in PsA.

³ IL-17A Inhibitor; Excludes (i) development, commercialization and manufacturing rights in mainland China, Hong Kong, Macau, South Korea and Taiwan, and (ii) development rights in certain other Asia Pacific countries including, without limitation, Australia, India, New Zealand and Singapore. We retain decision making authority for izokibep global development. Potential opportunity to extend certain IP protection into early 2040's.

⁴ Based on data from our Phase 2 and ongoing Phase 2b/3 trials in PsA, we intend to discuss with the FDA initiation of the Phase 3 program in AxSpA without completing earlier clinical trials in AxSpA. The FDA may require us to complete a Phase 2 trial in AxSpA prior to initiating our planned Phase 3 program.

⁵ Worldwide rights to non-oncology indications. Potential opportunity to extend certain IP protection into 2043.

⁶ Potential opportunity to extend certain IP protection to 2039.

⁷ Based on preclinical studies demonstrating highly potent inhibition of the c-KIT pathway targeting mast cell proliferation and degranulation across mast-cell driven diseases such as Chronic Urticaria, an inflammatory disease that is driven by the release of histamine and other vasoactive molecules produced by mast cells

Izokibep's High Potency & Small Size Enables Potential To Improve Clinical Response With SC Exposures Others Require IV To Achieve



Validated Target

IL-17A is associated with autoimmune inflammation. Marketed monoclonal antibodies have demonstrated targeting IL-17A results in dose-responsive increases in efficacy without dose-limiting toxicity.

Targeting more broadly than IL-17A as a means to more effectively inhibit the IL-17 axis has demonstrated risk for increased fungal infection, suicidal ideation & behavior, and liver toxicity with a requirement for routine monitoring – all raising the potential of association specifically with inhibition of IL-17F.

Hitting IL-17A the hardest may be the sweet spot of achieving increased exposure/efficacy without introducing additional or new safety liability. The high potency and small size of izokibep has the potential to impact clinical response.



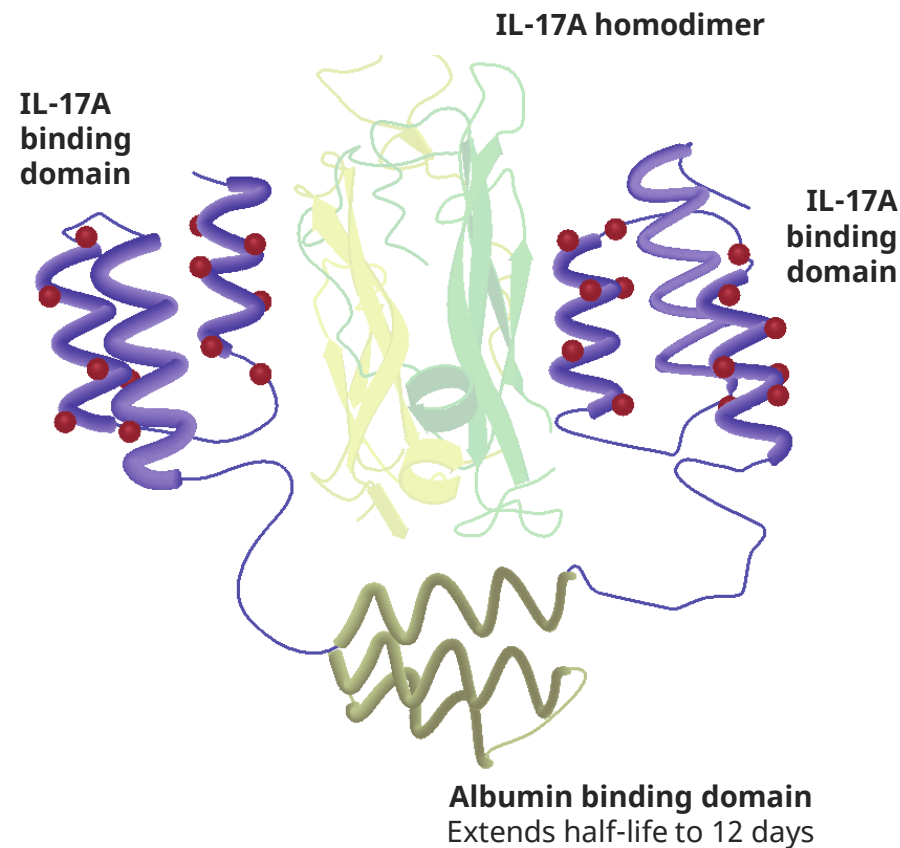
High Potency

Blocks the homodimeric IL-17A target protein by binding to both sub-units simultaneously with the high affinity (KD: 0.3 pM) versus other IL-17A inhibitors.



Small Size

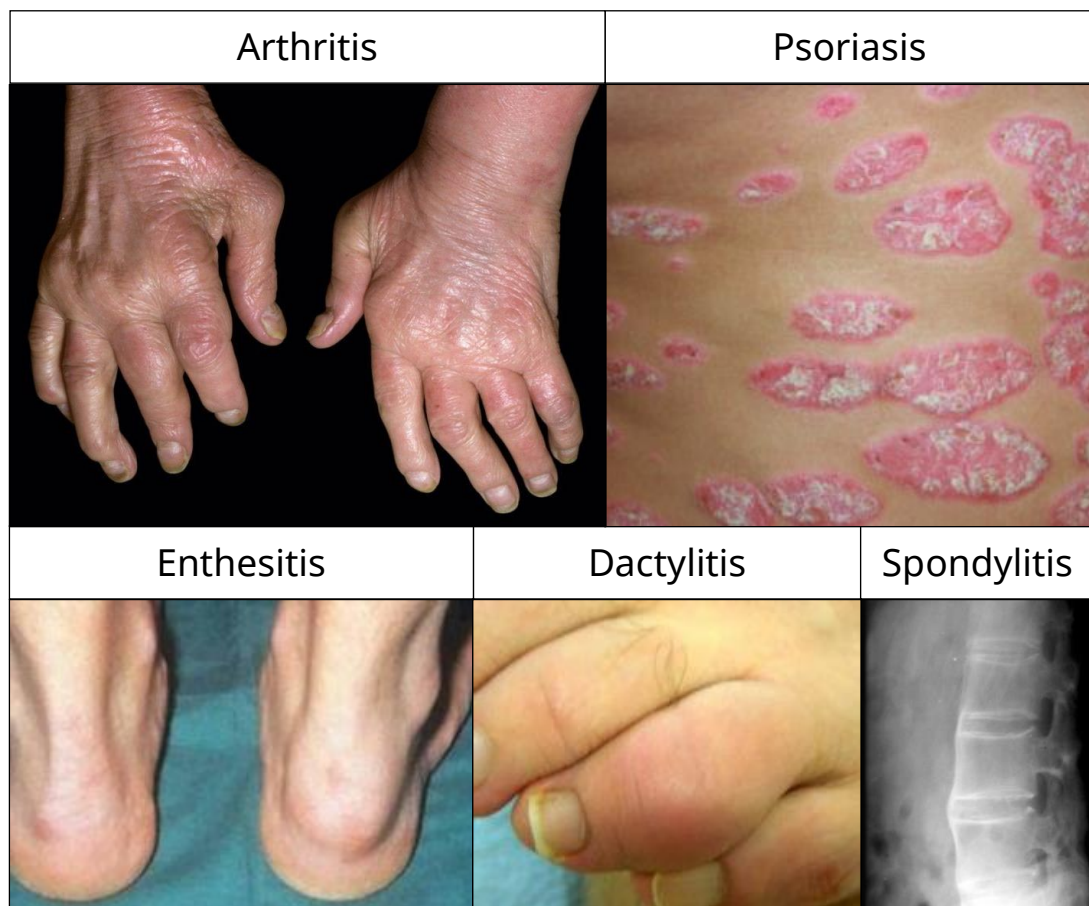
~1/10th the size of a mAb (~18.6 kD) enabling potential to reach difficult to treat tissues.



IZOKIBEP (~18.6 kDa)

PsA Is A Disease With Multiple Manifestations

Addressing Totality Of Manifestations Is Necessary To Achieve Disease Control & Restore Quality of Life



✓ Psoriatic arthritis (PsA) is a **chronic, inflammatory disease with multiple clinical manifestations** including arthritis, psoriasis, enthesitis (inflammation of dense, non-vascular tissues that connect ligaments and tendons to bone), spondylitis, and dactylitis

✓ ~1.6M PsA patients in the U.S.

✓ Among moderate-to-severe PsA patients, **over a third fail non-biologic therapy**

✓ **More complete and faster resolution of disease symptoms** manifesting in dense tissues (e.g., enthesitis) remain an unmet need

✓ **Addressing totality of manifestations is the goal** for patients

PsA Is A Disease With Multiple Manifestations

Addressing Totality Of Manifestations Is Required To Improve Quality of Life For Patients



Peripheral Arthritis

Painful swelling and stiffness of the joints of the arms and legs, including the elbows, wrists, hands and feet



Dactylitis

A hallmark symptom of PsA characterized by diffuse swelling along the entire length of fingers leading to "sausage-like" digits



Enthesitis

An early sign of PsA leading to a disabling and painful inflammation at sites where tendons, ligaments, or fascia insert into bones



Spondylitis

Inflammation of the axial skeleton (sacroiliac joints and spine) leading to severe back pain and stiffness



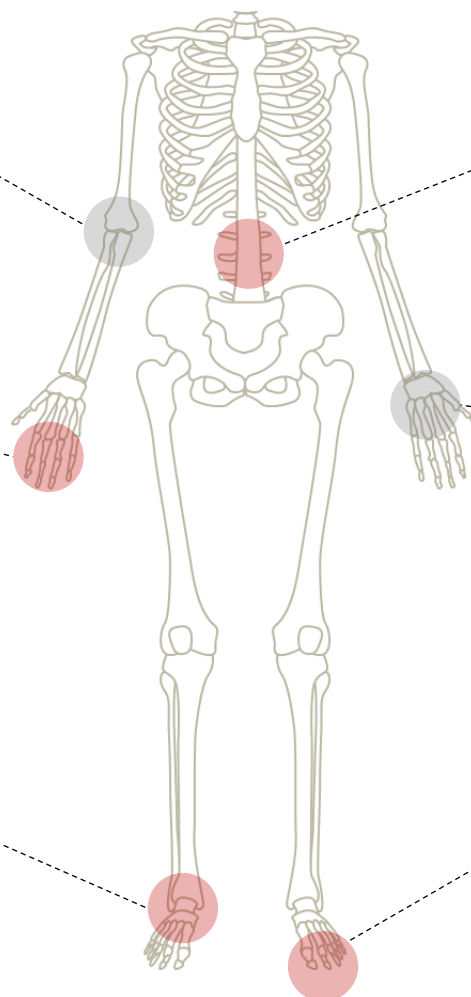
Skin Psoriasis

Chronic, inflammatory skin lesions (psoriasis), usually red, scaly thickened plaques on scalp, trunk, and extremities.



Nail Psoriasis

A serious functional impairment that affects a patient's quality of life and cause pitting, crumbling, and loosening of the nail plate



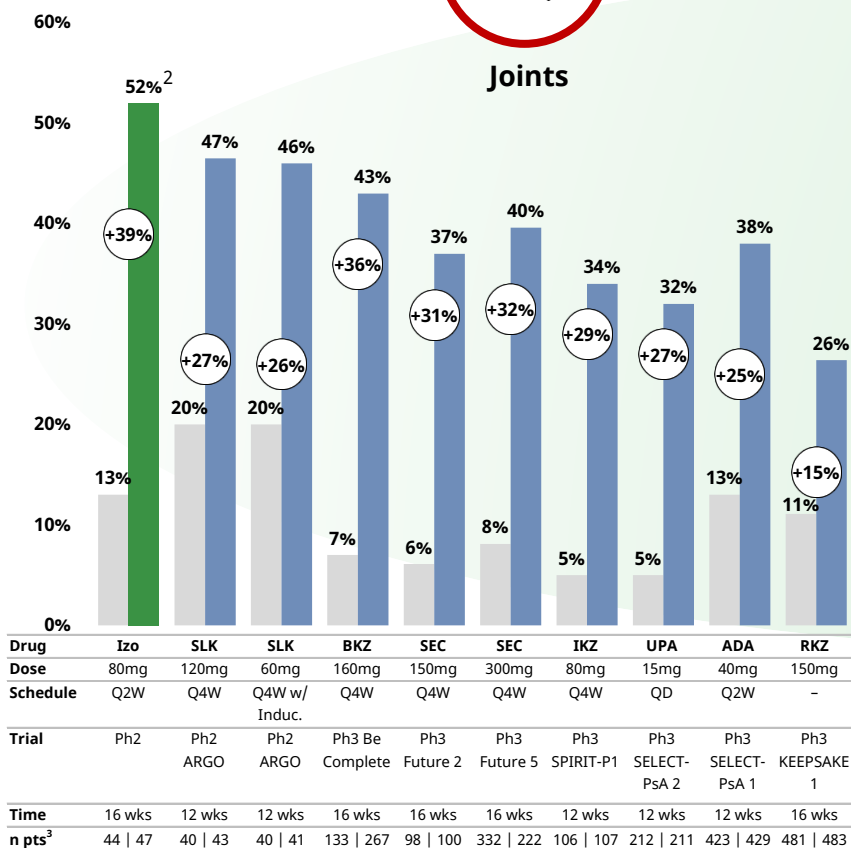
 *Historically difficult to treat*

Izokibep PsA P2 Top Range Responses Across Joints, Skin & Enthesitis¹

Ongoing Phase 2b/3 Evaluating Potential For Further Improved Responses With Higher Doses



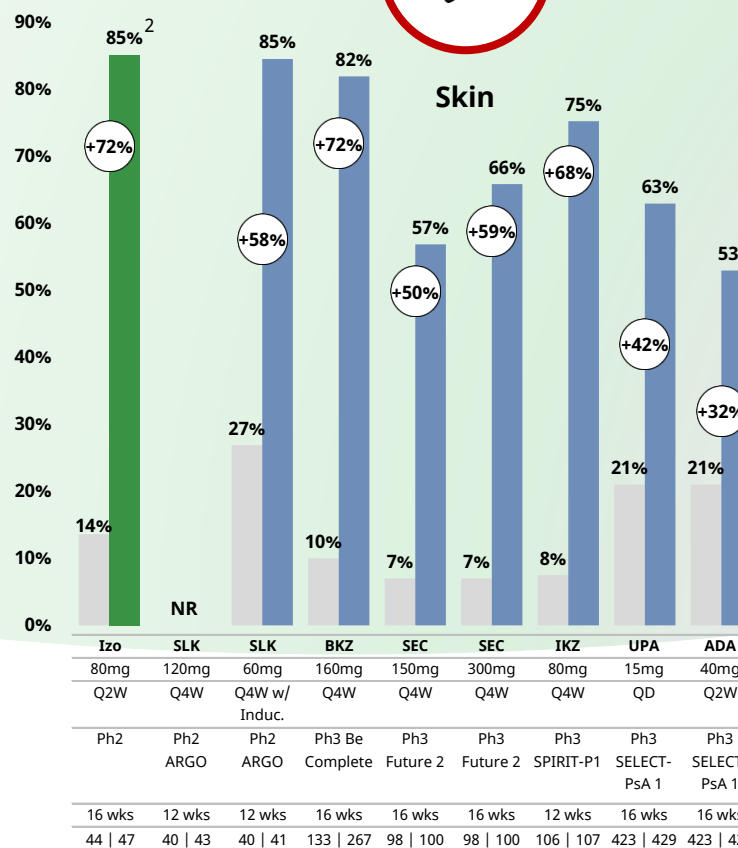
Joints



PASI75



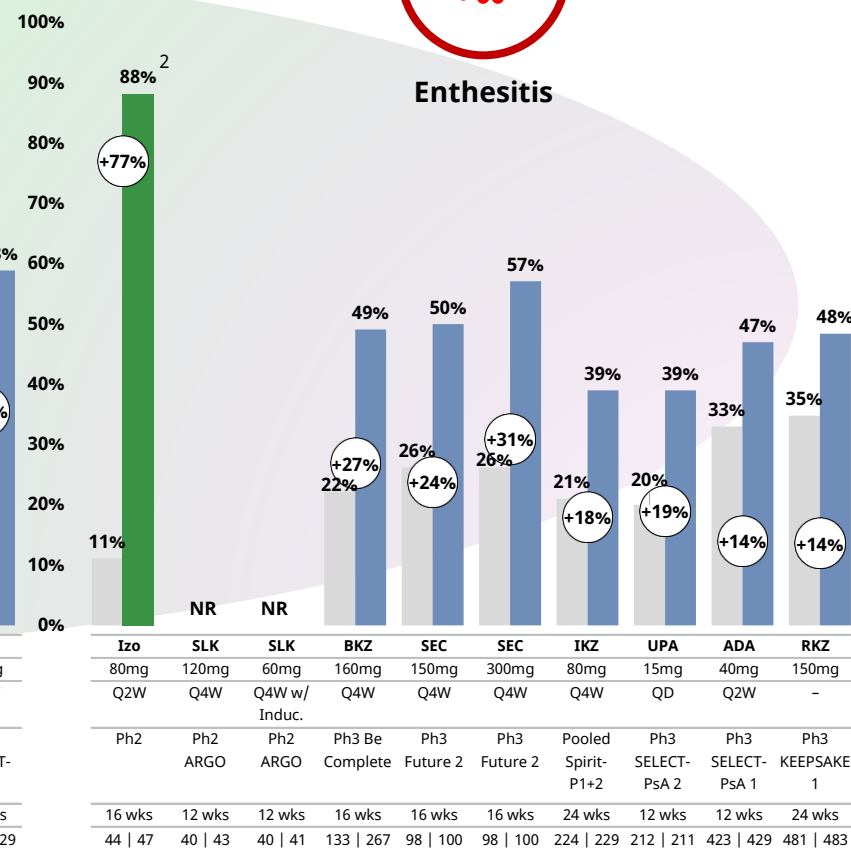
Skin



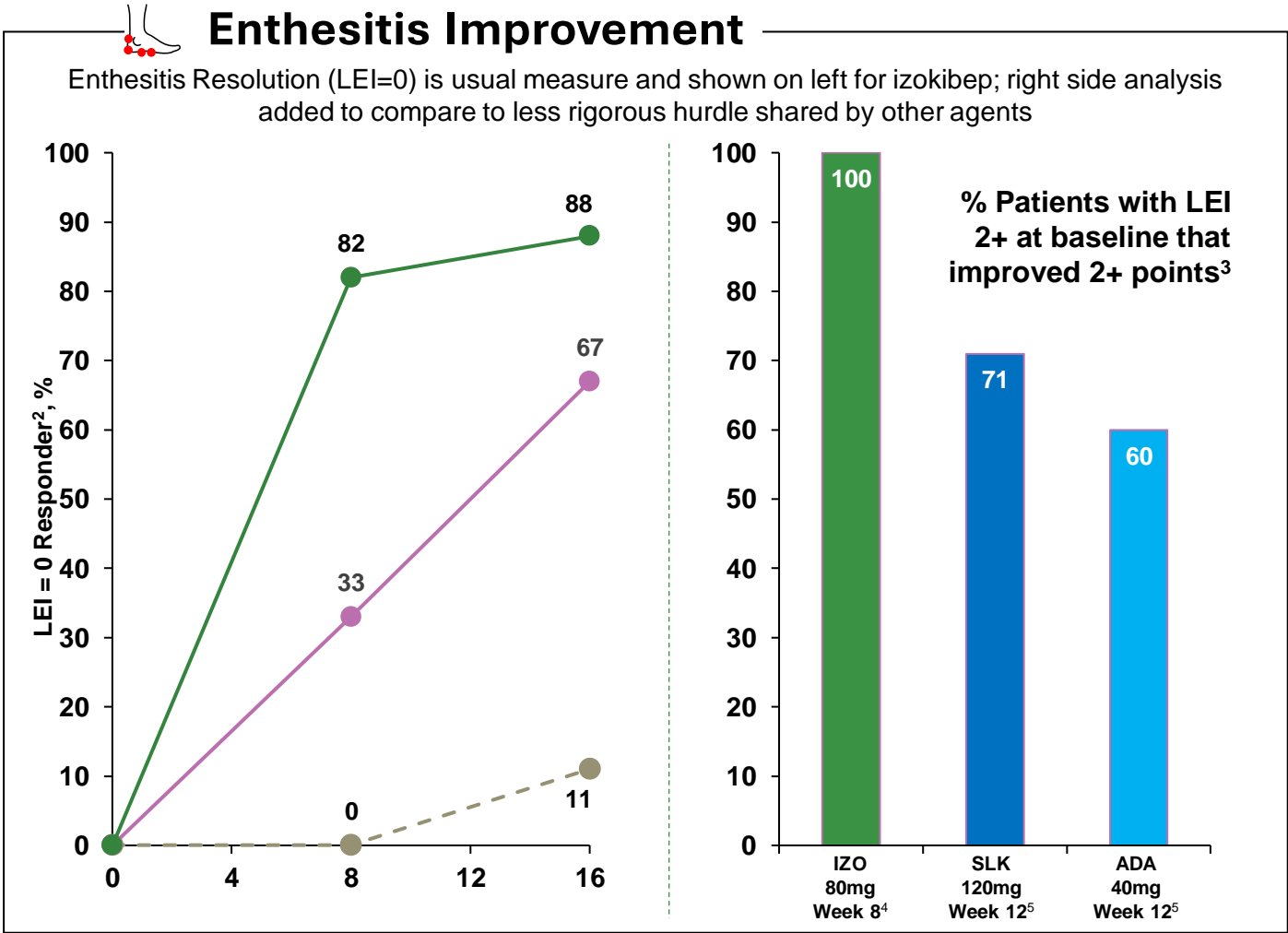
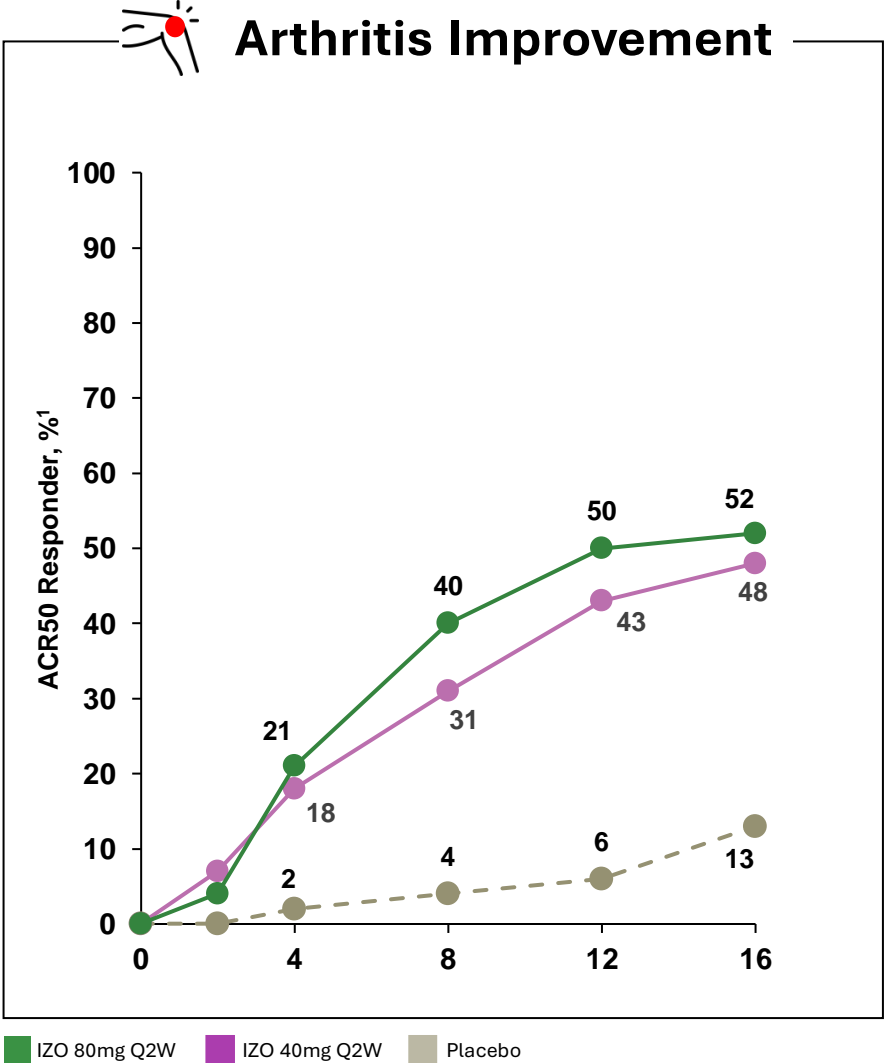
Resolution of LEI



Enthesitis

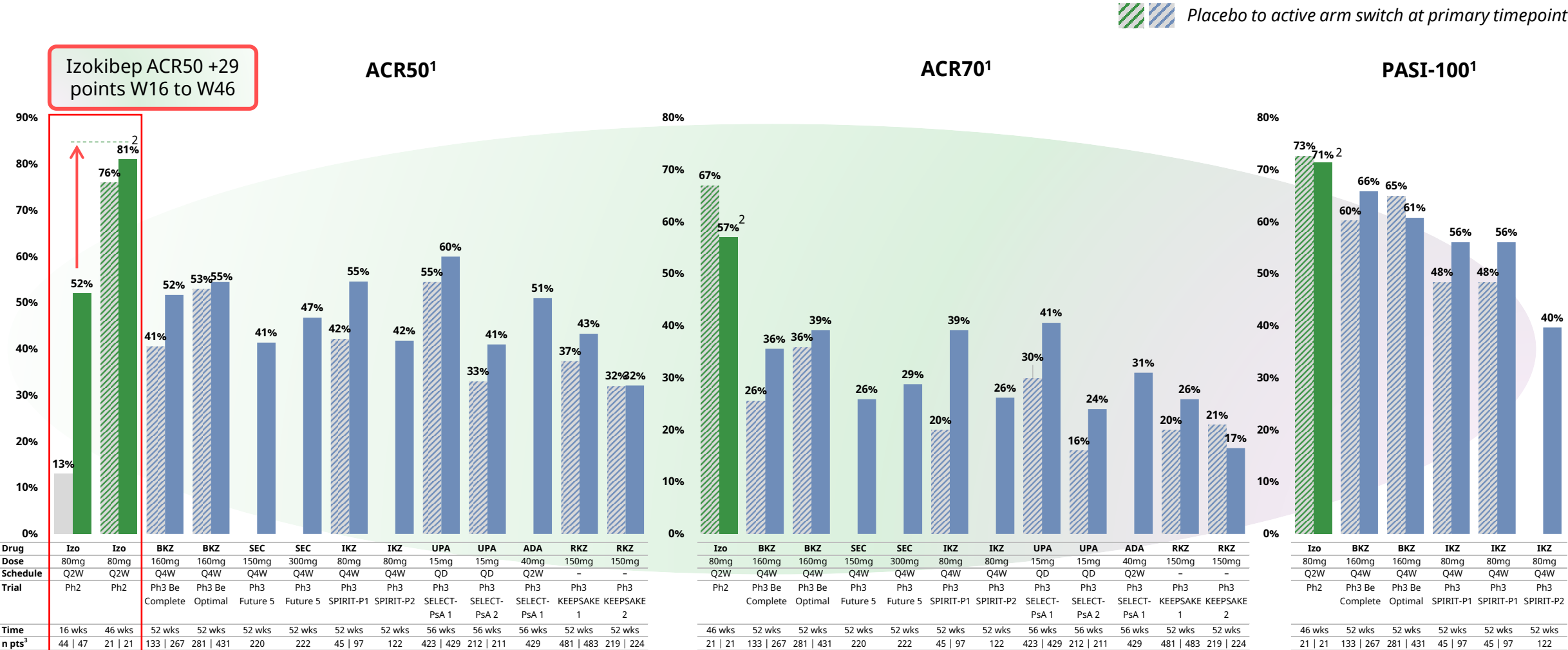


Speed Of Response Across Manifestations Was Rapid, Particularly In Difficult To Reach Tissues And In Patients With Severe Disease



Responses Increased Across Disease Manifestations Through ~1 Year

Majority of Patients Achieved ACR70 & PASI100 Responses With Durable Enthesitis Response At 89%



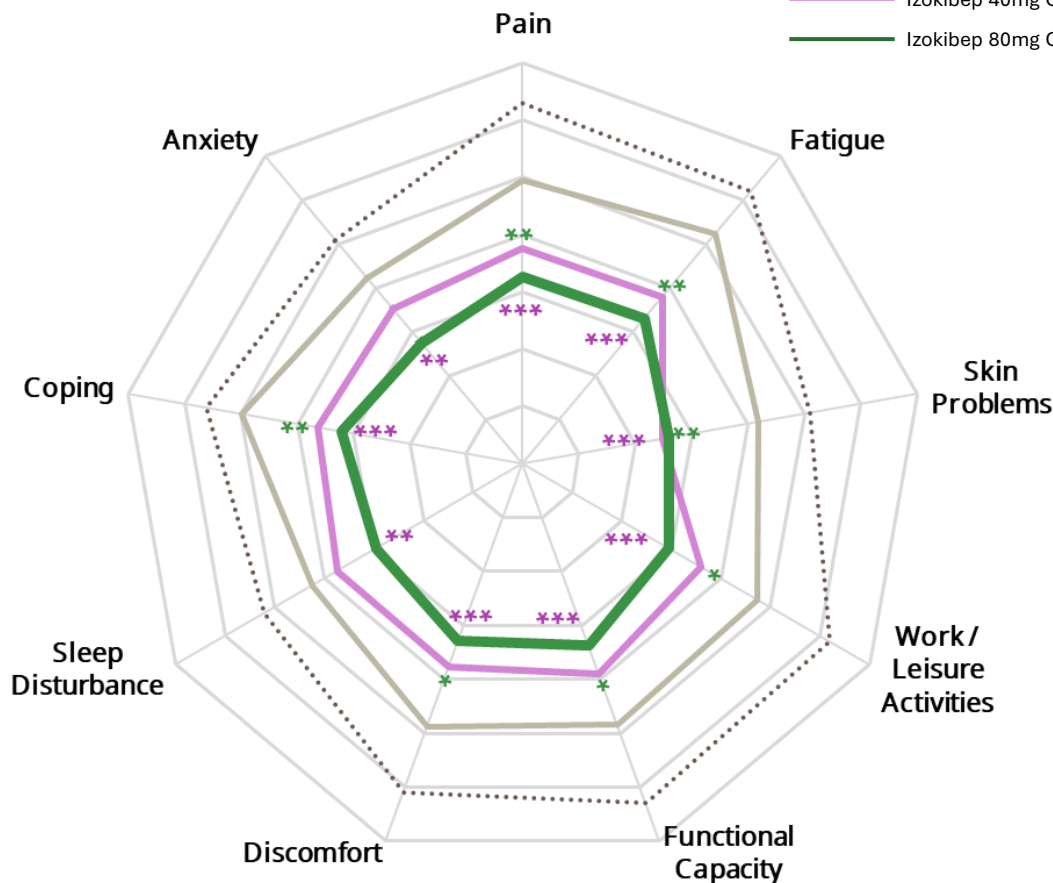
¹Data from U.S. / EU package inserts, FDA / EMA documents, and publications.
²46-week izokibep data as observed.
³Represents # of pts in respective (placebo | experimental) arms randomized, completed tx, or evaluable for endpoint.

Further Clinical Improvements Lead To Increased Quality of Life

Clinical Goal Is To Move Responses Toward The Center – No Impact On Quality of Life

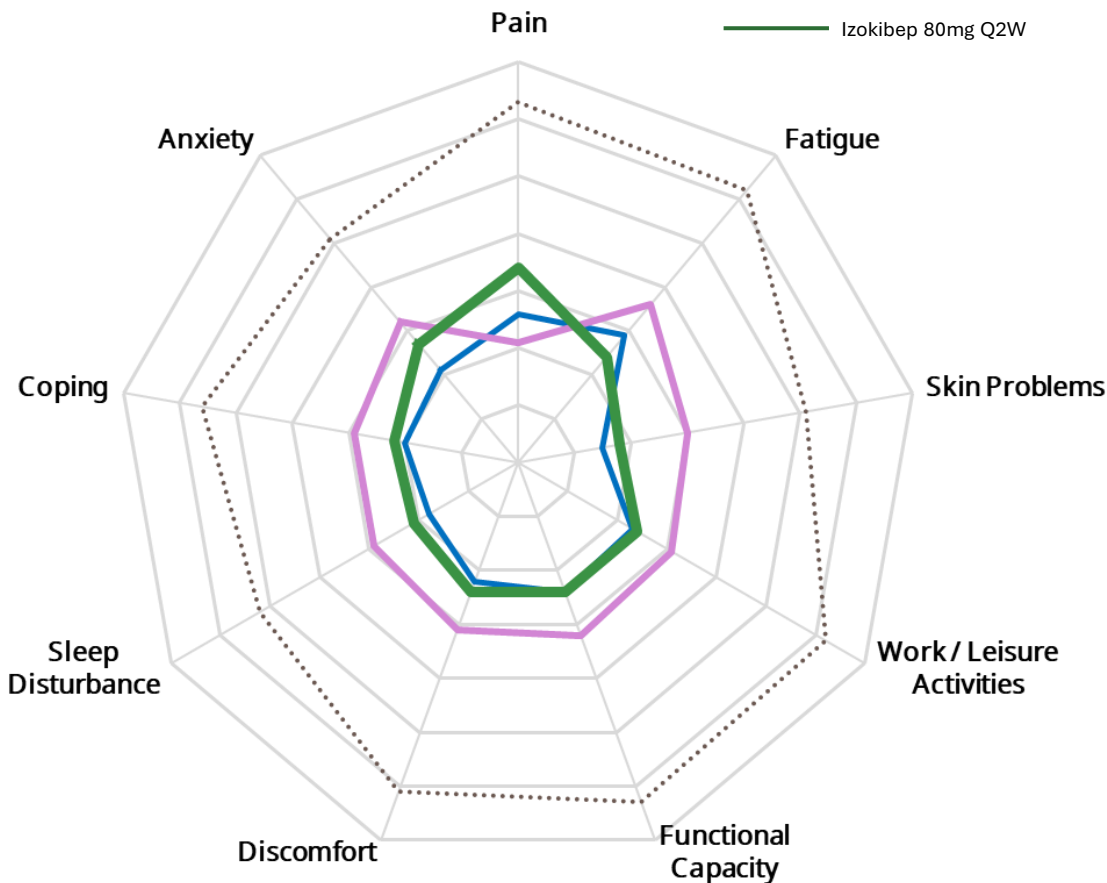
PsAID-9 Subdomains (Week 16)

- Baseline N=135
- Placebo
- Izokibep 40mg Q2W
- Izokibep 80mg Q2W



PsAID-9 Subdomains (Week 46)

- Baseline N=135
- Pbo Switches to 80mg Q2W @ W16
- Izokibep 40mg Q2W
- Izokibep 80mg Q2W

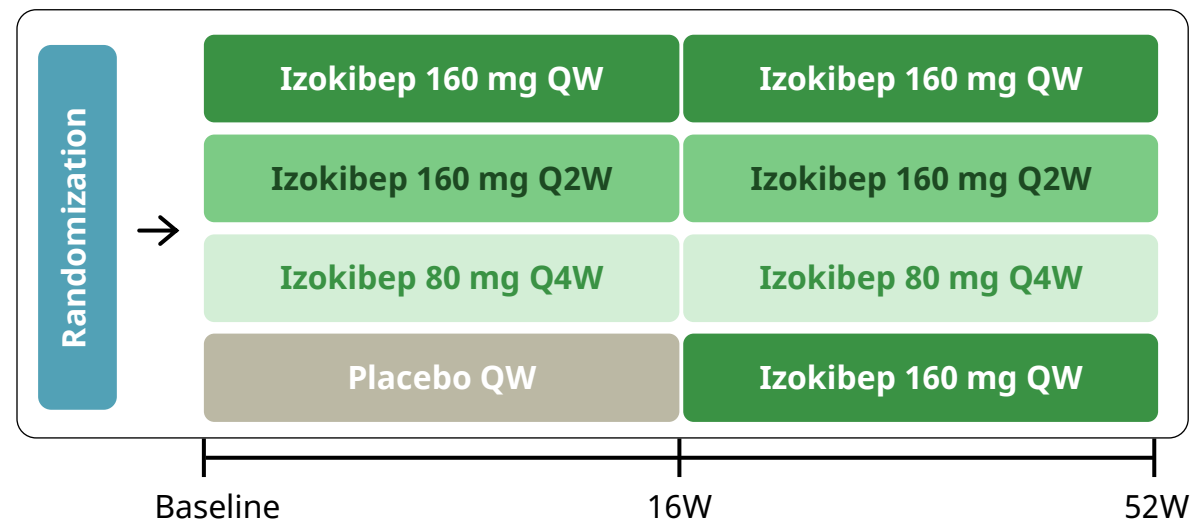


Phase 2b/3 Evaluating Potential To Further Maximize Responses

Enrollment Completed In Global Study Across 40 US & 31 Int'l Sites; Top-Line Results Expected Q1 2024

Screening/ Eligibility

- ✓ Moderate-Active PsA (CASPAR criteria)
- ✓ > 3 TJC68 and > 3 SJC66
- ✓ RF and anti-CCP negative at screening
- ✓ Previous failure to NSAID or csDMARD or TNFi



Efficacy Endpoints*

- > ACR50 (primary)
- > Resolution of enthesitis (LEI=0)
- > PsAID response
- > PASI90
- > HAQ-DI change from baseline
- > ACR20
- > MDA

*Primary and secondary endpoints, all week 16

Safety Endpoints*

- > TEAEs, events of interest, and SAEs
- > Laboratory values and vital signs at collected timepoints
- > Treatment-emergent ADAs

*All secondary endpoints

14:4:1:4 160 mg QW, 160 mg Q2W, 80 mg Q4W and placebo

80 mg Q4W equivalent to ~20 mg Q2W and included to enable dose modeling

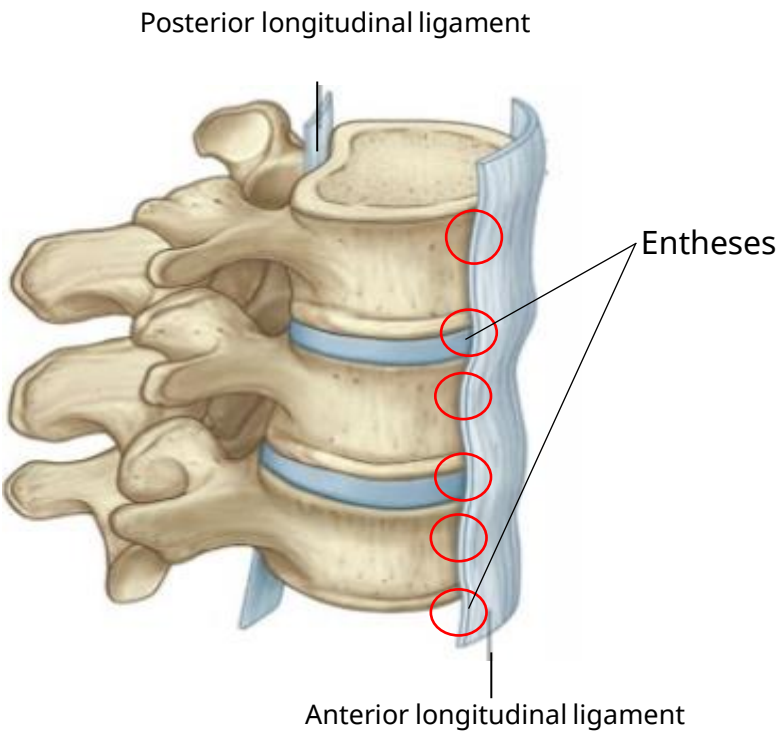
NSAID, non-steroidal anti-inflammatory drugs; csDMARD, conventional synthetic disease modifying anti-rheumatic drug; TNFi, TNF inhibitor; QW, Every Week; Q2W, Every Two Weeks

Enthesitis As First Point Of Inflammation In Axial Spondyloarthritis

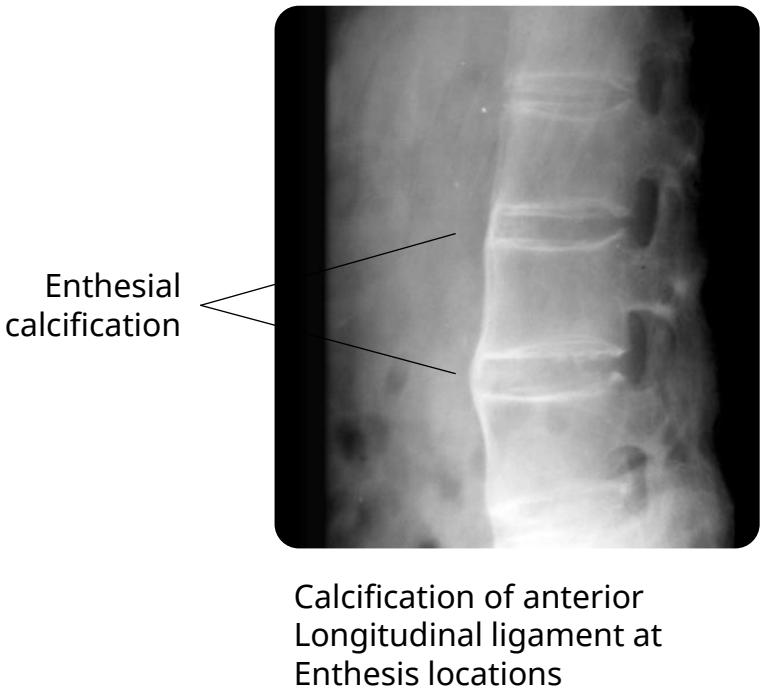
Phase 3 Program In AxSpA Expected To Initiate Based On PsA Phase 2b/3

Entheses Join Ligaments and Tendons to Bone Throughout the Body; Dense and Difficult Tissue To Penetrate

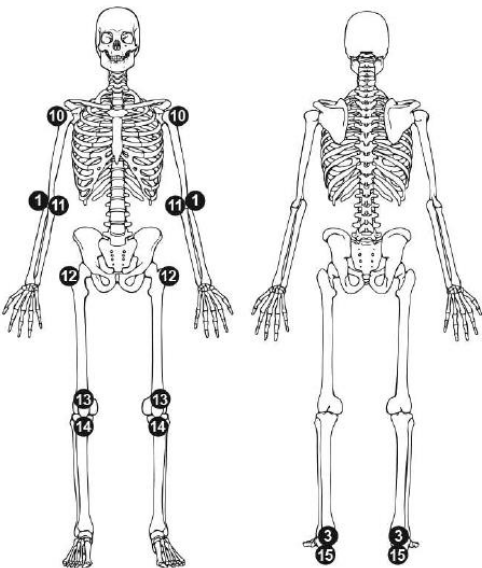
Posterior & Anterior Longitudinal Ligament attaches to bony spine through entheses



Lateral Spine X-Ray shows calcification along entheses. New bone is AxSpA hallmark

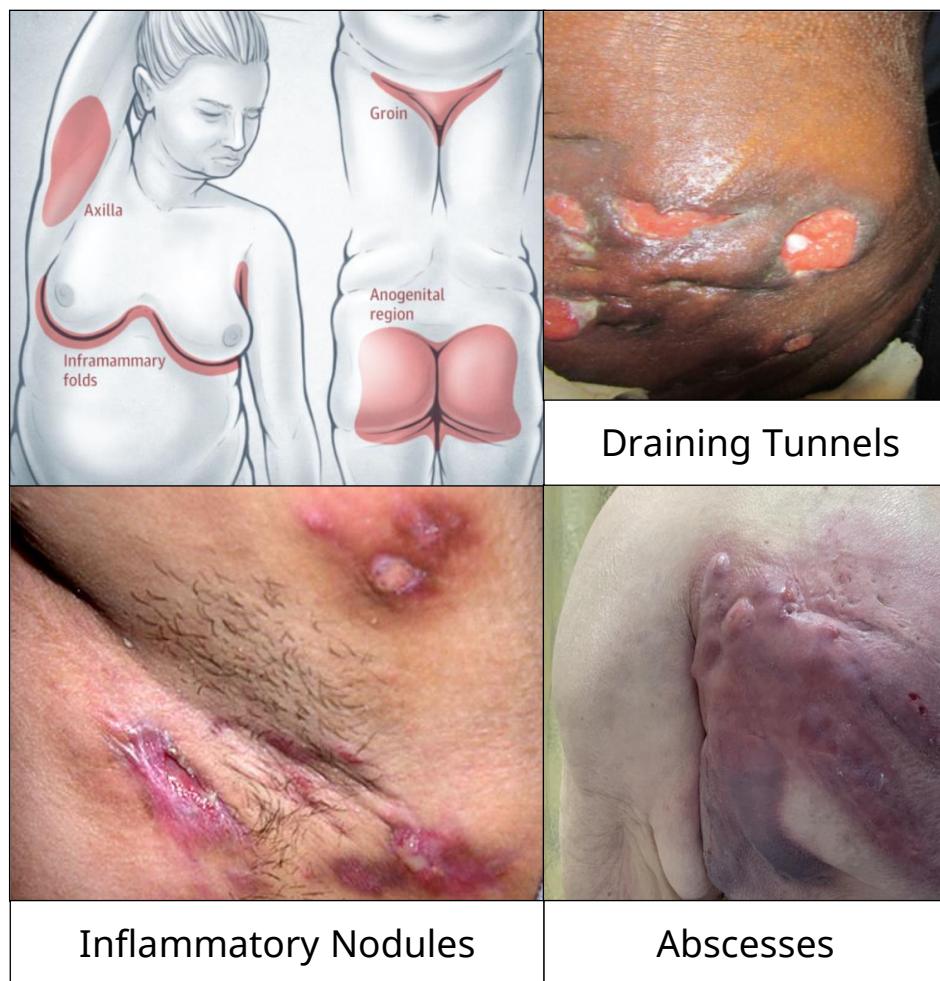


Enthesitis commonly occurs beyond the spine as well, leading to pain and disability



SPARCC Enthesitis Index for AxSpA assesses 16 sites, for use in trials

Hidradenitis Suppurativa Is A Devastating Disease Where Exposures Matter; High Potency & Small Size Could Improve Patient Outcomes

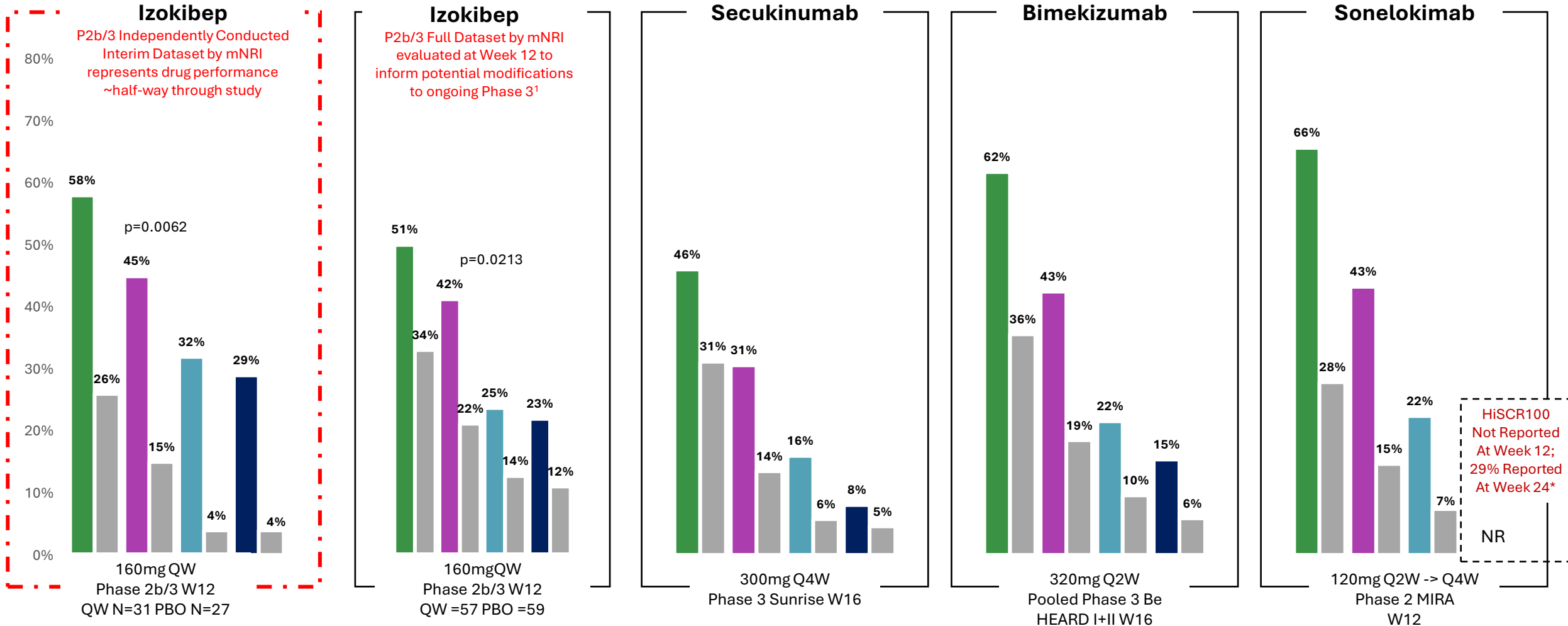


- ✓ Chronic Inflammatory disease characterized by skin abscesses, inflammatory nodules, fistulae, scar tissue, malodor and pain, often resulting in permanent disfigurement and social stigma negatively impacting quality of life
- ✓ **~370,000 HS patients in the U.S.;** approximately half of patients are considered to have moderate-to-severe disease
- ✓ Diagnosis rates are estimated to **increase 1-3% annually**
- ✓ **Current therapy options are limited;** more complete and faster resolution of disease symptoms remain an unmet need for patients

Izokibep Has Potential To Deliver Field-Leading Responses In HS

mNRI Demonstrates Statistical Significance For Both Full Study And Interim Datasets At Week 12

■ HiSCR50
 ■ HiSCR75
 ■ HiSCR90
 ■ HiSCR100
 ■ Placebo
 NR = Not Reported



Safety Results Consistent With Prior Izokibep Studies And IL-17A Inhibitors; No Evidence Of Safety Or Tolerability Limitation

Adverse Events Category Adverse Events Type	Placebo QW/Q2W (N= 59) n (%)	Izokibep Q2W (N= 59) n (%)	Izokibep QW (N= 57) n (%)	Total (N= 175) n (%)
Any TEAE	38 (64.4)	48 (81.4)	49 (86.0)	135 (77.1)
Leading to discontinuation of study treatment	2 (3.4)	1 (1.7)	4 (7.0)	7 (4.0)
Leading to death	0	0	0	0
Any TEAE assessed with the maximum intensity				
Mild	20 (33.9)	26 (44.1)	28 (49.1)	74 (42.3)
Moderate	17 (28.8)	20 (33.9)	19 (33.3)	56 (32.0)
Severe	1 (1.7)	2 (3.4)	2 (3.5)	5 (2.9)
Any study treatment related TEAE	6 (10.2)	27 (45.8)	37 (64.9)	70 (40.0)
Leading to discontinuation of study treatment	1 (1.7)	0	3 (5.3)	4 (2.3)
Any serious TEAE	2 (3.4)	1 (1.7)	2 (3.5)	5 (2.9)
Leading to discontinuation of study treatment	1 (1.7)	1 (1.7)	1 (1.8)	3 (1.7)
Any serious study treatment related TEAE	0	0	1 (1.8)	1 (0.6)
Leading to discontinuation of study treatment	0	0	0	0

ISRs were typically mild and rarely led to discontinuation; no serious or severe ISRs

Low rates of candida overall; no candida events in the QW group

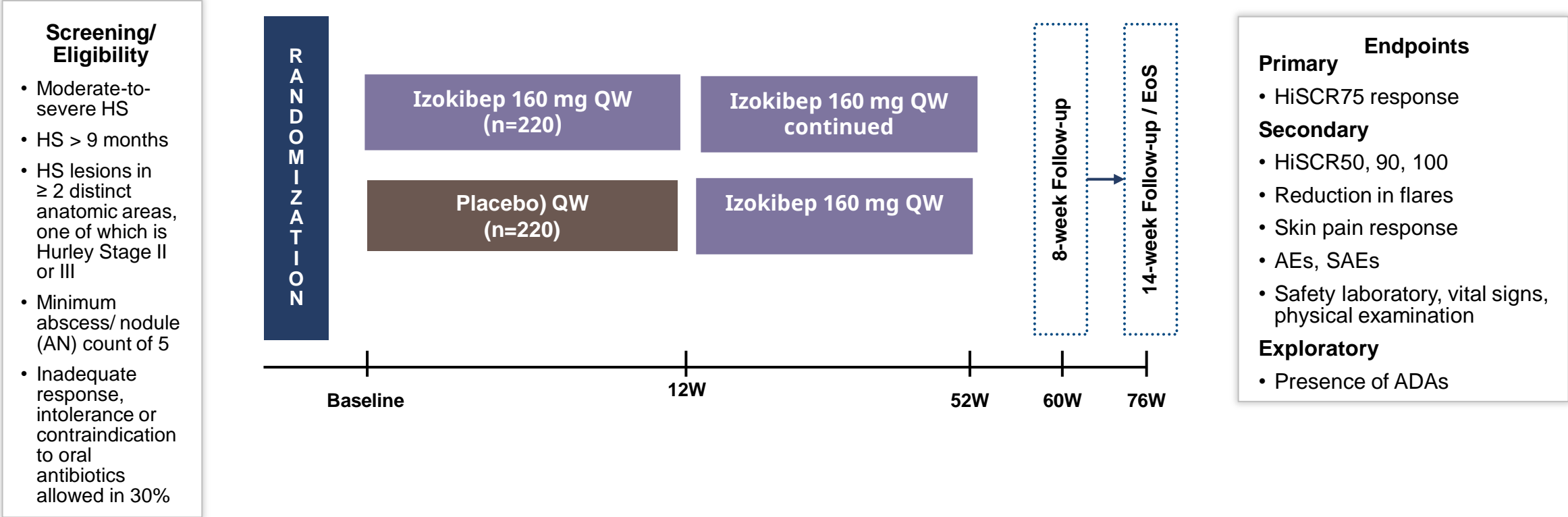
No events of IBD, GI Distress

Low number of SAEs overall; similar rates across groups

All SAEs were unrelated except 1 SAE in the QW group (Epstein-Barr virus infection). Subject resumed treatment and continued in the study

Izokibep Phase 3 Hidradenitis Suppurativa Trial Ongoing

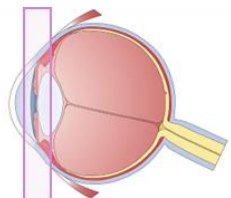
Discussions With FDA Will Inform Next Steps To Advance Registrational Program



ADA, anti-drug antibodies; AE, adverse event; AN, total abscess and inflammatory nodule count; EoS, end of study; HiSCR, Hidradenitis Suppurativa Clinical Response; HS, hidradenitis suppurativa; QW, once every week; Q2W, once every 2 weeks; SAE, serious adverse event.

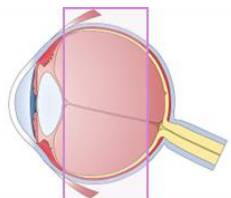
Uveitis Is inflammation In The Eye With High Unmet Need

Phase 2b/3 Trial In Non-Infectious Uveitis Currently Enrolling



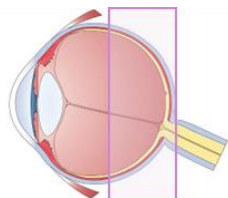
Anterior Uveitis

Anterior chamber
(iris, ciliary body)



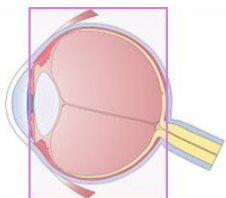
Intermediate Uveitis

Vitreous Chamber



Posterior Uveitis

Retina or choroid



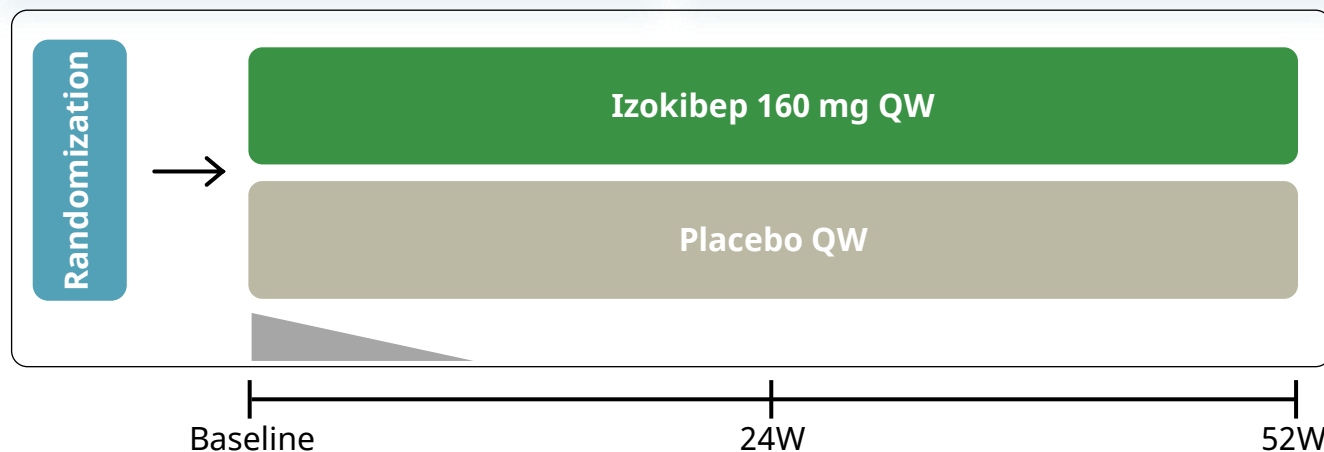
Panuveitis

Anterior or vitreous
chamber, retina or
choroid

- ✓ Inflammation that **can lead to vision loss**; demands more efficacious therapies/persistent responses
- ✓ More than **90% of uveitis cases have been reported to be non-infectious, chronic and recurrent** in nature
- ✓ **~300K uveitis patients in the U.S**; nearly a third are treated with biologics today
- ✓ Only approved treatments are corticosteroids and adalimumab; **~40% fail available biologics**
- ✓ More complete **reduction in haze without increased steroid use & disease worsening is the unmet need**

Screening/ Eligibility

- ✓ Active non-infectious uveitis
- ✓ Anterior chamber cells
- ✓ Abnormal fluorescein angiogram
- ✓ Macular edema on CT
- ✓ Failure of corticosteroids or TNFi



Efficacy Endpoints*

- › Time to treatment failure (Primary)
- › Quiescence
- › BCVA
- › NEI VFQ-25 score
- › Central retinal thickness

*Primary and secondary endpoints

Safety Endpoints*

- › TEAEs, events of special interest and SAEs
- › Laboratory values and vital signs at collected timepoints

*Secondary endpoint

Lonigutamab (anti-IGF-1R) for Thyroid Eye Disease

TED Is A Vision-Threatening Autoimmune Disease; Single Approved Therapy With Limitations



Proptosis

Redness



Diplopia

- ✓ **TED is characterized by progressive inflammation** that can lead to irreversible damage to tissues around the eye, threatening vision.
- ✓ **Understanding of TED as a chronic inflammatory condition has continued to evolve**, especially with recent studies demonstrating efficacy in subjects considered chronic vs. acute.
- ✓ **Greater depth and durability of response is needed**; standard of care (SoC) has a fixed treatment duration and IV administration.
- ✓ **Recent safety updates to SoC label highlight hearing impairment as serious**, potentially permanent.
- ✓ **~100,000 TED patients in the U.S.**; 35% are characterized as having moderate-to-severe disease

An Ideal Treatment Offers Improved Efficacy, Safety & Convenience

Initial Proof Of Concept Results From P1/2 Trial Of Subcutaneous Lonigutamab Expected End Q1 2024



Optimize Clinical Response

Maintain C_{min} at levels to achieve improved depth and durability of response.



Minimize Safety Impact

Minimize C_{max} to reduce risk of hearing impairment. IGF-1 functions to regenerate cells of the inner ear subsequent to auditory insults. We hypothesize that high C_{max} due to IV dosing of anti-IGF-1R breaches the blood labyrinth barrier and inhibits this normal function leading to hearing impairment.



Maximize Patient Convenience

Patient-delivered, at-home or in-office administration via pre-filled syringe or autoinjector.



Screening/ Eligibility



Proptosis defined in the study eye as ≥ 3 mm above normal



Clinical Activity Score (CAS) ≥ 4 (using a 7-item scale) for the most severely affected eye



Onset of active TED symptoms within 15 months prior to the baseline

12-week treatment duration, open-label, $N \leq 15$ /cohort

Cohort 3 TED:
SC Q4W

Cohort 2 TED:
SC QW

6-week treatment duration, pbo-controlled, $N = 8$

Cohort 1 TED:
Low Dose of SC
Q3W x2 Doses

Two-Dose Healthy Cohort

Multiple Dose Healthy
Subjects PK study
(complete)

Key Efficacy Endpoints

- Proptosis (reduction in eye bulging), diplopia (reduction in double vision), and Clinical Activity Score (change in CAS)

Safety Endpoints

- Incidence and characterization of nonserious and serious treatment emergent adverse events (TEAEs)

SLRN-517 Targets Mast Cell-Driven Diseases

Ongoing Phase 1/2 Single Ascending Dose Trial In Healthy Volunteers, Followed By Multiple Dose Evaluation



Fully Human IgG1

No agonism of mast cell degranulation, potential for reduced immunogenicity potentially limiting acute reactions to the drug itself, and potent antagonism of mast cell proliferation and degranulation



High Potency to Maximize Efficacy and Convenience

Blocks stem cell factor by binding to c-KIT with high affinity ($K_D \sim 1.55$ pM) enabling low volume SC dose and potential for greater exposures



Minimize On-Target Safety Impact

Combined with high potency, human half-life anticipated to be ~16 days, potentially enabling rapid depletion of mast cells while limiting opportunity for other effects on c-KIT or other sensitive tissues (spermatogenesis, hair color, hematopoietic cells (neutropenia))



SAD Screening/ Eligibility



Healthy Subjects:
18-65 years



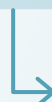
Males and
Females



No chronic medical
conditions or con meds

SAD

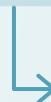
Cohort 1: Single dose SC
Healthy Subjects N=8 (incl 2 placebo)



Cohort 2: Single dose SC
Healthy Subjects N=8 (incl 2 placebo)



Cohort 3: Single dose SC
Healthy Subjects N=8 (incl 2 placebo)



Cohort 4: Single dose SC
Healthy Subjects N=8
(incl 2 placebo)

Efficacy Endpoints

› Tryptase Levels

Safety Endpoints

› Incidence and characterization of nonserious and serious treatment emergent adverse events (TEAEs)

ACELYRIN Is A Late-Stage Clinical Biopharma Company Creating An Industry Leading Immunology Portfolio



Focused Strategy and Experience

- › Experienced management team
- › Identifying, acquiring, and accelerating development and commercialization of potentially transformative therapies



Attractive Pipeline

- › Izokibep is a “pipeline-in-a-program” where we hypothesize that high potency and small size could lead to improved outcomes
- › Both PsA and HS now have data supporting this hypothesis
- › Building a portfolio of programs, including both lonigutamab in TED and SLRN-517 mast cell-driven diseases in clinical stage PoC studies



Positioned for Growth

- › Robust immunology portfolio covers areas of significant unmet need and includes several multi-billion-dollar indications
- › Well-capitalized having secured more than \$1 billion in private and public capital since founding in 2020
- › Continuing to attract leading talent, build capabilities and seek additional partnership opportunities

ACELYRIN 

Thank You



Contact

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