Priovant Overview

October 2025



Priovant Is an Emerging Leader in Specialty I&I

Brepocitinib, an oral once daily dual TYK2/JAK1 inhibitor, is in late-stage development for multiple highly morbid orphan autoimmune diseases with few or no approved targeted therapies; brepocitinib has generated compelling Phase 2 and Phase 3 clinical results in these indications



Successful Phase 3 VALOR study in dermatomyositis (DM) positions brepocitinib to potentially be the first approved targeted therapy in indication with tremendous unmet need



VALOR results confirm brepocitinib's potential to meaningfully improve DM patients' lives

- Rapid, sustained, clinically and statistically significant improvement across key disease domains
- Substantial reduction in steroid exposure, a major cause of morbidity in DM patients



Phase 3 ongoing in second orphan indication with high unmet need (non-infectious uveitis)

52-week Phase 2 data suggest potential best-in-indication profile for brepocitinib



Additional studies in orphan/specialty I&I indications underway

- Ongoing Phase 2 study in cutaneous sarcoidosis
- Initiation of additional studies planned for 2026

Brepocitinib Is a Potential First-In-Class Dual Selective TYK2/JAK1 Inhibitor, Representing Next Generation of JAK Inhibition

Evolution of JAK inhibitor field highlights market demand for efficacy in treating patients with the most debilitating conditions

Nonspecific/pan-JAK inhibitors





First targeted oral agents for inflammatory diseases

Non-specificity limited ability to dose to maximal efficacy and led to class-wide black box warning

Modest commercial success, but uptake impaired by less-than-biologic efficacy

Single JAK Isoform
Inhibitors





Rinvoq (JAKI) has generated often best-inindication efficacy and is a multiblockbuster drug despite black box warnings

Sotyktu (TYK2), which avoided a black box warning, has underperformed commercially due to less-than-biologic efficacy Selective, Dual Inhibitor of TYK2 and JAK1

Brepocitinib

Brepocitinib combines the attributes of selective TYK2 <u>and</u> JAK1 inhibition with the potential **to provide greater efficacy** for patients with highly morbid, heterogeneous autoimmune diseases





Dermatomyositis: Key Features in Common with Recent Orphan I&I Launches that Rapidly Achieved Blockbuster Revenue



Mid-tens-of-thousands prevalence

Prevalence of approximately 40,000-50,000 adults in US with approximately 35,000 patients receiving advanced chronic therapy¹

High morbidity with poor/no modern treatment options

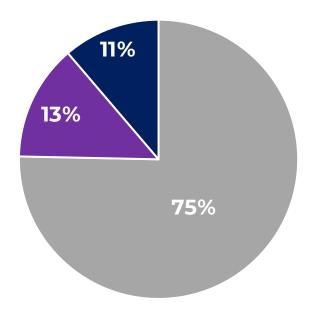
Skin and muscle disease lead to pain, disfigurement, highly impaired mobility, and extensive comorbidities (e.g., cardiometabolic, GI, depression)

Orphan price point and concentrated prescriber base

Patients concentrated at tertiary centers of excellence

Dermatomyositis Patients Have Significant Unmet Medical Needs

Therapies Received by Treated DM Patients



- Steroids & ISTs Alone
- IVIG-Containing Regimens
- Off-Label Biologics-Containing Regimens (No IVIG)

- Standard-of-care in DM is largely unchanged since the 1980s: combinations of corticosteroids and off-label ISTs
- Patient and physician need for modern, targeted therapies is extraordinarily high given that unapproved therapies with no RCT data (including JAK inhibitors) are used off-label at rates comparable to IVIg
- Even among patients treated with IVIg or off-label targeted therapies, chronic highdose steroid use remains high, with most requiring doses ≥10 mg/day for ≥100 days/year

CONFIDENTIAL

Brepocitinib Delivered First Ever Positive 52-Week Placebo Controlled Trial in DM (VALOR Study)

- Highly significant, robust, and consistent data across primary and all key secondary endpoints
- Consistent dose response seen between 15 mg and 30 mg, establishing 30 mg dose as optimal in this setting
- · Responses were rapid, deep, and broad, and showed clinically meaningful benefit to both muscle and skin symptoms
 - **Robust, steroid-sparing benefit:** Brepocitinib 30 mg showed a mean TIS of 46.5, a delta of >15 points (p=0.0006) relative to placebo at week 52 (TIS of 31.2), even with twice as many patients coming off background steroids on brepocitinib compared to placebo
 - **Depth of response:** >2/3 of brepocitinib 30 mg patients experienced at least a moderate response (TIS40), and nearly half experienced a major response (TIS60)
 - Rapidity of response: Onset was rapid with median time to a TIS40 response of ~2 months; TIS and CDASI responses significant as early as week 4
 - Breadth of response: Positive data on all 10 pre-specified endpoints demonstrating improvement in both skin and muscle symptoms
- Brepocitinib 30 mg safety profile in VALOR was consistent with prior clinical studies
 - Adverse Events of Special Interest (including malignancy, thromboembolic events, and cardiovascular events) did not occur with greater frequency in brepocitinib 30 mg arm compared to placebo + SOC therapies in VALOR over 52 weeks of double-blind treatment
 - Brepocitinib safety database across all evaluated indications and patient populations includes over 1,500 patients and subjects, with a safety profile that appears consistent with approved JAK and TYK2 inhibitors

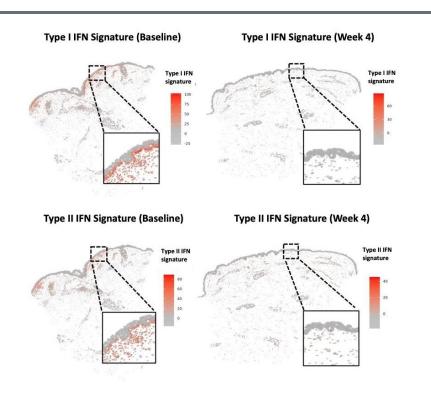
Strong Clinical Data Supported by Distinctive Alignment of Brepocitinib Mechanism (TYK2/JAK1 Inhibition) to DM Pathogenesis

Pathogenic Cytokine	Role in DM Pathogenesis		Brepocitinib	Selective JAK1 Inhibitor	Selective TYK2 Inhibitor	Type I IFN Antibody
Type I IFN (IFNα/β)	Lymphocyte Activation		//	~	~	//
Type II IFN (IFNγ)	Th1 Lymphocyte Polarization		✓	~	×	×
IL-12			~	×	✓	×
IL-6	Th17	B Cell Activation	//	~	Partial	×
IL-23	Lymphocyte Polarization		~	×	~	×

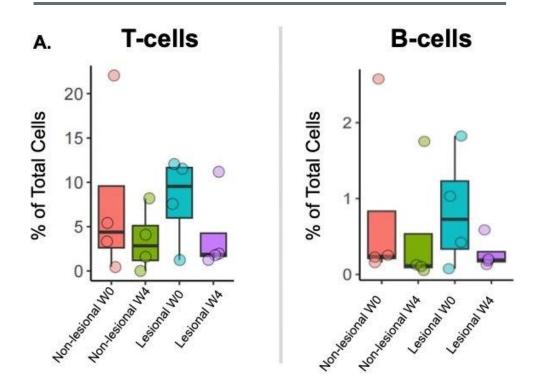
Mechanistic Data from DM Patients Confirm Potential Disease-Modifying Effects of Dual TYK2 and JAK1 Inhibition with Brepocitinib

In an open-label study of five DM patients with highly active skin disease¹, treatment with brepocitinib resulted in marked reduction in Type I and Type II IFN signaling and reduced infiltration of immune cells at the dermal-epidermal junction at Week 4

Normalization of Type I and Type II IFN Signaling²



Reduced Infiltration of Pathogenic Lymphocytes



1) NCT06433999

2) Representative spatial RNA transcriptomics image of type I and type II IFN signature scores at Week 0 and Week 4 in lesional skin (single patient shown)



VALOR: Global Phase 3 Placebo-Controlled Study Evaluating Brepocitinib In Dermatomyositis

N=241 adults with dermatomyositis

Randomized 1:1:1 by PhGA-VAS 52-WEEK TREATMENT PERIOD

BREPOCITINIB 30 MG QD (N = 81)

BREPOCITINIB 15 MG QD (N = 81)

PLACEBO (N = 79)

Mandatory corticosteroid taper to ≤5 mg/day from week 12 to 36; recommended further tapering at investigator discretion

Primary Endpoint

Eligible Patients

- Definite or probable dermatomyositis (2017 EULAR/ACR criteria)
- Skin activity: CDASI-A ≥6
- Muscle activity: MMT-8 ≤142
- Refractory or intolerant to SOC therapy

Permitted Background Therapy

Oral IST, antimalarial, and/or OCS

Primary Endpoint

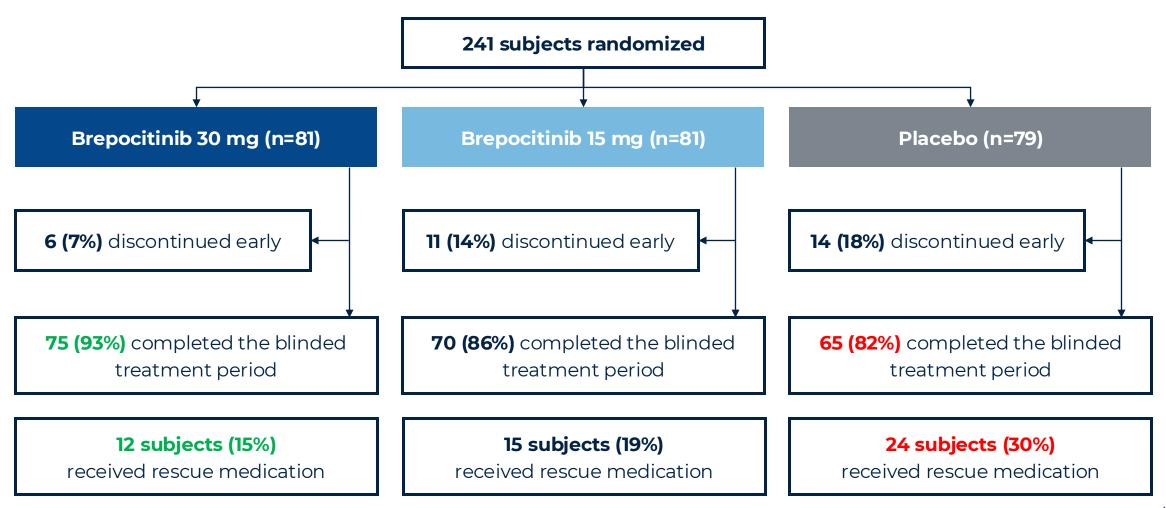
30 mg vs. placebo mean Total Improvement Score at Week 52

Enrolled Population Had Highly Active, Multisystem Disease

Arms were well-balanced across demographics, baseline disease activity, and background medications

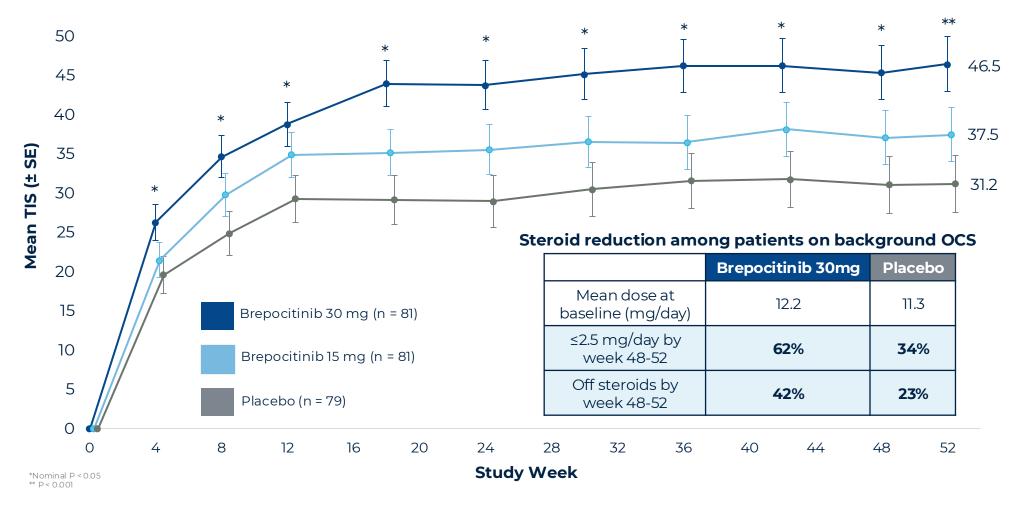
	Brepocitinib 30 mg (n = 81)	Brepocitinib 15 mg (n = 81)	Placebo (n = 79)
Mean Age (years) (± SD)	50.4 (14.5)	50.7 (12.1)	50.7 (13.5)
Sex (Female) – no. (%)	65 (80%)	67 (83%)	55 (70%)
Region: US/Canada – no. (%)	32 (40%)	34 (42%)	30 (38%)
Disease Activity – no. (%)			
Mild	13 (16%)	19 (24%)	13 (16%)
Moderate	54 (67%)	40 (49%)	48 (61%)
Severe	14 (17%)	22 (27%)	18 (23%)
Mean MMT-8 Score (± SD)	121.7 (16.4)	124.5 (14.2)	121.6 (17.0)
Mean CDASI-A Score (± SD)	19.5 (11.3)	18.7 (11.3)	21.1 (12.0)
History of ILD – no. (%)	19 (24%)	17 (21%)	11 (14%)
Medications at Baseline – no. (%)			
Immunosuppressant	55 (68%)	57 (70%)	61 (77%)
Antimalarial	24 (30%)	22 (27%)	19 (24%)
Corticosteroids	60 (74%)	58 (72%)	64 (81%)
Mean dose (mg/day) (± SD)	12.2 (5.7)	10.7 (6.2)	11.3 (5.9)
Corticosteroids > 5 mg/day	47 (58%)	38 (47%)	47 (59%)

Disposition: Brepocitinib Had Substantially Higher Completion Rate and Substantially Lower Rescue Rate Than Placebo



Brepocitinib Showed Statistically Significant and Clinically Meaningful Improvement on Primary Endpoint of TIS

Separation between brepocitinib 30 mg and placebo at all time points, starting as early as week 4, achieved together with substantially greater steroid reduction in brepocitinib 30 mg arm



Primary Endpoint

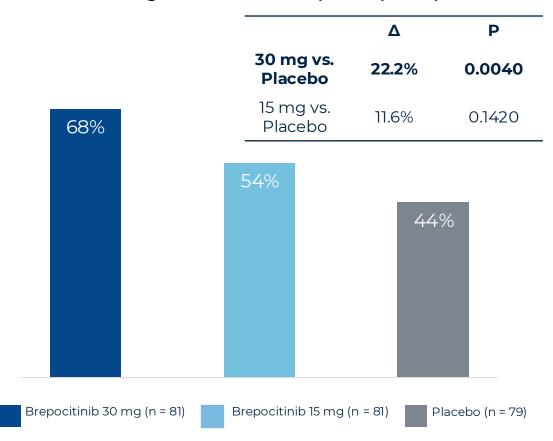
30 mg vs. Placebo

At Week 52

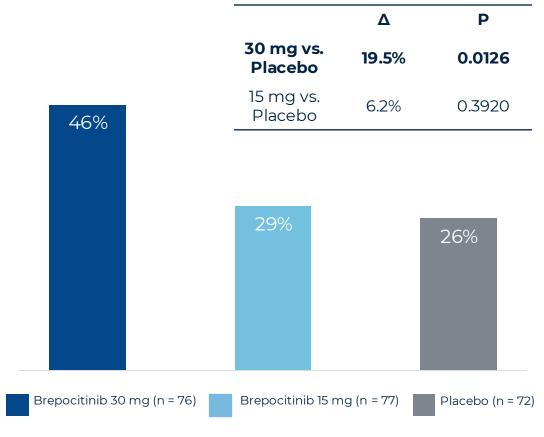
TISΔ 15.3 P = 0.0006

>2/3 of Patients on 30 mg Achieved Moderate TIS Response (TIS40) & Nearly Half Achieved Major TIS Response (TIS60)

Patients Achieving Moderate TIS Response (TIS40) at Week 52

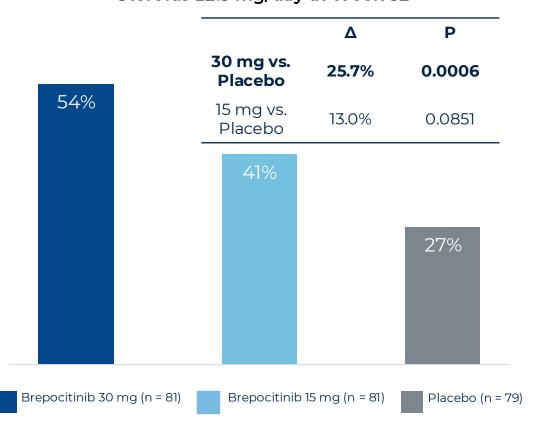


Patients Achieving Major TIS Response (TIS60) at Week 52

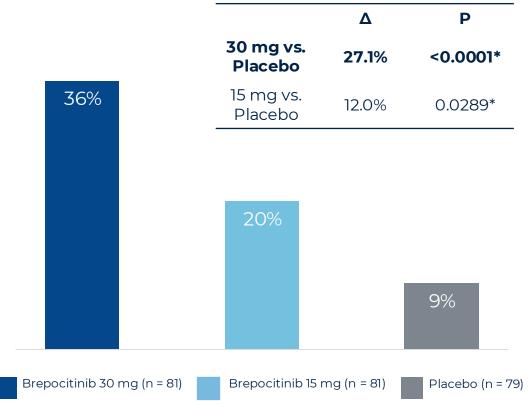


More Than a Third of Brepocitinib 30 mg Patients Achieved <u>Both</u> Major TIS Response and Minimal or No Steroid Burden at Week 52

Patients Achieving Moderate TIS Response (TIS40) with Oral Steroids ≤2.5 mg/day at Week 52



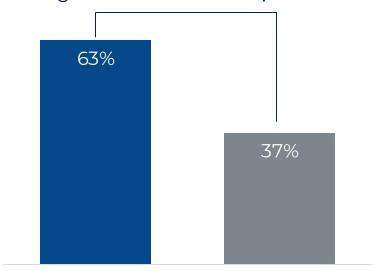
Patients Achieving Major TIS Response (TIS60) with Oral Steroids ≤2.5 mg/day at Week 52



Brepocitinib 30 mg Achieved Meaningful Cutaneous Improvement in Subjects with Moderate-to-Severe Skin Disease at Baseline

Highly morbid, often treatment-resistant population representing significant share of DM patients

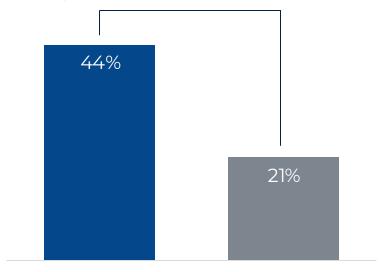
30 mg vs. Placebo: Δ 25.7%; P=0.0016*



Mean Percent Reduction in CDASI-A by Week 52

Subjects with baseline CDASI-A > 14





Patients Achieving Cutaneous Clinical Remission by Week 52 (CDASI-A \leq 5)

Subjects with baseline CDASI-A > 14

Brepocitinib 30 mg Demonstrated Substantial Evidence of Improvement on Muscle Disease Across Multiple Endpoints

Global Myositis Benefit

Substantial Improvement on TIS in Patients with Moderate-to-Severe
Muscle Disease at Baseline

+17 points

vs. Placebo in patients with MMT-8 < 136 at baseline¹

72% on brepocitinib 30 mg achieved TIS40 in this subgroup, versus 46% on placebo **Motor Strength**

Confirmed Benefit on MMT-8 with Brepocitinib 30 mg vs. Placebo

13.5 vs. 8.7

 Δ 4.8, P=0.04²

72% on brepocitinib 30 mg achieved 7-point increase³, compared to 54% on placebo

Functional Muscle Improvement

HAQ-Disability Index Achieved Clinical and Statistical Significance

-.30 points

vs. Placebo, P = 0.0035

49% on brepocitinib 30 mg achieved the MCID of at least -0.3, compared to 29% on placebo

Based on a post-hoc analysis

^{!.} Nominal Pvalue

 ⁷⁻point change on the MMT-8 score represents 1 category of muscle disease activity (i.e., moderate vs. mild disease)
 MCID: Minimum clinically important difference

Brepocitinib 30 mg Achieved Statistically Significant Benefit on All Ten Ranked Endpoints

Measurements of skin disease, muscle disease, rapidity of onset, and steroid sparing; consistent dose response was also seen across endpoints

Key Endpoint	Important Features	Brepocitinib 30mg (n=81)	Placebo (n=79)	P-Value
Mean TIS (Primary)	Composite endpoint, focus on muscle disease and global benefit	46.5	31.2	0.0006
CDASI-A change from baseline at Week 52	Improvement in skin disease activity	-11.7	-7.0	0.0006
DMOMS at Week 52	DM-specific muscle and skin composite measure of benefit	57.9	40.5	0.0014
TIS40 Response at Week 52	Moderate TIS response (focus on global benefit / muscle)	67.9%	44.3%	0.0040
Time to Consecutive TIS40 Response by Week 52	Time to onset of sustained benefit (particularly high bar)	85 days	168 days	0.0155
Patients achieving TIS40 Response + ≤2.5 mg OCS at Week 52	Achievement of clinical response and steroid reduction	54.3%	26.6%	0.0006
CDASI-A 40% Response with ≥4- point improvement at Week 52	Clinically meaningful skin response	61.7%	44.3%	0.0357
TIS60 Response at Week 52	Major TIS response – Highest TIS response threshold	46.1%	26.4%	0.0126
Change from baseline in HAQ-DI at Week 52	Improvement in physical and functional disability and daily living activities related to muscle strength	-0.337	-0.042	0.0035
Change from baseline in CDASI-A at Week 4	Rapid onset of skin response	-6.4	-3.5	0.0003

Overview of Safety Events

	Brepocitinib 30 mg QD (N=81)	Brepocitinib 15 mg QD (N=81)	Placebo (N=79)
Participants with:			
AEs	73 (90%)	70 (86%)	72 (91%)
Death	0	0	0
SAEs	13 (16%)	7 (9%)	10 (13%)
AEs leading to treatment discontinuation	5 (6%)	6 (7%)	9 (11%)
AEs leading to study discontinuation	3 (4%)	4 (5%)	3 (4%)
Adverse Events of Special Interest:			
Cardiovascular events	1 (1%)	0	2 (3%)
Thromboembolic events	0	0	1 (1%)
Viral reactivation	4 (5%)	2 (2%)	4 (5%)
Opportunistic infections	0	0	0
New or recurrent diagnoses of malignancy	0	0	2 (3%)
Increase in ALT or AST	1 (1%)	2 (2%)	1 (1%)

- Adverse events of special interest balanced across treatment arms; no new safety signals for brepocitinib
- Brepocitinib safety database includes over 1,500 patients and subjects, with a safety profile that appears consistent with approved JAK and TYK2 inhibitors

VALOR Results Confirm Brepocitinib's Potential to Meaningfully Improve the Lives of Patients with DM

Observed Results in VALOR

Breadth of Response

Statistically and clinically significant improvement in skin disease

Statistically and clinically significant improvement in muscle disease

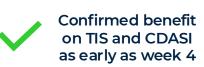
Depth of Response

High TIS response rates even while aggressively tapering steroids

Functional remission of skin disease achieved in nearly half of subjects with moderate-to-severe disease at baseline

Significant fraction of patients can potentially achieve deep, clinically meaningful responses

Speed of Response



Median Time to TIS40 of 8 weeks

Safety

Safety database of >1,500 patients

Adverse events of special interest balanced across treatment arms; no new safety signals for brepocitinib

Implication for Patients

Nearly all DM patients can potentially benefit from brepocitinib

Patients can potentially achieve rapid improvement in symptoms in as few as 4 weeks

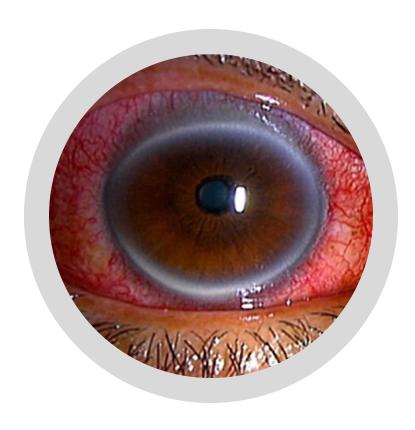
Potentially **favorable benefit:risk** profile for patients

Results achieved with a convenient once-daily oral therapy





Non-Infectious Uveitis: Key Features in Common with Recent Orphan I&I Launches that Rapidly Achieved Blockbuster Revenue



High tens-of-thousands prevalence

Approximately 70,000-100,000 prevalent patients in the US, with >40,000 patients receiving biologic therapy¹

High morbidity and few treatment options

Fourth-leading cause of blindness among working-age population in developed world²

Only approved modern therapy (Humira) has limited efficacy, with >50% ultimately experiencing treatment failure³

Orphan price point and concentrated prescriber base

High concentration of patients treated at dedicated uveitis specialty centers; most of remainder treated by retina specialists



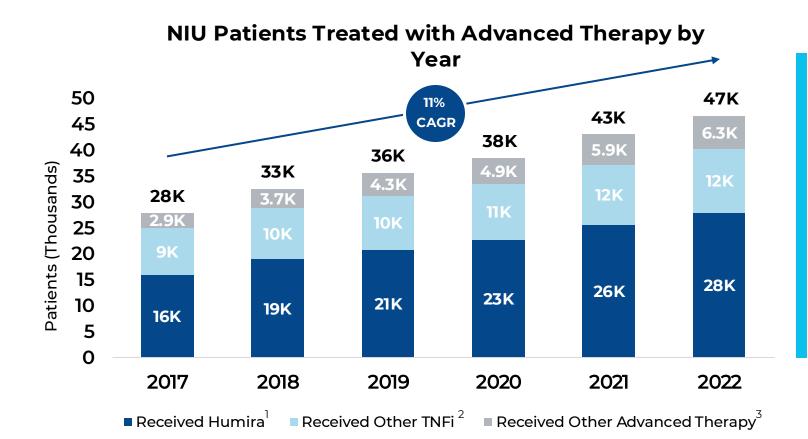
¹⁾ Thorne et al, JAMA Ophthalmol. (2016) and IQVIA analysis of pharmacy claims of patients with NIU

Barisani-Asen bauer, T., Maca, S.M., Mejdou bi, L. et al. Orphanet J Rare Dis 7, 57 (2012)

Jaffe et al. NEJM (2016)

Photo sourced from Masuda et al, Am J Ophthalmol Case Rep (2018)

IQVIA Analysis of the NIU Market Confirms >40,000 Patients Receiving TNFi for NIU, with >10% CAGR for Advanced Therapies



- Widespread use of advanced systemic medication for NIU treatment
- Large commercial opportunity in TNF-refractory population alone, given high TNFi failure rate (>50% in clinical studies)
- Additional potential blockbuster opportunity in broader nonanterior NIU population



¹⁾ Analysis includes patients with at least 2 NIU Dx claims at least 30 days in or before 2022 (patients had to have continuous pharmacy and medical benefit enrollment in 2021 - 2023) and medication utilization within one year of index NIU diagnosis in 2022. Includes NIU of any etiology or anatomic area.

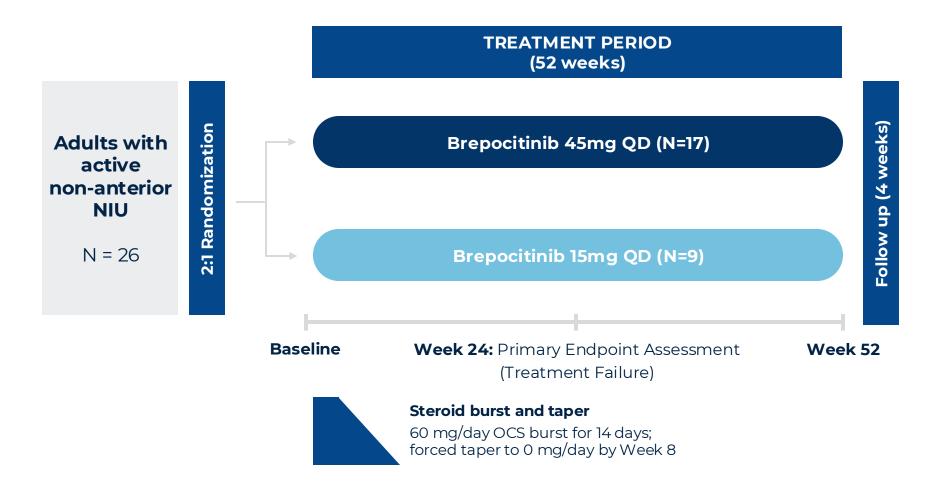
l) Includes any patient who received Humira during calendar year, whether or not they received any additional advanced therapy (including other TNFi)

Includes any patient who did not receive Humira during calendar year, but did receive a different TNFi. Includes originator molecules (e.g., Remicade, Enbrel) and biosimilars (e.g., Inflectra, Renflexis, Avsola) targeting TNF-α

⁴⁾ Other advanced therapies used include JAK inhibitors and biologic agents/monoclonal antibodies targeting IL-6, IL-12/23, IL-17, IL-18, IL-17a, CD-20, and CD-28

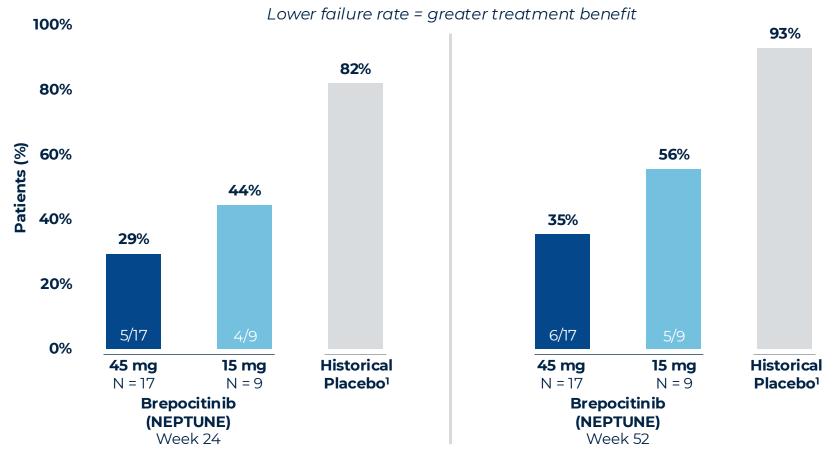
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Design Of Phase 2 NEPTUNE Study of Brepocitinib in Non-Infectious Uveitis



52-Week Data from the Phase 2 NEPTUNE Study of Brepocitinib in NIU Showed Potential Best-in-Indication Efficacy Sustained to One Year

Treatment Failure at Week 24 and 52, compared to historical placebo*



Reminder:

Better Treatment Failure results for brepocitinib in NEPTUNE achieved despite 6-week steroid taper in NEPTUNE compared to 13-week taper in precedent studies, in both cases following two-week steroid burst

- Requires that brepocitinib act more quickly
- Increases difficulty of maintaining best state achieved
- Reduces steroid burden

<u>Disclaimer</u>: Figure reflects cross-trial comparison and not results from a head-to-head study. Differences exist between trial designs and subject characteristics, and caution should be exercised when comparing data across studies.



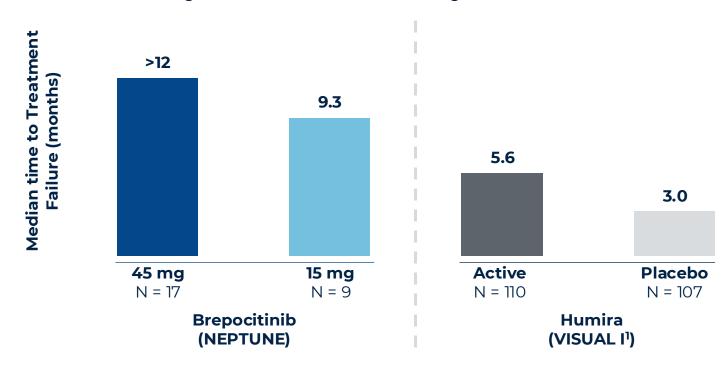
^{*}Treatment Failure calculations include all discontinuations as failures, per pre-specified endpoint definition in NEPTUNE study

Historical placebo data from Humira VISUAL 1 study - Jaffe et al, NEJM, 2016. Placebo failure rate was calculated by subtracting the reported No. of patients remaining over the total initial placebo population from 1 at weeks 25 and 55 (N=107)

Brepocitinib Potential Best-in-Indication Efficacy Profile Also Seen on Median Time-to-Treatment Failure

Time To Treatment Failure, compared to VISUAL I Study*

Higher time-to-treatment failure = greater treatment benefit

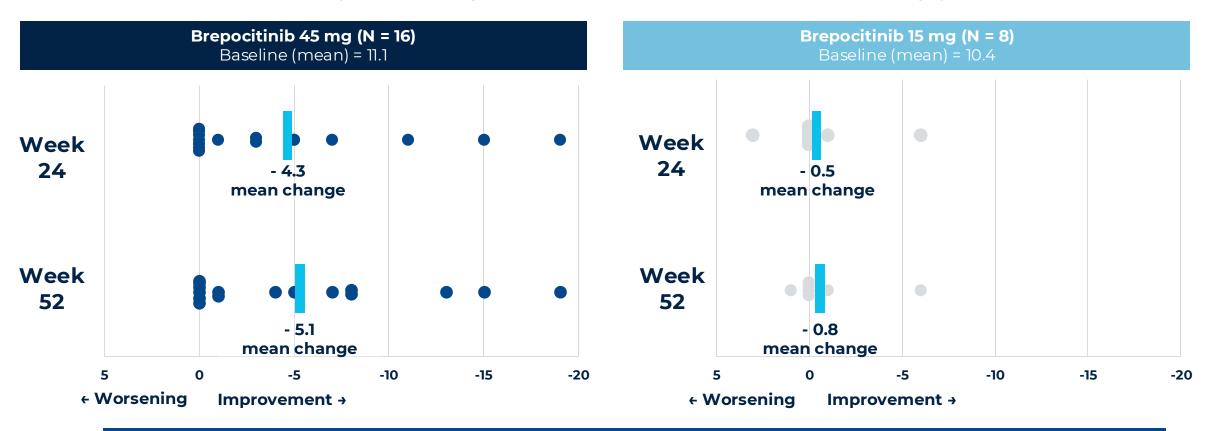


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Dose Dependent Benefit on Posterior Segment Inflammation Seen, with Sustained Improvement at 52 Weeks

Measurement of retinal vascular leakage by wide-field fluorescein angiography (FA) score change from baseline at Week 24 and Week 52; centrally assessed using ASUWOG, a multi-domain, semi-quantitative scoring system¹



No patients on brepocitinib 45 mg worsened from baseline



Potential Brepocitinib Benefit on Prevention and Treatment of Macular Edema Also Sustained to 52 Weeks

45 mg at Baseline

45 mg at Week 24

45 mg at Week 52

By comparison:

10 patients

did not have macular edema $(CST < 300 \mu m^{1})$

0 patients

developed macular edema (0% occurrence rate)

0 patients

developed macular edema

(0% occurrence rate)

In the Humira VISUAL I study, among patients who did not have macular edema at baseline, 50% of placebo patients developed macular edema after 6.2 months

50% of Humira patients developed macular edema after 11.1 months²

7 patients

had macular edema (CST ≥ 300 µm)

3 of 7 patients

had resolution of macular edema

(43% resolution rate)

3 of 7 patients

had resolution of macular edema

(43% resolution rate)

In a different study of patients with uveitic macular edema at baseline. Humira resolution rates at Month 6 were 22%3

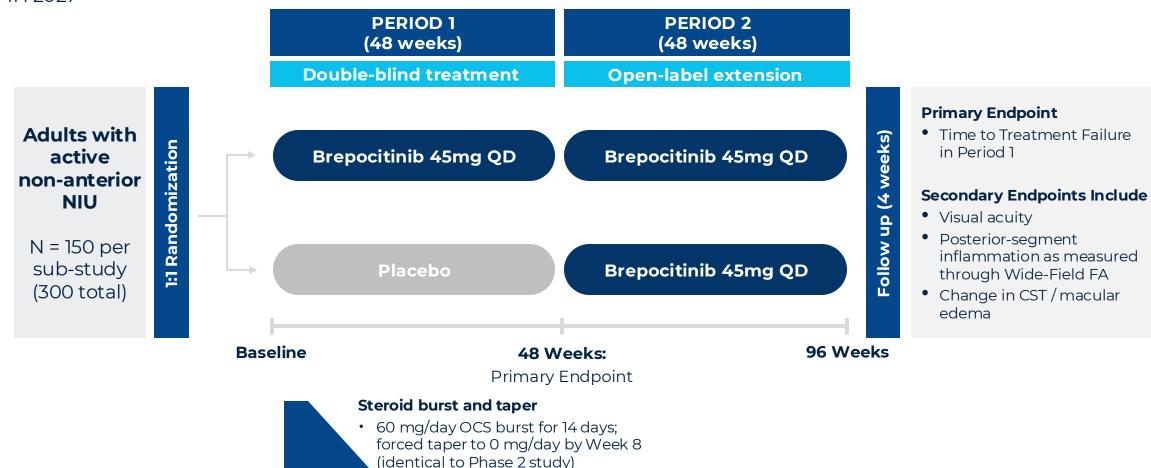
<u>Disclaimer</u>: Figures reflect cross-trial comparison and not results from a head-to-head study. Differences exist between trial designs and subject characteristics, and caution should be exercised when comparing data across studies.

Definition of macular edema in NEPTUNE was CST ≥ 300 µm, normalized by central reader across instrument types

Leclerg et al, Ophthalmology 2021

CLARITY: A Phase 3 Study of Brepocitinib in Adults with Active, Non-Infectious, Non-Anterior Uveitis

Two identical sub-studies, CLARITY-1 and CLARITY-2, actively enrolling under a single protocol; topline results expected in 1H 2027



Cutaneous Sarcoidosis





Cutaneous Sarcoidosis: Next Proof-of-Concept Indication for Brepocitinib



Mid tens-of-thousands prevalence

30,000-50,000 affected US cutaneous sarcoidosis patients¹ with no approved therapies; uncontrolled disease can result in severe disfigurement²

Proof-of-concept data from ~20 JAK-treated patients

Dual TYK2/JAK1 inhibition well-suited to Th1 immunophenotype of sarcoidosis; case reports and investigator-initiated trial with JAKi agents have shown clinically meaningful responses

Alignment with DM and NIU

Orphan price point; concentrated prescriber base overlapping with DM

Yale IIT Provides Proof-of-Concept for JAK Inhibition in Cutaneous Sarcoidosis

Open label study of tofacitinib in 10 patients with longstanding cutaneous sarcoidosis¹

Cutaneous Sarcoidosis Activity and Morphology Instrument (CSAMI) is an established, reproducible endpoint to assess sarcoidosis skin disease symptoms²



Results supported by multiple case reports indicating complete or near-complete resolution of longstanding, recalcitrant disease in JAK-treated patients^{4,5,6,7,8,9}

Damsky et al, J Am Acad Dermatol. (2020)

Damsky et al, ACR Open Rheumatol. (2020)



Noe et al, JAMA Dermtol 2019

MCID = 5 point reduction from baseline Damsky et al, N Engl J Med. (2018)

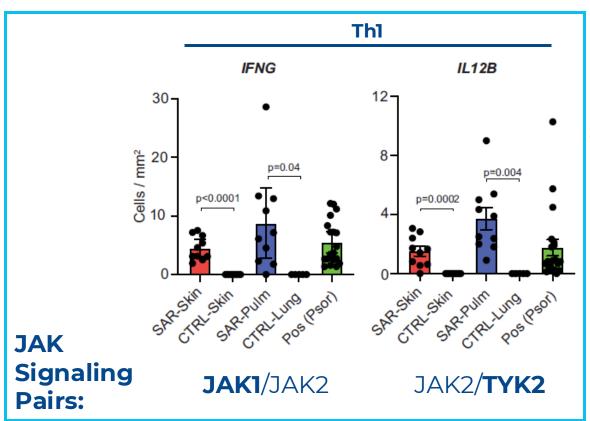
Kerkemeyer et al, J Am Acad Dermatol. (2021) Rotenberg et al, Eur Respir J. (2018)

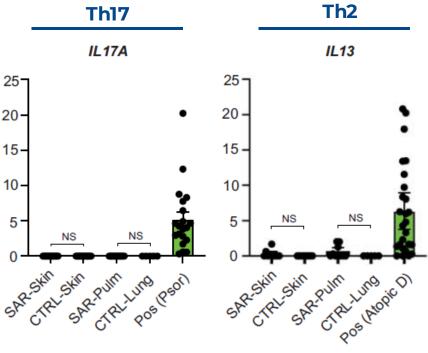
⁹⁾ Wei et al, JAAD Case Rep. (2019)

Pronounced Th1-type Immunity Is the Predominant Polarization in Sarcoidosis Skin and Lung Tissue

Marked upregulation of key Th1 cytokines, including Type II IFN and IL-12, suggests potential best-in-indication selectivity profile for brepocitinib's dual inhibition of TYK2 and JAK1

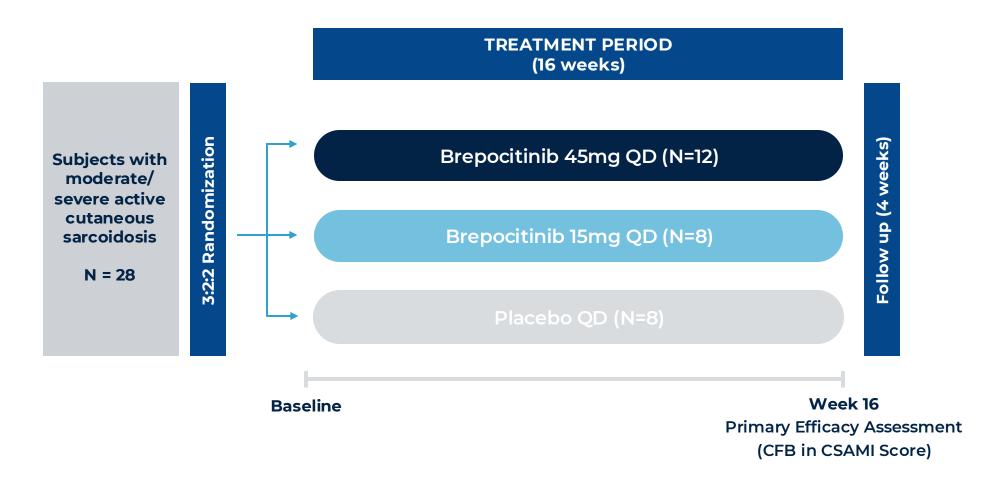
Quantitation of RNA In-Situ Hybridization for Key Immunoregulatory Cytokines





BEACON: A Phase 2 Study of the Safety and Efficacy of Brepocitinib in Adults with Cutaneous Sarcoidosis

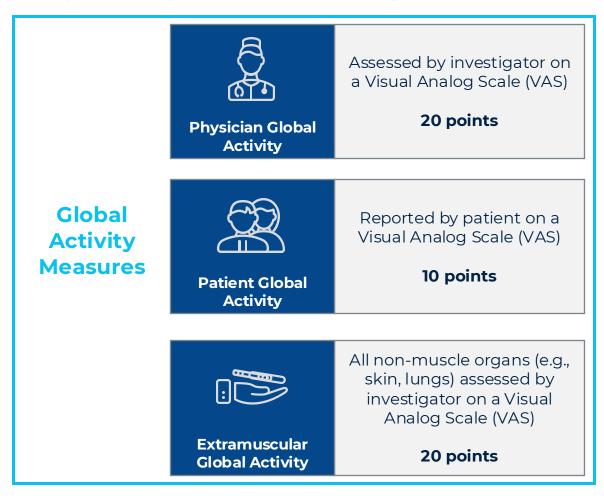
Study actively enrolling; topline results expected in 2H 2026

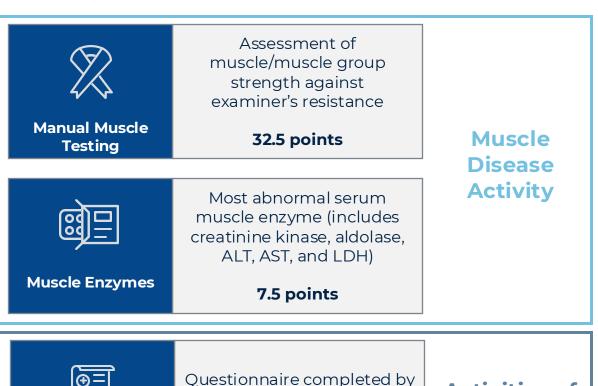




Total Improvement Score (TIS): A Validated Assessment Tool for Use in Myositis Clinical Studies

The TIS reflects improvement from baseline in 6 core set measures (CSMs), including 3 global measures that capture disease activity across organ systems, 2 muscle-specific measures, and a commonly used measure for ADLs





the patient

10 points

Heath Assessment

Questionnaire

Activities of

Daily Living