Jasper Therapeutics

JASPER THERAPEUTICS

Corporate Presentation
March 2026

Safe Harbor Statements

Forward-Looking Statements

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Briquilimab: Targeted Mast Cell Depletion in Multiple Inflamatory Diseases

Briquilimab

Designed for best-in-class profile

- Potency: direct ligand/receptor blockade with high affinity to KIT
- Speed: rapid Tmax and high Cmax
- Efficacy: >25 point reductions in UAS7 and CRs as early as week 2 observed across multiple cohorts
- Tolerability: Drug properties enable rapid mast cell depletion followed by clearance to minimize KIT related AEs

Clinical Profile

In CSU, CIndU and asthma

- Clinical data in more than 95 patients across multiple studies
- BEACON, SPOTLIGHT and OLE studies in chronic urticaria show rapid onset of deep and durable responses
- ETESIAN study provides PoC in asthma in FEV_1 improvement and substantial reductions in eosinophils
- Safety/tolerability observations possibly related to KIT blockade were generally transient, low-grade events that resolved on study

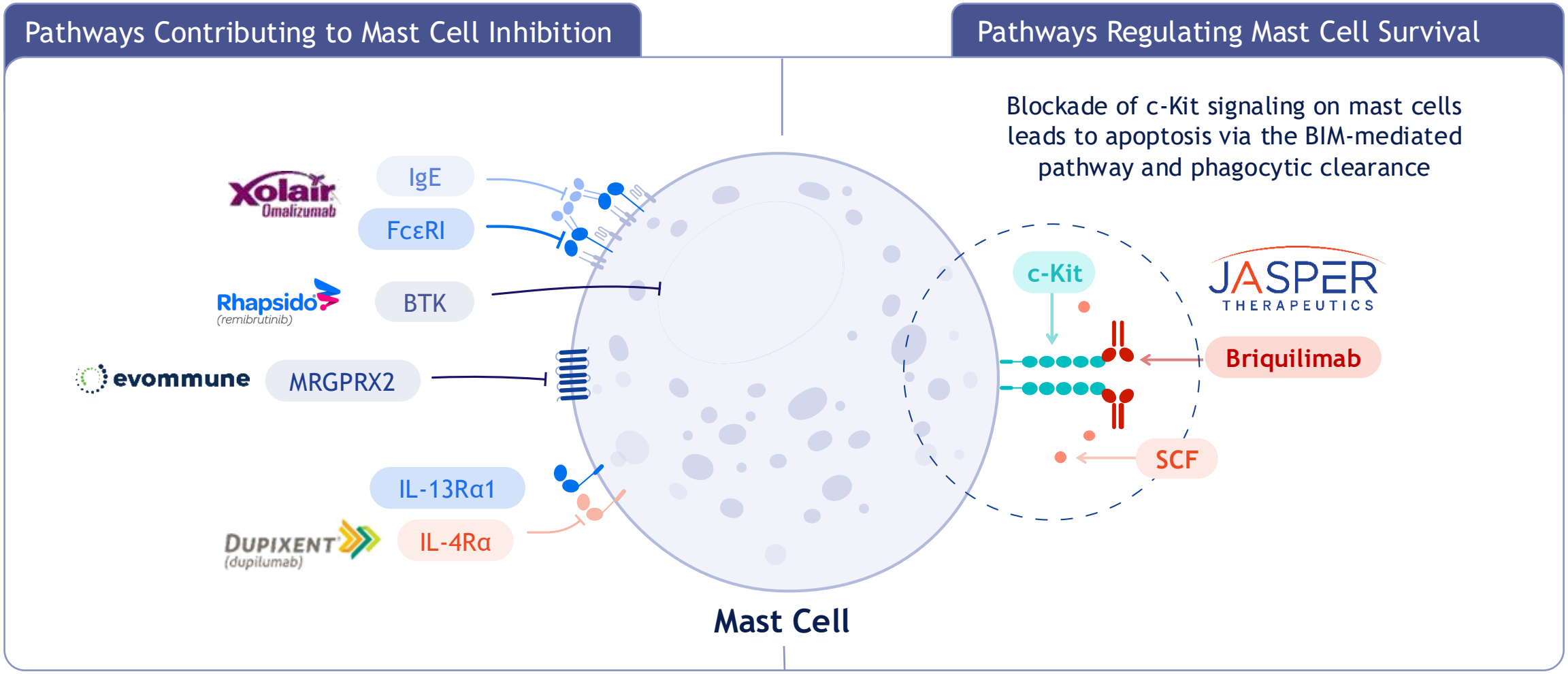
Upcoming Milestones

In mast cell driven diseases

- CSU: planning to commence registrational program beginning with Phase 2b study in 2H 2026
- CIndU: Phase 3 study planned to commence early 2028
- Asthma: strong POC supports evaluation of next steps for development

Briquilimab Design and Differentiation

Mast cell depletion may lead to deeper and more durable efficacy compared to inhibition and silencing approaches



BRIQUILIMAB IS AN INVESTIGATIVE DRUG AND IS NOT APPROVED FOR ANY INDICATION

Briquilimab: Designed for a best-in-class profile

Design		Profile
1) Potency	• Direct blockade of SCF binding site • High affinity c-Kit (K_d <5pM) and potency (IC50 70pM)	• 83% CRs in BEACON C9.1 (240mg/180mg Q8W) • 92% CRs at 180mg in CIndU (SPOTLIGHT) • FEV1 improvement & clear reduction in eosinophil levels demonstrated in asthma
2) Speed	• Rapid T_{max} (4-7 days) • High C_{max} (18 ug/mL mean at 240mg)	• >25pt UAS7 reduction by week 4 in multiple cohorts • Complete Responses (CRs) reported as early as week 2
3) Clearance	• Nine day subcutaneous half life • Allows restoration of Kit signaling between 8 week dose cycles	• On-target AEs generally mild and low frequency events • Majority of cases reversible within the dosing interval

Briquilimab: Development in CSU, CIndU and Asthma

BEACON TRIAL

CSU: N = 63
H1-AH failed

- ΔUAS7 >25 in multiple cohorts
- CRs observed as early as week 2 across multiple dose cohorts
- More than 50% of patients dosed at 180mg or higher achieved a CR at 4 weeks post-dose[1]
- Safety profile with repeat dosing competitive and favorable for chronic administration
- Commencing registrational studies with a Phase 2b in 2H 2026

SPOTLIGHT TRIAL

CIndU: N = 27
H1-AH failed (ColdU and SD)

- 92% CRs at the 180mg dose
- 66% of patients achieved a CR by week 2 post-dose (180mg)
- No SAE, no AE Gr3 or higher
- Favorable safety profile observed
- Data support advancing to a registrational study in CIndU

ETESIAN TRIAL

Allergic Asthma: N = 17
Positive allergen & MCh challenge

- Study measured response on EAR, LAR and airway hyperresponsiveness
- Improvements in FEV1 shown in both EAR and LAR
- Improvements in airway hyperresponsiveness observed in the MCh challenge
- Substantial reductions in eosinophils levels observed
- Strong POC supports advancing to next stage of development in asthma

[1] Measured 4 week after initial dose for single dose patients and 4 weeks post-dose for patients dosed Q8W or Q12W

BRIQUILIMAB IS AN INVESTIGATIVE DRUG AND IS NOT APPROVED FOR ANY INDICATION

Briquilimab in Chronic Spontaneous Urticaria

BEACON TRIAL

+

Open-Label Extension Study

Briquilimab demonstrates a differentiated efficacy & safety profile

BEACON and OLE data support advancing into a Phase 2b CSU study in 2H 2026

Briquilimab's unique drug properties allow for rapid clinical efficacy while minimizing KIT related AEs

- Briquilimab's MOA (direct ligand/receptor blockade) and high Cmax leads to rapid mast cell depletion with deep UAS7 reduction and disease control in first 2-4 weeks
- Drug clearance near end of 8 week dosing cycle allows for reduction of KIT related AEs and improved profile for patients

Briquilimab demonstrates rapid and durable clinical responses

- 83% of patients (n=6) in most recent update (BEACON C9.1) achieved a CR by week 3, with 67% reporting CRs at 12 weeks
- More than 50% of patients dosed at 180mg or more (n=41) achieved CR or WC by week 4
- 74% of CSU patients (n=39) in the open-label extension study achieved a PR or WC disease on 180mg Q8W at 12 weeks

Briquilimab was well tolerated and demonstrates a favorable chronic safety profile

- OLE (180mg Q8W) shows deepening efficacy with low incidence of KIT related AEs that were generally mild and transient
  - 63 patients with a median duration of more than 200 days

Data support commencing a Phase 2b study as part of a CSU registrational program in 2H 2026

- Phase 2b study expected to be a 75-100 patient multi-site study evaluating two effective dose regimens vs. placebo

Phase 1b/2a BEACON Study in Chronic Spontaneous Urticaria

Randomized, Double-Blind, Placebo-Controlled, Multiple Ascending Dose Study

BEACON TRIAL

Screening/Eligibility

- CSU diagnosis ≥ 6 mos.
- UAS7 ≥ 16
- 18+ years
- H1-antihistamine-failed

Study Operations

- **US Lead: Tom Casale, MD**
- **EU Lead: Martin Metz, MD**
- ~30 sites in the US & EU

Key Assessments

- **Disease Scores:** UAS7, UCT
- **Safety:** TEAEs, SAEs
- **PK**
- **Mast Cell Depletion & Recovery:** Serum Tryptase, Skin Biopsies

	Cohort #	Patients (Randomization)	Dose	Schedule
Open Label (n=6)	C1 & C2	n=3+3 per dose	10mg & 40mg	Weeks 0, 4, 12, 20
Double-Blind Placebo-Controlled (n=81)	C3	n=8 (3:1)	80mg	Q8W
	C4a	n=6 (2:1)	120mg	Q8W
	C4b	n=6 (2:1)		Q12W
	C5b	n=10 (3:1)	180mg	Q8W
	C5a	n=9 (3:1)		Q12W
	C6	n=8 (3:1)	240mg	Single Dose
	C7	n=6 (3:1)	360mg	Single Dose
	C8	n=9 (3:1)	240mg	Q8W
	C8.1	n=2(3:1)		Q8W
	C9	n=9 (3:1)	240mg → 180mg	Q8W
	C9.1	n=8 (3:1)		Q8W

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BRIQUILIMAB IS AN INVESTIGATIVE DRUG AND IS NOT APPROVED FOR ANY INDICATION

Cohorts included in January 2025/July 2025 data cuts

Additional patients enrolled since July 2025 data update

January 2026 BEACON Study & OLE Study Data Update

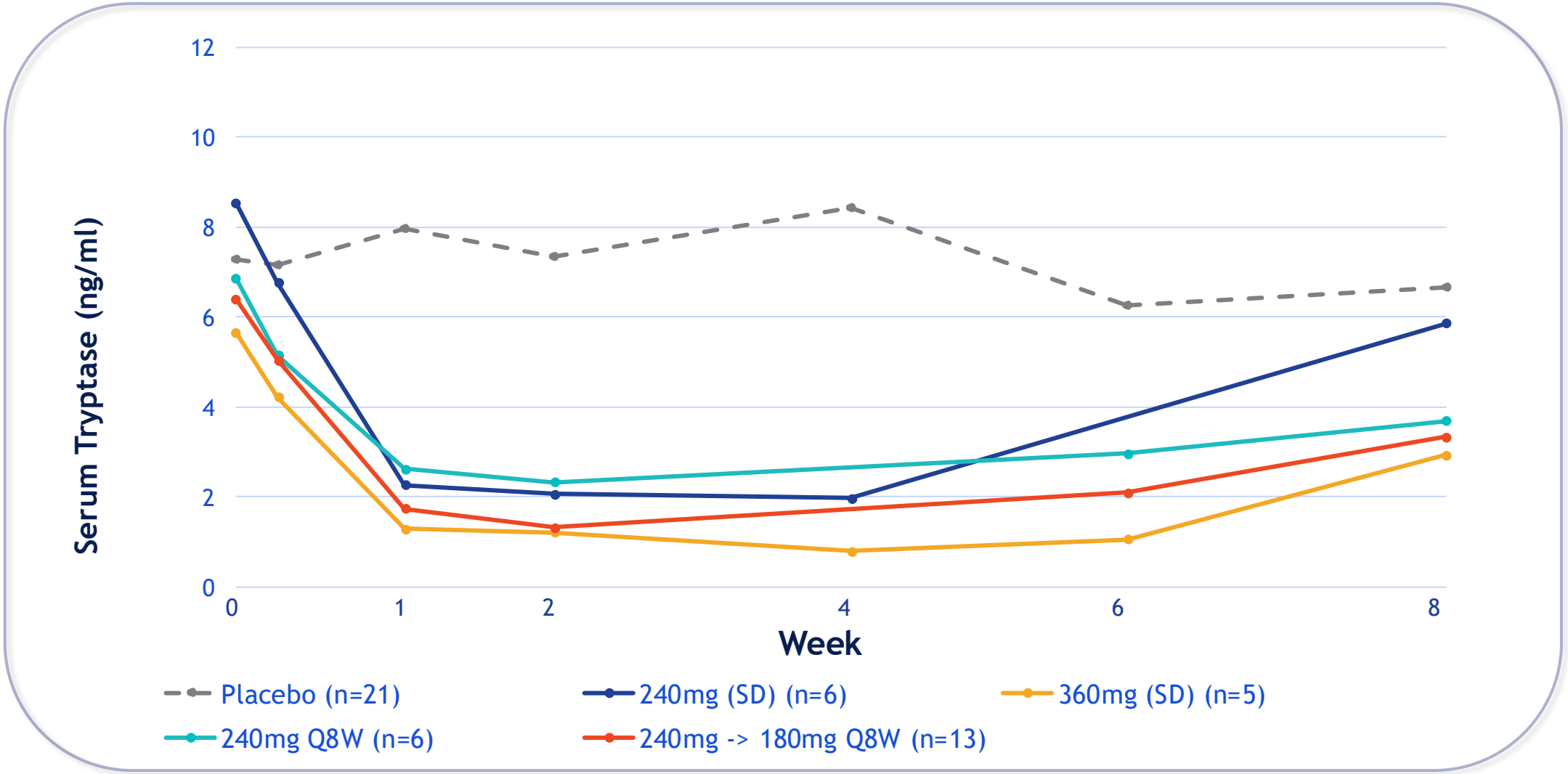
Briquilimab continues to demonstrate rapid and durable clinical responses

- **BEACON Cohort 9.1 patients reaffirms strong efficacy and safety profile**
  - Rapid onset of effect with CR or well controlled disease reported in the majority of patients by week 2
    - 83% (5 of 6) of patients achieved a CR at week 3 after initial 240mg loading dose
    - 67% (4 of 6) of patients reported a CR at week 12 on the 180mg maintenance dose
- **CSU OLE – Progressive UAS7 reductions over time supports potential for a maintenance dose in CSU**
  - 75% (27 of 36) of patients achieved CR or WC disease at 12 weeks
- **CIndU OLE – Durable clinical response demonstrated in CIndU patients with repeat-dose briquilimab**
  - 65% (11 of 17) of CIndU patients achieved CR or PR at week 16 (8 weeks from last dose)

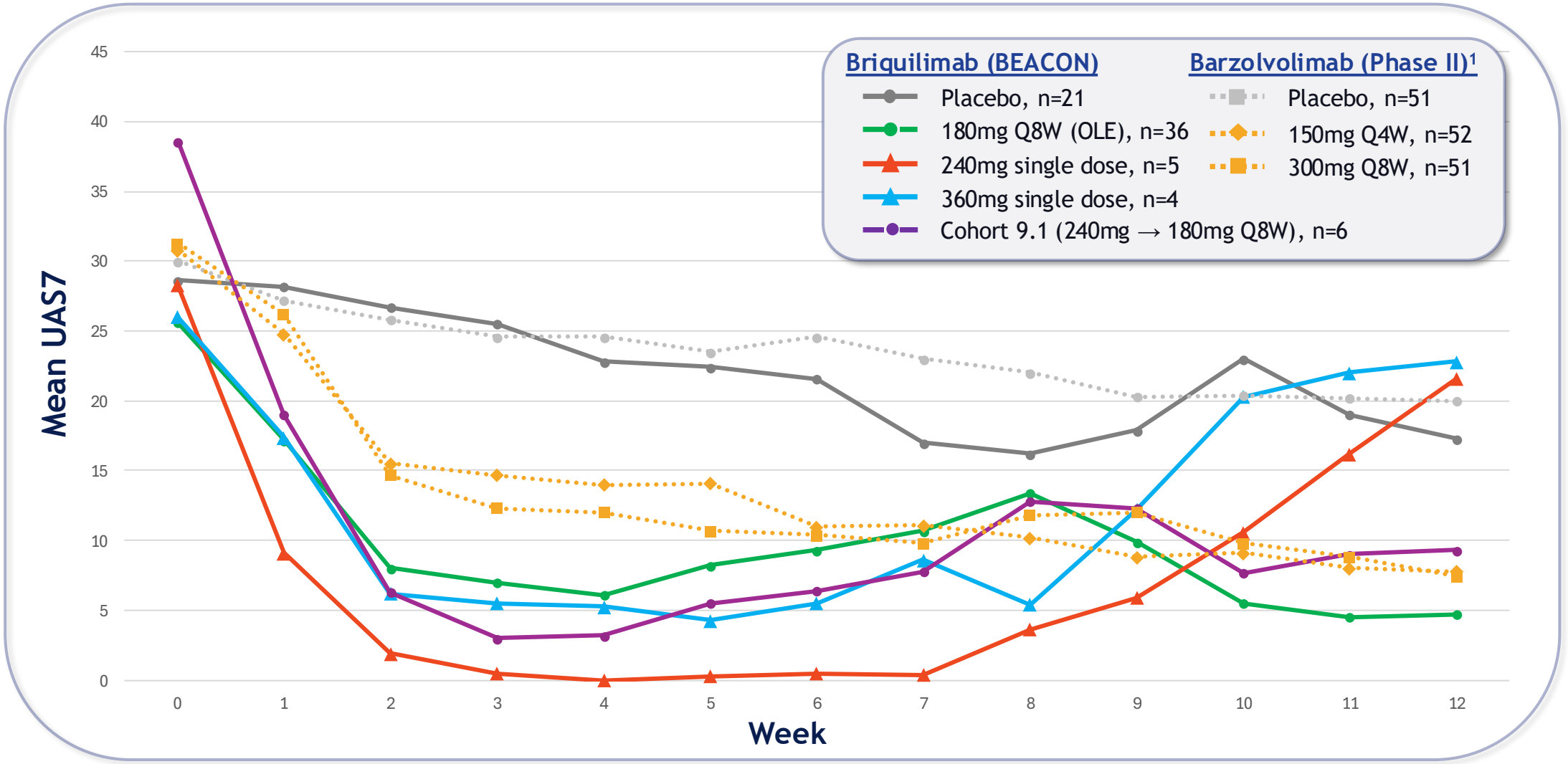
Briquilimab continues to demonstrate the potential for a differentiated safety profile

Data gathered to-date sufficient to enable final dose selection for CSU Phase 2b study

Rapid and deep reductions in tryptase with initial 240mg or higher dose



Briquilimab demonstrated rapid and deep onset of disease control

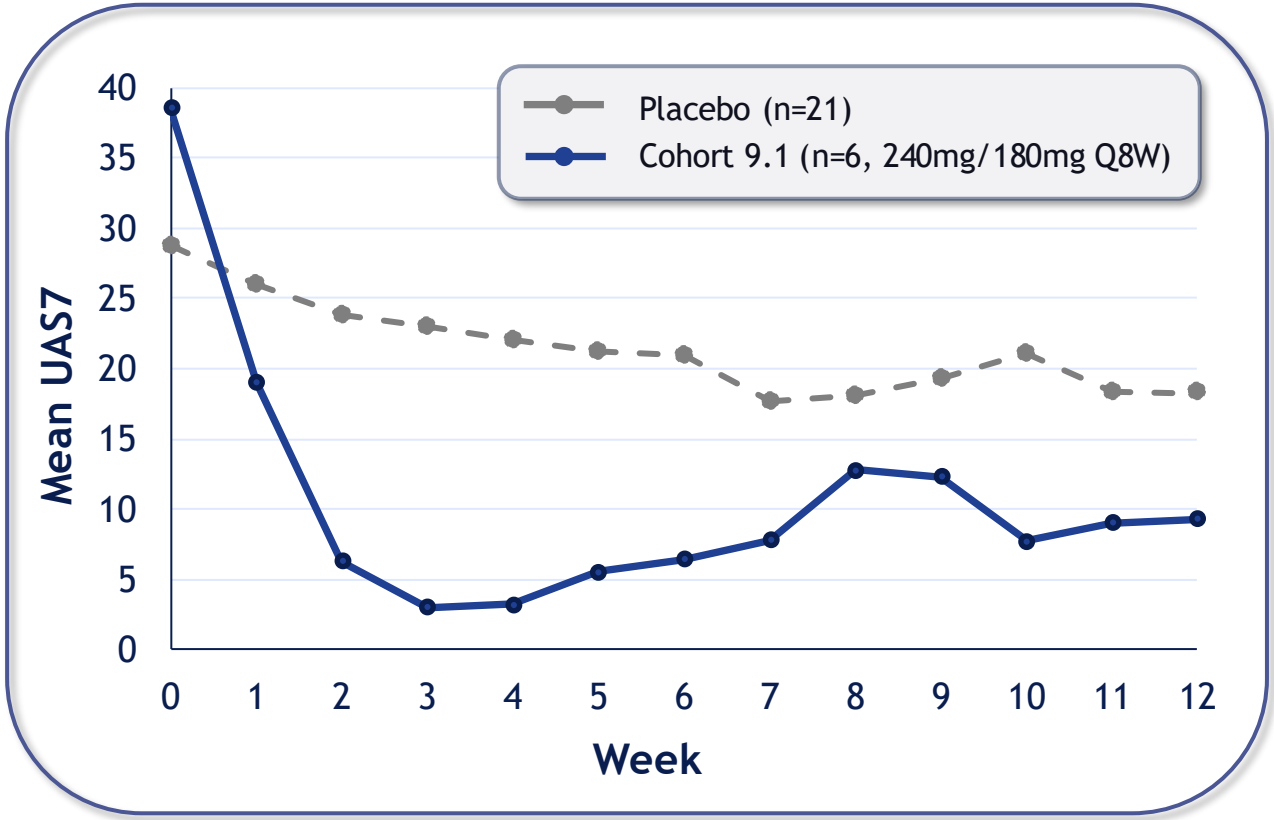


Note: At Week 6 in the BEACON study, patients in the placebo arm were allowed rescue medications.

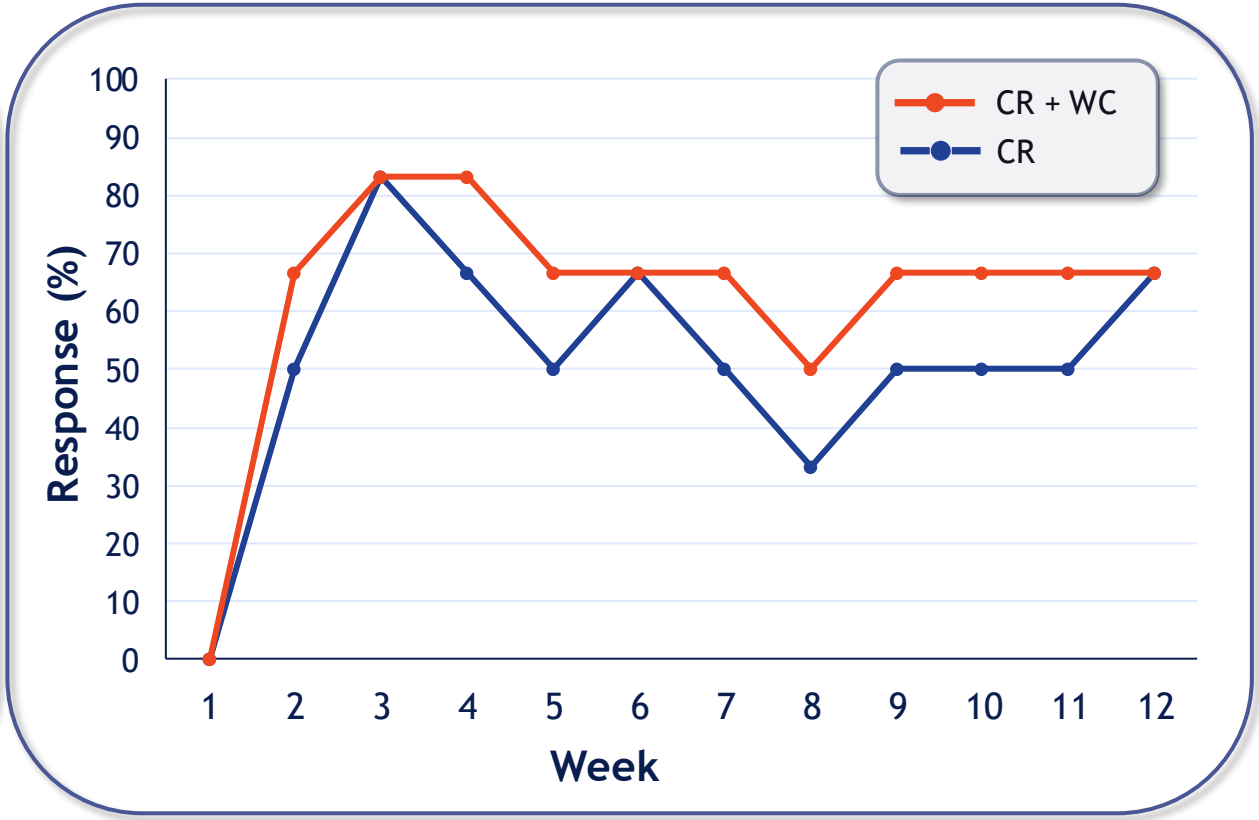
Note: These observations are derived from separate clinical settings; comparisons across trials are not based on head-to-head studies.

New 240mg/180mg Q8W data demonstrate rapid and sustained UAS7 response

83% of patients with complete response at week 3 (n=6)



Note: At Week 6 in the BEACON study, patients in the placebo arm were allowed rescue medications



Note: Last observation carried forward (LOCF) method was used for data imputation

Briquilimab well tolerated with favorable safety profile demonstrated

BEACON TRIAL

Number of Participants With:	Cohort 5 Pooled 180mg Briquilimab (N=14)	Cohort 6 240mg Briquilimab (N=6)	Cohort 7 360mg Briquilimab (N=5)	Cohort 8 240mg Q8W Briquilimab (N=6)	Cohort 9 240mg→ 180mg Q8W (N=7)	Cohort 9.1 240mg→ 180mg Q8W (N=6)	Total Pooled Briquilimab (N=64)[4]	Total Pooled Placebo (N=21)
Any TEAE	10 (71.4)	6 (100)	4 (80)	3 (50)	5 (71.4)	6 (100)	48 (75)	12 (57.1)
Any Treatment-Related Serious TEAE	1 (7.1)[1]	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (1.6)[1]	0 (0)
Any TEAE Leading to Discontinuation of IP	1 (7.1)[1]	0 (0)	0 (0)	0 (0)	1 (14.3)[2]	0 (0)	2 (3.1)[1,2]	0 (0)
Any Treatment-Related TEAE ≥ Grade 3	0 (0)	1 (16.7)[3]	0 (0)	0 (0)	0 (0)	0 (0)	1 (1.6)[3]	0 (0)

Median duration of follow-up: Cohort 8 – 256 days; Cohort 9 – 211 days; Cohort 9.1 – 95 days

Most commonly reported AEs (≥10 participants): nasopharyngitis, neutrophil count decreased, taste disorder, fatigue

[1]Single participant, 180mg Q8W, CoFAR grade 2 hypersensitivity reaction
[2]Single participant, 240mg D1 180mg Q8W, CoFAR grade 2 hypersensitivity reaction
[3]Single participant with Grade 3 neutrophil count decreased, resolved in 14 days
[4]Total pooled briquilimab includes 10mg (n=3), 40mg (n=3), 80mg (n=6) and 120mg (n=8)

Safety/tolerability observations possibly related to KIT blockade were generally limited to low grade events

Majority resolved during repeat dosing and none resulted in discontinuations or dose delays

Adverse Event as reported term	Cohort 5 Pooled 180mg Briquilimab (N=14)	Cohort 6 240mg Briquilimab (N=6)	Cohort 7 360mg Briquilimab (N=5)	Cohort 8 240mg Q8W Briquilimab (N=6)	Cohort 9 240mg→ 180mg Q8W (N=7)	Cohort 9.1 240mg→ 180mg Q8W (N=6)	Total Pooled Briquilimab (N=64)[4]	Pooled Placebo (N=21)
Hair color changes	2 (14.3%)	0 (0%)	0 (0%)	1 (16.7%)	0 (0)	0 (0)	5 (8.8%)	1 (4.8%)
Skin discoloration	0 (0)	0 (0)	0 (0)	1 (16.7)[3]	0 (0)	0 (0)	1 (1.6)[3]	1 (4.8)
Taste change[5]	1 (7.1)	3 (50)	2 (40)	0 (0)	2 (28.6)	1 (16.7)	11 (17.2)[1]	1 (4.8)
Neutrophil count decreased	3 (21.4)	5 (83.3)	2 (40)	0 (0)	2 (28.6)	1 (16.7)	15 (23.4)[2]	2 (9.5)

Median duration of follow-up: Cohort 8 – 256 days; Cohort 9 – 211 days; Cohort 9.1 – 95 days

[1] Median time to resolution of taste change in briquilimab-treated participants was 54 days
[2] Median time to resolution of Neutrophil count decreases in briquilimab-treated participants was 15 days
[3] Single participant with skin discoloration described as hyperpigmentation
[4] Total pooled briquilimab includes 10mg (n=3), 40mg (n=3), 80mg (n=6) and 120mg (n=8)
[5] Includes reported terms of taste disorder, hypogeusia, and dysgeusia.

Jasper Chronic Urticaria Open Label Extension Study (JSP-CP-014)

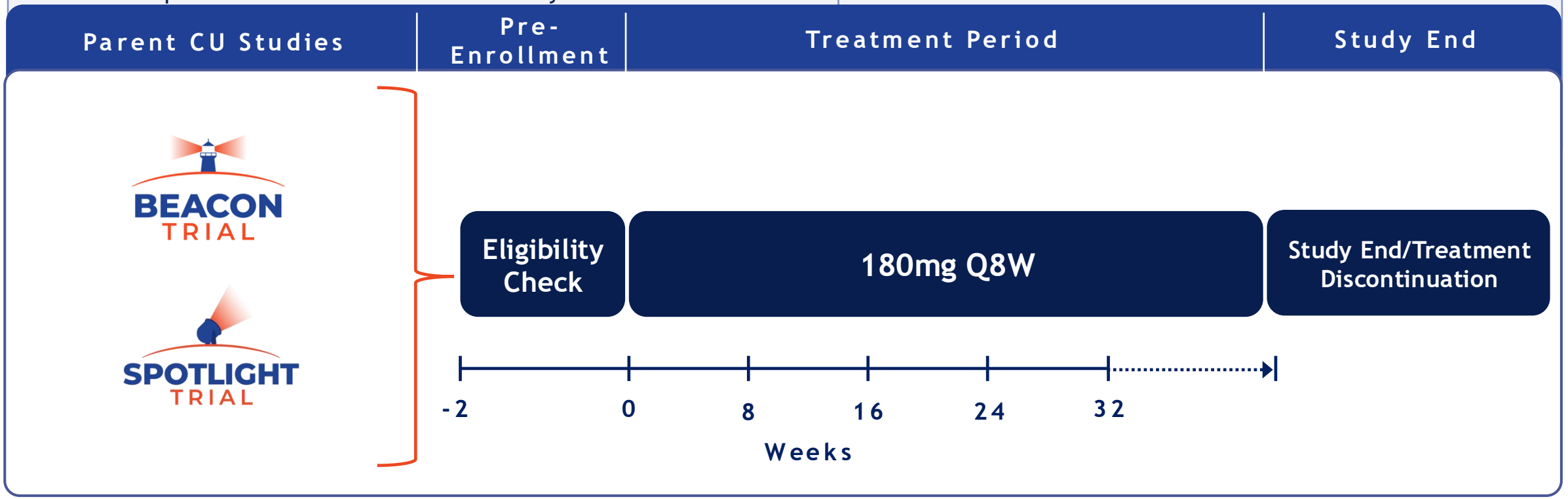
Enrolling patients from the BEACON and SPOTLIGHT studies

Screening/Eligibility

- To enroll, patients from BEACON/SPOTLIGHT must either:
  - Wait for symptoms to return following dosing (defined as UAS7 ≥ 16 for CSU, UCT ≤ 12 for CIndU)
  - OR complete the BEACON/SPOTLIGHT study

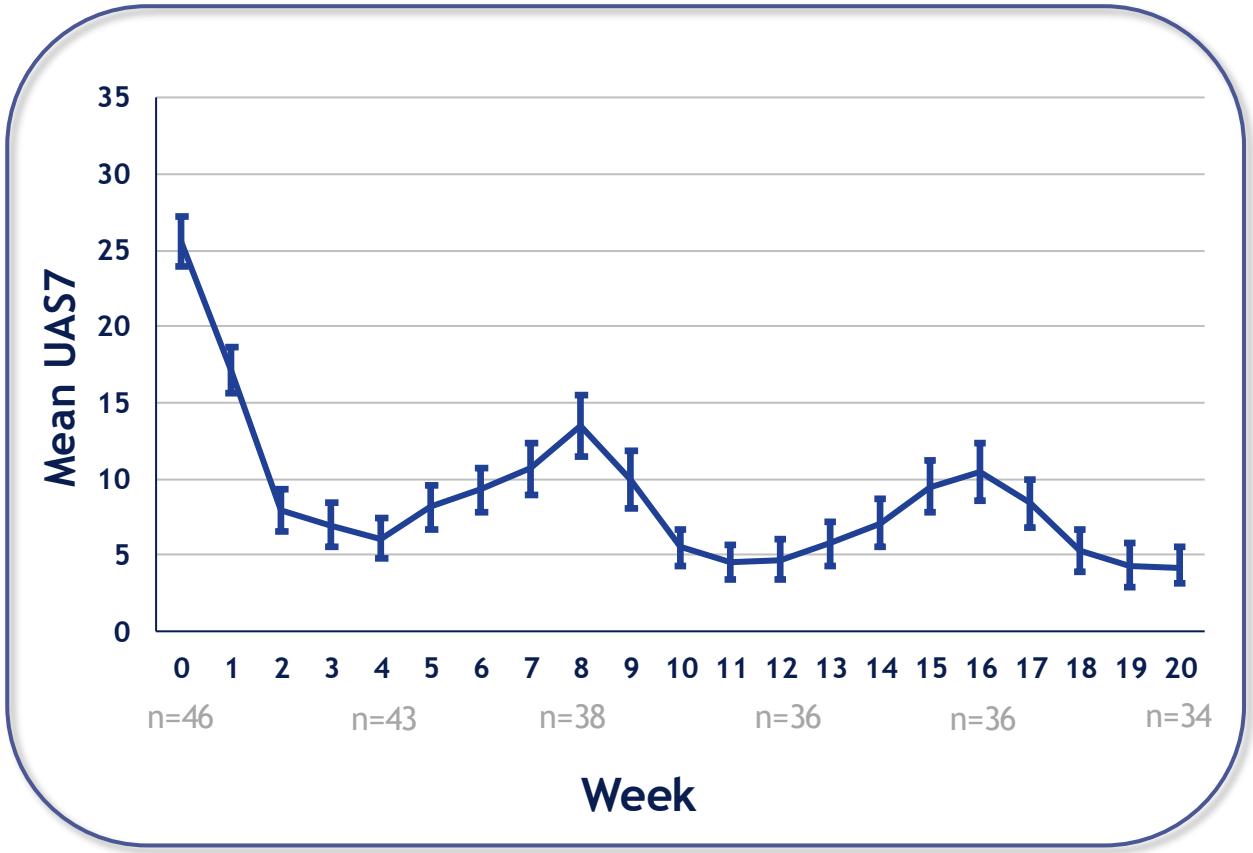
Key Objectives/Enrollment Target

- Generate additional safety, efficacy and durability at 180mg Q8W dose schedule for both CSU and CIndU programs

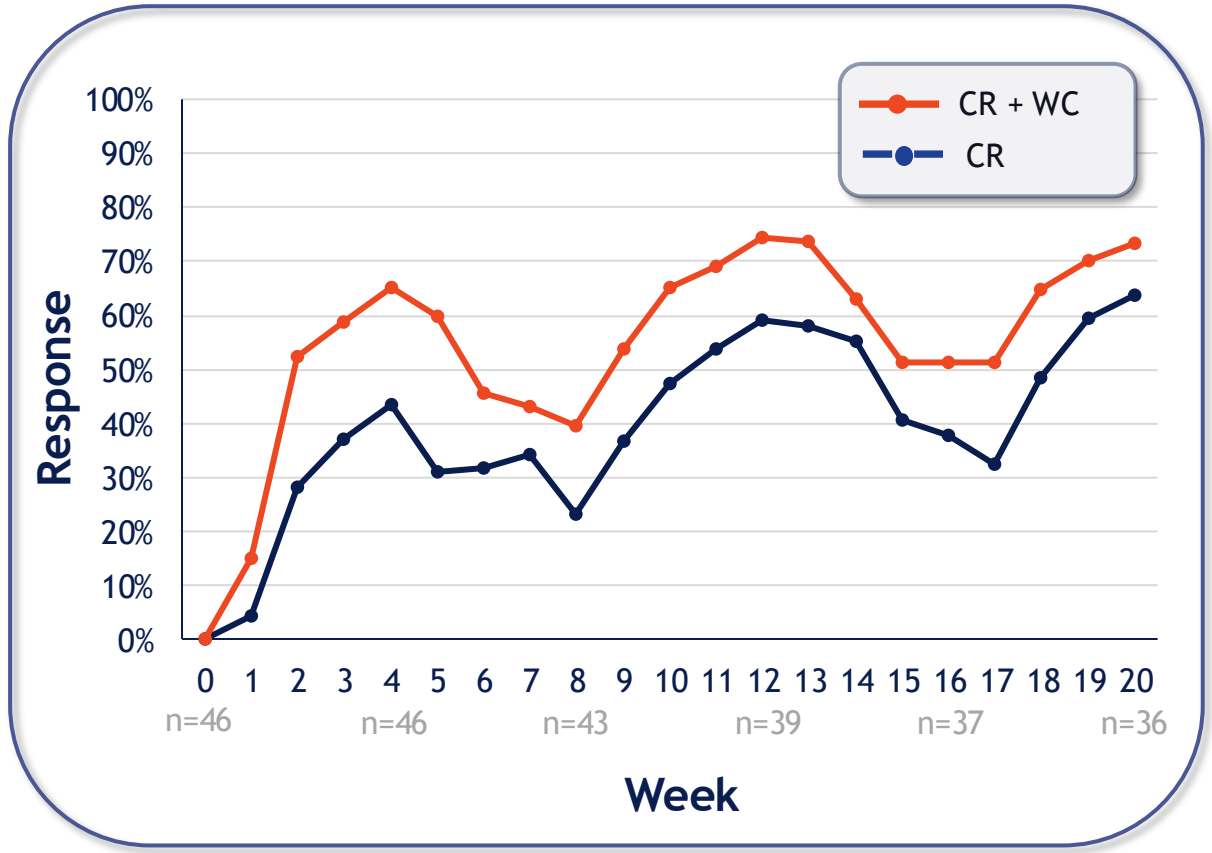


CSU OLE: Continues to show increasing efficacy over time at 180mg Q8W

22.4 pt reduction in UAS7 at week 12 and 62% Complete Response rate observed at week 20



Note: UAS7 data are presented as mean ± SEM



Note: Last observation carried forward (LOCF) method was used for data imputation

Briquilimab well tolerated with favorable safety profile in the OLE study

Low rate of safety/tolerability observations possibly related to KIT blockade in OLE

	Briquilimab 180mg Q8W (n=63)
Any Adverse Event*	39 (61.9%)
Any Serious Adverse Event	2 (3.2)[1]
Any adverse event leading to discontinuation	1 (1.6)[2]
Adverse event leading to death	0 (0)
Any Treatment-Related TEAE ≥ Grade 3	0 (0)

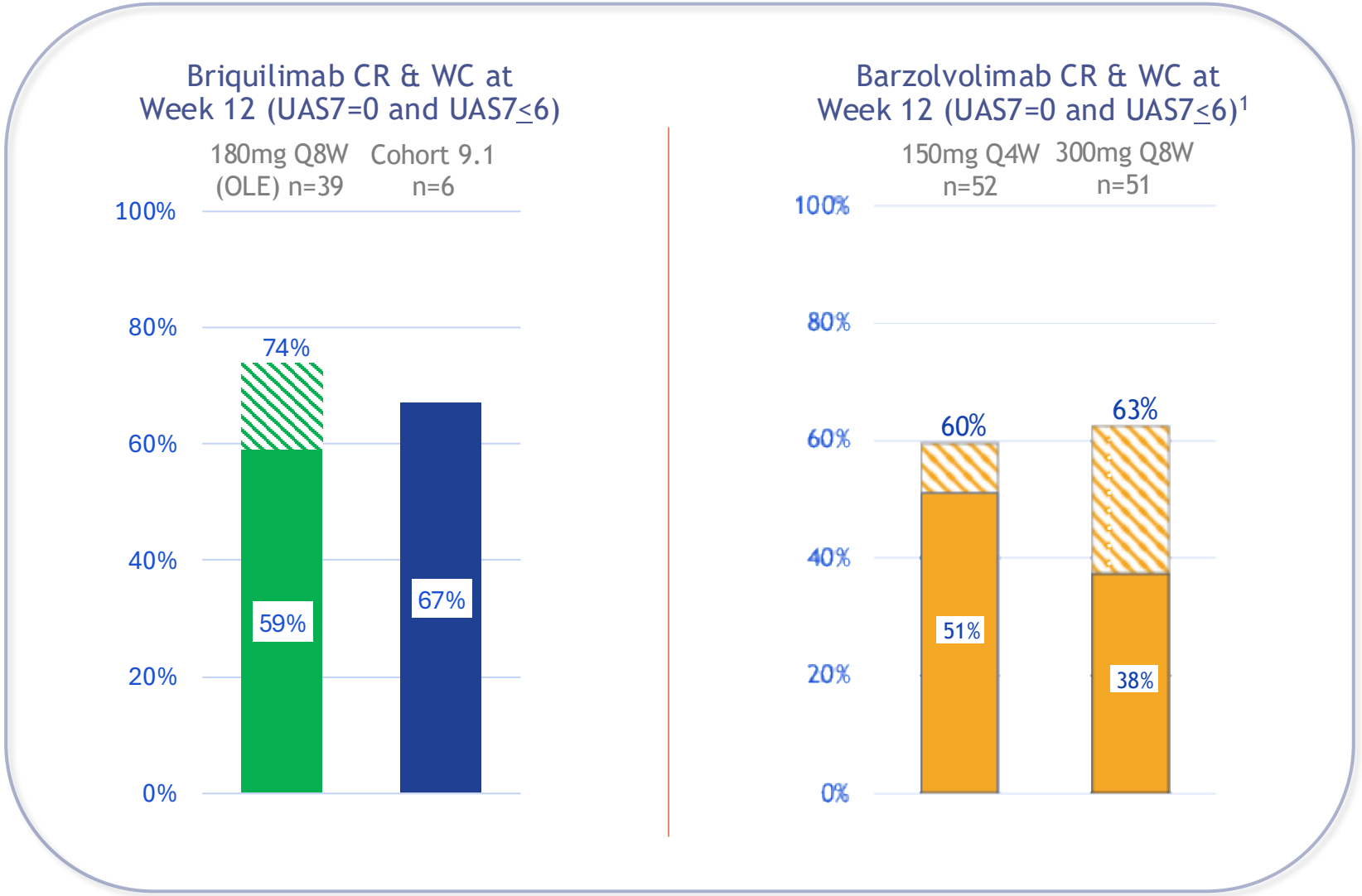
	Briquilimab 180mg Q8W (n=63)
Hair color change	1 (1.6%)
Skin discoloration	2 (3.2)[3]
Taste disorder/hypogeusia	8 (12.7)
Neutrophil count decreased	2 (3.2)[4]
WBC count decreased	1 (1.6)[5]

Median duration of follow up: 205 days

*AEs occurring in ≥3 participants: nasopharyngitis, taste disorder, CoVID 19, fatigue

1. One case of large bowel obstruction, one case of breast injury, both unrelated
2. Grade 1 hypogeusia, related
3. Both reported as skin hyperpigmentation
4. One case related, one case unrelated to treatment. Both cases resolved while on treatment.
5. One case related, resolved while on treatment

Briquilimab complete response and well controlled disease at 12 weeks



Note: These observations are derived from separate clinical settings; comparisons across trials are not based on head-to-head studies.

Note: Last observation carried forward (LOCF) method was used for data imputation

1 Barzolvolimab Phase 2 CSU Topline Results

Briquilimab in Chronic Inducible Urticaria

SPOTLIGHT TRIAL

+

Open-Label Extension Study

Briquilimab Phase 1b/2a SPOTLIGHT Study in CIndU

Randomized, Double-Blind, Placebo-Controlled, Multiple Ascending Dose Study

SPOTLIGHT TRIAL

Screening/Eligibility

- Diagnosis of Cold Urticaria (ColdU) or Symptomatic Dermographism (SD) for ≥ 3 mos
- H1-antihistamine-failed
- 18+ years

Study Operations

- **EU Lead : Martin Metz, MD**
- ~5 sites in the EU
- N = ~27

Key Assessments

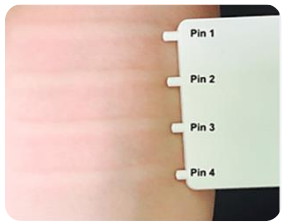
- **Provocation Test:** TempTest (ColdU), FricTest (SD)
- **Disease Scores:** UCT
- **Mast Cell Depletion & Recovery:** Serum Tryptase, Skin Biopsies, Codeine Skin Tests
- **Safety:** TEAEs, SAEs

Provocation Test Measured at 12 Weeks (Primary Endpoint)

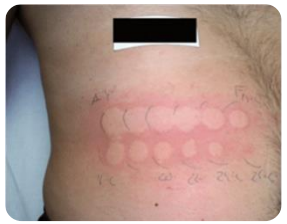
Dose	Patients	Schedule	Key Assessments & Follow-up
40 mg	n=3	Single Dose	**12 Week Efficacy Observation Period (6 Week Preliminary Analysis)**
120 mg	n=12		**+ 24 Week Additional Safety Observation**
180 mg	n=12		

Provocation Tests Used for Clinical Evaluation

Symptomatic Dermographism
FricTest™
CR - No response at Fric Level 4
PR - > 2 pin improvement

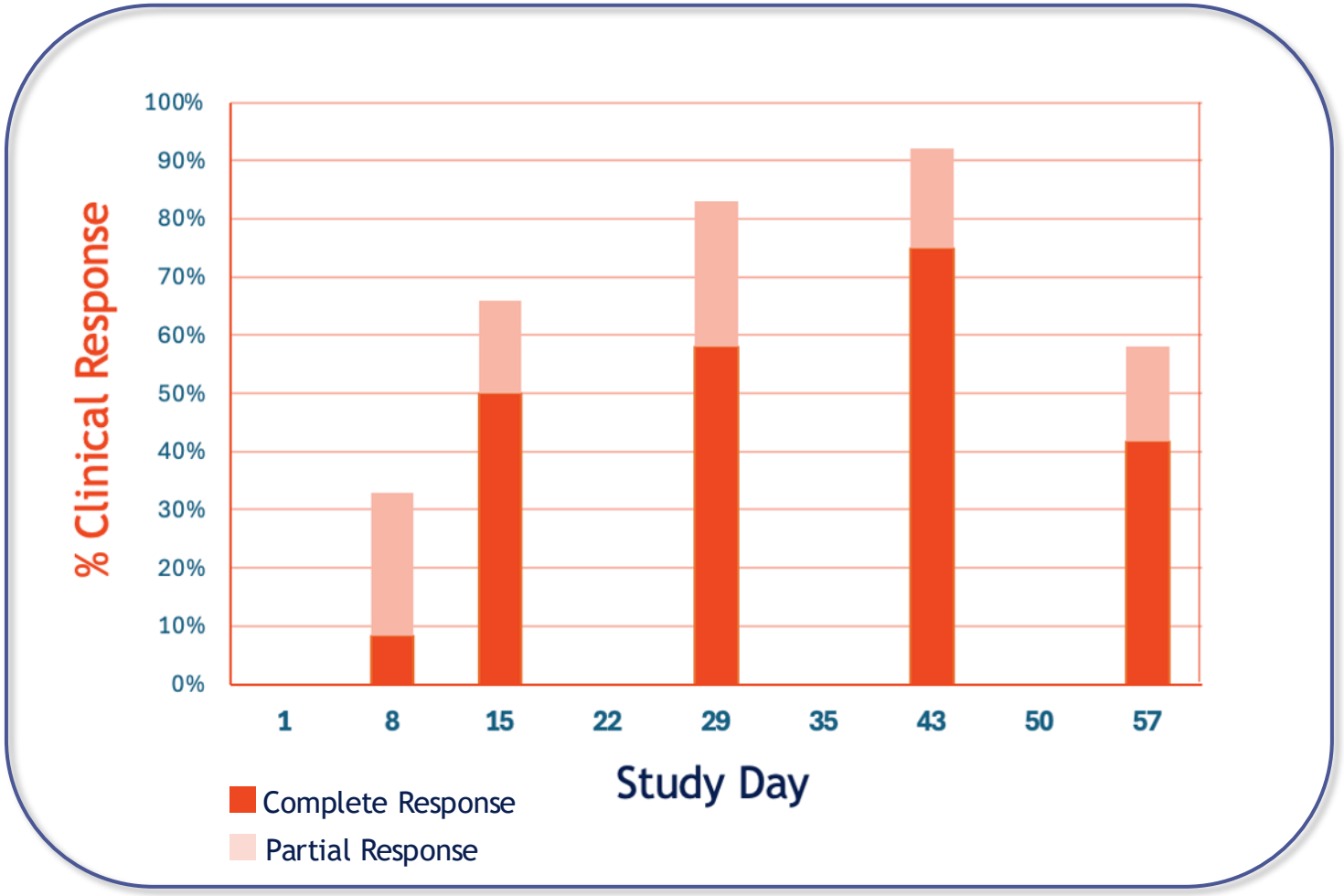


Cold Induced Urticaria
TempTest™
CR - Negative test at < 4°C
PR - Improvement by > 4°C



SPOTLIGHT: Clinical response through 8 weeks with briquilimab 180mg (n=12)

- 12 of 12 patients (100%) achieved either CR or PR by week 8
- 8 of 12 patients (67%) achieved clinical response by the week 2 assessment
- 11 of 12 participants (92%) reported either CR or PR at week 6
  - 9 of 12 patients (75%) achieved complete response at week 6
- 5 CRs and 2 PRs (58%) maintained through week 8, durability assessment ongoing



AD_T0003, AD_T0004, AD_L0001, AD_L0002

SPOTLIGHT Safety and Tolerability

	Briquilimab 40mg (n=3)	Briquilimab 120mg (n=12)	Briquilimab 180mg (n=12)
Any adverse event	2	12	10
Any serious adverse event	0	2*	0
Any adverse event leading to discontinuation	0	0	0
Adverse event leading to death	0	0	0
Adverse event ≥ grade 3	0	1*	0

*SAE: Biliary colic leading to cholecystectomy, Grade 3 Fracture of the right shoulder (both unrelated to treatment)

AEs occurring in ≥3 participants: Nasopharyngitis, neutrophil count decrease, fatigue, headache, abdominal pain, COVID-19, diarrhea, dizziness, nausea

SPOTLIGHT Safety/Tolerability Observations Possibly Related to KIT Blockade Were Generally Limited to Low Grade Events

SPOTLIGHT TRIAL

All events were grade 1 or 2 and none resulted in discontinuations

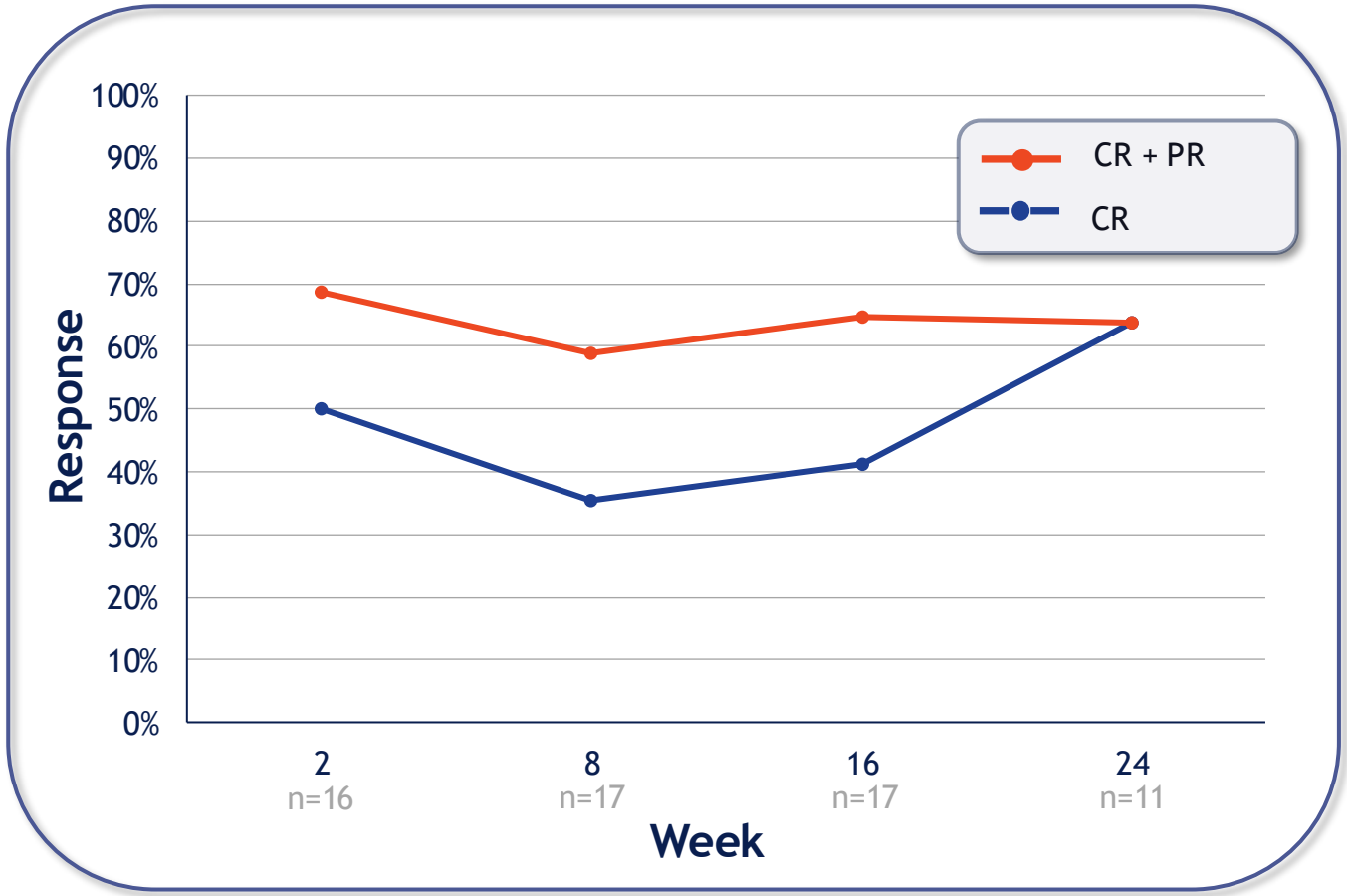
Adverse Event as reported term	Briquilimab 40mg (n=3) n (%)	Briquilimab 120mg (n=12) n (%)	Briquilimab 180mg (n=12) n (%)	Briquilimab All doses (n=27) n (%)
Hair color changes	0 (0)	0 (0)	0 (0)	0 (0)
Skin discoloration	0 (0)	0 (0)	0 (0)	0 (0)
Taste change/Hypogeusia	0 (0)	1 (8.3)	2 (16.7)	3 (11.1)
Neutrophil count decreased	1 (33.3)	1 (8.3)	6* (50)	8 (29.6)

* Four participants with Grade 1, two with Grade 2 ; median time to resolution 16d; four of six observations occurred proximal to a common cold diagnosis, one of six observations occurred proximal to COVID 19 diagnosis

Grade 1 neutrophil count decrease defined as ANC between 1,500 – 1,700/mm^3
Grade 2 neutrophil count decrease defined as ANC between 1,000 – 1,500/mm^3

CIndU OLE: Clinical responses maintained at 24 weeks with 180mg Q8W

- 17 CIndU patients rolled over from SPOTLIGHT
- Continued to observe a rapid onset of effect:
  - 11 of 16 patients (69%) achieved either CR or PR by week 2
- Durable effect even at 8 weeks post-dose
  - 11 of 17 patients (65%) maintained clinical response even at week 16
  - Challenge preformed prior to next dose



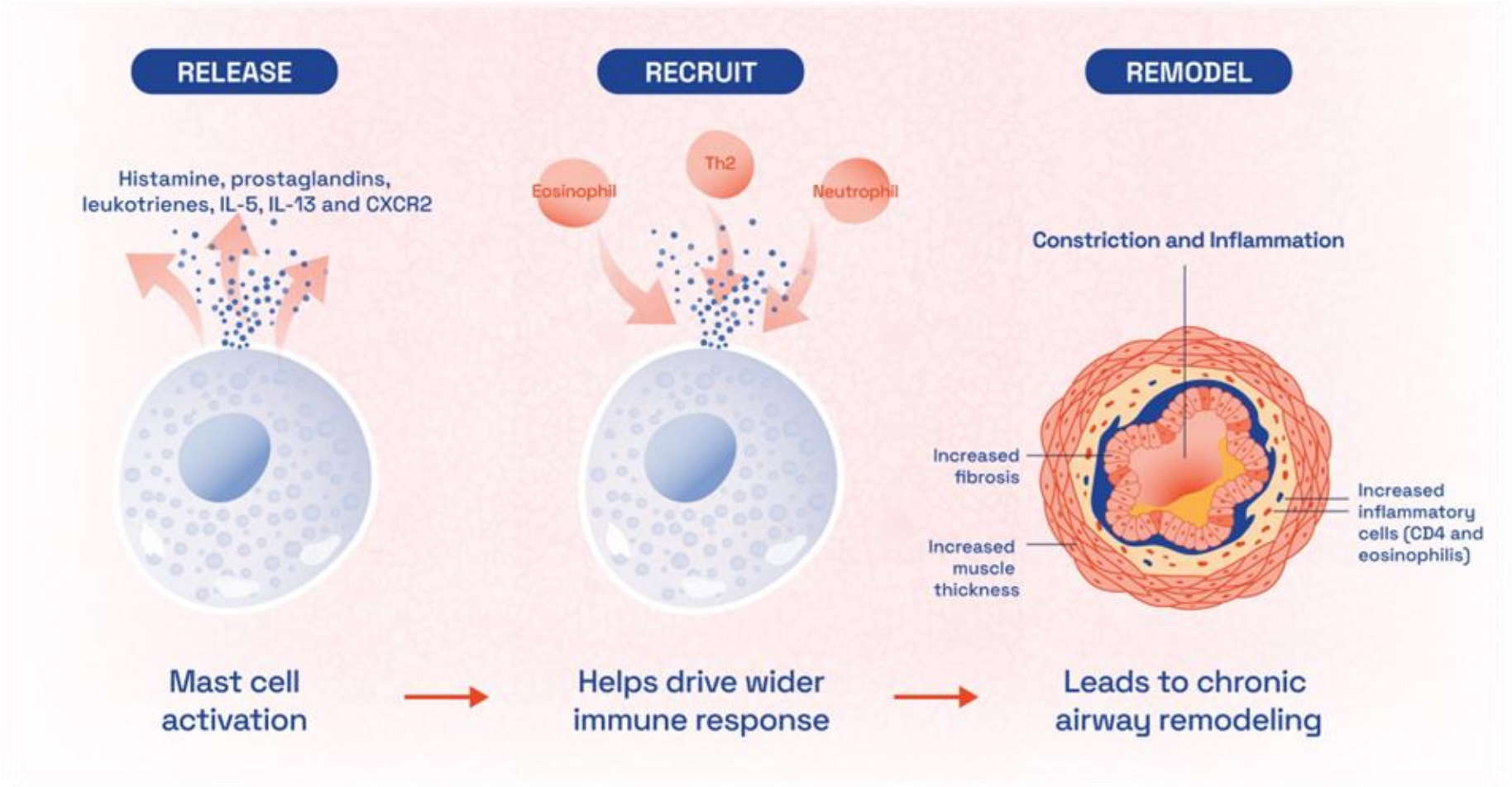
CR: TFS (Total Fric Score)=0 or CTT (Critical Temperature Threshold)<=4^{0}C
PR: TFS reduction of 2 or more from baseline or reduction of 4^{0}C or more in CTT

ETESIAN TRIAL

Briquilimab in Asthma

Mast cells play a critical role in inflammation and tissue remodeling in asthma

- The presence or accumulation of mast cells within the lung are pathological features of asthma[1]
- Mast cells release mediators and recruit other cell types into the airway that drive inflammation throughout all phases of the asthmatic response [2]



[1] Méndez-Enríquez E, Hallgren J. Mast cells and their progenitors in allergic asthma. Front Immunol. 2019;10:442022.
[2] Galli SJ, Tsai M, Piliponsky AM. The development of allergic inflammation. Nature. 2008;454(7203):445-454.

Briquilimab Phase 1b/2a ETESIAN Study in Allergic Asthma

Double-blind, placebo-controlled, single dose, challenge study

ETESIAN TRIAL

Screening/Eligibility

- Diagnosis of stable allergic asthma
- Baseline FEV_1 70% of predicted value
- Positive methacholine challenge at baseline
- 18-65 years of age

Study Operations

- **Lead Investigator: Paul O'Byrne, MD**
- 6 centers in Canada
- **N = 17 patients**
- **Study terminated early for administrative reasons**

Key Assessments

- **Early & Late Asthmatic Response:** % decrease in FEV_1 from baseline
- **Changes in Airway Hyperresponsiveness:** Methacholine PD20 24 hours after allergen challenge
- **Mast Cell Depletion & Recovery:** Serum Tryptase
- **Safety:** TEAEs, SAEs

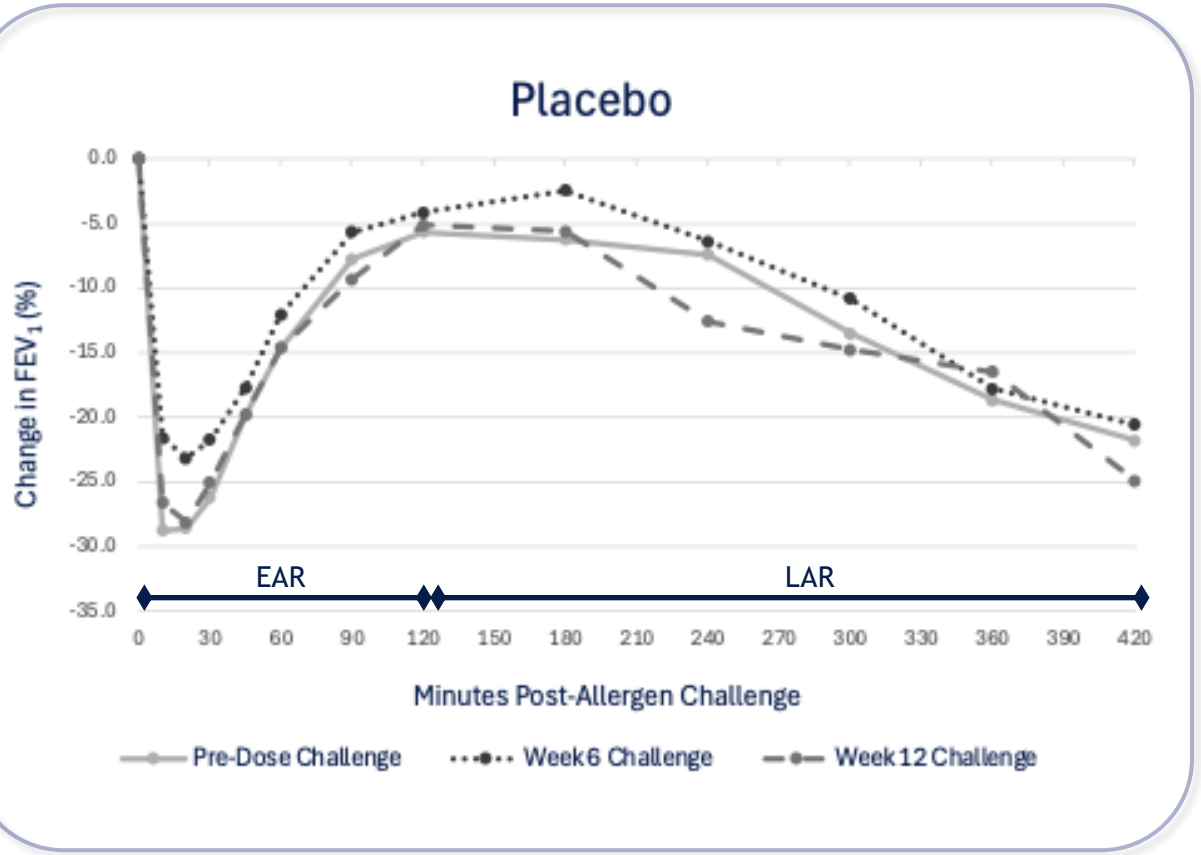
Allergen Challenge & Methacholine PD20 Measured at 6 weeks and 12 weeks

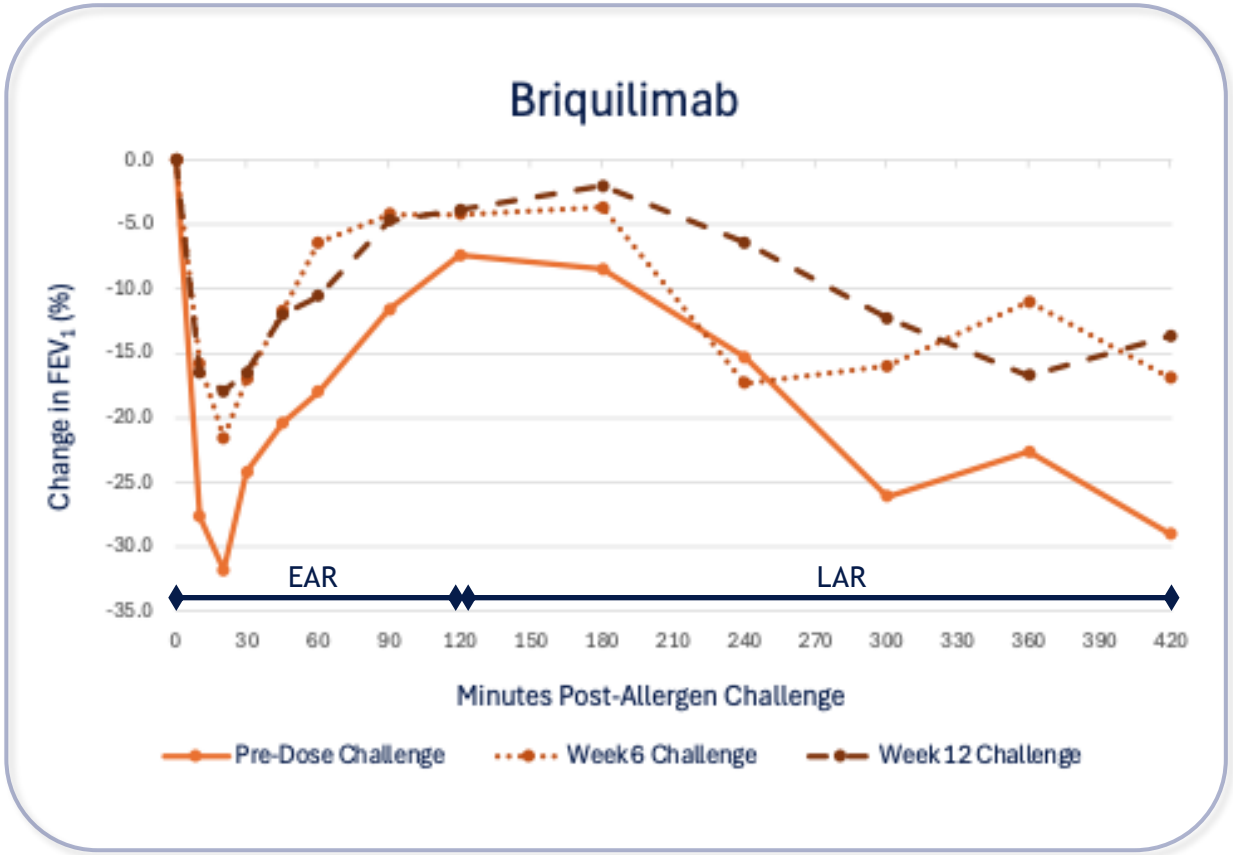
Patients (Randomization)	Dose	Timeline
n=17 (1:1)	180 mg (Single Dose)	Week -2: Dosing; Day 0: Dosing; Week 6: Allergen Challenge; Week 12: Allergen Challenge; Week 14: Safety Follow-Up

Briquilimab Mitigates the Effects of Allergen Challenge on FEV_1 Response

Robust and sustained impact of mast-cell depletion on asthmatic response at 6 and 12 weeks

ETESIAN TRIAL

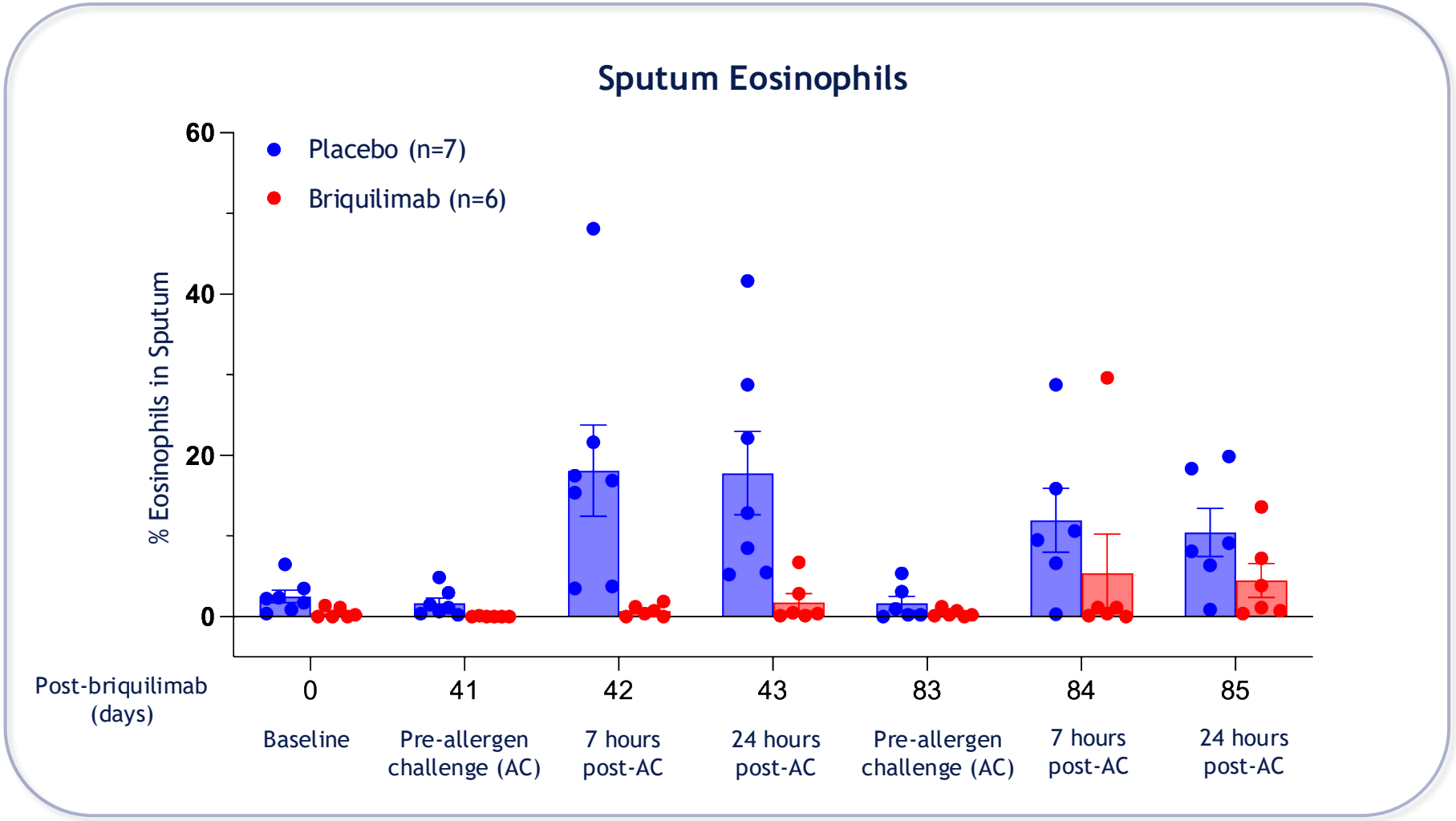




Eosinophil Response Suppressed by Briquilimab

Substantial eosinophil reduction at both 6-week and 12-week allergen challenge timepoints

ETESIAN TRIAL



Preliminary Data Shows Briquilimab Was Well Tolerated with a Favorable Safety Profile in the ETESIAN Study

ETESIAN TRIAL

	Briquilimab 180mg Single Dose (n=8)	Placebo (n=9)
Any TEAE	4 (50%)	4 (44.4%)
Any Treatment-Related Serious TEAE	0 (0%)	0 (0)
Any TEAE Leading to Discontinuation of IP	0 (0%)	0 (0)
Any Treatment-Related TEAE ≥ Grade 3	0 (0%)	0 (0)

	Briquilimab 180mg Single Dose (n=8)	Placebo (n=9)
Any TEAE	0 (0%)	0 (0%)
Any Treatment-Related Serious TEAE	0 (0)	0 (0)
Any TEAE Leading to Discontinuation of IP	1 (12.5)	0 (0)
Any Treatment-Related TEAE ≥ Grade 3	1 (12.5)	0 (0)

A single placebo subject had an unrelated hypersensitivity reaction, CoFAR grade 2
A single briquilimab subject had related rash and pruritus, both CoFAR grade 1

CTCAE grade 1 dysgeusia resolved after 55 days
CTCAE grade 1 white blood cell count decreased, resolving at time of study completion

ETESIAN Study Summary

ETESIAN TRIAL

First time a potent KIT-specific therapeutic targeting mast cells has demonstrated potential for the treatment of asthma

PK/PD demonstrated deep & sustained biologic activity in key biomarkers, including:

- Serum tryptase
- Sputum eosinophils

Robust improvements observed in both aspects of the challenge study:

- Improvement in mean FEV_1 response seen at week 6 and week 12 in allergen challenge
- Reductions in airway hyper-responsiveness observed in the methacoline challenge

Data suggest that mast cells play a central role in airway inflammation

- Given that the mast cell may be a central actor in both T2 high and T2 low disease, further development in the broader asthma population is warranted
- Next steps being evaluated, including potential dose-ranging/repeat dose studies in asthma

Opportunity in Mast Cell Diseases

Chronic urticaria is one of the most prevalent immunological conditions with ~1.4 million biologic eligible patients in the G6

Chronic urticaria is a devastating disease characterized by severe itching, hives/wheals, inflammation, and/or angioedema occurring for >6 weeks

Chronic urticaria symptoms can arise spontaneously (CSU) or after known triggers (CIndU)

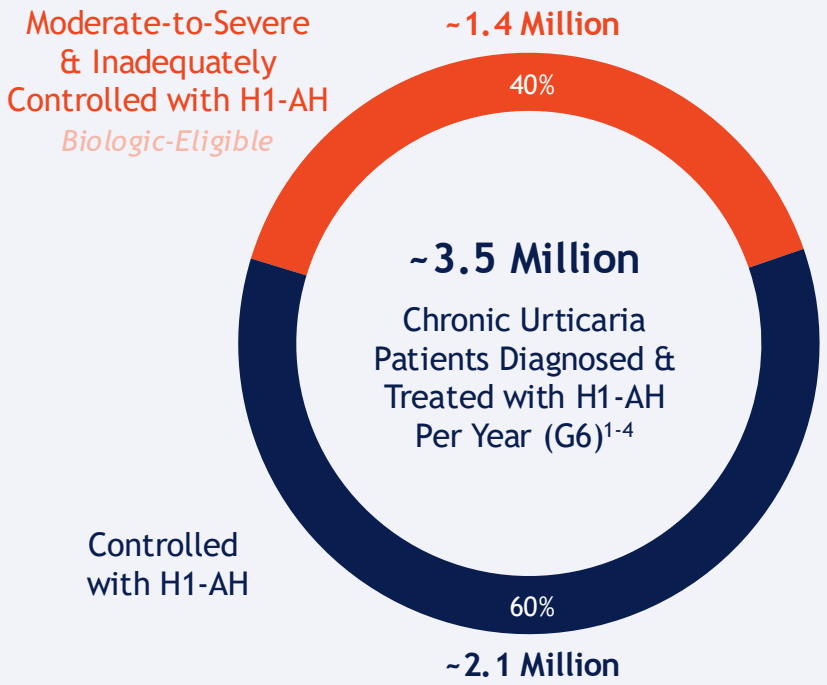
~1.4 million patients

have moderate-to-severe disease, in which the disease commonly persists for 5+ years [6]

*Approximately 50% of patients receiving Xolair have an inadequate response (Xolair prescribing information); H1-AH = H1-antihistamines.

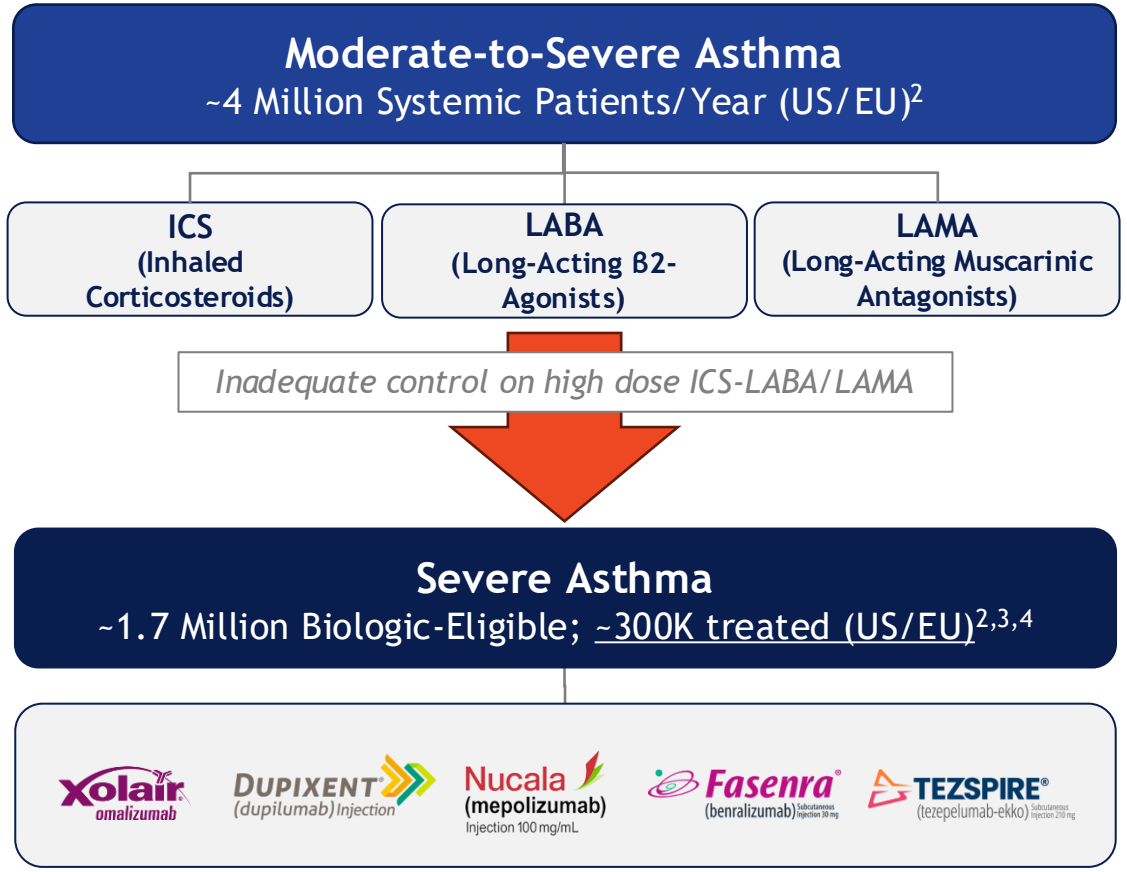
[1] Kolkhir P, et al. Nature Reviews. 2022; [2] Balp MM, et al., EADV 2023; [3] Novartis R&D Day, Dec. 2021; [4] Decision Resources Group, Chronic Urticaria, Dec. 2023; [5] IQVIA sales data; [6] Saini S, Kaplan A. JACI Practice. 2018.

Chronic Urticaria Market Opportunity



~2/3 chronic urticaria cases are CSU. ~1/3 are cindu (~15% of patients have both) [1]

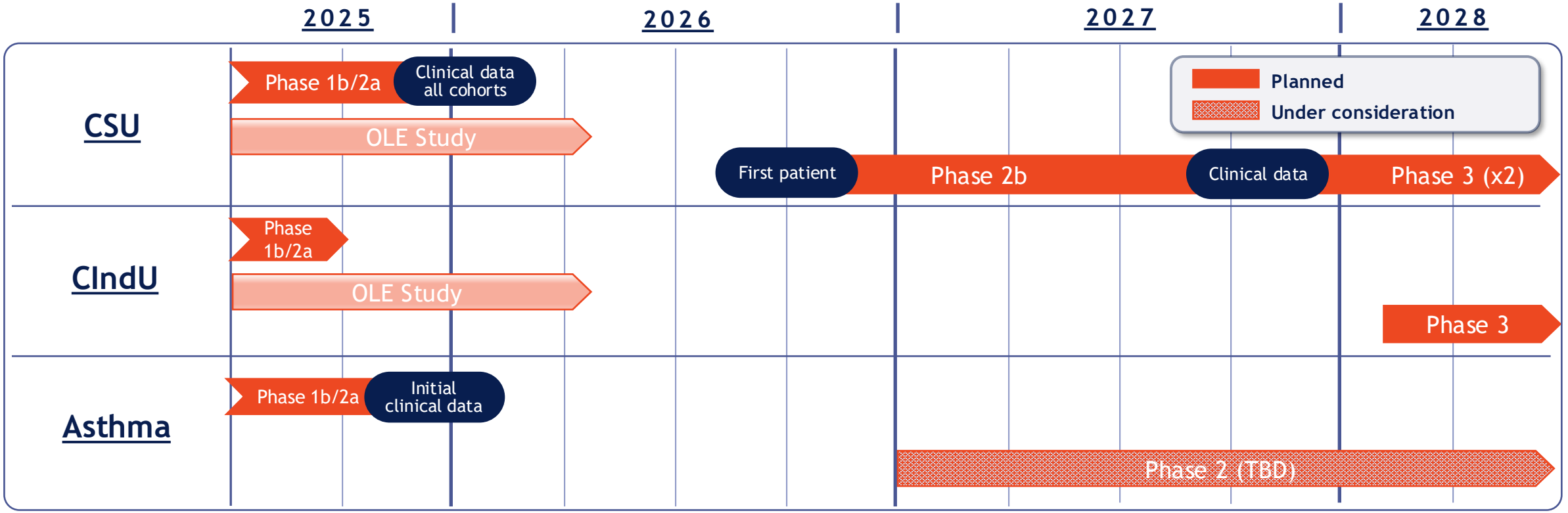
The global asthma biologics market is ~$10B today and is expected to grow with new therapies



- Severe asthma is a potentially life-threatening disorder characterized by **poor QoL, persistent symptoms, and frequent emergency room visits**[1,2]
- Approved biologics have limited efficacy, and are concentrated on only patients with high eosinophils
- Only **~17% of severe asthma patients receive biologic treatment.** Penetration is expected to grow with new therapies for patients with allergic or Type 2-low disease (~50% of patients)[4,5,6]

1 2022 GINA Main Report, Global Initiative for Asthma - GINA; 2 Qin. J Asthma. 2021; 3 GlobalData; 4 Sanofi R&D Day, Dec. 2023; 5 TD Cowen Respiratory Outlook 2024 (Sanofi/Regeneron/AstraZeneca); 6 Jasper Primary Research 2024.

Rapidly advancing briquilimab into registrational studies in CSU and CIndU



Other mast cell driven diseases under consideration

- Atopic Dermatitis
- COPD
- Food Allergies
- Chronic Rhinosinusitis
- IBD
- Prurigo Nodularis

Jasper maintains full worldwide rights to develop and commercialize briquilimab in all indications

Briquilimab: Targeted Mast Cell Depletion in Multiple Inflamatory Diseases

Briquilimab

Designed for best-in-class profile

- Potency: direct ligand/receptor blockade with high affinity to KIT
- Speed: rapid Tmax and high Cmax
- Efficacy: >25 point reductions in UAS7 and CRs as early as week 2 observed across multiple cohorts
- Tolerability: Drug properties enable rapid mast cell depletion followed by clearance to minimize KIT related AEs

Clinical Profile

In CSU, CIndU and asthma

- Clinical data in more than 95 patients across multiple studies
- BEACON, SPOTLIGHT and OLE studies in chronic urticaria show rapid onset of deep and durable responses
- ETESIAN study provides PoC in asthma in FEV_1 improvement and substantial reductions in eosinophils
- Safety/tolerability observations possibly related to KIT blockade were generally transient, low-grade events that resolved on study

Upcoming Milestones

In mast cell driven diseases

- CSU: planning to commence registrational program beginning with Phase 2b study in 2H 2026
- CIndU: Phase 3 study planned to commence early 2028
- Asthma: strong POC supports evaluation of next steps for development

Jasper Therapeutics

NASDAQ: JSPR March 2026

JASPER THERAPEUTICS