



# PHASE 1B/2A SPOTLIGHT STUDY IN CHRONIC INDUCIBLE URTICARIA\*

## Open Label, Dose Escalation Study of Briquilimab Subcutaneously Administered

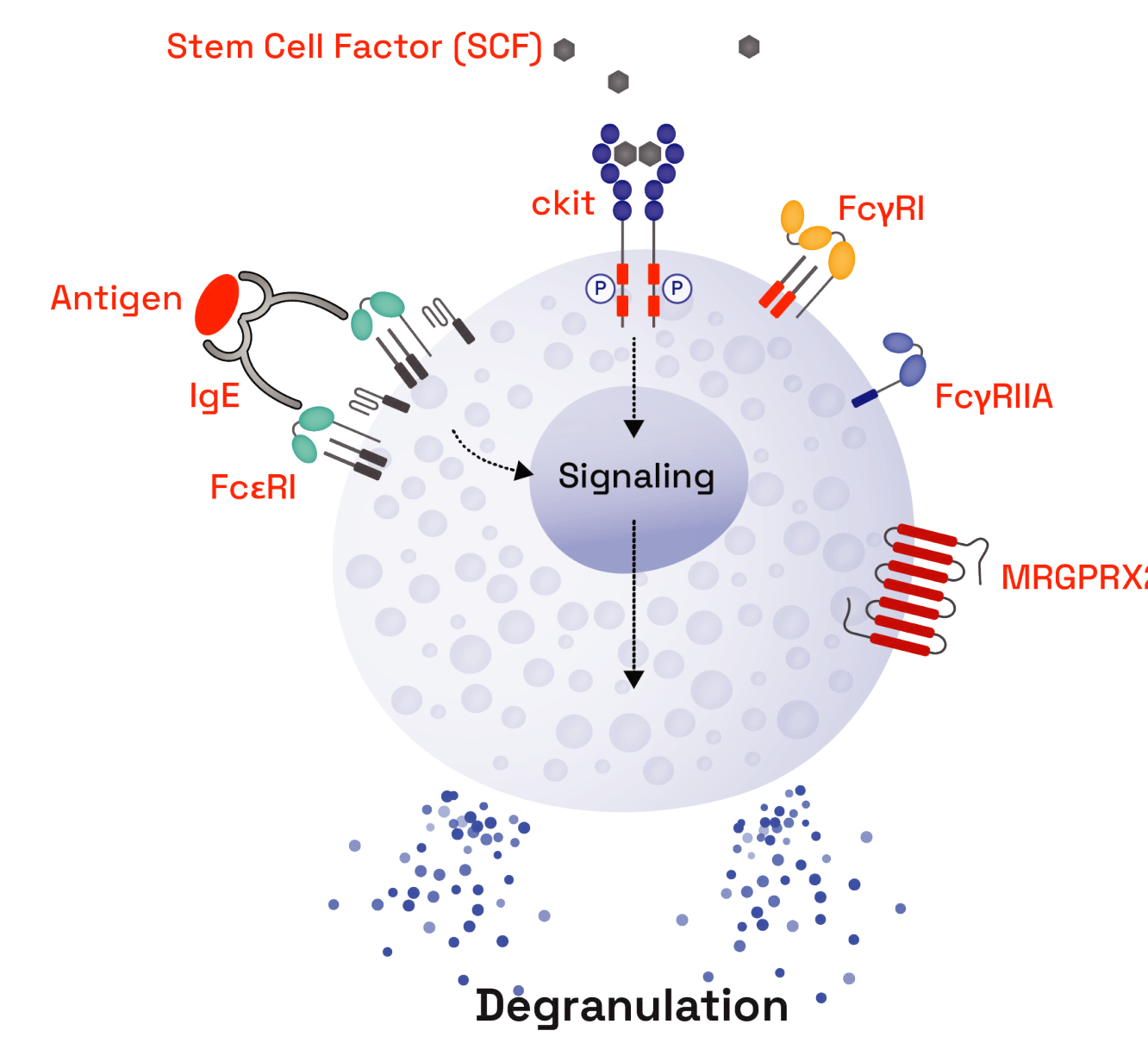
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\*Protocol Title: A Phase 1b/2a, Dose Escalation Trial of Safety, Pharmacokinetic/Pharmacodynamic and Preliminary Clinical Activity of Briquilimab in Adult Patients with Chronic Inducible Urticaria (CIndU) Who Remain Symptomatic Despite Treatment with H1-Antihistamines

### BACKGROUND

Mast cells (MCs) are key drivers of the inflammatory response in a number of allergic and dermatologic diseases<sup>1</sup>



- MCs are potent drivers of inflammation in skin, lungs and gut
- Activated MCs release pro-inflammatory compounds that drive diseases such as CSU, & CIndU
- Current approved therapies targeting mast cell driven diseases have limited efficacy and limited durability of response

Chronic inducible urticaria (CIndU), a subtype of chronic urticaria, is an inflammatory disease driven by the activation of skin mast cells

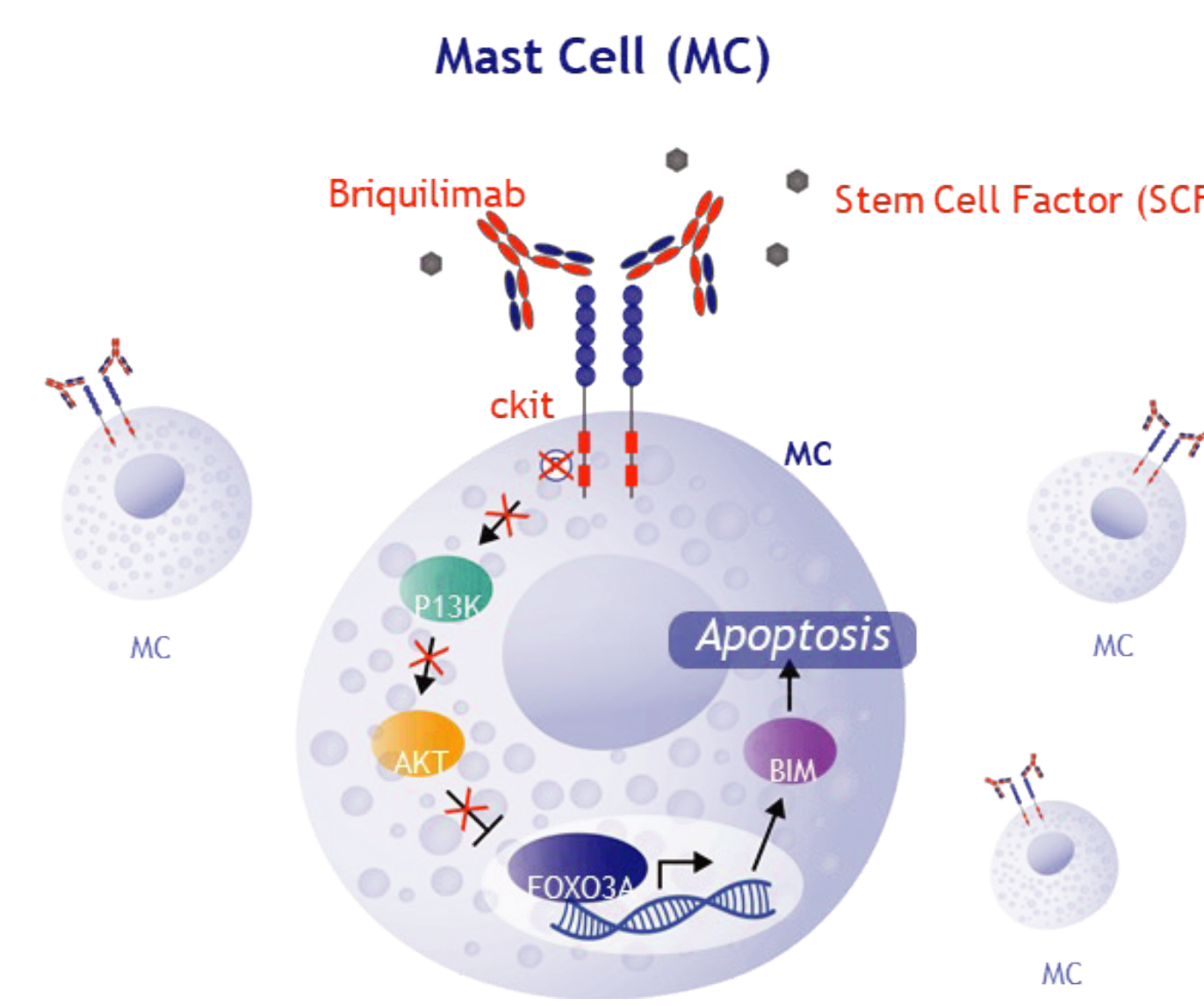


- Devastating disease characterized by severe itching, hives/wheals, inflammation, and/or angioedema **occurring for >6 weeks**
- Patients with CIndU develop symptoms in response to specific stimuli (e.g., cold, heat, pressure)
- Patients suffer numerous physical/psychological symptoms that **significantly impair quality of life** (sleep/work disturbances, depression)
- The two most common forms of CIndU are **symptomatic dermographism (SD)** and **cold contact urticaria (ColdU)**

**References:** 1. Theoharides et al. *N Engl J Med.* (2015) 2. Moller C et al. *Blood* (2005) 3. Hundley TR et al. *Blood* (2004) 4. Arnold JN et al. *Annu Rev Immunol* (2007) 5. Jasper internal data (Phase 1a, healthy volunteer study) 6. Maurer et al, GA<sup>2</sup>LEN Global Urticaria Forum; Berlin, December 6, 2022

### BRIQUILIMAB

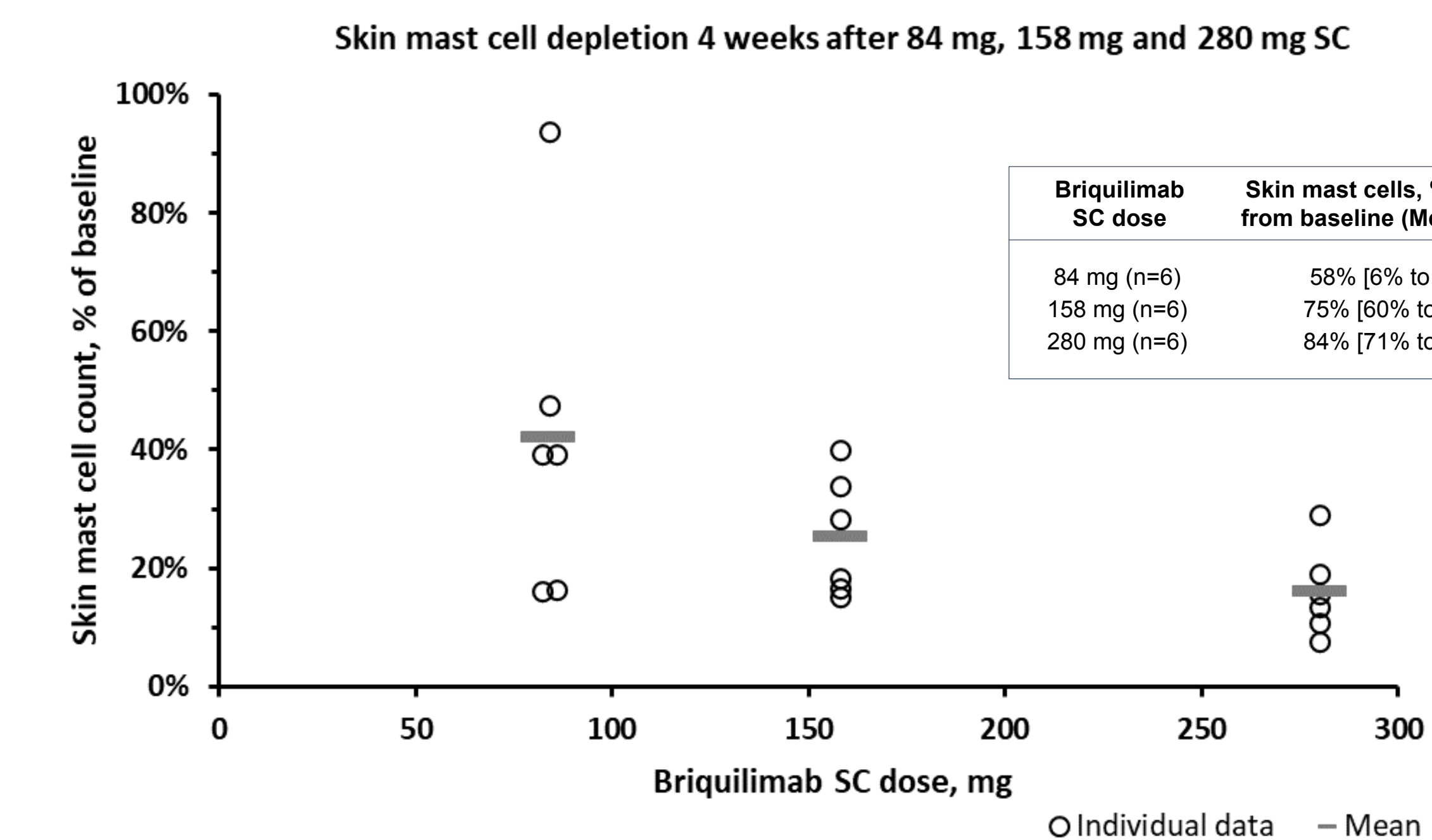
Mechanism of Action<sup>2-4</sup>



**Briquilimab-Mediated Mast Cell Apoptosis**

- SCF signaling through c-Kit prevents mast cells apoptosis via the Bim-mediated pathway<sup>1</sup>
- Blockade of c-Kit signaling on MCs leads to apoptosis and phagocytic clearance<sup>2</sup>
- Depletion of cutaneous MCs are C<sub>max</sub> dependent, whereas unwanted effects appear AUC driven
- Once MC are depleted, unwanted effects minimized by intermittent dosing

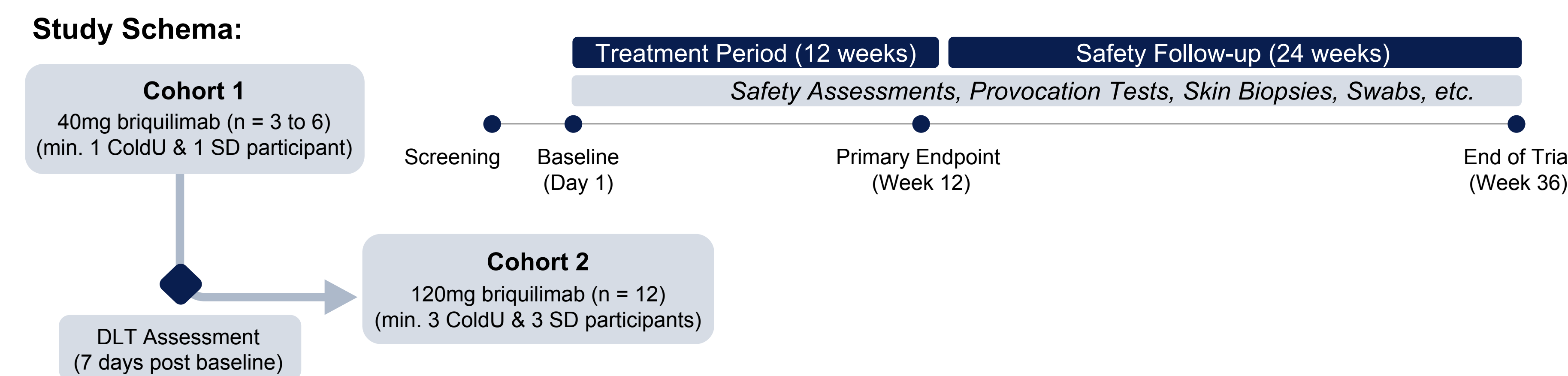
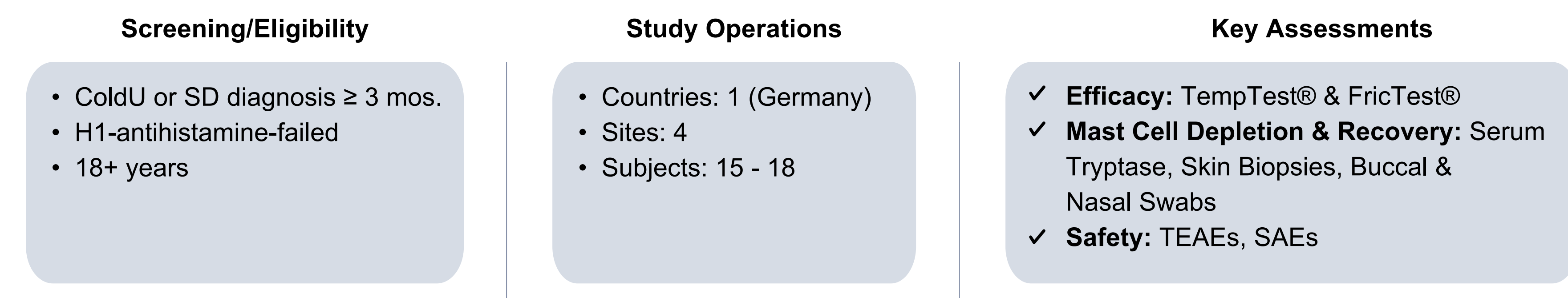
Single subcutaneous injection of briquilimab significantly depletes human skin MCs<sup>5,6</sup>



- SC dose above 80mg, potently depletes skin MCs
- Dose dependent MC depletion
- MC depletion by day 7, with durable response lasting at least 29 days
- MCs take at least 3 months to recover, potentially leading to durable disease control<sup>2</sup>

### BRIQUILIMAB PHASE 1B/2A SPOTLIGHT STUDY IN PATIENTS WITH CHRONIC INDUCIBLE SPONTANEOUS URTICARIA (CINDU)

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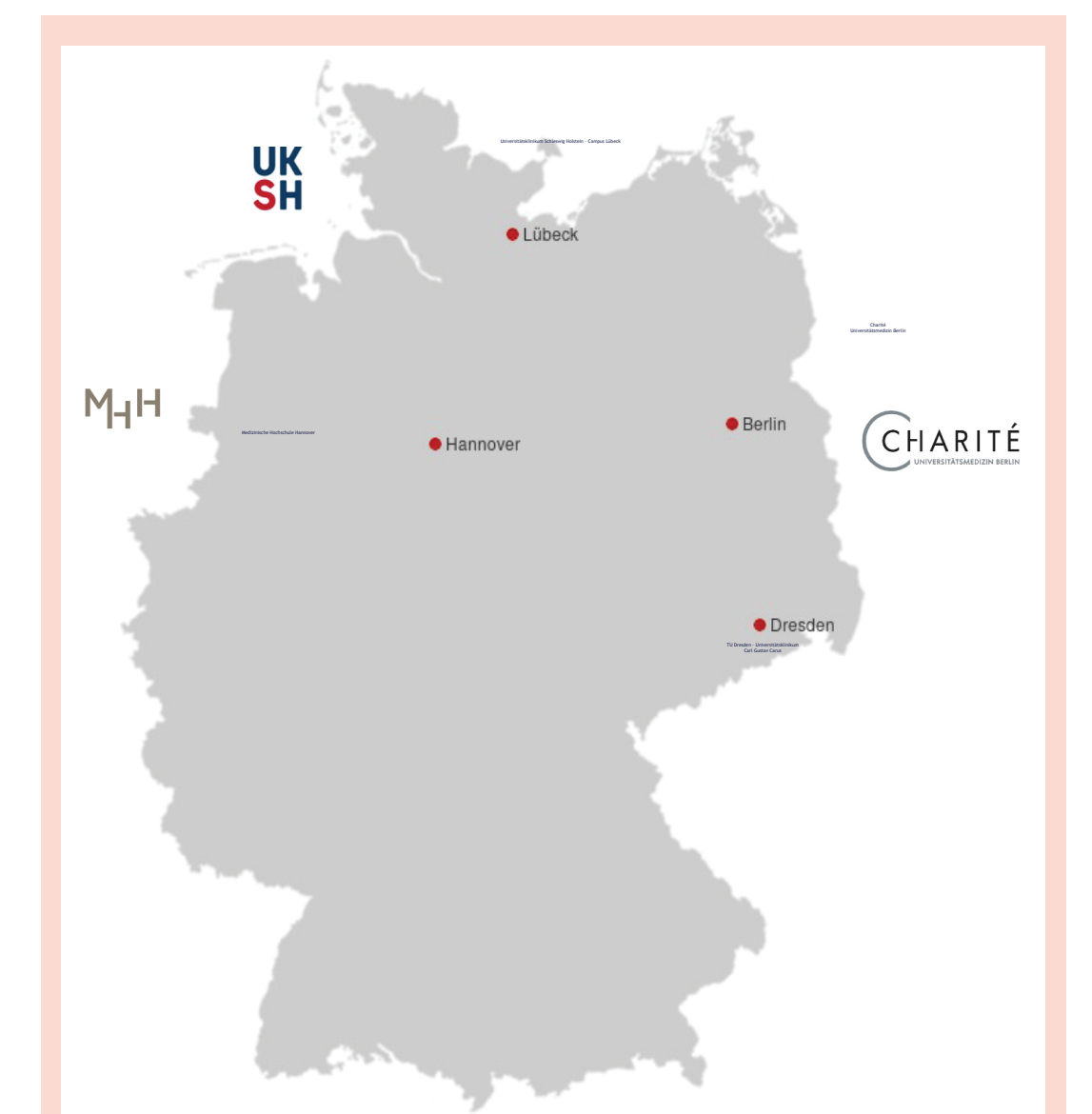


**Status: Patient enrollment ongoing at sites in the EU**

**Study Goal:** evaluate the safety, tolerability, and preliminary efficacy of a single SC dose of briquilimab in patients with Cold Urticaria (ColdU) or Symptomatic Dermographism (SD)

**Key Objectives:** Single SC dose of briquilimab at two dose levels, 40mg and 120mg, to study the effects of:

- Mast cell depletion and disease symptom/disease modifications
- Briquilimab drug clearance
- Time to return of disease symptoms
- Briquilimab on other c-Kit expressing cell lineages



Our thanks to the patients, site staff and investigators of the Spotlight trial

Briquilimab is an investigational product and not approved for any indication.