Abstract N°: 4765

Spesolimab for the treatment of generalised pustular psoriasis flares: Preliminary analysis of the EFFISAYIL REP study

Siew Eng Choon*[1], A David Burden[2], Bruce Strober[3, 4], Akimichi Morita[5], Tsen-Fang Tsai[6], Min Zheng[7], Ming Tang[8], Juliann Reardon[9], Christian Thoma[10], Mark G Lebwohl[11]

[1]Department of Dermatology, Hospital Sultanah Aminah Johor Bahru, Clinical School Johor Bahru, Monash University, Subang Jaya, Malaysia

[2]School of Infection and Immunity, University of Glasgow, Glasgow, United Kingdom

[3]Department of Dermatology, Yale University School of Medicine, New Haven, CT, United States

[4]Central Connecticut Dermatology, Cromwell, CT, United States

[5]Department of Geriatric and Environmental Dermatology, Nagoya City University Graduate School of Medical Sciences, Nagoya, Japan

[6]Department of Dermatology, National Taiwan University Hospital and National Taiwan University College of Medicine, Taipei, Taiwan

[7]Department of Dermatology, The Second Affiliated Hospital, Zhejiang University, School of Medicine, Hangzhou, Zhejiang, China

[8]Boehringer Ingelheim (China) Investment Co. Ltd, Shanghai, China

[9]Boehringer Ingelheim Pharmaceuticals Inc., Ridgefield, CT, United States

[10]Boehringer Ingelheim International GmbH, Biberach, Germany

[11]The Kimberly and Eric J. Waldman Department of Dermatology, Icahn School of Medicine at Mount Sinai, New York City, NY, United States

Introduction & Objectives: Spesolimab is a selective, humanised monoclonal antibody targeting the interleukin (IL)-36 receptor and approved as a 900 mg intravenous (IV) formulation for treatment of generalised pustular psoriasis (GPP) flares, based on the results of the EFFISAYIL 1 study.1 EFFISAYIL REP (NCT06013969) is an open-label, multicentre, single-arm, post-marketing study that is currently ongoing, assessing the efficacy and safety of spesolimab for the retreatment of GPP flares without washout restrictions for concomitant medications. Here, we report a preliminary analysis of efficacy and safety data from EFFISAYIL REP in patients who received IV spesolimab for treatment of their initial GPP flare.

Materials & Methods: Eligible participants were aged ≥18 years with a documented history of GPP as per the European Rare and Severe Psoriasis Expert Network criteria, a prior history of frequent GPP flares, and no previous exposure to the subcutaneous formulation of spesolimab. Treatment with IV spesolimab was initiated in patients presenting with a GPP flare, defined by a GPP Physician Global Assessment (GPPGA) pustulation subscore of ≥2, the presence of fresh pustules, and ≥5% of body surface area affected by erythema and pustules. Patients received a single dose of 900 mg IV spesolimab on Day 1, with the option of a second dose on Day 8 if flare symptoms persisted or disease severity worsened. Concomitant medications could be continued if indicated for comorbidities other than GPP. Concomitant medications indicated for GPP were discontinued prior to receiving the first dose of IV spesolimab, with no requirement for a washout period, although patients could receive escape medication for GPP at the investigator's discretion. The primary endpoint was a GPPGA pustulation subscore of 0 at Week 1. The secondary endpoint was a GPPGA pustulation subscore of 0 or 1, with a ≥2-point reduction from baseline at Week 1. Safety was monitored throughout the trial. Data cut-off was 1 November 2024.

Results: Thirty-six spesolimab-naïve patients from 14 countries received 900 mg IV spesolimab to treat their first

flare in this trial; mean (±standard deviation) age was 46.2 (18.9) years, and 20 patients (55.6%) were female. *IL36RN* mutations were present in 3 patients (8.3%) and absent in 4 (11.1%); the mutation status was unknown for 29 patients (80.6%). Concomitant medication use for GPP (discontinued unless deemed necessary by the investigator) and/or other comorbidities included systemic steroids, methotrexate, cyclosporine, acitretin and biologics (including secukinumab [IL-17 inhibitor] and adalimumab [tumour necrosis factor-alpha inhibitor]).

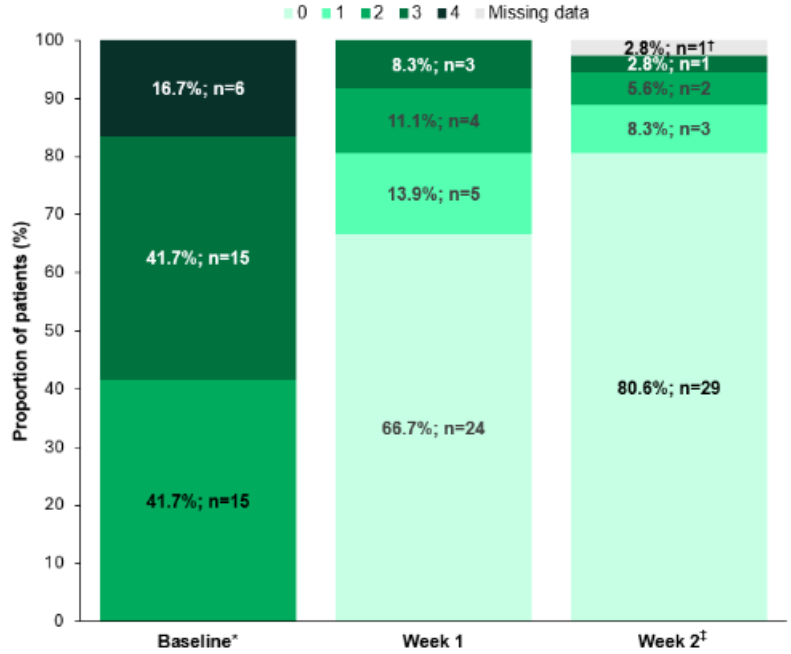
At Week 1, 66.7% of patients (n=24/36) achieved the primary endpoint of a GPPGA pustulation subscore of 0 (Figure 1), rising to 80.6% of patients (n=29/36) at Week 2. In addition, 80.6% of patients (n=29/36) achieved the secondary endpoint of a GPPGA pustulation subscore of 0 or 1 with a ≥2-point reduction from baseline by the end of Week 1, indicating rapid control of flares. By the end of Week 2, the proportion of patients who achieved the secondary endpoint increased to 83.3% (n=30/36). Preliminary safety data from the trial remain consistent with the known safety profile of spesolimab.

Conclusion: In this preliminary analysis of the ongoing EFFISAYIL REP study, spesolimab demonstrated rapid control of flares in patients with GPP, with no new safety risks identified.

Reference:

\1. Bachelez H, et al. NEJM. 2021;385:2431–40.

Figure 1. Frequency of patients per individual GPPGA pustulation subscore over time after treatment of flare



*Baseline pustulation scores prior to the administration of 900 mg IV spesolimab.
†Patient withdrew from the study on Day 8.
‡Patients with up to two doses of 900 mg IV spesolimab; 22 patients received a single dose, and 14 patients received two doses.
GPPGA, Generalised Pustular Psoriasis Physician Global Assessment; IV, intravenous.