Imsidolimab, an IL-36 Receptor Antagonist, was Effective and Well-Tolerated for Treatment, Maintenance of Response, and Prevention of Flares in Patients with Generalized Pustular Psoriasis

Results from the Phase 3 Trials, GEMINI-1 and GEMINI-2

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Background & Introduction

Generalized pustular psoriasis

- A systemic, inflammatory disease that can be severe, debilitating, and life threatening[1]
- Characterized by recurrent flares of non-infectious pustular and erythematous skin lesions
- Pathogenesis is attributed to excessive activity of the IL-36 pathway[2]

Imsidolimab

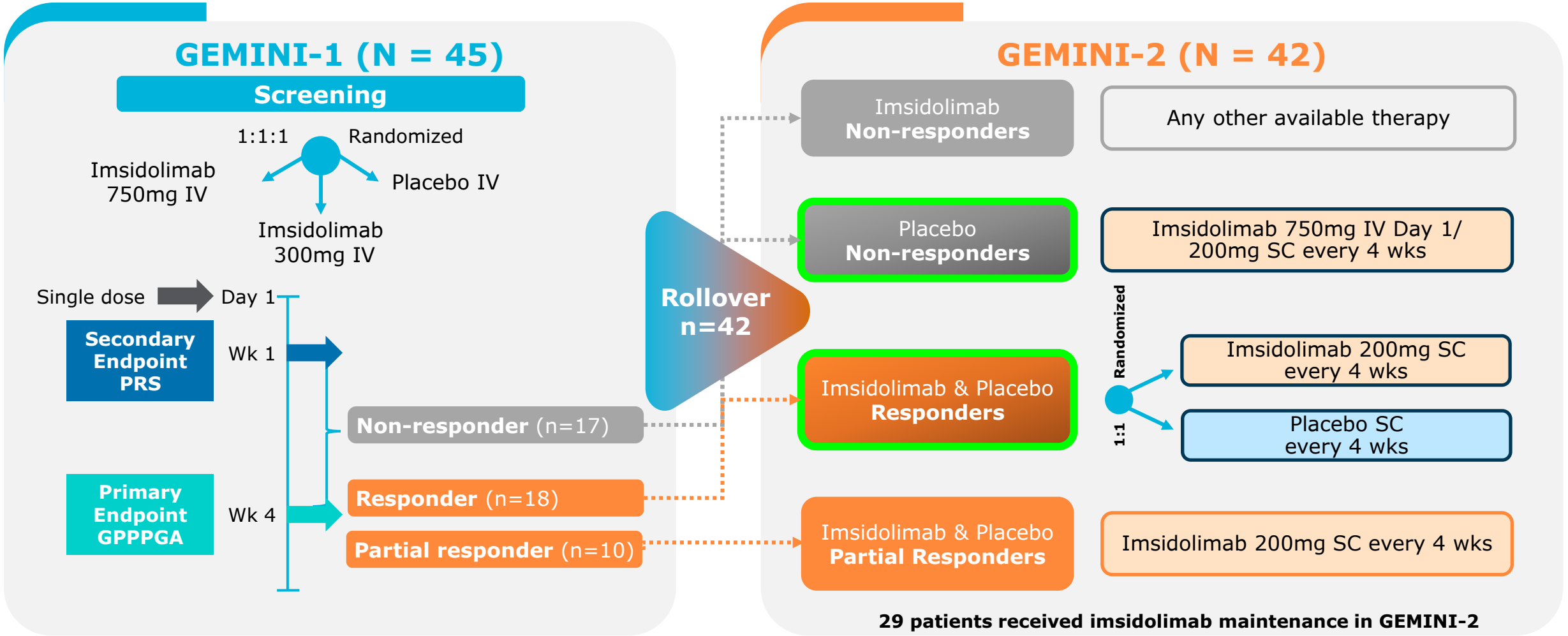
- An investigational IgG4 antibody to the IL-36 receptor that antagonizes IL-36 signaling
- The Phase 2 GALLOP[3] trial assessed imsidolimab in moderate-severe GPP flares and demonstrated:
  - Rapid and sustained resolution of symptoms and pustular eruptions
  - An acceptable safety profile and was generally well tolerated
  - Supporting evidence to advance to Phase 3 studies

Objectives

- Report the results of the completed Phase 3 trials:
  - **GEMINI-1**: randomized double-blind, placebo-controlled trial to evaluate safety and efficacy of imsidolimab IV for treatment of GPP flares
  - **GEMINI-2**: long-term extension trial of GEMINI-1 to evaluate safety and efficacy of imsidolimab SC for maintenance therapy to prevent GPP flares

1. Gooderham MJ, et al. *Expert Rev Clin Immunol* 2019;15:9017-19. 2. Marrakchi S, et al. *N Engl J Med* 2011;365:620-28. 3. Warren RB, et al. *Br J Dermatol* 2023;189:161-69.

GEMINI-1 and GEMINI-2 Study Designs



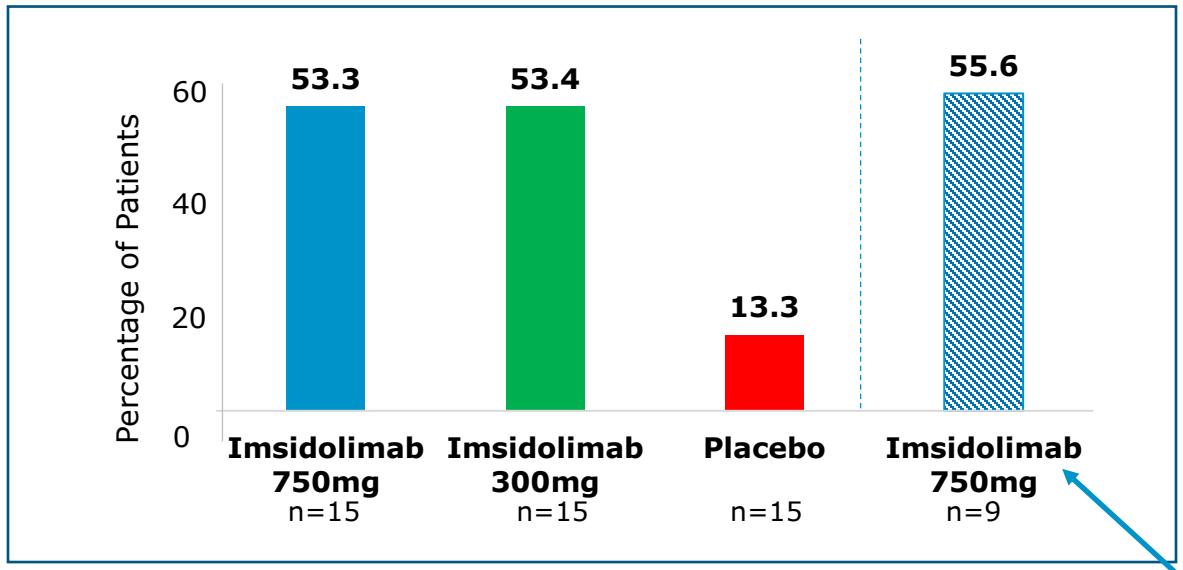
GPPPGA, Generalized Pustular Psoriasis Physician Global Assessment; PRS, Pustulation Rating Scale

Responder: Completed Week 4 of GEMINI-1 with GPPPGA score of 0 (clear) or 1 (almost clear) collectively across all GPP disease attributes (pustulation, erythema, scaling)
Partial responder: Completed Week 4 of GEMINI-1 but did not have GPPPGA score of 0 or 1
Non-responder: No improvement or worsening

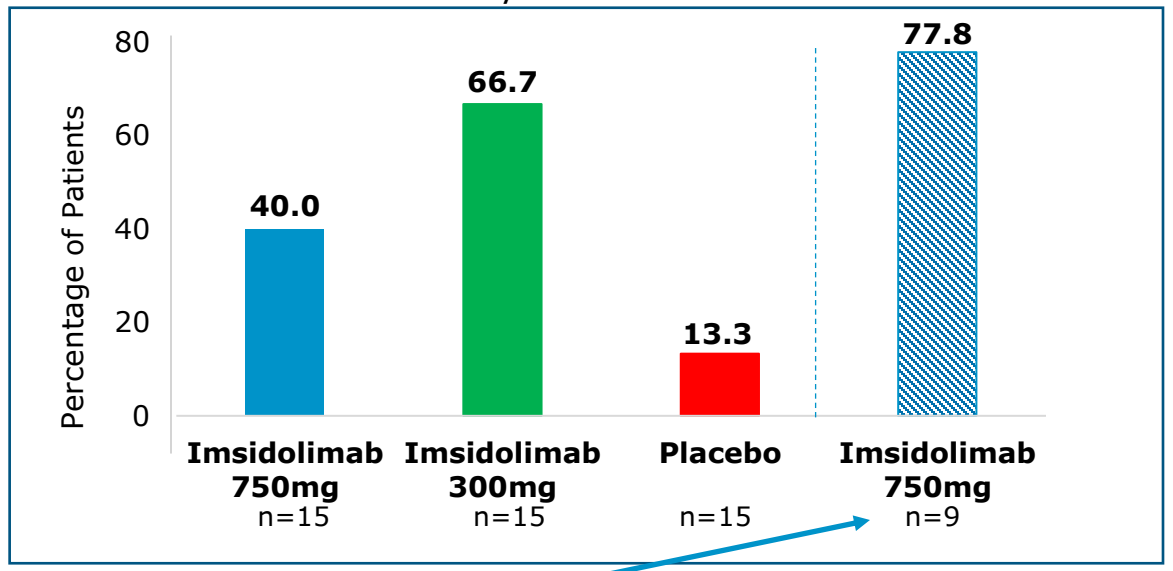
Topline data will be presented

GEMINI-1: Both Doses of Imsidolimab Showed Clinically Meaningful Improvement in GPP Flare on Primary & Secondary Endpoints

Primary Endpoint
GPPPGA 0/1 at Week 4



Key Secondary Endpoint
PRS 0/1 at Week 1



- Single doses of imsidolimab were highly effective at inducing GPPPGA response vs. placebo

Observational data from placebo non-responders in GEMINI-1 who crossed over to GEMINI-2 rescued with imsidolimab 750mg IV showed similar results to GEMINI-1

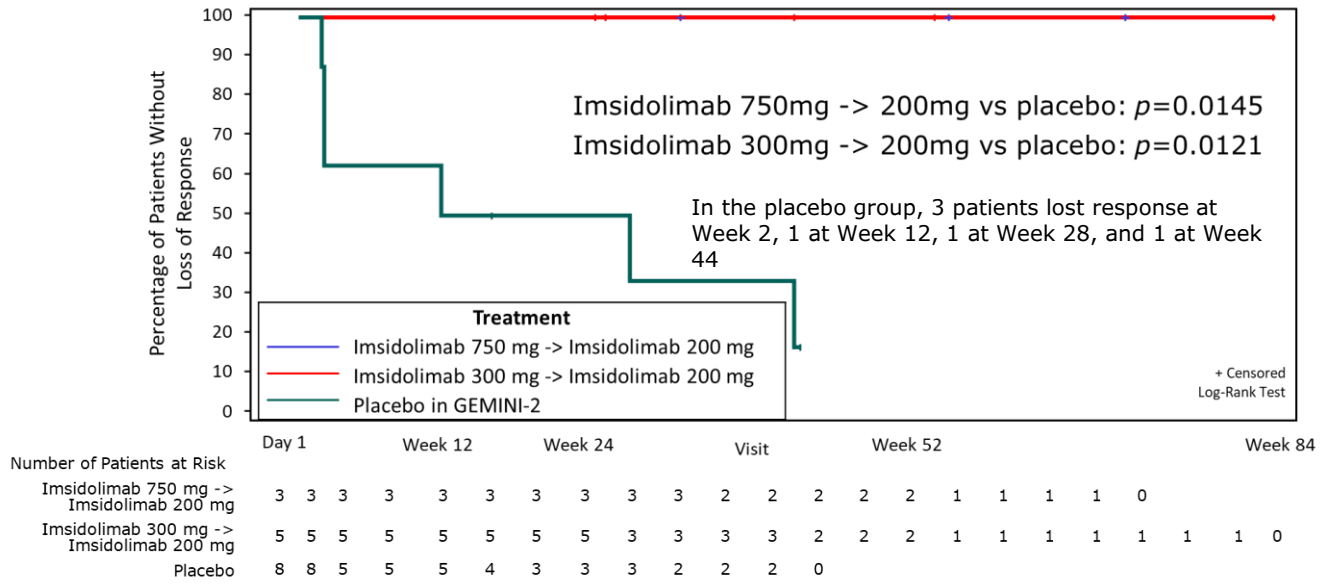
- Single doses of imsidolimab had a rapid onset of effect within days to 1 week vs. placebo

Safety and Tolerability

- Treatment-emergent adverse events (TEAE) were similar across treatment groups
- No SAEs or severe AEs in imsidolimab-treated patients
- No cases of Drug Reaction with Eosinophilia and Systemic Symptoms (DRESS) or Guillain-Barre Syndrome (GBS)
- Low incidence and no elevation of infections vs. placebo
- No infusion reactions reported
- Of the 30 patients treated with imsidolimab, 1 treated with 750 mg (3%) had detectable non-neutralizing anti-drug antibodies (ADA)

GEMINI-2: Maintenance Dosing With SC Imsidolimab 200mg Maintained GPPPGA 0/1 Response, Prevented Flares, and Was Well Tolerated

Time to Loss of GPPPGA 0/1 Response in GEMINI-2



- Imsidolimab 200mg SC every 4 weeks significantly maintained GPPPGA response regardless of the IV dose in GEMINI-1
- Imsidolimab (n=8): 100% maintained a GPPPGA score of 0/1 and 0 flared
- Placebo (n=8): 25% maintained a GPPPGA score of 0/1 and 62.5% flared (GPPPGA ≥3)

In the imsidolimab 200mg SC group, 5 patients received imsidolimab 300mg IV and 3 received 750mg IV in GEMINI-1. In the placebo group, 3 patients received imsidolimab 300mg IV, 4 received 750mg IV, and 1 received placebo in GEMINI-1

Safety and Tolerability

- TEAEs were similar in imsidolimab and placebo groups
- No SAEs led to study treatment discontinuation or withdrawal
- Similar to GEMINI-1: No DRESS or GBS, low incidence and no elevation of infections vs placebo, no infusion reaction, and low ADA

Summary & Conclusions

- Rapid and clinically meaningful improvement of GPP was obtained with single IV doses of imsidolimab 300mg and 750mg
- Regardless of the single IV dose received in GEMINI-1 (300mg or 750mg), maintenance dosing with every 4-week 200mg SC imsidolimab maintained clear to almost clear status of GPP and prevented flares during at least 24 weeks of follow-up
- Across the trials, imsidolimab administered IV or SC was well tolerated
  - Low incidence and no elevation of infections vs placebo
  - No infusion reactions were reported
- Overall, anti-drug antibodies (ADA) were non-neutralizing and detection was uncommon
- Imsidolimab represents a promising therapeutic option for patients with GPP

Thank you!

Anaptys is grateful to all investigators and their staff, and to the patients and their caregivers for participation in these studies