Updated Results from RESOLVE; Ongoing Study of EP-104GI (Long-acting Fluticasone Propionate Injection) For Eosinophilic Esophagitis

Nguyen N[1], Helliwell J.[2], Kowalski M. M.[2], Ko H. H.[3], Afif W[4], Holtmann G[5], Bredenoord A. J.[6] Dellon E. S.[7] Dobek C[2], Ravikumar P[2], Peck V[2], Malone A.[2]

1.Royal Adelaide Hospital, Adelaide, Australia 2.Eupraxia Pharmaceuticals Inc. Victoria, Canada 3.G.I. Research Institute, Vancouver, Canada 4.McGill University Health Center, Montreal, Canada 5.Princess Alexandra Hospital, Woolloongabba, Australia 6.Amsterdam UMC, Netherlands 7.UNC School of Medicine, NC, USA

This work was supported by Eupraxia Pharmaceuticals Inc.

BACKGROUND

- Complex local inflammation in eosinophilic esophagitis (EoE) leads to burdensome symptoms such as dysphagia, but treatment options remain limited[1]
- The broad anti-inflammatory action of topical corticosteroids enables them to address EoE's complex pathogenesis[2]
  - Transient and indirect contact of swallowed topical corticosteroids with the mucosa may limit efficacy
- EP-104GI is as a submucosal, long-acting formulation of fluticasone propionate microparticles, engineered to provide controlled, localized drug release at a consistent rate, with the potential to locally address esophageal inflammation[3]

METHODS

- RESOLVE part 1 (NCT05608681) is a Phase 1b, multicenter, open-label, dose-escalation trial

AIM : To evaluate the safety, tolerability and feasibility of EP-104GI injection in adults with EoE

- EP-104GI was injected into the esophageal wall in alternating quadrants during endoscopy in escalating dose levels (number of sites x dose per site)
- Participants are followed for up to 24 (4×1mg to 12×2.5mg) or 52 weeks (12×4mg and subsequent dose levels) (Fig. 1)

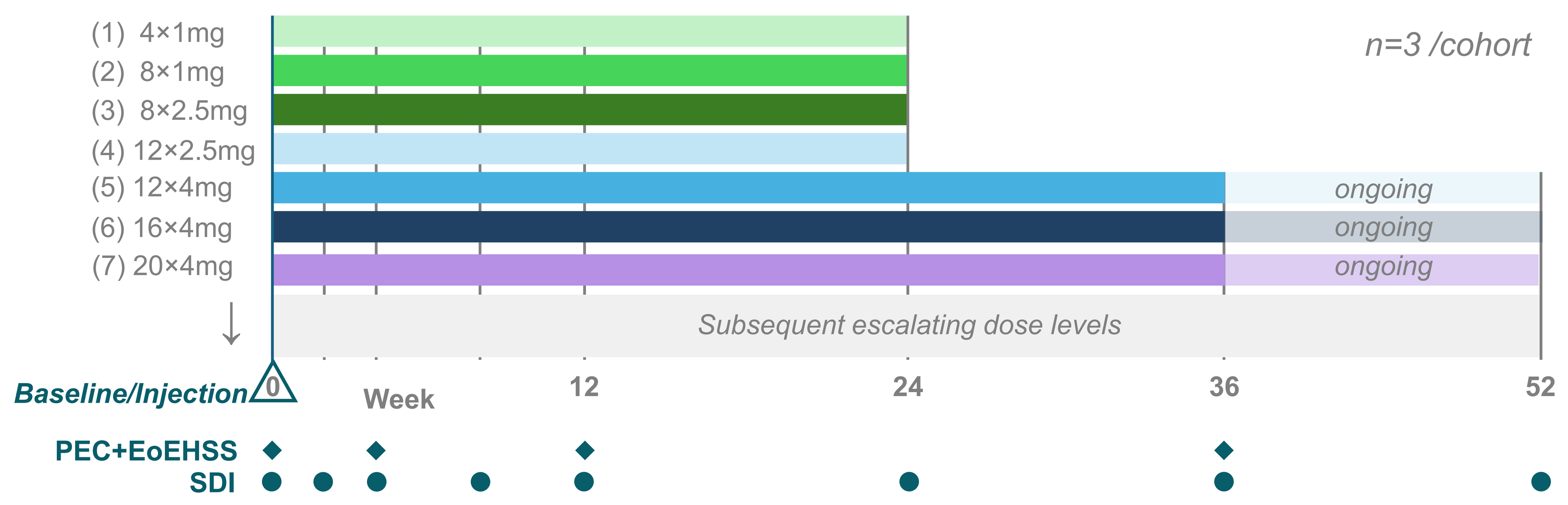

Figure 1. RESOLVE Part 1: Dose Escalation Study Design

RESULTS

Safety, Tolerability And Pharmacokinetics

- No dose limiting toxicity reported to date: no serious treatment-emergent adverse events, events of GI or oral candidiasis, or cases of adrenal suppression were reported TEAEs related to EP-104GI administration for doses reported included esophageal sensitivity, pressure sensation, chest pain, nausea, throat tightness
- Serum concentrations of cortisol and glucose were stable following EP-104GI administration (Fig. 3a/b), as were plasma levels of fluticasone following an initial peak (Fig. 3c)

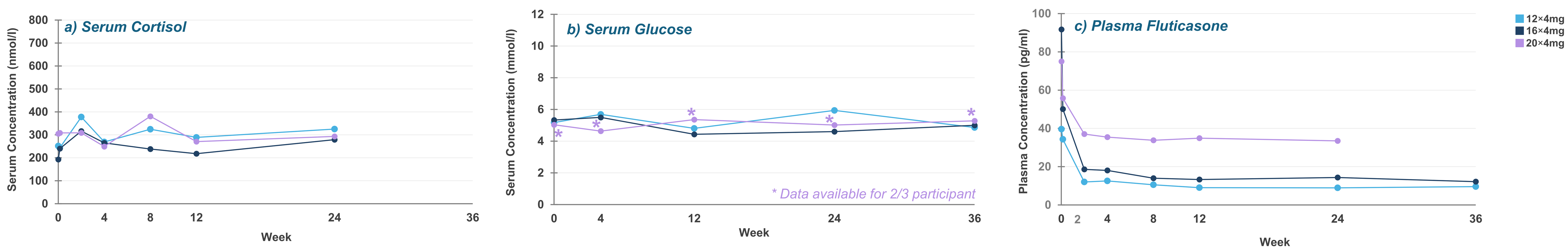

Figure 2. Mean Systemic Cortisol, Glucose and Fluticasone Concentrations Following Administration of EP-104GI

Histological & Symptoms Improvements

- Eosinophil counts and histologic severity show an escalating response for increasing doses, with improvements >45% in EoE Histology Scoring System (EoEHSS) grade and stage at week 36 (Tab. 1)
- Participants reported persistent, long-term improvements in patient-reported dysphagia following single administration of EP-104GI of >45% in Straumann Dysphagia Index (SDI) at week 24 and maintained ≥40% at week 36 (Fig. 3)

Table 1: Histological Responses to EP-104GI

Cohort No.	(5)	(6)	(7)
Sites × Dose	12×4 mg	16×4 mg	20×4 mg
Total Dose	48 mg	64 mg	80 mg
Percentage Change From Baseline In Composite† EoE Histology Scoring System (Grade)			
Week 12	-54%	-65%	-11%
Week 36	-45%	-40%	-51%
Percentage Change From Baseline In Composite† EoE Histology Scoring System (Stage)			
Week 12	-54%	-66%	-14%*
Week 36	-56%	-34%	-72%*
Percentage of biopsy sites with Peak Eosinophil Count ≤6 eosinophil/hpf			
Week 12	38%	67%	20%*
Week 36	52%	26%	70%*
Percentage of biopsy sites with Peak Eosinophil Count <15 eosinophil/hpf			
Week 12	48%	81%	27%*
Week 36	60%	34%	70%*
Percentage Change From Baseline In Peak Eosinophil Count			
Week 12	-32%	-79%	-33%*
Week 36	-45%	-6%	-41%*

† Calculated by summing the individual available items and dividing by the maximum score for evaluated items (range, 0-1)
* Data available for 1/3 participants

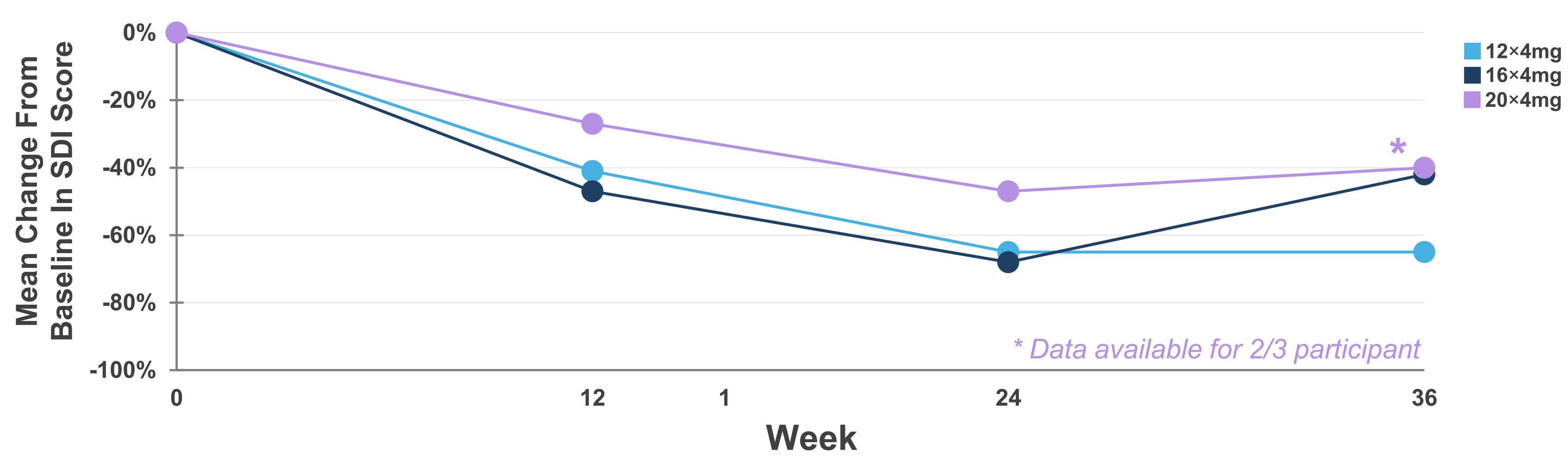

Figure 3. Straumann Dysphagia Index (SDI) Following EP-104GI Administration

CONCLUSIONS

- EP-104GI administration has been feasible, safe and well tolerated to date, with no gastrointestinal candidiasis, signs of adrenal suppression, or other dose-limiting toxicity reported
- Overall, escalating histological improvements and long-term improvements in dysphagia support the investigation of escalating dose levels over a 52-week post-dose period

REFERENCES

1. Dellon et al. (2025) AJG 120(1):31-59. 2. Schoepfer et al. (2024) Inflamm Intest Dis. 9(1):199–209 3. Hasnoot et al. (2022) Am J Gastroenterol 117(9):1412-1418. 4. Malone et al. (2025) Gastroenterology, 169:1 S-402