**Background**

Pathologic accumulation and over-activation of eosinophils and mast cells are implicated in multiple chronic inflammatory diseases in the gastrointestinal (GI) tract, including eosinophilic esophagitis (EoE), gastritis (EG), duodinitis (EoD), and colitis—collectively termed eosinophilic gastrointestinal diseases (EGIDs)1–7.

- Patients with EGIDs have decreased quality of life due to chronic debilitating symptoms and often nonspecific symptoms such as dysphagia, abdominal pain, bloating, nausea, vomiting, and diarrhea.

**Methods**

**Patients**
- EG and EoD are thought to affect 45,000–50,000 patients in the US, although this number might be underestimated; there is evidence that EG and EoD are as common as inflammatory bowel diseases (IBD)1,2.
- Current treatment options, such as diet restriction and corticosteroids, have well tolerated effects and are inappropriate for chronic use.
- There is an unmet need for novel therapies.

**Enrollment**
- AK002 (lirentelimab), an investigational medicine, is a humanized, non-fucosylated IgG1 monoclonal antibody against Siglec-8*.
- AK002 (lirentelimab) proposed mechanism of action

**Study Design**
- ENIGMA was a phase 2, multi-center, randomized, double-blind, placebo-controlled study in 65 patients with EG/EoD that included patients with: Activating inflammation in tissues
- Response was similar across patients with EG and/or EoD.
- Additional studies of lirentelimab are ongoing:
  - Phase 3 randomized trial in patients with EoE (NCT04322708)
  - Phase 2/3 randomized trial in patients with EoD (NCT03432708)

**Results**
- Long-term treatment with lirentelimab resulted in histologic & symptomatic improvements in patients with EG and/or EoD through week 94.
- Symptomatic responses improved with increased duration of treatment.
- Response was similar across patients with EG and/or EoD.
- Lirentelimab was generally well tolerated.
- Most common adverse event was mild to moderate infusion-related reaction; mostly occurred on first infusion; rarely occurring on subsequent infusions.
- No drug-related serious adverse events in the OLE as of 7/7/2021.