Submucosal Injection of the RNA Oligonucleotide GUT-1 in Active Ulcerative Colitis Patients: A Randomized, Double-Blind, Placebo-Controlled Phase 2a Induction Trial

Phase IIa, randomized, double-blind, placebo-controlled trial. Endoscopically active UC patients, refractory to convencional therapy were randomized to a single dosing of 25 nM GUT-1, 250 nM GUT-1, or placebo by endoscopic submucosal injections.

Primary endpoint: Improvement of endoscopic lessions at week 2 or 4 using mayo endoscopic score, improvement was considered Mayo 0-1.

Results: N=24

- Endoscopic improvement at w2 or 4 was achieved in 71.4% GUT-1 250nM, 0% in GUT-1 25nM and 28.6% in placebo.
- Clinical remission was 57.1% GUT-1 250, 0% GUT-1 25 and 14.3% placebo.
- Histological improvement was shown by 42.9% GUT-1 250, 0% GUT-125 and 0% placebo.
- GUT-1 application was well tolerated.

Conclusion:
Single dosing by submucosal injection of GUT-1 repressed CHST15 mucosal expression and may represent a novel induction therapy by modulating tissue remodelling in UC

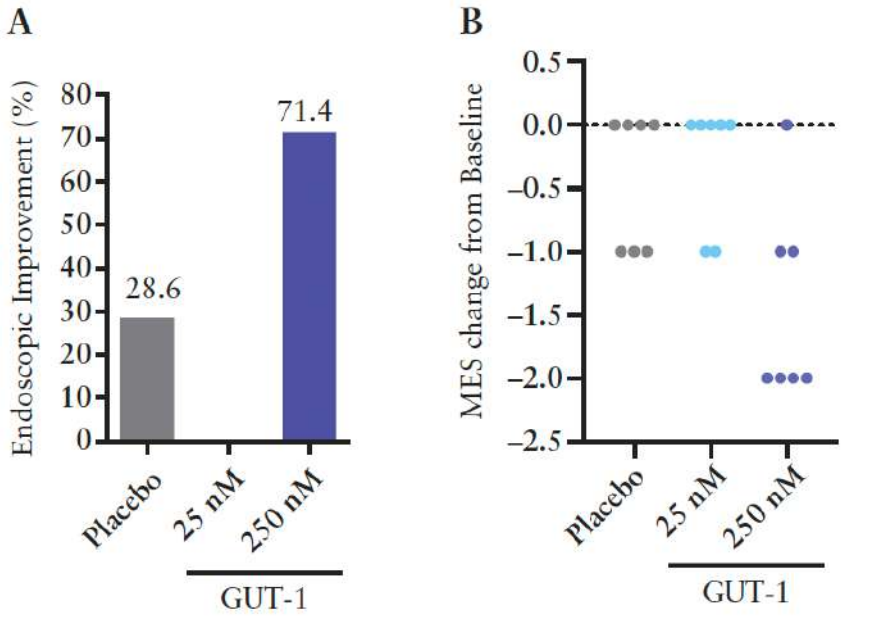

Figure 2. Induction of endoscopic improvement by GUT-1. [A] Rates of endoscopic improvement at week 2 or 4. [B] Changes in the mean Mayo Endoscopic Subscore [MES] at the end of the induction study [weeks 2 or 4] in the GUT1 250 nM [dotted purple], GUT-1 25 nM [dotted light blue], and placebo [dotted grey] groups.

Atreya R et al. J Crohns Colitis. 2024; 18: 406-415