Lyophilised oral faecal microbiota transplantation for ulcerative Colitis (LOTUS): a randomised, double-blind, placebo-controlled trial

Double-blind, randomised, placbeo-controlled trial in 2 Australian centers.

Adult patients with active ulcerative colitis after 2 weeks of amoxicillin, metronidazol and doxycycline were randomised to lyophilised FMT or placebo capsules for 8 weeks. At week 8 FMT responders were randomly assigned to either continue or withdraw FMT for a further 48 weeks.

<u>Primary endpoints:</u> Corticosteroid-free remission with endocopic remission or response (total Mayo score≤2, all subscores≤1) week 8

Results: N=35 (recruitment terminated earlier due to COVID)

- At week 8 CS-free remission+endoscopic remission/response occurred in 53%FMT vs 15% placebo, p=0.027.
- Adverse events within the 8 weeks 67% FMT vs 85% placebo and were generally mild.
- Of the FMT patients who achieved clinical or endoscopic response n=4 were randomized to open-label FMT or withdraw therapy n=6. All patients who continued FMT were in clinical, endoscopic and histologic remission at week 56100% vs 0% of the FMT withdrawn.

Conclusion:

Antibiotics followed by orally administered FMT was associated with induction of remission in active UC. Continuing FMT was well tolerated and appeared to demonstrate clinical, endoscopic and histologic efficacy.



