Introduction The Endobarrier is an endoluminal duodenal-jejunal bypass liner (DJBL) developed by GI Dynamics for the treatment of obese patients with T2DM. It consists of a single use endoscopic implant designed to mimic the effects of gastric bypass but without the risks of undergoing surgery and the possible long-term complications associated with bariatric surgery. We report results of its safety profile in patients receiving the device for one-year duration of therapy as part of the Endobarrier randomised controlled trial (RCT).

Methods The multicentre Endobarrier RCT (NCT02459561) was conducted across two sites in the UK and recruited 170 patients with Type 2 Diabetes and BMI 30–50 kg/m². Participants were randomised to receive the DJBL (n=85) for one year or conventional medical therapy, diet and exercise (n=85).

Results A total of 75/85 participants received the Endobarrier implant. There were 19 (25%) early explants (table 1) before the one year period for which the commonest indication for removal was abdominal pain and device migration. There were two GI bleeds and one liver abscess which was managed with antibiotics and drainage with no permanent sequelae.

Conclusions The majority of patients received one year of Endobarrier therapy. The early explant rate of 25% is in keeping with previously conducted clinical trials on the Endobarrier. There was one case of liver abscess in the 75 successful implants performed - a complication rate of 1.3% which is similar to post market surveillance data (1%) from GI Dynamics. Liver abscesses still remain a rare but significant complication of Endobarrier therapy.