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IMPACT OF BILIOPANCREATIC LIMB LENGTH ON WEIGHT LOSS AND METABOLIC OUTCOMES AFTER OAGB:

A SYSTEMATIC REVIEW AND META- ANALYSIS OF 51 STUDIES & 8,394 PATIENTS

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the**Alfred**

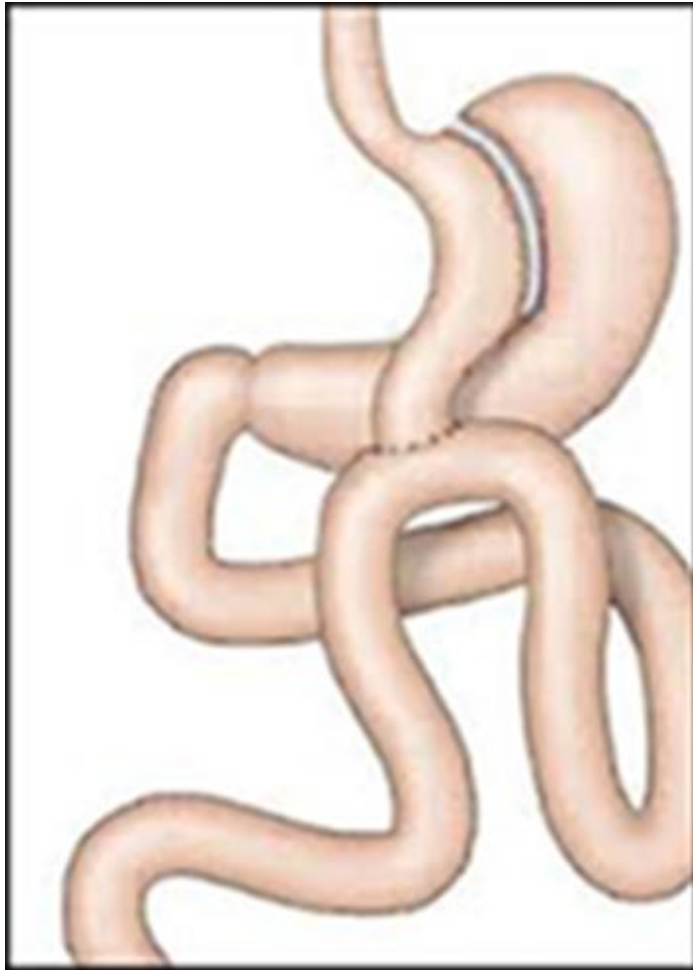
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HOW MUCH BOWEL TO BYPASS?



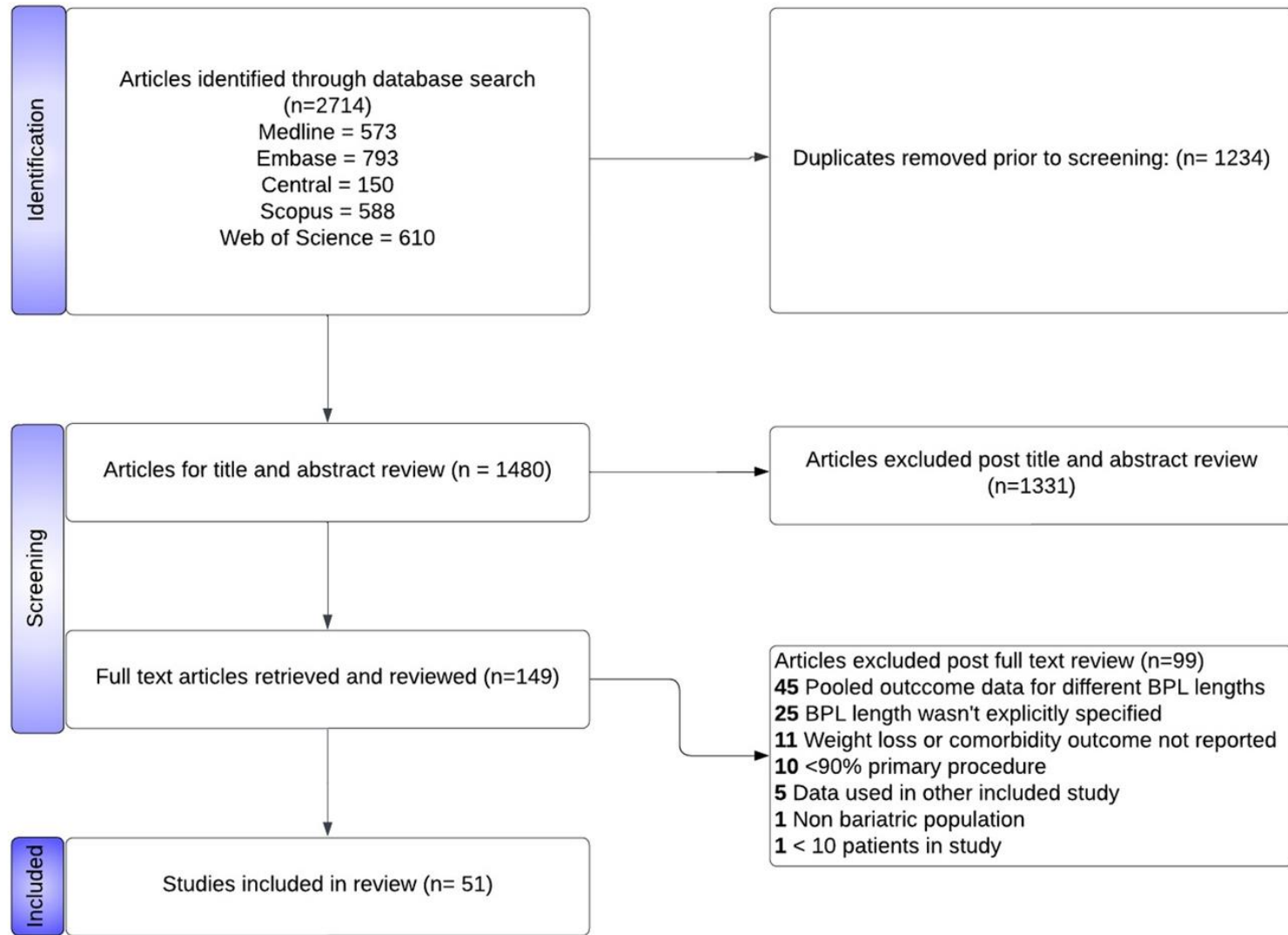
- 3rd most common MBS Procedure Worldwide
- 36,000+ procedures performed in 2023
- *IFSO Consensus Statement 2018*
 - 2/55 statements reached disagreement consensus:
 - OAGB not a malabsorptive procedure
 - The standard length of the BPL should be 150cm
- 150-250 cm in surgical practice

THREE META-ANALYSES: NO CONSENSUS

Study	Studies Pooled	Key Finding
Tasdighi, et al. <i>Obesity surgery</i> vol. 32,3 (2022): 892-903. doi:10.1007/s11695-021-05848-2	10 studies in Meta Analysis	<200cm vs ≥200cm No difference in weight loss
Salman, et al. <i>Obesity surgery</i> vol. 33,6 (2023): 1846-1856. doi:10.1007/s11695-023-06556-9	7 studies in Meta Analysis	200cm vs 150cm: Higher weight loss, more severe nutritional deficiency
Li, et al. <i>Obesity surgery</i> vol. 32,7 (2022): 1-9. doi:10.1007/s11695-022-06048-2	6 studies in Meta Analysis	150-160cm vs 200cm: No difference EWL%, TWL% favours 200cm (1.57% mean difference)

Each study was restricted to studies that directly compared two limb lengths, disregarding the majority of published data available

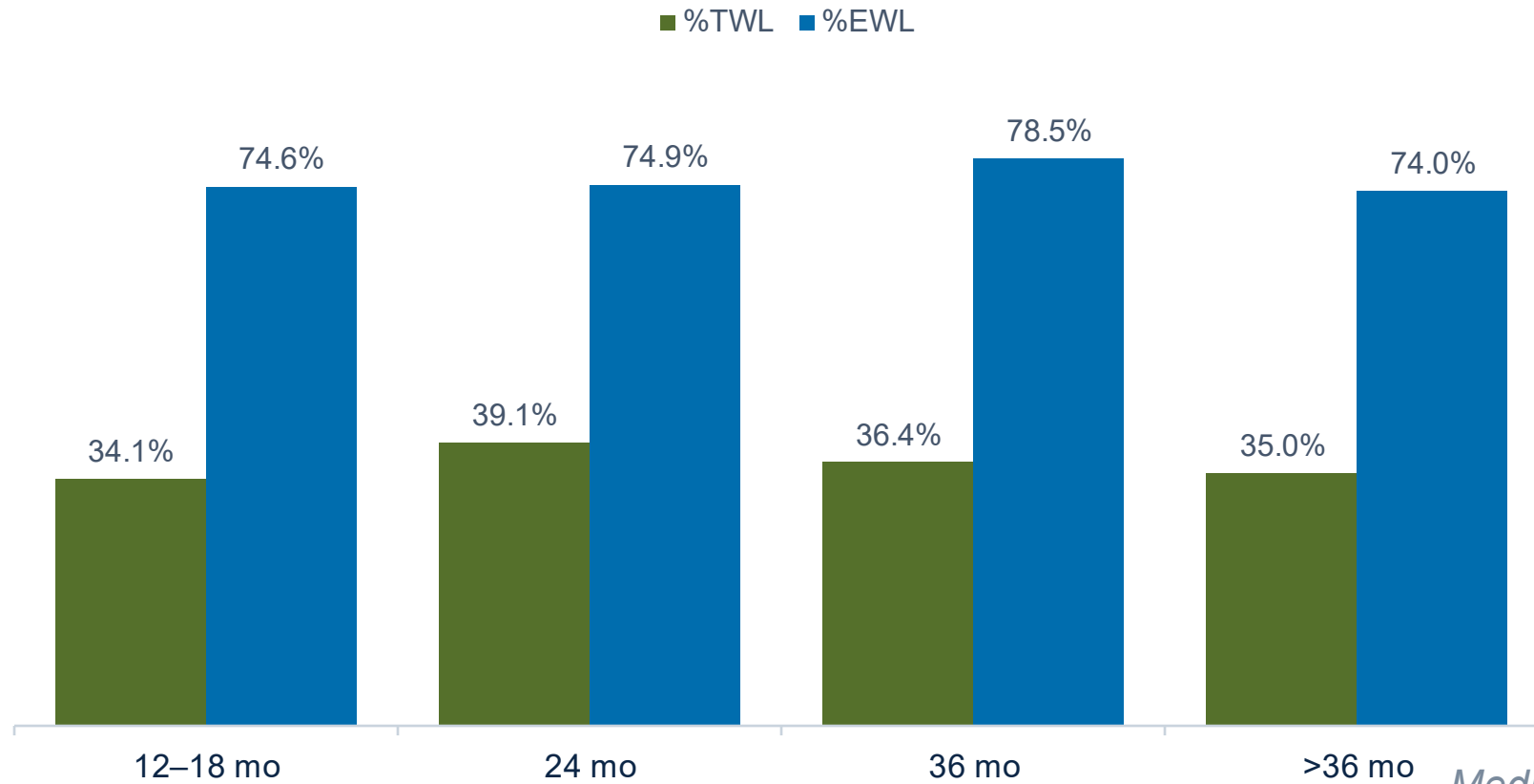
METHODS



- Pool all data that reports limb length and outcomes
- Search: Medline, Embase, CENTRAL, Scopus, Web of Science
- Eligibility:
 - $\geq 90\%$ primary OAGB
- Defined BPL limb length
 - ≥ 12 months follow-up
 - ≥ 10 patients per eligible arm
- Synthesis: Random-effects REML meta-analysis of pooled means, %TWL and %EWL analysed separately

RESULTS

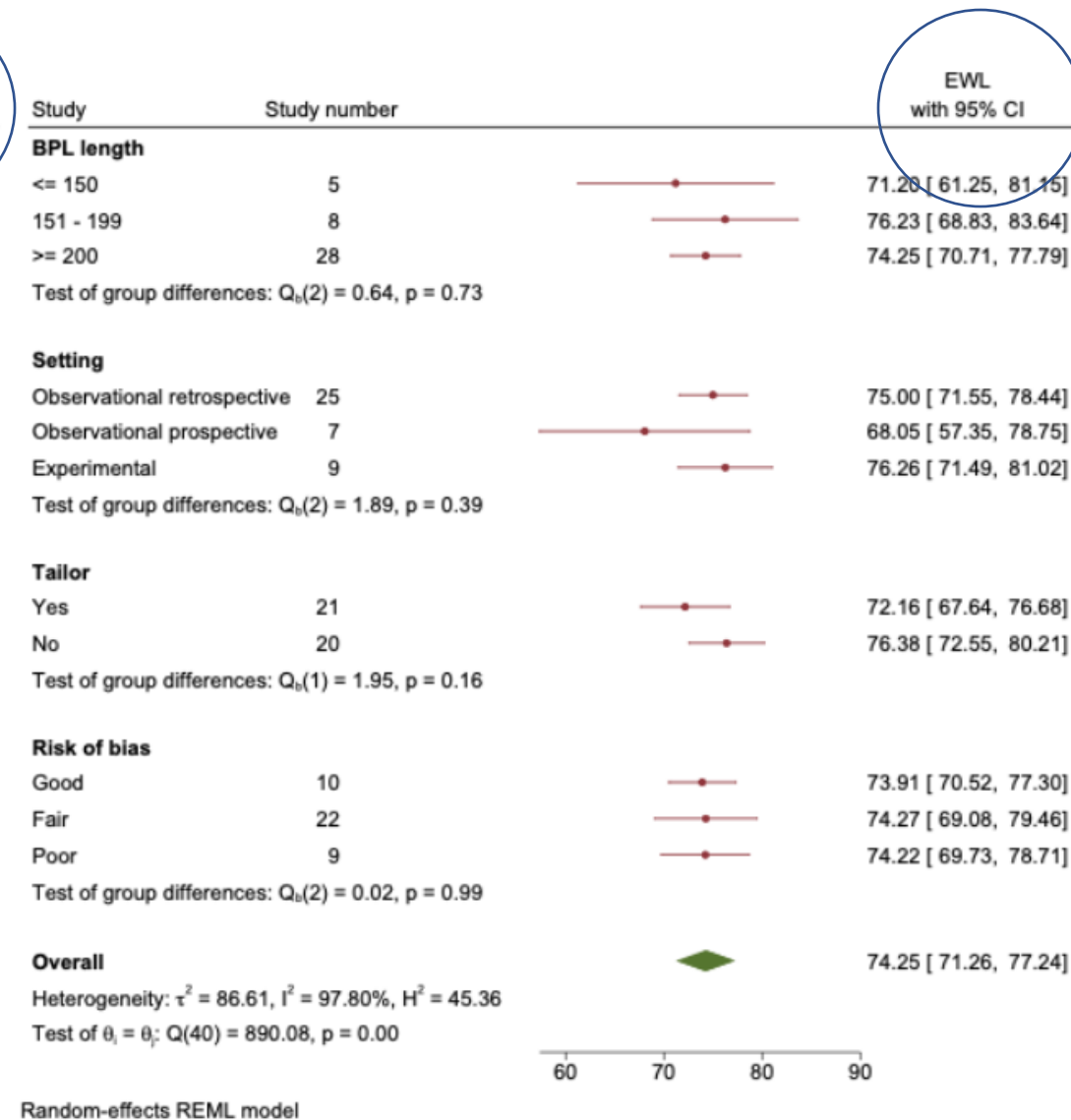
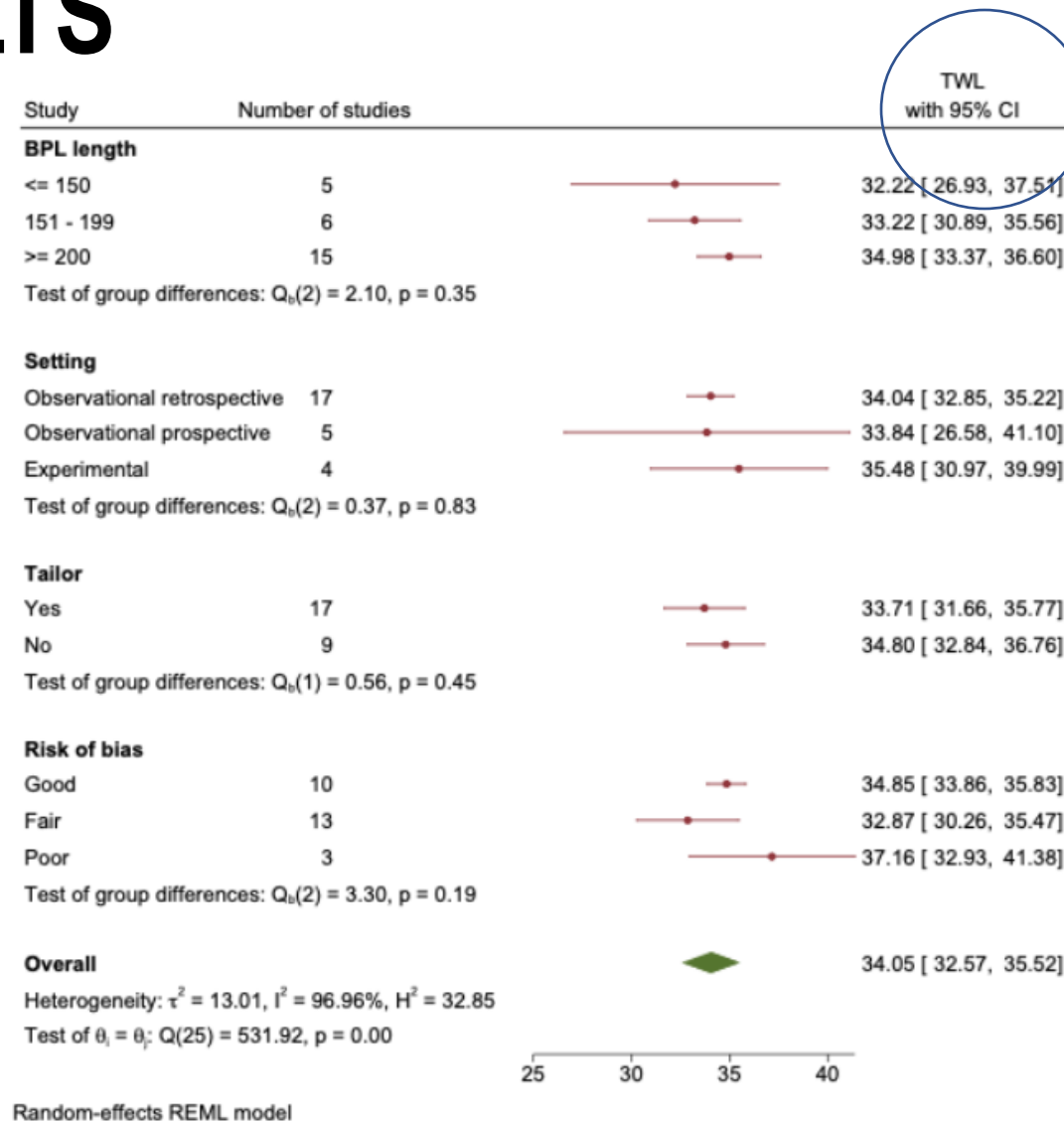
POOLED WEIGHT LOSS



Median follow-up in the >36 month group was 60 months (range 60–120).

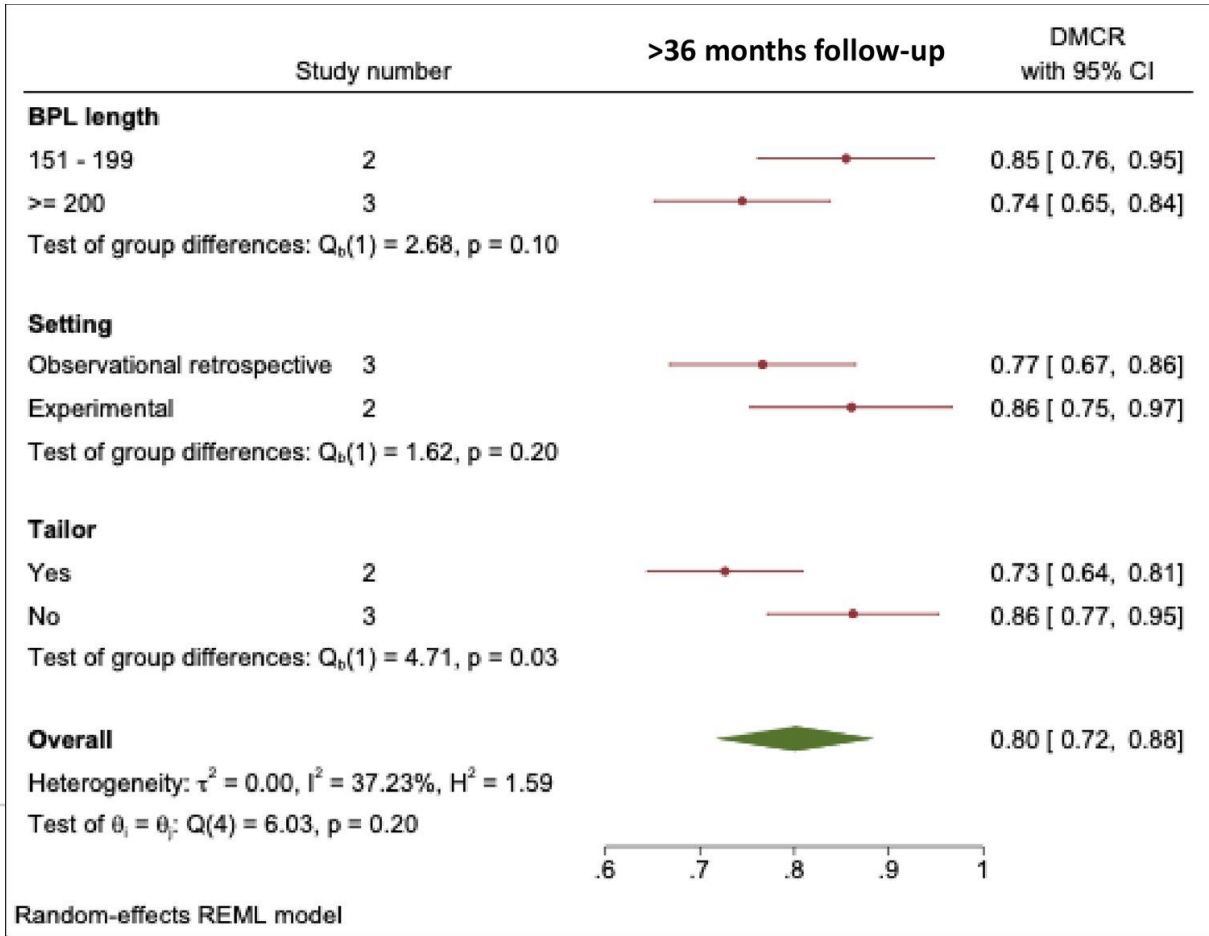
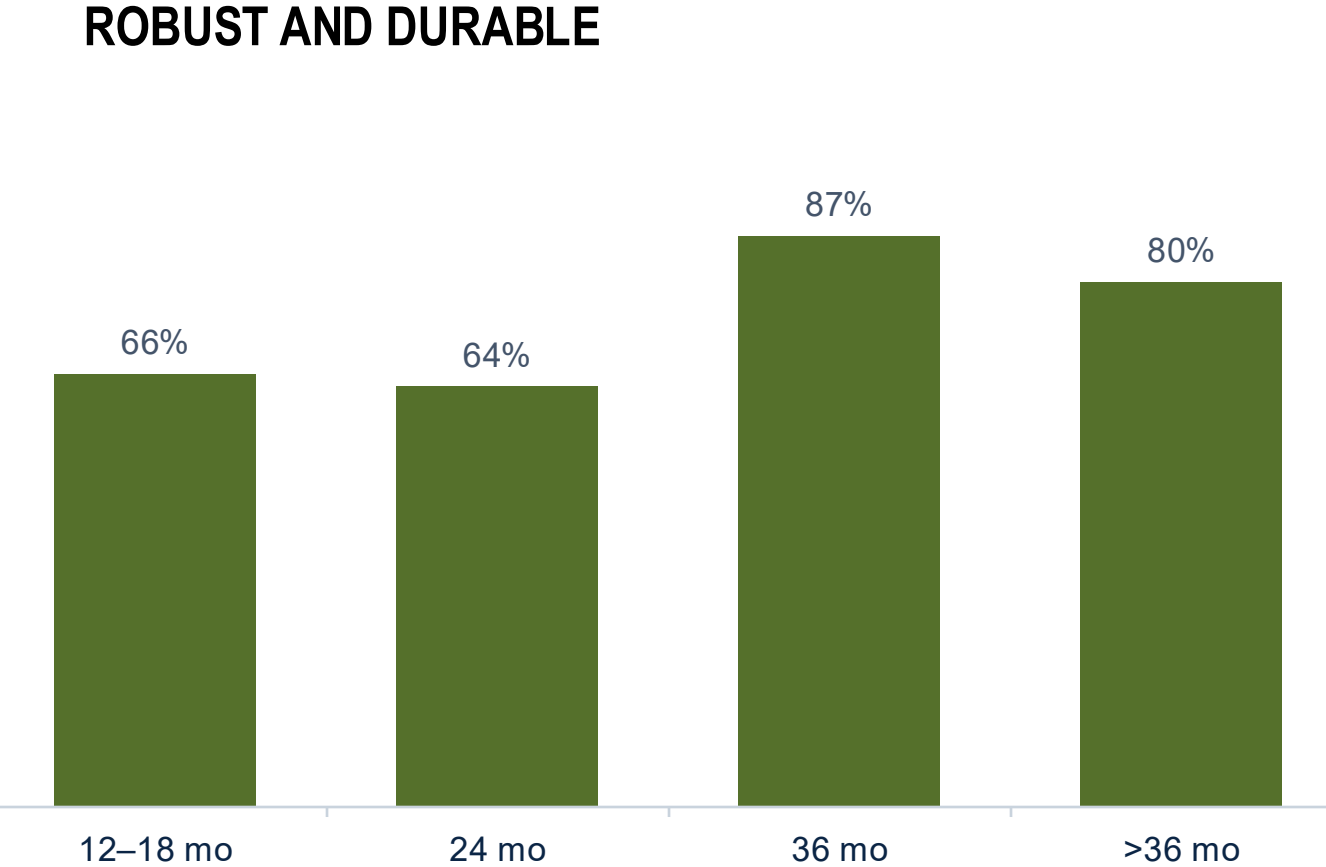
RESULTS

WEIGHT
LOSS NOT
DEPENDENT
ON LIMB
LENGTH



DIABETES REMISSION

ROBUST AND DURABLE

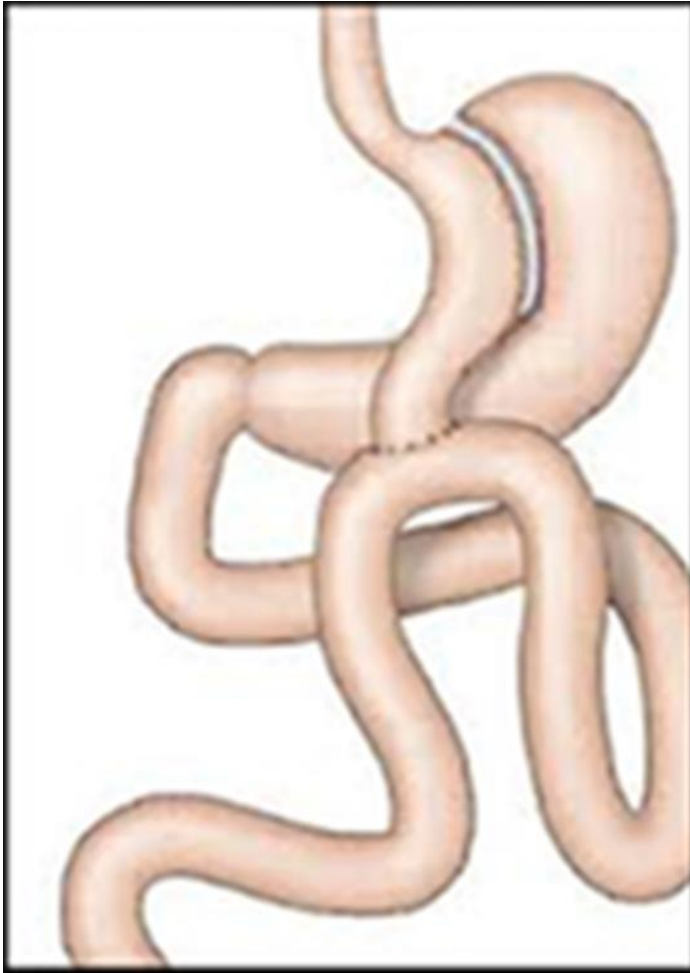


NUTRITIONAL IMPACT



- 14 studies reported new hypoalbuminaemia
- 100 cases
 - *6.8% median reported incidence*
- Albumin is a poor proxy for nutrition
 - *Inflammation*
 - *Hepatic dysfunction*
 - *Low plasma volume*
 - *Protein malnutrition*
- Inadequate data to pool in meta-analysis

CONCLUSION



- OAGB provides
 - *Excellent durable weight loss*
 - *Excellent remission of diabetes*
- No documented benefits of longer BP limb
 - *Don't chase length without measuring costs*
- Future research should include malnutrition
 - *Ideally body composition*

Acknowledgements

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