

ESG and Obesity Pharmacotherapy: A Match Made in Heaven

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Disclosures

Consultant and professional education for
Olympus, Medtronic, & GI Windows

Research with Allurion

Questions

- Would ESG and antiobesity medication be synergistic?
- What drug should be used?
- Should medication be given before or after the procedure? Or at the same time?
- If treatment is not simultaneous, what is the timing?
- Can combination therapy approach surgical results?



Badurdeen D et al. **Endoscopic Sleeve Gastroplasty plus Liraglutide** versus Endoscopic Sleeve Gastroplasty Alone for Weight Loss. *Gastrointestinal Endoscopy*. 2021. doi.org/10.1016/gie.2020.10.016

- Retrospective, 3 outpatient clinics in Brazil who use same technique and followup procedure 11/2017-7/2018. 26 matched pairs, thus 52 total patients
- Liraglutide (GLP-1 agonist daily injection) offered to all patients 5 months after ESG. Patients who opted to take drug were matched 1:1 to patients who declined.
- Results recorded 12 months after ESG (7 months after starting liraglutide)
- ESG+Liraglutide had greater %TBWL (24.72% vs. 20.51)
- ESG+Liraglutide had greater reduction of percent body fat (7.85% vs. 10.54%)

Hoff AC et al. **Endoscopic Sleeve Gastroplasty plus Semaglutide** Versus Endoscopic Sleeve Gastroplasty Alone for Weight Loss: A Prospective, Randomized, Double-Blind, Placebo-Controlled Study. *EC Gastroenterology and Digestive System* 2022. doi.org/10.31080/ecgds.20222.09.00931

- 61 patients from three outpatient clinics in Brazil 6/2019-10/2019. 58 patients completed the study
- Within one month of ESG, patients randomly assigned once-weekly injectable semaglutide or an identical placebo pen.
- Results recorded 12 months after ESG
- ESG+Semaglutide had greater %TBWL (25.21% vs. 18.65%)
- ESG+Semaglutide had greater reduction of percent body fat (12.69% vs. 9.04%)
- ESG+Semaglutide had lower mean HgA1C (4.9 vs. 5.3)

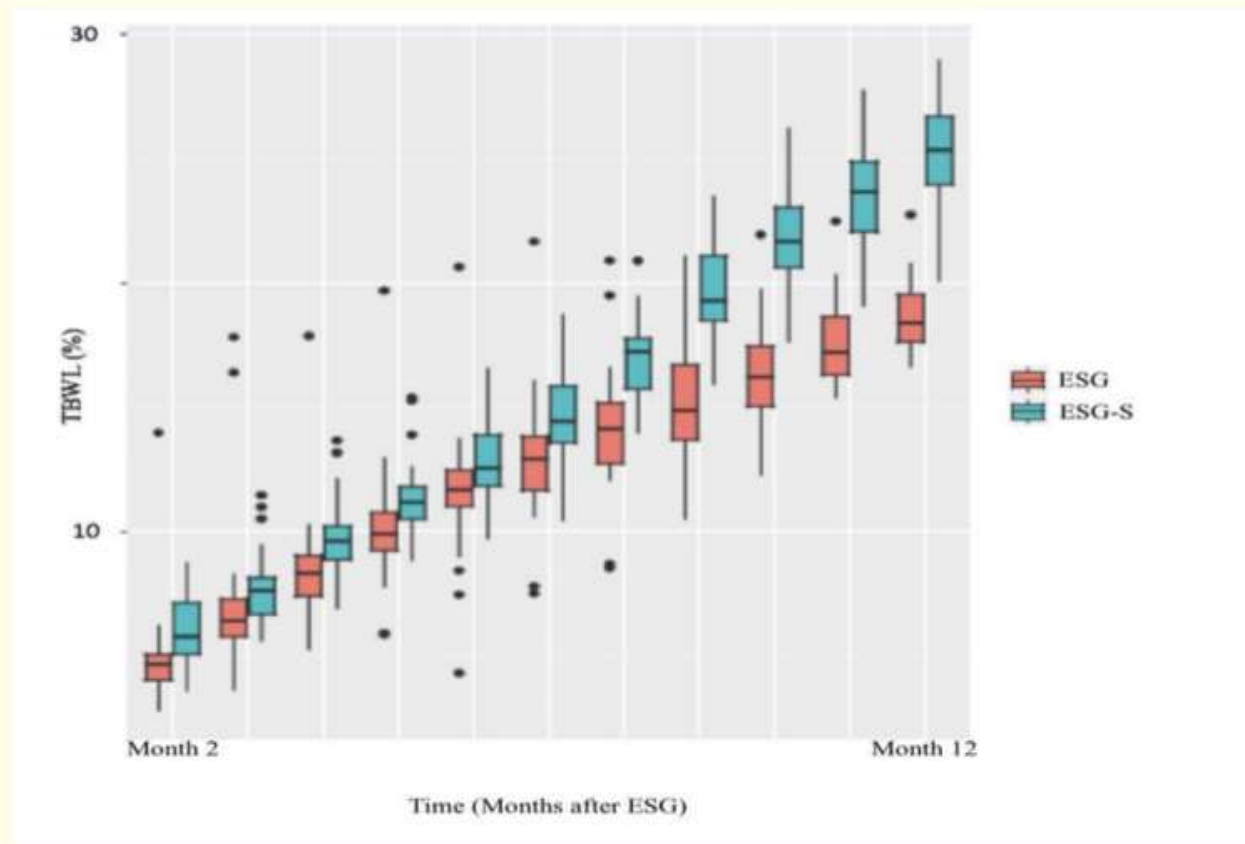
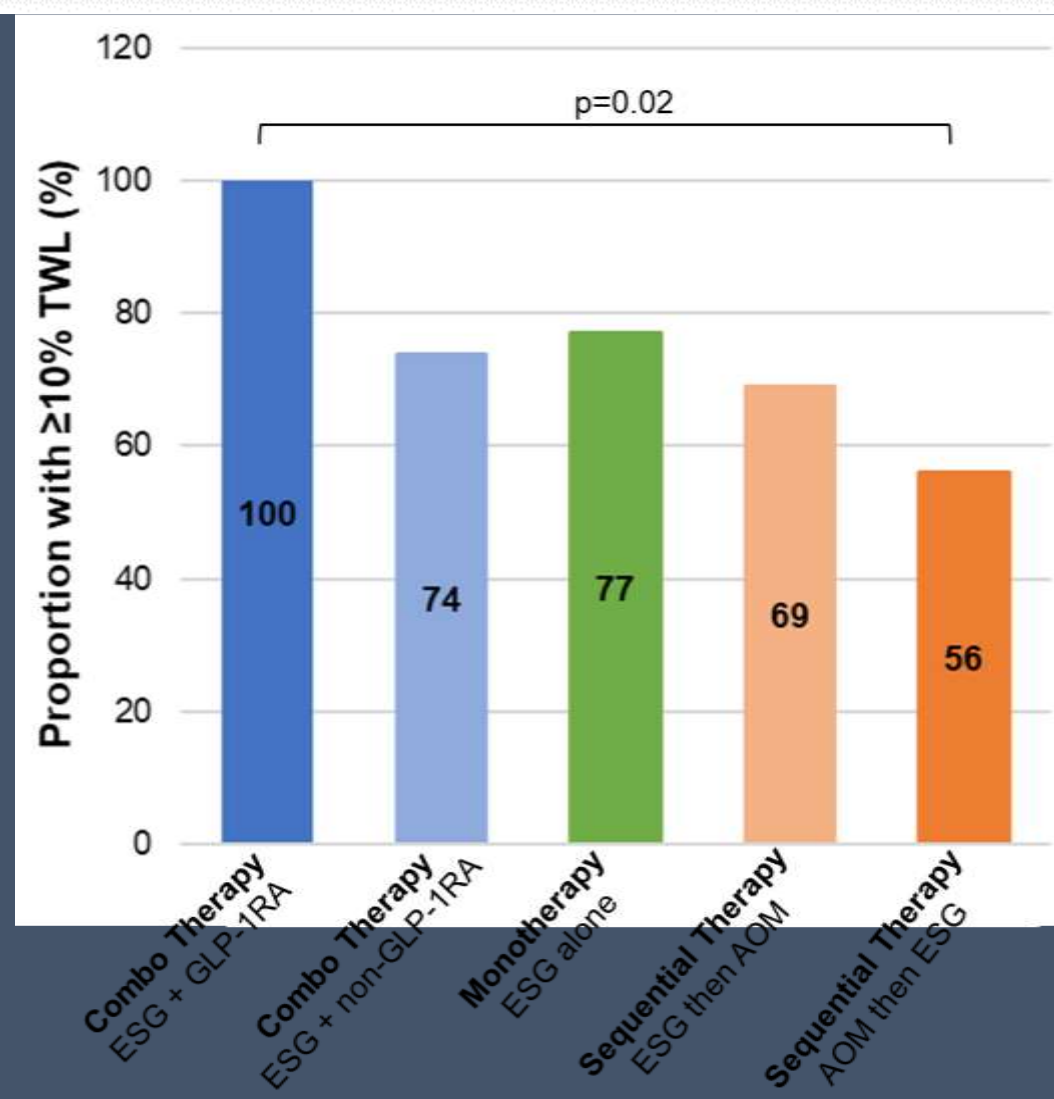
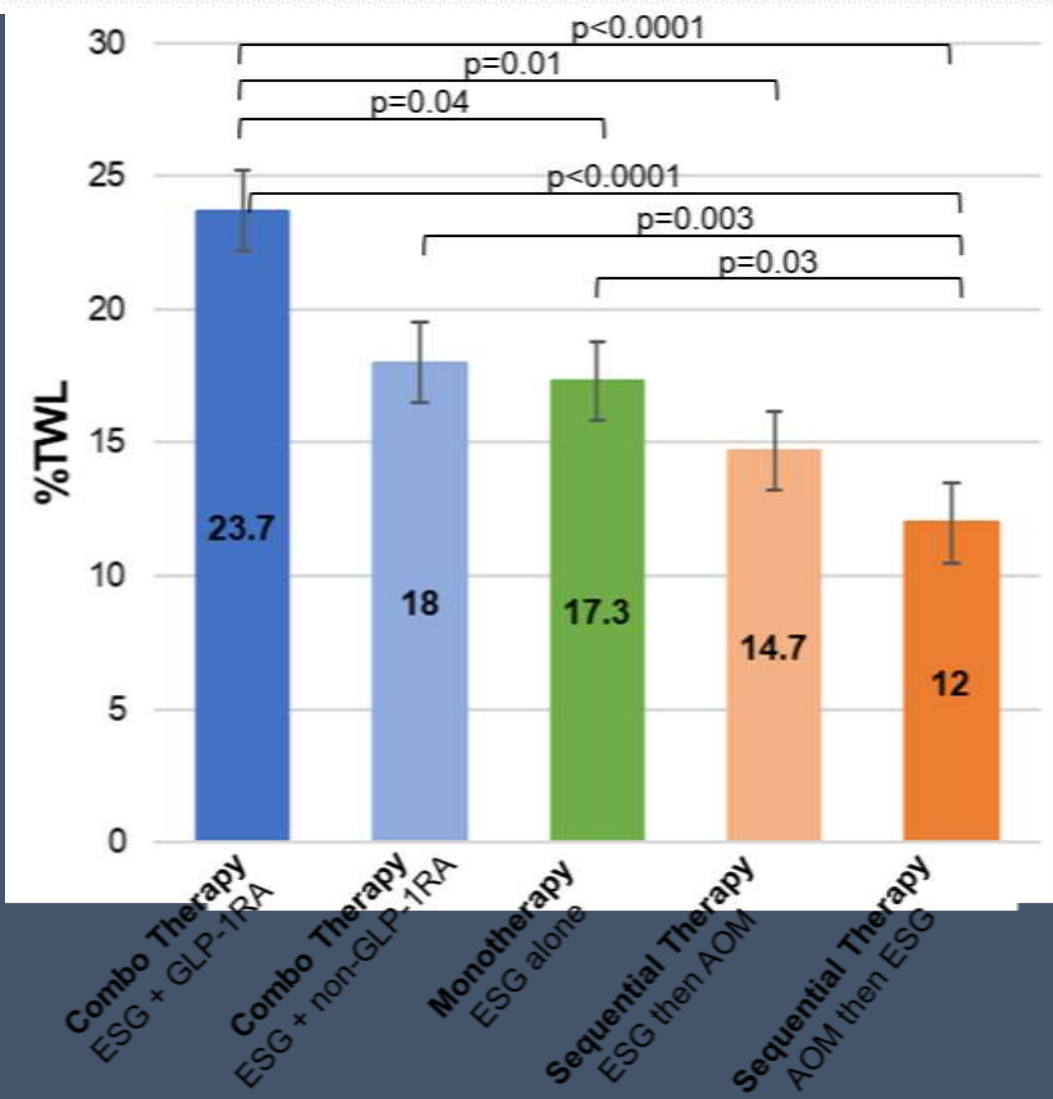


Figure 2: Change in %TBWL after ESG and placebo (ESG) versus semaglutide (ESG-S).

Not yet published, Presented at Digestive Disease Week 2023 by Dr. Pichamol Jirapinyo

- Single center, retrospective, 224 patients
- Roughly one third had ESG alone or “monotherapy”, one third had ESG+AOM within six months of each other or “combination therapy” and one third had ESG+AOM more than six months apart or “sequential therapy” (81% had med first and 19% had ESG first)
- AOMs included phentermine, phentermine/topiramate, orlistat, bupropion/naltrexone ER, liraglutide, or semaglutide. 30% were prescribed a GLP-1 agonist as their anti-obesity medication.
- %total body weight loss was measured at one year

Weight Loss at 12 Months



@DDW2023

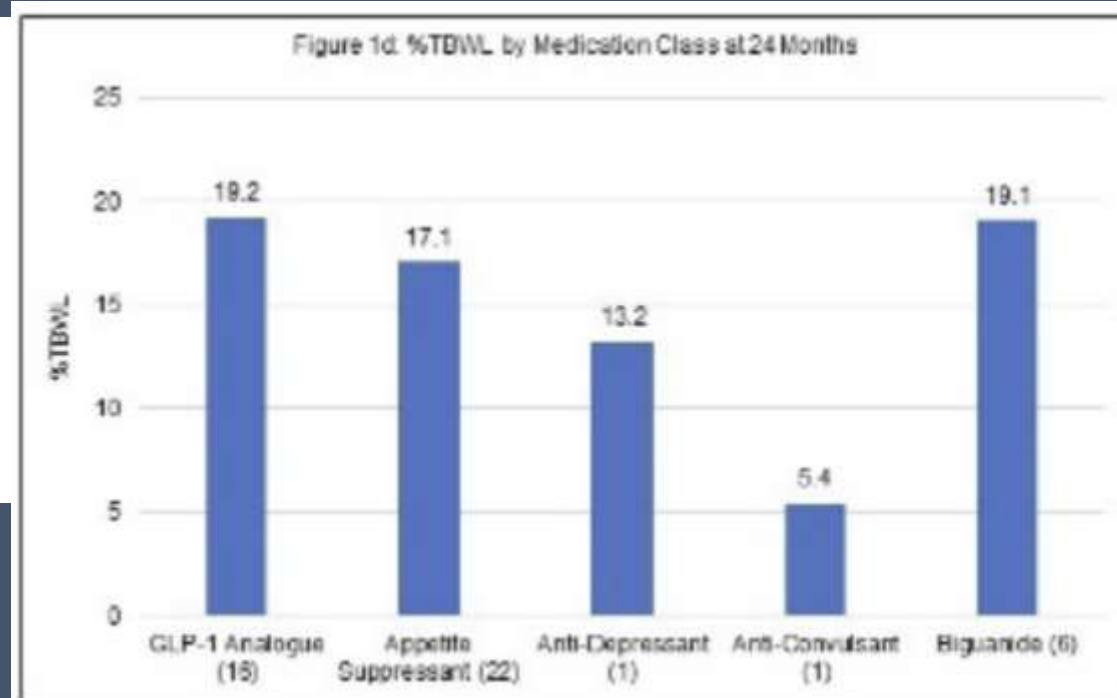
Su1909: WEIGHT LOSS OUTCOMES OF CONCOMITANT ANTI-OBESITY MEDICATION USE WITH ENDOSCOPIC SLEEVE GASTROPLASTY IN CLINICAL US SETTINGS

1909 - Session Number: 7490 - Poster - Sun, May 07. 12:30pm - 1:30pm (Central)

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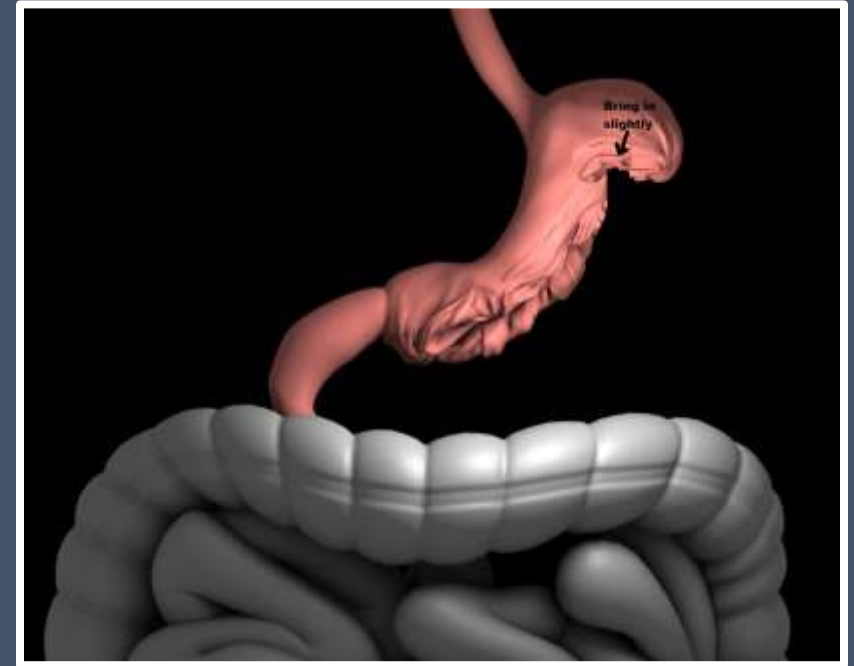
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A total of 1506 patients from 7 US sites (4 gastroenterologists and 3 surgeons)



Endoscopic Sleeve Gastroplasty + Anti-obesity Medication

- Evolving field
- Being done very commonly in practice but few published scientific papers
- Timing (before? after? throughout treatment?) is one issue that needs further study
- GLP-1 agonists seem best so far
- Dosage and duration best practices also not yet known



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