

# 2023 SCSG LGI SYMPOSIUM







# UGI/Motility Abstracts From DDW 2023

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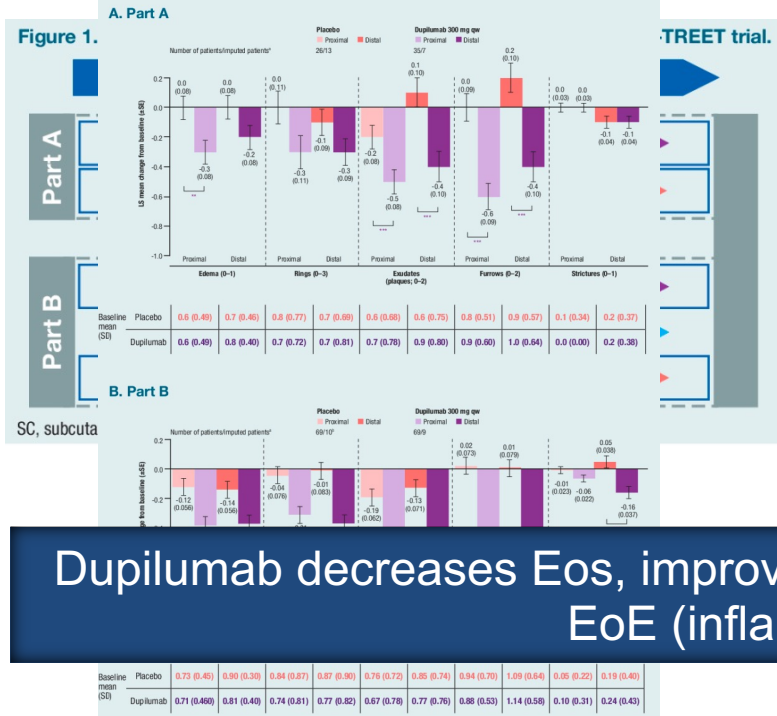
# Disclosures



- Brooks D. Cash, MD has served as a consultant and speaker for Phathom Pharmaceuticals

# Dupilumab Helps With Remodeling in EoE

Figure 2. Change from baseline at Week 24 in the major features of the EREFS in the proximal and distal esophageal regions in patients in A) Part A and B) Part B.



- Post hoc analysis of dupilumab phase 3 trial
- Assessed changes in remodeling and inflammation per EREFS score over 24 weeks
  - Edema (0–1), rings (0–3), exudates (0–2), furrows (0–2), strictures (0–1)
    - Inflammation: edema + exudates + furrows
    - Remodeling: rings + strictures
- Dupilumab improved EREFS inflammation score vs placebo (Part A: -2.4; Part B: -2.9)
- Dupilumab improved EREFS remodeling score vs placebo (Part A: -0.4 NSS; Part B: -0.9)

Dupilumab decreases Eos, improves symptoms, and targets pathophysiology of EoE (inflammation and fibrosis)

# Seasonal Variation of Six Food Elimination Diet

- Food-pollen allergy is associated with typical atopic and GI symptoms due to cross-reactivity of foods in sensitized individuals
- Study evaluated the frequency of + SPT to pollens (grass and birch) and effects of SFED according to SPT status and pollen status at time of assessment
- Assessments occurred at 6 weeks with SFED and each food group re-introduction
- 58 patients; 62% had + SPT



# Seasonal Variation of Six Food Elimination Diet

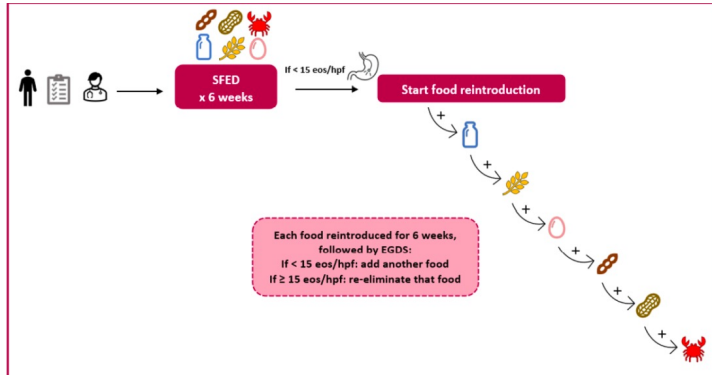
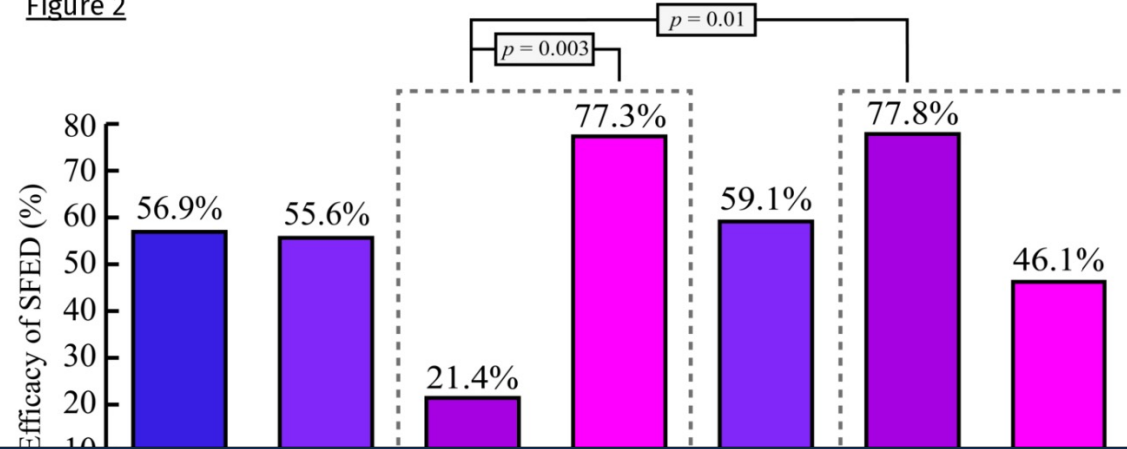


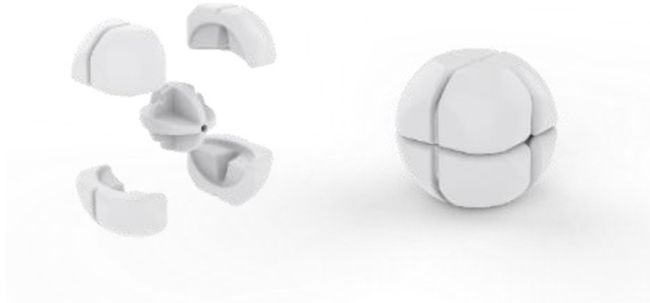
Figure 2



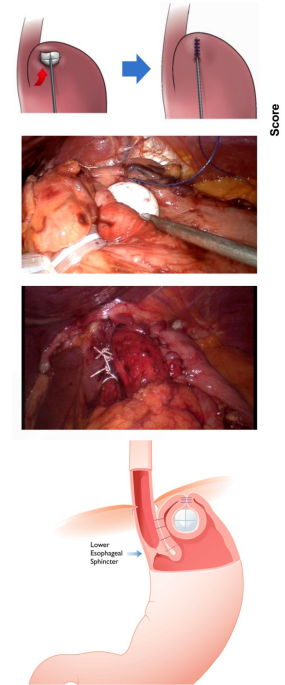
- Aeroallergens appear to be associated with Eo reactivity and persistence in EoE
- Assessment for food-pollen allergy may be helpful in predicting, monitoring, and individualizing response to SFED for EoE

# ARS with RefluxStop in Patients With IEM

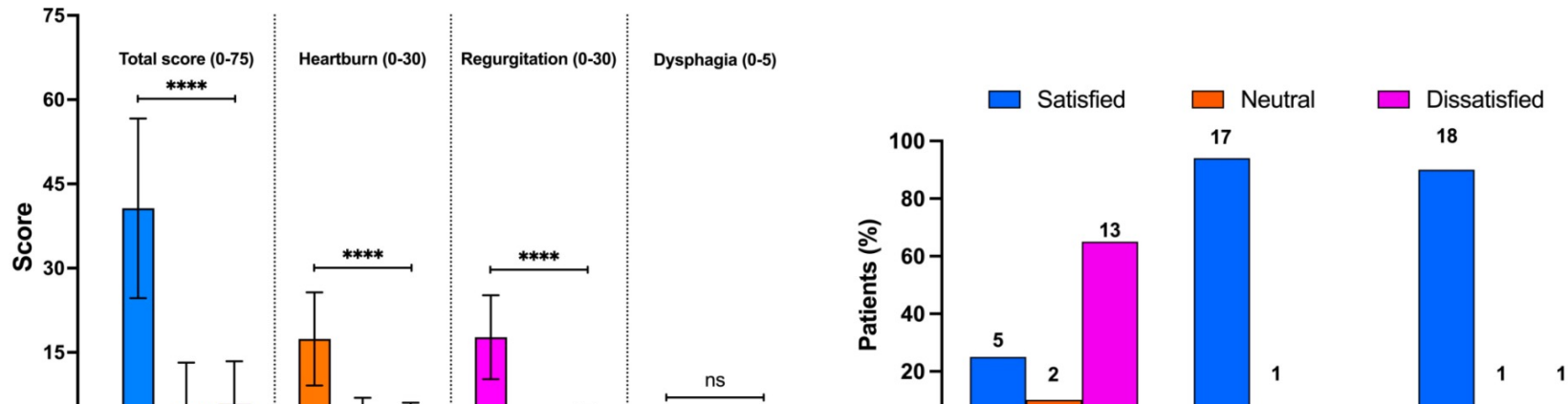
- Retrospective 12-month review of 20 patients with GERD and hiatal hernia diagnosed with IEM via HREM who underwent hernia repair (median size 4.5 cm) and implantation of RefluxStop



Implanted laparoscopically to prevent the sphincter from moving into the thorax through invagination into the fundus wall and reinforcing fundoplication cuff



# IEM Due to GERD and Impact of ARS



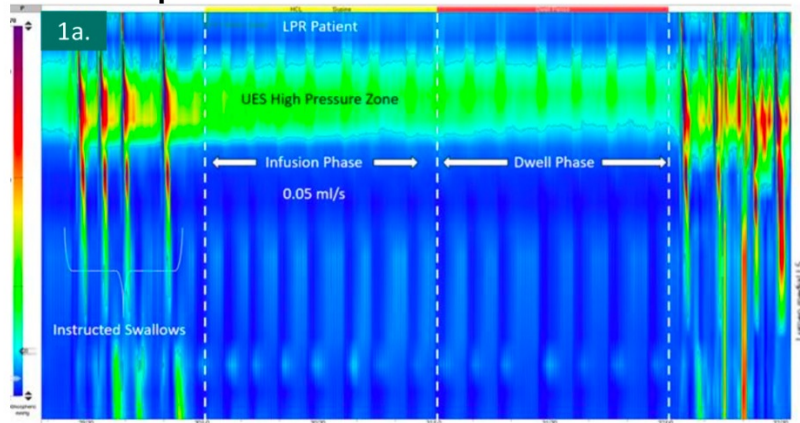
ARS with hiatal hernia repair and RefluxStop implantation in patients with GERD and IEM improved GERD symptoms  
 Additional study is needed to assess long-term efficacy and safety vs surgery alone as well as other therapies

1 required adenoscopy at 11 months, 5 required esophageal dilation due to persistent dysphagia

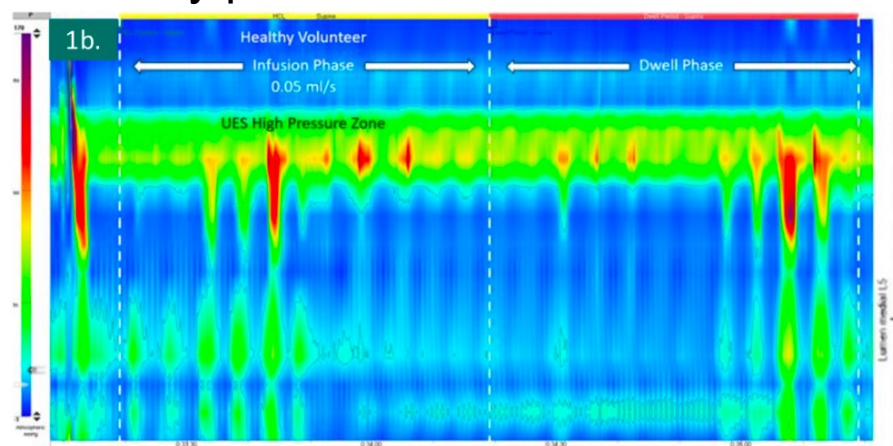


# UES and LPR

## LPR pt with ultraslow acid infusion



## Healthy pt with ultraslow acid infusion



UES response in LPR patients is attenuated and LPR patients fail to maintain UES pressure during passive dwelling of refluxate  
May be part of the pathophysiology

# Vonoprazan vs Lansoprazole for EE

- Vonoprazan is a P-CAB approved for H pylori therapy in combination with antibiotics
  - Being considered by FDA for EE indication
- Meta-analysis of vonoprazan vs lansoprazole for EE: 4 RCT; 1119 Vono 20 mg/D, 1089 Lanso 30 mg/D
  - 1341 males; 867 females
- LA Grade
  - A: Vono 24.9% Lanso 27.1%
  - B: Vono 28.6%. Lanso 26.9%
  - C: Vono 22.6%. Lanso 23.1%
  - D: Vono 4.4%. Lanso 3.4%

# Vonoprazan vs Lansoprazole for EE

## 8-weeks EH

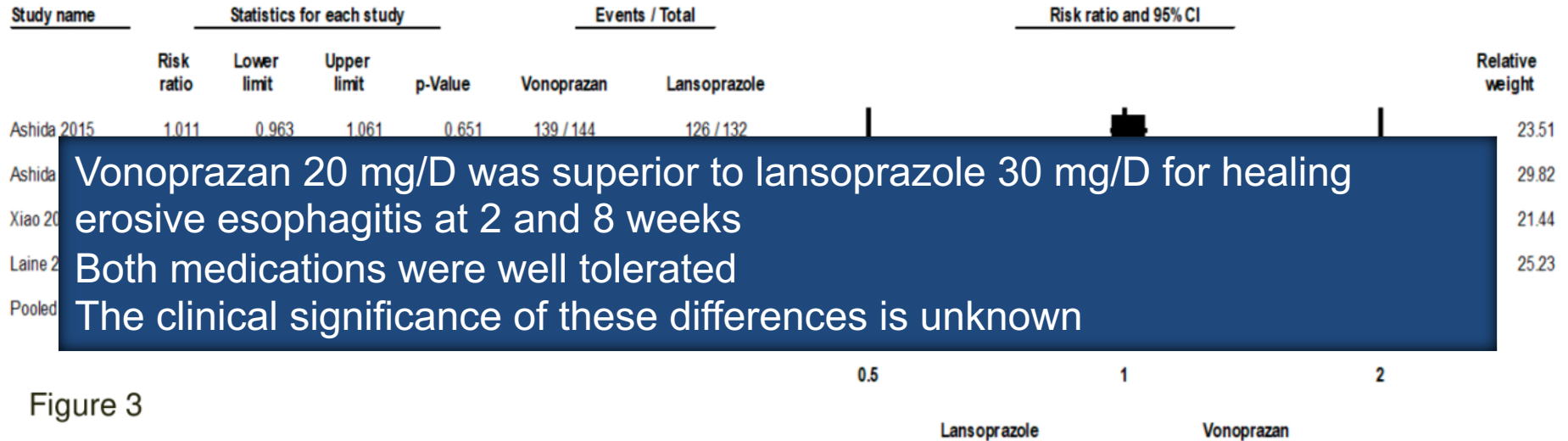


Figure 3

Vono 95% vs Lanso 92%;  $p < 0.03$



# Non-Endoscopic Test for BE and EAC

- Current BE guidelines support non-invasive cell collection paired with biomarker as an alternative to endoscopy for BE screening
- EsoCheck is 501(k)-cleared cell collection device that can be swallowed in-office and collected without sedation
- Current study was a real-world assessment of EsoCheck procedures in 1483 patients
  - Average sampled length 7.4 cm
  - Gag reflex 1-5 scale
  - DNA (ng) and cellular yield measured
  - Time required

# Non-Endoscopic Test for BE and EAC



Figure 1: EsoCheck™ balloon size at its maximum inflated volume – 11 cc (A), collection volume – 5.4 cc (B), and its inverted state (C).



Figure 6: DNA yield of samples collected using EsoCheck™.

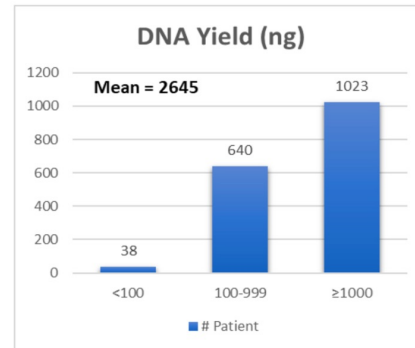


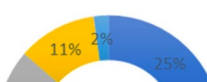
Figure 7: Representative H&E images of samples collected.



## Procedure Time (min)



## Patient Tolerance Rating

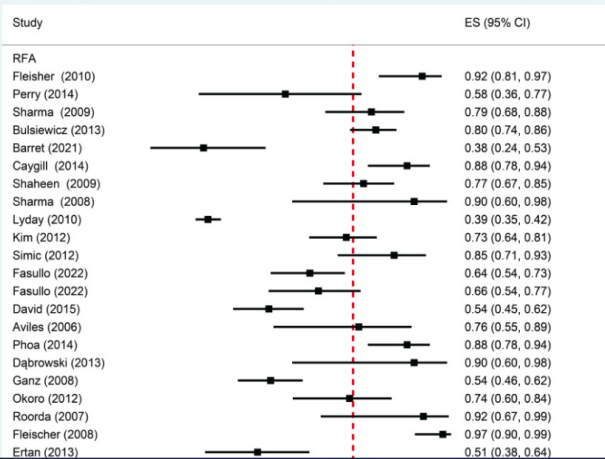


- 98% success rate; avg DNA yield 2645 ng; mostly intact cells (25K–2.5 million)
- No device malfunctions, well tolerated
- Potential to improve frequency and ease of BE screening

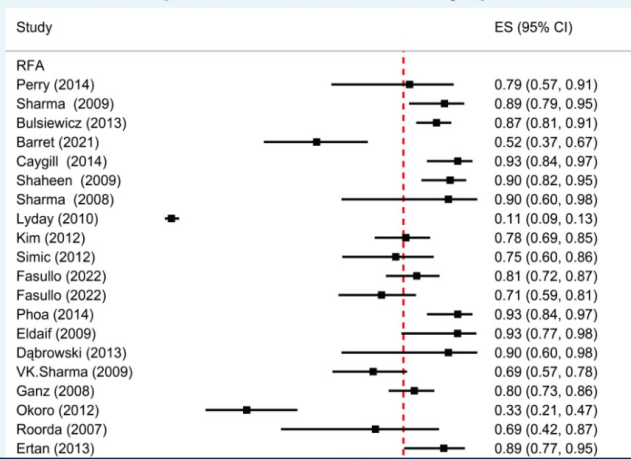
# RFA vs Cryo for BE

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- C

## Complete Eradication of Intestinal Metaplasia

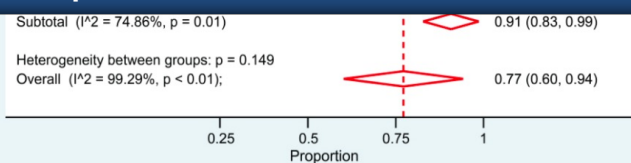
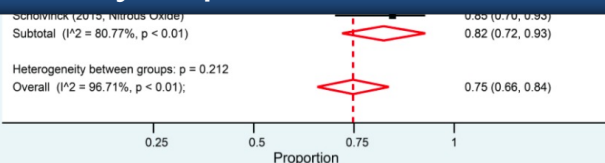


## Complete Eradication of Dysplasia



E-IM

- RFA and Cryo deliver similar rates of IM and Dysplasia eradication with potentially important differences in complication rates





# Timing of Endoscopy for FB

**Table 1. Demographics, baseline characteristics, EFI event details, and time to EGD among patients with and without complication**

	No complication (n = 166)	Complication (n = 22)	p
<b>Demographics</b>			
Age at event (mean years ± SD)	53.6 ± 19.3	66.1 ± 20.4	0.005
Male (n, %)	112 (67.5)	13 (59.1)	0.43
White (n, %)*	147 (90.2)	19 (86.4)	0.58
<b>Procedure details (n, %)</b>			
GI procedures endoscopy unit	38 (22.9)	8 (36.4)	0.17
ASA Class I	24 (14.5)	1 (4.6)	0.20
ASA Class II	78 (47.0)	5 (22.7)	0.031
ASA Class III	56 (33.7)	14 (63.6)	0.006
ASA Class IV	8 (4.8)	2 (9.1)	0.40
General anesthesia	142 (85.5)	18 (81.8)	0.81
<b>EoE diagnosis (n, %)</b>			
New EoE diagnosis at time of EFI	32 (19.3)	2 (9.1)	0.47
New EoE diagnosis on follow-up EGD	7 (4.2)	1 (4.6)	0.94
Total EoE diagnosis (prior, at EFI, at f/u)	51 (30.7)	3 (13.6)	0.10
<b>Time to EGD (median hours, IQR)#</b>			
0-6 hours to EGD (n, %)	24 (14.5)	3 (13.6)	0.92
6-12 hours to EGD (n, %)	44 (26.5)	4 (18.2)	0.40
12-18 hours to EGD (n, %)	30 (18.1)	7 (31.8)	0.13
18-24 hours to EGD (n, %)	35 (21.1)	3 (13.6)	0.41
24-30 hours to EGD (n, %)	12 (7.2)	2 (9.1)	0.76
30-36 hours to EGD (n, %)	8 (4.8)	0	0.29

- FB complications were more likely attributable to ASA, rigid endoscope, age, and motility disorders
- Time from food impaction and endoscopy was not associated with esophageal or extra-esophageal complications
- Urgent/emergent endoscopy for esophageal food impaction may not be necessary

**Table 2. EGD details and EoE diagnoses among patients with and without complication**

	No complication (n = 166)	Complication (n = 22)	p
<b>Procedure details (n, %)</b>			
GI procedures endoscopy unit	38 (22.9)	8 (36.4)	0.17
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<b>Any stricture or stenosis</b>			
Peptic stricture or other stenosis	45 (27.1)	7 (31.8)	0.64
Caustic stricture	2 (1.2)	0	0.61
Schatzki's ring	18 (10.8)	3 (13.6)	0.70
Hiatal hernia	22 (13.2)	4 (18.2)	0.53
<b>EoE diagnosis (n, %)</b>			
New EoE diagnosis at time of EFI	32 (19.3)	2 (9.1)	0.47
New EoE diagnosis on follow-up EGD	7 (4.2)	1 (4.6)	0.94
Total EoE diagnosis (prior, at EFI, at f/u)	51 (30.7)	3 (13.6)	0.10

# Intubation for FB Management: Cost Impact

- Minimal data to guide practice of intubation in patients with esophageal food or FD impactions (necessity, timing)
  - Common cause of provider disagreement/debate
- Retrospective cohort using Nationwide Inpatient Sample 2016–19 with FB or food bolus impaction undergoing EGD
- 6742 patients identified
  - 382 intubated (2/3 early-day of admission, 1/3 late- >1 day after admission)
- Day of admission intubation for esophageal impactions appears to be significantly superior to late intubation in terms of mortality, LOS, and hospital costs
  - Hospital costs: \$73,700 vs \$155,850

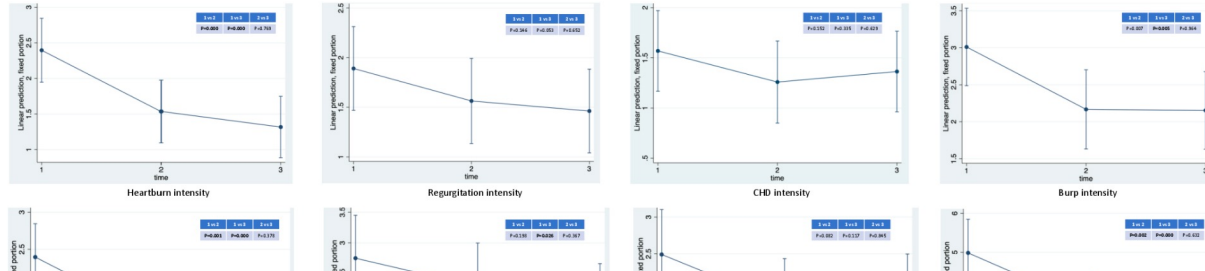
# CBT Improves Reflux in Patients With Insomnia

- Insomnia and poor sleep are well-recognized to be associated with GERD
- CBT has shown efficacy as a treatment for insomnia
  - Shortage of trained professionals and limited access
- Rome Foundation Pilot Grant sponsored study of web-based CBT in GERD patients with insomnia
- 22 patients completed 6-week web-based CBT program for insomnia (Sleepio)
  - Weekly sessions with cognitive and behavioral techniques and psychoeducation
  - Daily sleep diaries



# CBT Improves Reflux in Patients With Insomnia

Figure 1



- Significant improvements seen in heartburn, burp, and regurgitation; greater improvement in reflux hypersensitivity and functional heartburn
- Sleep quality improved in all
- Web-based CBT may be effective for sleep quality and GI symptoms, especially those with DGBI overtones

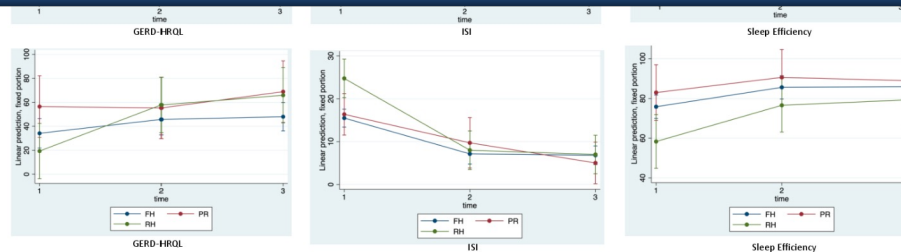


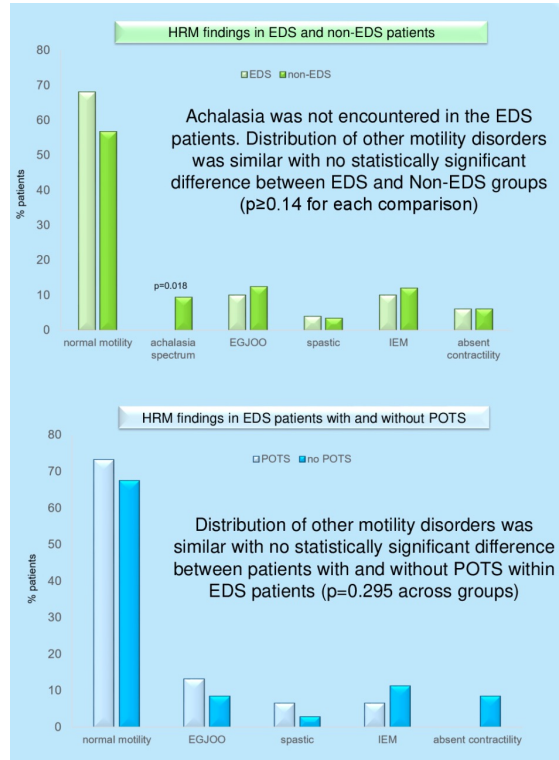
Figure 2. Top row includes the predictive margins of time with 95% confidence intervals for GERD-HRQL, ISI, and Sleep efficiency. Bottom row further subcategorizes the FH, RH, and PR phenotypes.

GERD-HRQL, GERD-health related quality of life; ISI, insomnia severity index; FH, functional heartburn; RH, reflux hypersensitivity; PR, persistent reflux.

# EDS and Esophageal Motility

- EDS increasingly encountered diagnosis in patients with functional GI complaints
  - Diverse array of UGI and LGI symptoms, including GERD and dyspepsia
  - Esophageal motility disorders not previously evaluated
- Retrospective review of 50 patients with EDS undergoing HREM
  - Ages 17–74, 96% female
  - Reflux 62%; Dysphagia 28%, Chest pain 6%, Dyspepsia (4%)
  - 30% also had POTS diagnosis; 84% with affective disorders
  - 52% had DGBI (24 IBS and 5 FD)
  - Compared characteristics and HREM results to 233 non-EDS patients

# EDS and Esophageal Motility



- Similar prevalence of esophageal motility disorders in EDS patients and non-EDS patients referred for HRM
- No difference when POTS present
- Most common EMDs were EGJOO and IEM
- High prevalence of affective disorders and use of neuromodulators suggest predominance of symptoms related to mechanisms other than motor disturbances





# 2023 SCSG<sup>7</sup> LGI SYMPOSIUM

Thank you for your attention