

# A SYSTEMATIC REVIEW OF QUALITY OF LIFE AND GASTROESOPHAGEAL REFLUX DISEASE

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## 1. INTRODUCTION

Gastroesophageal reflux disease (GERD) is a common gastrointestinal condition associated with functional impairment and loss of productivity. Disease management and the patient perspective may be better understood when considering the quality of life (QoL) patients with GERD experience.

**Aim:** To perform a systematic review involving GERD and QoL parameters.

## 2. METHODS

### LITERATURE SEARCH

- Databases: MEDLINE, Embase, Cochrane Library
- Published between 2013-2023
- Studies: Randomized controlled trials (RCTs), case-control, cohort studies

### ELIGIBILITY

- Adult GERD patients
- QoL data from disease-specific or generic instrument

Data analysis included narrative synthesis of pre- and post-procedural total scores.

## 3. RESULTS

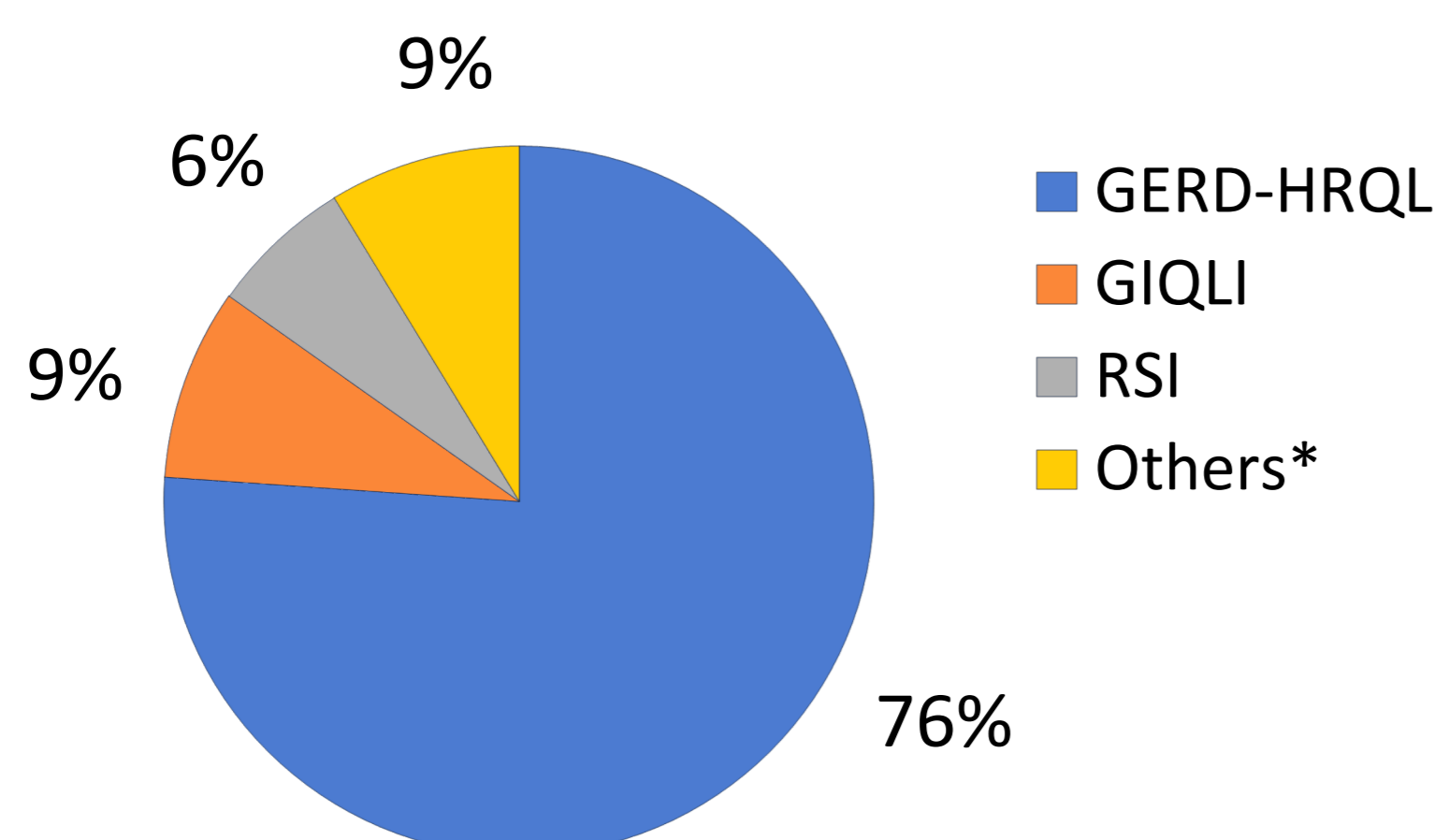
### CHARACTERISTICS OF INCLUDED STUDIES (n=42)

- Study design: RCTs (19%), cohort studies (81%)
- Study type:
  - Single-arm study (50% - medical 2%, surgery 48%)
  - Comparative (50% - medical vs surgery 12%, surgery vs surgery 38%)

### MAJOR FINDINGS

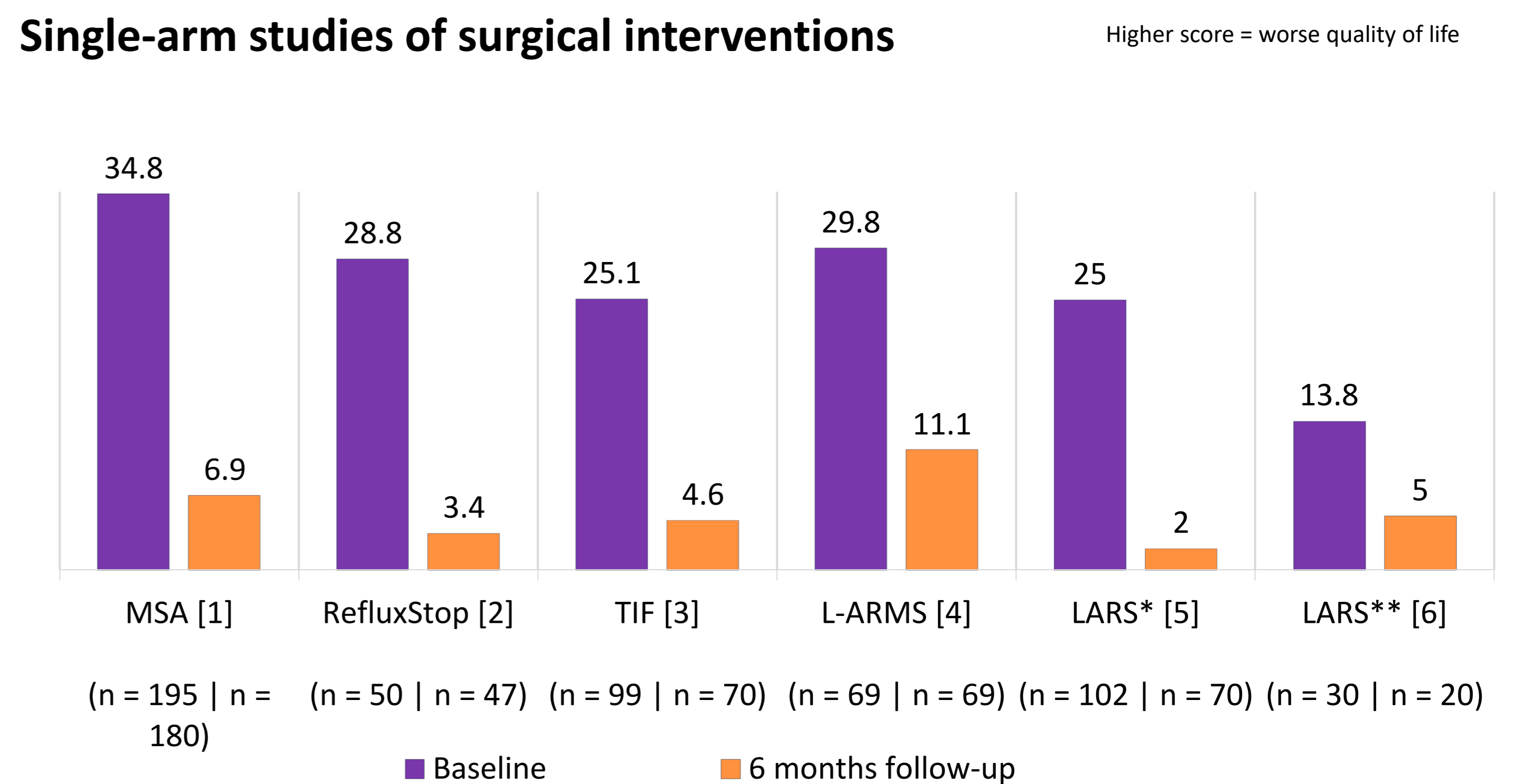
- GERD-HRQL is the dominant instrument across studies (Fig. 1)
- The magnitude of QoL improvement after surgery is large across all surgical methods in 6-month and 12-month follow-ups (Fig. 2-3)
- QoL improvement after PPI use is very small compared to post-operative period of surgery (Fig. 4)

**Figure 1: Quality of life instruments**



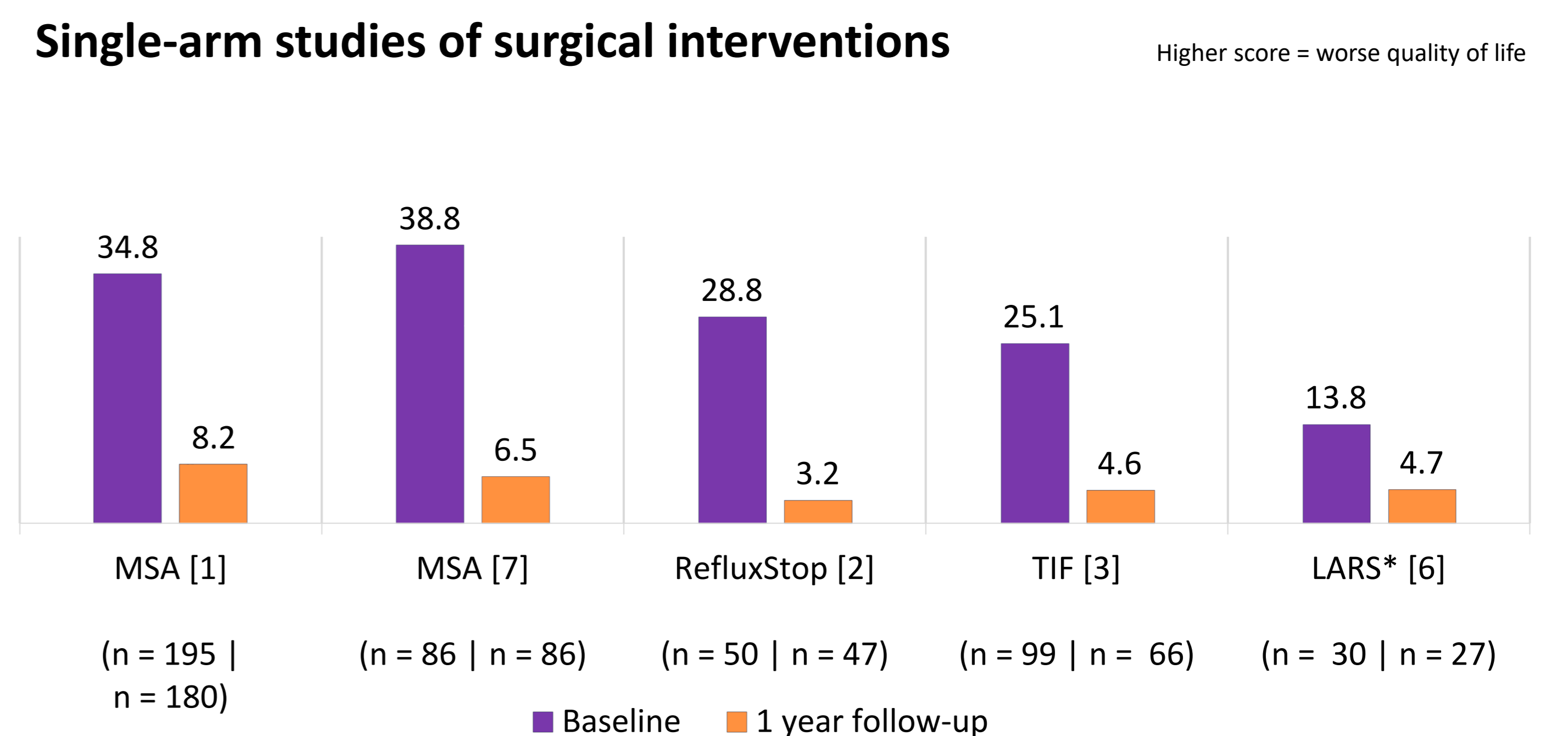
\* EQ-5D, PGWB, GERSS, SF-36

**Figure 2: Mean GERD-HRQL scores at 6-mo follow-up**



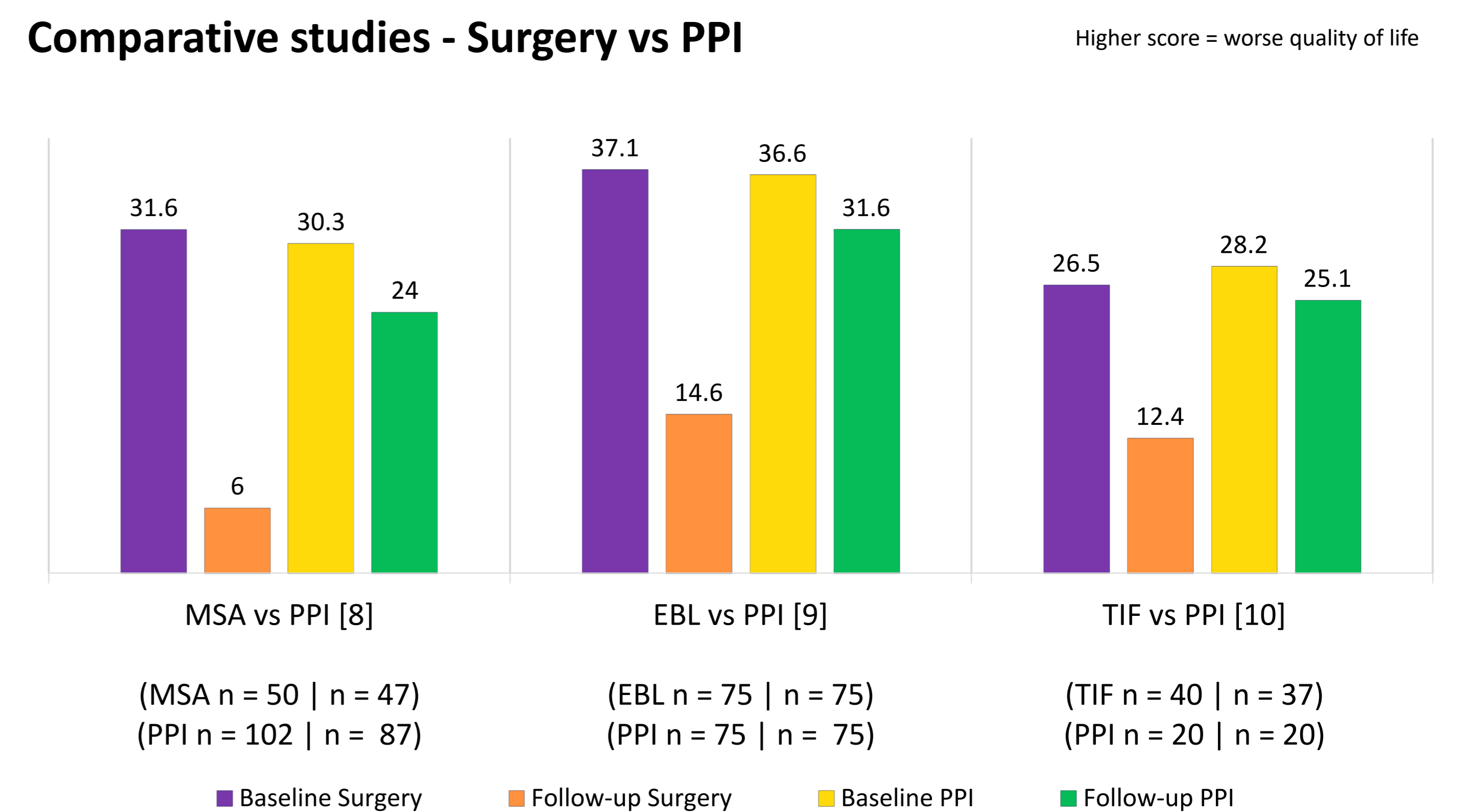
\* MSA, LNF, partial fundoplication and paraesophageal closure without fundoplication combined  
\*\* MSA, LNF, and LTF combined

**Figure 3: Mean GERD-HRQL scores at 12-mo follow-up**



\* MSA, LNF, and LTF combined

**Figure 4: Mean GERD-HRQL scores at 6-mo follow-up**



## CONCLUSIONS

GERD patients have poor quality of life, based on baseline mean total GERD-HRQL scores. Active disease management seems to have a beneficial influence on the quality of life at follow-up. Surgical management leads to better quality of life than medication, especially after 6 months. Yet, most results stem from observational studies and heterogenous populations.

**References:** <sup>1</sup>Ayazi (2020), <sup>2</sup>Bjelovic (2020), <sup>3</sup>Janu (2019), <sup>4</sup>He (2022), <sup>5</sup>Hill (2022), <sup>6</sup>Wu (2022), <sup>7</sup>Ward (2020), <sup>8</sup>Bell (2019), <sup>9</sup>Seleem (2018), <sup>10</sup>Witteman (2015).

**Abbreviations** EBL, endoscopic band ligation; EQ-5D, European Quality of Life Five Dimension; GERD-HRQL, Gastroesophageal Reflux Disease Health-Related Quality of Life; GERSS, Gastroesophageal Reflux Symptom Scale; GIQLI, Gastrointestinal Quality of Life Index; L-ARMS, laparoscopic antireflux mucosectomy; LARS, laparoscopic antireflux surgery; LNF, laparoscopic Nissen fundoplication; LTF, laparoscopic Toupet fundoplication; MSA, magnetic sphincter augmentation; PGWB, Psychological General Well-Being Index; PPI, proton pump inhibitor; RSI, Reflux Symptom Index; SF-36, 36-Item Short Form Survey; TIF, transoral incisionless fundoplication.