

Predictors for Recurrence after Laparoscopic Paraesophageal Hernia Repair

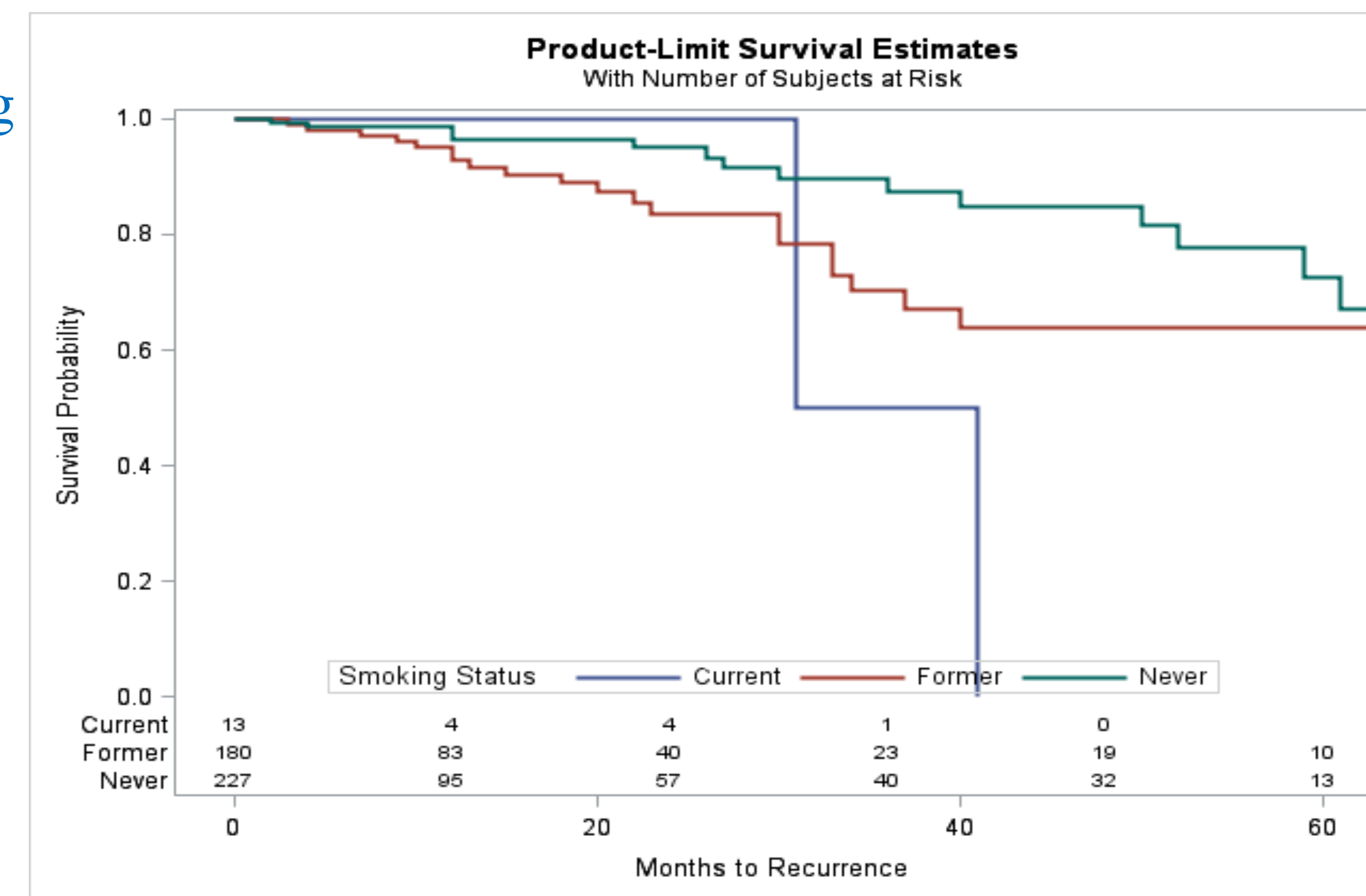
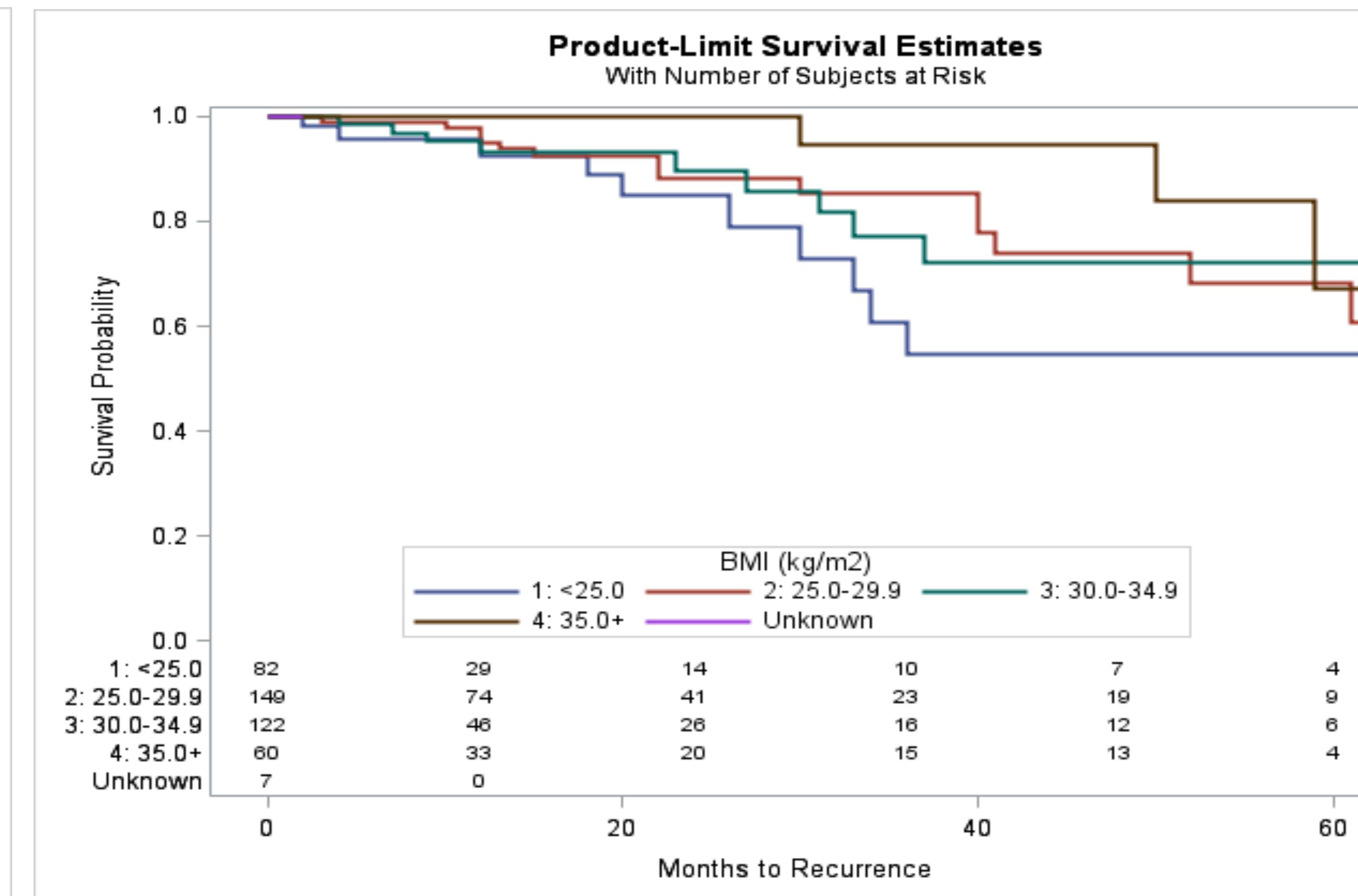
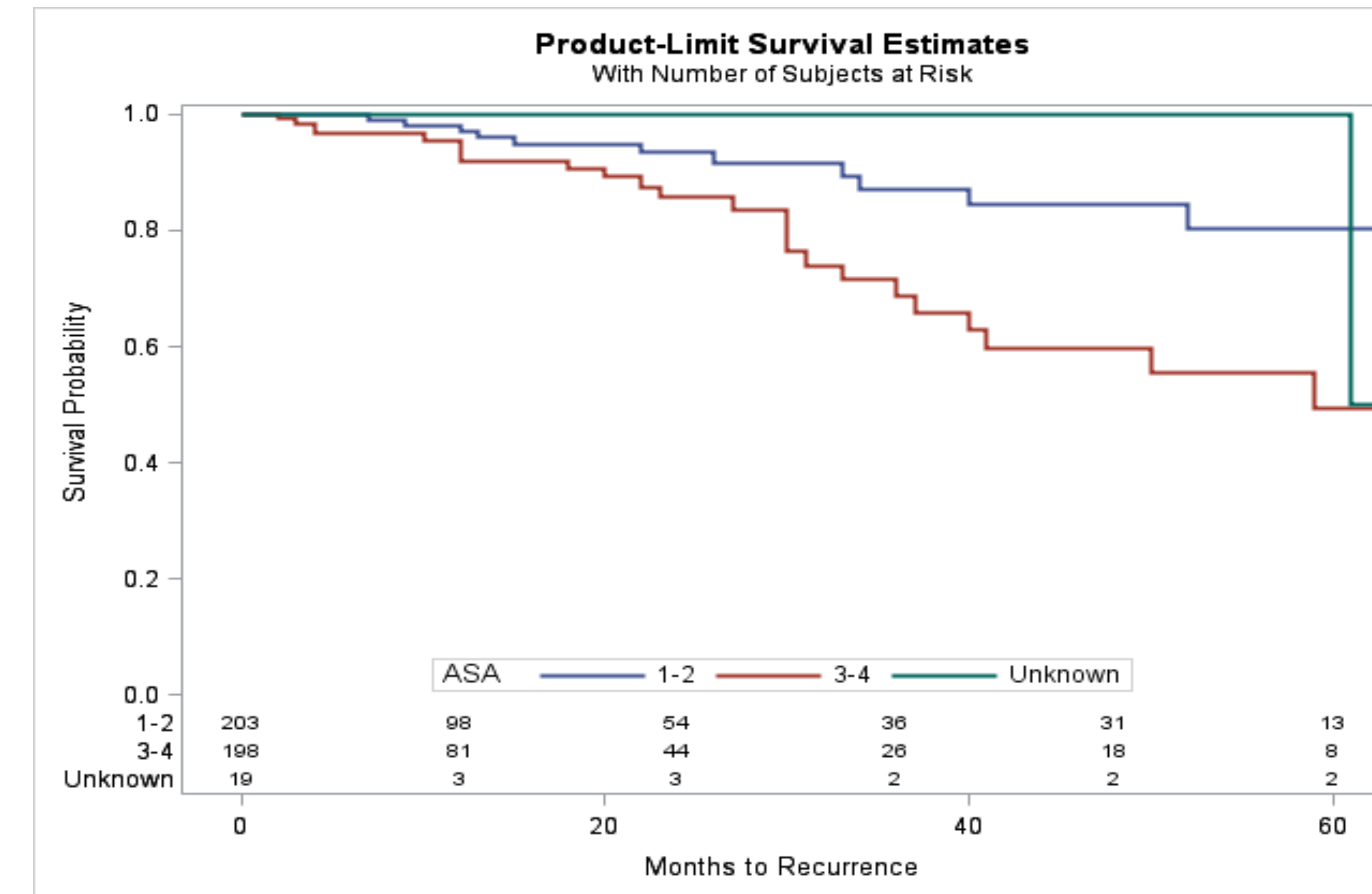
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Introduction

- Following paraesophageal hernia repair there is a reported recurrence rate of 12-55% in the literature.
- Few studies exist examining factors associated with paraesophageal hernia recurrence.
- This study attempts to identify factors associated with recurrent paraesophageal hernia following laparoscopic paraesophageal hernia repair.

Methods

- Retrospective review of patients undergoing laparoscopic paraesophageal hernia repair between 2010-2019 at a single institution.
- Demographic, radiographic, manometric, endoscopic and intraoperative data collected.
- Symptoms surveyed pre / post-operatively up to 5 years (GERD-HRQL, RSI, SF-36).
- Symptomatic and/or radiographic (>2cm) paraesophageal herniae recurrences identified.
- Variables associated with recurrence entered into multivariate analysis.



Conclusion

- Time to paraesophageal hernia recurrence was 1-3 years following initial repair.
- Lower BMI was associated with paraesophageal hernia recurrence.
- Smokers (active and former) were at increased risk of paraesophageal hernia recurrence.
- Medical comorbidities as defined by elevated ASA class was associated with paraesophageal hernia recurrence.

Results

- N=407 patients
- Average age 70 ± 11 years and predominantly female (n=314, 77.1%)
- Average BMI 29.5 ± 5.6
- Median follow up 9 months (IQR 1-25mo).
 - Mean time to recurrence 25 ± 16 months.
- Hiatal hernia type:
 - II 2.2% (n=9)
 - III 80.6% (n=328)
 - IV 14.5% (n=59)
 - V 2.7% (n=11)
- Fundoplication performed in 89.4% (n=364) patients.
 - Total 68.4% (n=249)
 - Partial 31.6% (n=115)
- Paraesophageal recurrence rate 8.9% (n=36)
 - Reoperation required 5.7% (n=20)
- Factors associated with recurrence:
 - Current smoker
 - HR 4.67 (1.17-18.60) p=0.03
 - Former smoker
 - HR 1.95 (0.98-3.88) p=0.05
 - BMI >35 vs <25
 - HR 0.17 (0.04-0.6) p=0.01
 - ASA class 3-4 vs 1-2
 - HR 2.77 (1.35-5.67) p=0.005

Contact

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