

INTRODUCTION

- Breast cancer related lymphedema (BCRL) is the collection of interstitial protein-rich fluid due to a disruption of lymphatic flow either from the disease or treatment - most commonly axillary lymph node dissection (ALND)
- Immediate lymphatic reconstruction (ILR) at the time of ALND is emerging as the standard of care to decrease BCRL
- Small subset of patients undergoing ALND have been found to have anatomic variations that prevent ILR from occurring

OBJECTIVES

- To determine the incidence of lymphedema in patients not amenable to ILR

METHODS

- Retrospective analysis of a prospectively maintained database
- Study included patients who were referred to the Multidisciplinary Lymphedema clinic for ILR at time of ALND between 2016 and 2021
- Patients excluded if they had preoperative lymphedema or less than 6 months of follow up
- Patients underwent reverse lymphatic mapping and co-surgeon axillary dissection (plastic and general surgeon)
- Development of BCRL was assessed through patient reported symptoms, circumferential limb measurements, and bioimpedance spectroscopy
- Patients were considered ineligible for ILR if they lack visualized lymphatics or anatomic variations between identified lymphatics and preserved venules

FIGURES

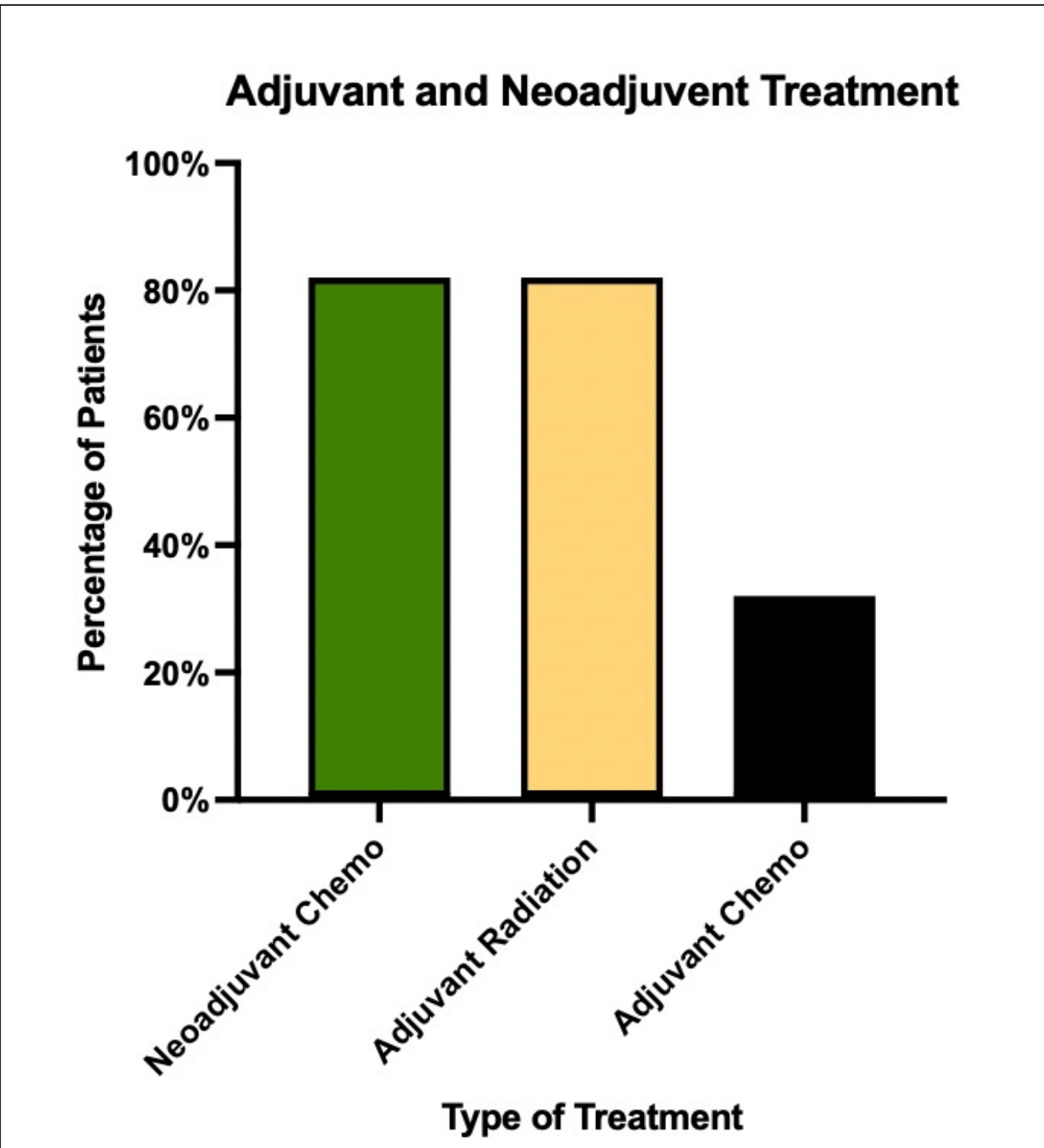


Figure 1. Percentage of patients who received neoadjuvant or adjuvant treatment.

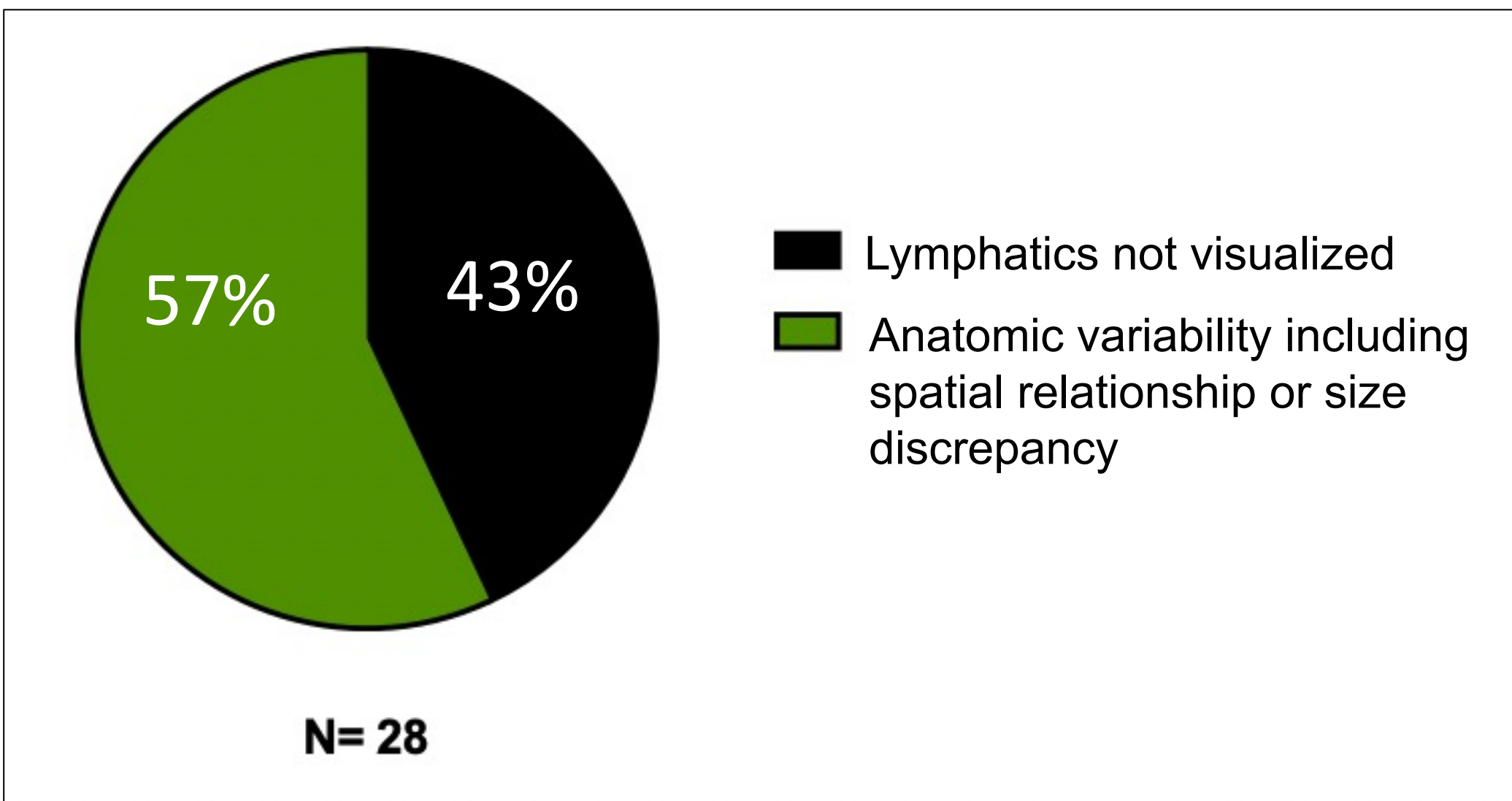


Figure 2. Reason for inability to perform ILR in patient population.

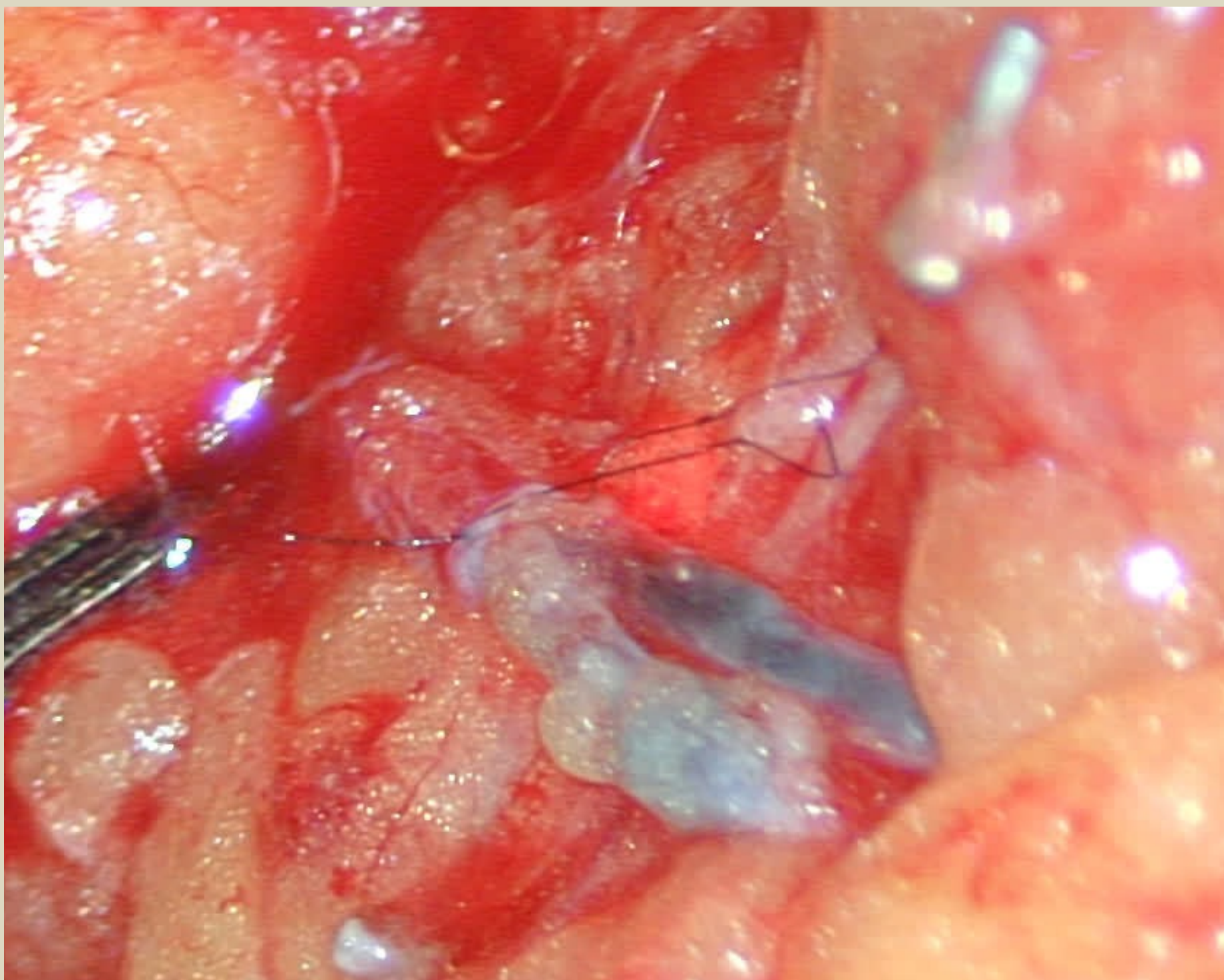


Figure 3. Two lymphatic (blue) vessels anastomosed to the vein.

RESULTS

- 28 patients met inclusion criteria
 - Mean age 55 years (range 30-74 years)
 - Mean BMI: 29 kg/m²
 - Mean Follow up time: 553 days
- 28% of patients had prior oncologic breast and axillary surgery prior to ALND
- Eight patients (29%) of these patients developed lymphedema**

REFERENCES

- DiSipio T, Rye S, Newman B, Hayes S. Incidence of unilateral arm lymphoedema after breast cancer: a systematic review and meta-analysis. *Lancet Oncol.* 2013;14(6):500-515
- Coriddi M, Mehrara B, Skoracki R, Singhal D, Dayan JH. Immediate Lymphatic Reconstruction: Technical Points and Literature Review. *Plast Reconstr Surg Glob Open.* 2021;9(2):e3431.

DISCUSSION

- In our study, the incidence of BCRL in patients undergoing ALND was 29%
- This incidence is decreased compared to our historical ALND cohorts (44%), but is greater than those receiving ILR (5%)**
- Continued close postoperative monitoring is recommended** until further studies can help risk stratify this cohort of patients