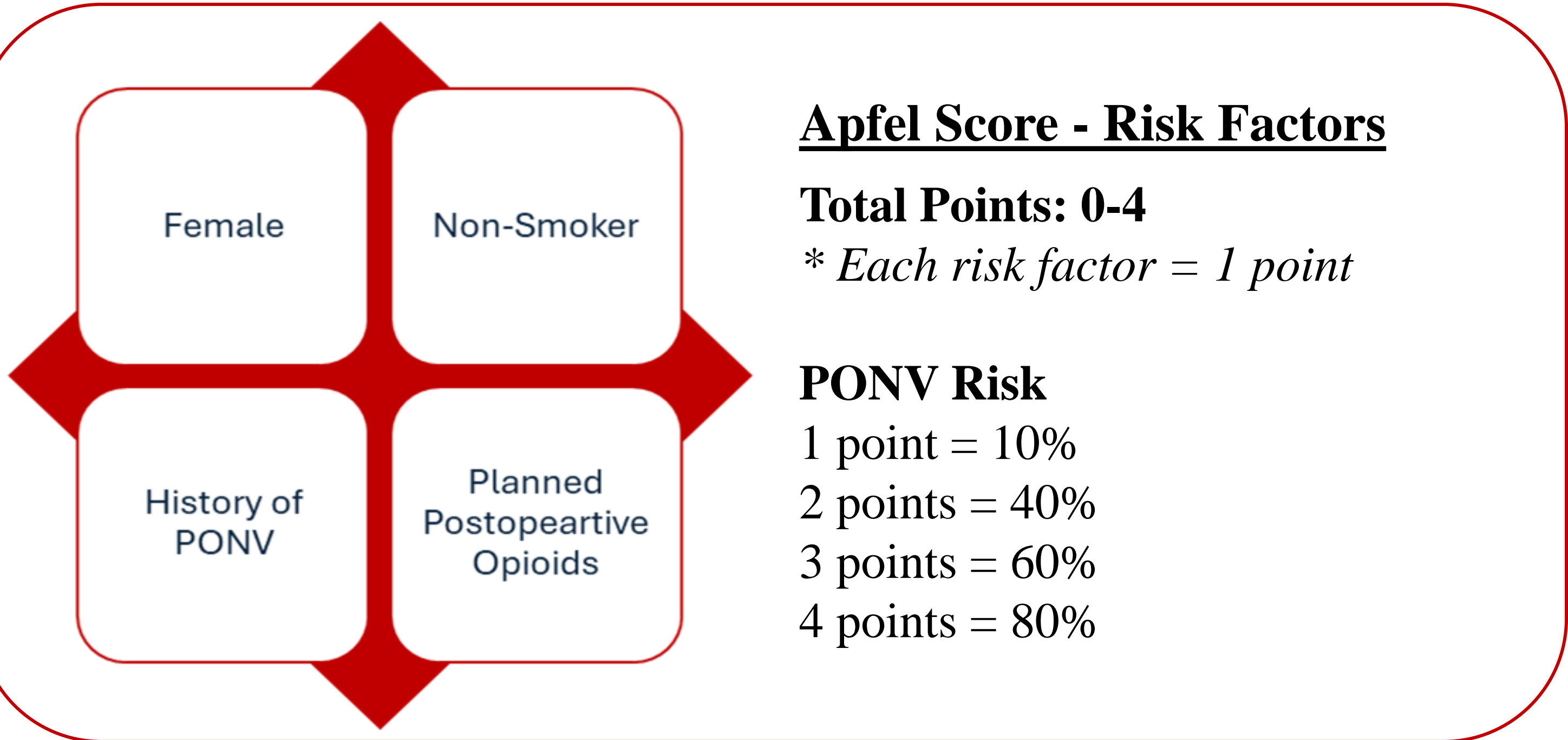


Background

In 2023, 15 million laparoscopic procedures were conducted

- Laparoscopy, tonsillectomy, and strabismus considered high risk for PONV
- PONV incidence:**
 - 20-30% in overall surgical population
 - 80% in well-established surgeries**
- Apfel Score* can be used to identify high risk patients



Dexamethasone: A corticosteroid, is a well-established antiemetic and considered FIRST LINE PROPHYLAXIS for PONV

- Current consensus guidelines suggest 4-10mg to decrease PONV
- Prior studies showed lack of significance between 4 and 8-10mg
- Recent studies are utilizing 0.01mg/kg or 8mg with affirmative significance

Significance

Effects of PONV

- Increased healthcare cost
- Increased length of stay in PACU
- Poor patient satisfaction
- Increases in adverse patient outcomes

Gap in Knowledge

- High prevalence of PONV in women undergoing laparoscopy without population specific systematic review
- Variable utilization of dexamethasone dose among anesthesia providers
- Availability of updated research without analysis for quality

Methods

Systematic Review: A summary of research results that uses *clearly defined, reliable, objective, and reproducible* methods to systematically search, critically appraise, and synthesise current evidence specific to the research question

Participants: Women, greater than or equal to 18 years of age

Types of Studies: Randomized Control Trials and Cohort Studies

Comparators: 4mg and 8mg of Dexamethasone

Inclusion Criteria: Full-text, English, Peer-reviewed, Quantitative articles published within 10 years, female population discernable, laparoscopic procedures, IV dexamethasone utilized, examination of dose-response effect

Exclusion Criteria: Male patients, systematic reviews, qualitative studies, non-laparoscopic surgery, undefined dosing of dexamethasone

Review Question

What dose of intravenous dexamethasone is the *most effective* at reducing postoperative nausea and vomiting in women undergoing laparoscopic surgery?

Purpose

Examine the best available evidence to determine the dose-response effect of intravenous (IV) dexamethasone for postoperative nausea and vomiting (PONV) in adult women undergoing laparoscopic surgery

Literature Review

