

# **Overnight Split Dosing with 1L Polyethylene Glycol + Ascorbic Acid Bowel** Preparation Delivers High Levels of High-Quality Cleansing for Colonoscopy: A Sub-analysis of a Large Real-World Study

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## Introduction

Clinical guidelines recommend evening/morning split dosing for routine colonoscopy procedures.

Overnight split dosing with 1 liter polyethylene glycol + ascorbic acid (1L PEG+ASC) has demonstrated strong cleansing performance in clinical trials and in small-scale or single-center real-world evidence studies.<sup>1–6</sup>

We report a sub-analysis from the largest real-world study to date of 1L PEG+ASC, evaluating patients who received this split dosing regimen.

## **Methods and Materials**

An observational, multicenter, retrospective study evaluated the medical records of colonoscopy outpatients between July 2019 and September 2021 at 12 centers in Spain and Portugal. Participants were adults (aged  $\geq$ 18 years) who underwent a screening, follow-up, or diagnostic colonoscopy after an evening/morning (split dose) or same-day regimen of 1L PEG+ASC. Data from the split-dose subgroup were examined in this analysis.

Bowel cleansing was assessed by site endoscopists using the Boston Bowel Preparation Scale (BBPS). Adequate cleansing was defined as a combined BBPS score of  $\geq 6$  with all segmental scoring  $\geq 2$ . A segmental score of 3 defined high-quality cleansing.

BBPS scores were compared between time-to-colonoscopy groups with the Wilcoxon rank-sum test.

### Results

Table 1. Patient characteristics of individuals taking a split dose of 1L PEG+ASC. N=4,316 (32.8%)

Characteristic	n (%)
Male	2,070 (48.0)
Mean age (SD)	58.1 (13.4)
≥65 years old	1,442 (33.4)

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Figure 1. Percentage of patients achieving overall BBPS score ≥6 or greater with overnight split dosing



#### Figure 2. Percentage of patients achieving high-quality cleansing with overnight split dosing



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Figure 3. Mean segmental BBPS scores in patients with a time interval of ≥5 hours versus <5 hours from end of bowel preparation consumption to start colonoscopy



## **Cleansing efficacy**

An overall BBPS score 9 was attained in 58% of patients (Figure 1). High rates of the BBPS maximum score of 3 were observed in all segments (65.4% in the right colon) (Figure 2).

The time interval between completing bowel preparation consumption and the colonoscopy had a small but significant effect on the BBPS score in the right colon only: ≤5 hours to colonoscopy improved cleansing (P=0.0013) (Figure 3).

Colonoscopy completion: Only 1.6% of colonoscopies were incomplete, and 0.4% were due to poor preparation.

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## Safety

Table 2. Adverse events in individuals taking a split dose of 1L PEG+ASC. N=4,316

Adverse event	n (%)
Any	170 (3.9)
Nausea	104 (2.4)
Vomiting	53 (1.2)
Abdominal pain	16 (0.4)
Dehydration	8 (0.2)
Headache	12 (0.3)
Dizziness	5 (0.1)
Anal pain	1 (0.02)
Other	0 (0)

# Conclusions

 Results from this analysis show that overnight split dosing with 1L PEG+ASC delivered excellent overall and segmental bowel cleansing quality in real-world settings.

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