

# INPLASY

## Effects of Glucagon-like Peptide-1 Receptor Agonists on Upper Endoscopy (EGD)

INPLASY202460028

doi: 10.37766/inplasy2024.6.0028

Received: 09 June 2024

Published: 09 June 2024

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### ADMINISTRATIVE INFORMATION

**Support** - None.

**Review Stage at time of this submission** - The review has not yet started.

**Conflicts of interest** - None declared.

**INPLASY registration number:** INPLASY202460028

**Amendments** - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 09 June 2024 and was last updated on 09 June 2024.

### INTRODUCTION

**Review question / Objective** Do GLP-1 increase retained gastric contents, aborted procedures, repeat endoscopies and aspiration events during EGD.

**Rationale** Understanding the impact of GLP-1 receptor agonists on EGD procedures is critical for optimizing patient management and procedural safety. If GLP-1 receptor agonists are found to adversely affect EGD outcomes, modifications in pre-procedural protocols, such as altering the timing of medication administration or implementing additional pre-procedural fasting measures, could be recommended. This could enhance the safety and effectiveness of EGDs in patients receiving GLP-1 therapy.

**Condition being studied** EGD The following interventions were included: Glucagon-like Peptide-1 Receptor Agonists for any cause. Dulaglutide - once weekly. Albiglutide - once weekly. Liraglutide - once daily. Semaglutide - one

weekly subcutaneously, daily orally. Exenatide BID - twice daily. Exenatide QW - once weekly. Lixisenatide - once daily. Tirzepatide - once weekly.

### METHODS

**Search strategy** To conduct this review we identified and included studies about randomized controlled trials, observational studies (all types), cohort (longitudinal) studies, cohort studies, case-control studies, before after studies or cross sectional studies which compared Glucagon-like Peptide-1 Receptor Agonists for any cause. Dulaglutide - once weekly. Albiglutide - once weekly. Liraglutide - once daily. Semaglutide - one weekly subcutaneously, daily orally. Exenatide BID - twice daily. Exenatide QW - once weekly. Lixisenatide - once daily. Tirzepatide - once weekly. to No GLP-1. Studies which were about BLANK or that were compared to BLANK were not included. Studies which were on Any age and gender were assessed as relevant to this review. The primary outcome of interest was/were

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Retained gastric contents, GI Symptoms, Aborted Procedures, Repeat endoscopy due to retained contents, Aspiration or Other AE, while the secondary outcome/s of interest were Type of retained gastric contents or Fasting time. We were only interested in studies conducted in BLANK. If the setting of the study was BLANK it was assessed as an excluded study.

**Participant or population** Adults.

**Intervention** Studies of any age and gender were eligible for this review.

**Comparator** Studies with the following comparator groups were eligible: No GLP-1.

**Study designs to be included** To conduct this review we identified and included studies about randomized controlled trials, observational studies (alltypes), cohort (longitudinal) studies, cohort studies, case-control studies, before after studies or cross sectional studies which compared Glucagon-like Peptide-1 Receptor Agonists for any cause.

**Eligibility criteria** Adult using GLP-1 undergoing upper endoscopy.

**Information sources** MEDLINE, Cochane, Embase, LILACS, Scopus, PubMed.

**Main outcome(s)** Give the pre-specified main (most important) outcomes of the review, including details of how the outcome is defined and measured and when these measurement are made, if these are part of the review inclusion criteria. Included primary outcomes were: Retained gastric contents, GI Symptoms, Aborted Procedures, Repeat endoscopy due to retained contents, Aspiration or Other AE. Included secondary outcomes were: Type of retained gastric contents or Fasting time. Measures of effect Frequencies, OR, RR.

**Data management** We will use covidence for data extraction. Proportions and OR/RR will be obtained.

**Quality assessment / Risk of bias analysis** OTTAWA for descriptive and Cochane for clinical trials.

**Strategy of data synthesis** Meta-analysis of proportions and of ORs.

**Subgroup analysis** Type of GLP-1, type of measurement.

**Sensitivity analysis** Other AE, times to endoscopy Measures of effect Time.

**Language restriction** English and Spanish.

**Country(ies) involved** United States.

**Keywords** GLP-1RA, EGD.

**Contributions of each author**

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