## International Platform of Registered Systematic Review and Meta-analysis Protocols

# INPLASY

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Author Affiliation: Beijing University of Chinese Medicine. Roux-en-Y gastric bypass versus sleeve gastrectomy for diabetes remission in obesity with type 2 diabetes: an updated systematic review and meta-analysis

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## ADMINISTRATIVE INFORMATION

**Support -** Key Science and Technology Research Project of Jilin Provincial Department of Science and Technology (No. 20170204023YY).

**Review Stage at time of this submission -** Formal screening of search results against eligibility criteria.

Conflicts of interest - None declared.

INPLASY registration number: INPLASY2023120003

**Amendments** - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 01 December 2023 and was last updated on 01 December 2023.

## **INTRODUCTION**

R eview question / Objective What's the prevalence in different gastrectomy for diabetes remission in obese patients with type 2 diabetes?

**Condition being studied** There is a lack of understanding of the prevalence in different gastrectomy for diabetes remission in obese patients with type 2 diabetes.

## **METHODS**

**Participant or population** Obese patients with type 2 diabetes undergoing either Roux-en-Y gastric bypass or sleeve gastrectomy.

**Intervention** Either Roux-en-Y gastric bypass or sleeve gastrectomy.

Comparator Surgical counterpart.

Study designs to be included Randomized controlled trials.

**Eligibility criteria** The trials, which have been reported our primary outcome at the time point of 1, 1 to 3, or over 5 years, would be included.

**Information sources** The databases such as PubMed, Embase, The Cochrane Library, Web of Science, and literature tracing by manual retrieval if necessary, were used to search for relevant randomized controlled trials. **Main outcome(s)** The primary outcome was the relative risk of diabetes remession between Rouxen-Y gastric bypass and sleeve gastrectomy.

**Quality assessment / Risk of bias analysis** The Cochrane's Collaboration tool for assessing risk would be utilized for the quality assessment of randomized controlled studies.

**Strategy of data synthesis** Relative diabetes remission would be analysed by estimating risk ratio (95% confidential interval).

**Subgroup analysis** Subgroups would be determined according to mean BMI, regions, single or multi-center study design, and risk of bias.

**Sensitivity analysis** Sensitivity analysis would be achieved through one by one exclusion method to evaluate the stability of meta-analysis results.

#### Country(ies) involved China.

**Keywords** Roux-en-Y gastric bypas; sleeve gastrectomy; obese; type 2 diabetes.

#### **Contributions of each author**

Author 1 - Ximing Lin - Author 1 extracted the literature data. The author would finish literature selection, meta-analysis, and draft the manuscript. Email: lxm951029@163.com

Author 2 - Shuman Ran - Author 2 would contribute to the development of the selection criteria and the risk of bias assessment strategy, and resolve the confict between two independent selection.

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Author 3 - Genzheng Liu - Author 3 would finish literature selection and assist in drafting the manuscript.

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Author 4 - Hua Meng - Author 4 provided the idea and scheme. The author would read, give feedback and approve the final manuscript. Email: menghua@zryhyy.com.cn

Author 5 - Changqing Lin - Author 5 would provide the statistical expertise, read, give feedback and

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