

## Selection Criteria

### Inclusion criteria:

- (1) Only randomized controlled trials were eligible;
- (2) Head-to-head studies compared clinical effect of saxagliptin versus acarbose as add-on therapy to metformin;
- (3) Studies on Chinese patients with type 2 diabetes (T2DM) who are 18 years or older;
- (4) Studies on patients not adequately controlled by metformin; expect for diet or/and exercise, only saxagliptin and metformin in saxagliptin arm, and acarbose and metformin in acarbose arm were allowed;
- (5) Studies written in Chinese or English;
- (6) Studies had glycosylated hemoglobin (HbA<sub>1c</sub>) as the primary outcome indicator; and systolic blood pressure (SBP), body weights, cholesterol, or hypoglycemia as outcome indicator;
- (7) Studies with a follow-up duration of 12 weeks or longer;

### Exclusion criteria:

- (1) Studies not related to or not targeted at saxagliptin (or acarbose), including studies merely on dipeptidyl peptidase-4 inhibitor (DPP-4i) or alpha-glucosidase inhibitors;
- (2) Studies only provided information about saxagliptin (or acarbose), including introduction of pharmacokinetics, pharmacologic properties, pharmacodynamics, clinical use or mechanism of action;
- (3) Studies were monotherapy design;
- (4) Studies not targeted at (saxagliptin + metformin) versus (acarbose + metformin);
- (5) Studies not targeted at T2DM, including impaired glucose tolerance (IGT), impaired fasting glucose (IFG), gestational diabetes or type 1 diabetes (T1DM);
- (6) Studies on cell lines or animals;
- (7) Literature reviews or meta-analysis;
- (8) Meeting abstracts;
- (9) Economic evaluation studies;
- (10) Letters or comments;
- (11) Duplicate;