



Effective Health Care

Oral Diabetes Medications for Adults with Type 2 Diabetes Nomination Summary Document

Results of Topic Selection Process & Next Steps

- *Oral Diabetes Medications for Adults with Type 2 Diabetes* will go forward as an update to or expansion of an existing comparative effectiveness or effectiveness review.

Topic Description

Key Questions:

Key Question 1. In adults age 18 or older with type 2 diabetes mellitus, what is the comparative effectiveness of treatment options for the intermediate outcomes of glycemic control (in terms of HbA1c), weight, or lipids?

Key Question 2. In adults age 18 or older with type 2 diabetes mellitus, what is the comparative effectiveness of treatment options in terms of the following long-term clinical outcomes?

- All-cause mortality
- Cardiovascular mortality
- Cardiovascular and cerebrovascular morbidity (e.g., myocardial infarction and stroke)
- Retinopathy
- Nephropathy
- Neuropathy

Key Question 3. In adults age 18 or older with type 2 diabetes mellitus, what is the comparative safety of the following treatment options in terms of the following adverse events and side effects?

- Hypoglycemia
- Liver injury
- Congestive heart failure
- Severe lactic acidosis
- Cancer
- Severe allergic reactions
- Hip and non-hip fractures
- Pancreatitis
- Cholecystitis
- Macular edema or decreased vision
- Gastrointestinal side effects

Key Question 4. Do safety and effectiveness of these treatment options (Table 2) differ across subgroups of adults with type 2 diabetes, in particular for adults age 65 or older, in terms of mortality, hypoglycemia, and cardiovascular and cerebrovascular outcomes?

Considerations

- A limited search of the literature since the publication of the 2011 systematic review, including core clinical journals, found that a number of the review's conclusions on comparative effectiveness of oral diabetes agents were out of date due to a newly approved drug class (SGLT-2 inhibitors) and new evidence on previously reviewed drug classes. Several recent studies have evaluated the use of combination therapies in adults with Type 2 Diabetes Mellitus. .
- In addition to updating information on the potential benefits of available treatments, conclusions regarding adverse events should also be updated. There have been a number of potential adverse events associated with rosiglitazone (e.g. increased cardiovascular risks), pioglitazone (e.g. increased risk of bladder cancer), the combination of pioglitazone with insulin (e.g. cardiac failure), and GLP-1 analogs or DPP-4 inhibitors (e.g. increased risk of pancreatitis).