**Title**

After Metformin, whats the next best medication for managing sugars in type 2 diabetes?

**Author and affiliations**

Dr. Daniel Aronov - Evidence Based Medicine Podcast

**Background**

There has only been one major study to compare different classes of hypoglycaemic medications and assess their impact on microvascular and macrovascular complications. It is called the UKPDS study and it compared metformin to sulfonylureas and to insulin, finding metformin to be superior in its ability to reduce cardiovascular disease. This study was published in 1998 and has formed the basis for almost all national and international guidelines to recommend metformin as first line for type 2 diabetes mellitus. The issue is that several hypoglycaemic agents have come to market since 1998 and there have been no studies to compare them and help us determine the best second line agent. For this reason, most guidelines are less decisive about which agent to use second line. This can be frustrating for physicians and can create insecurity about treatment choices. This presentation will delve into the evidence behind each of the oral hypoglycaemics, their harms and benefits and their strength and weaknesses, thus equipping clinicians with the knowledge and confidence to make patient centred decisions on which second line agent to use.

**Aims**

* To understand the limitations in the evidence in determining which diabetic medications are superior
* To understand the harms and benefits of the various oral hypoglycaemic medications: DPP4 inhibitors, GLP1 receptor agonists, glitazones, SGLT2 inhibitors, sulfonylureas and metformin.
* To be able to confidently discuss the pros and cons of each therapy with patients and participate in shared decision making.

**Method**

This presentation will be a fun and engaging exploration through the history and evidence of the oral hypoglycaemic medications

**Results**

To be discussed during the presentation

**Conclusion**

There is a vast array of oral hypoglycaemic agents to choose from for second line treatment of type 2 diabetes mellitus. Each comes with its own set of harms and benefits. It is worth exploring the evidence and becoming familiar with these to help prescribe the most appropriate medication for each individual patient.

**References** (If applicable)