

OREGON HEALTH POLICY AND RESEARCH

Health Resources Commission

Issue 5, Updated 6-05

Oregon's Drug Review: Evidence on Oral Drugs for Diabetes

Diabetes causes high blood sugar (hyperglycemia). Over time, high blood sugar harms the heart, kidney, and nerves. Diet, insulin, and oral drugs lower this risk by 25%.

Which Drugs Were Included In This Review?

This review looked at the following oral drugs for diabetes that lower blood sugar.

(It did not include diabetic drugs that delay carbohydrate digestion (as acarbose). Nor did it include biguanides (as metformin) or glitazones (as Actos). Also not included are fixed combinations of these drugs with other drugs.

<u>Oral Sulfonylureas</u>	<u>2nd Generation</u>	<u>Non-sulfonylurea Secretagogues</u>
<u>1st Generation</u> <ul style="list-style-type: none">• chlorpropamide (Diabenese)• tolazamide (Tolinase)• tolbutamide (Orinase)	<ul style="list-style-type: none">• glimepiride (Amaryl)• glipizide (Glucotrol)• glipizide ER (Glucotrol ER)• glyburide (Diabeta, Micronase)• glyburide micronized (Glynase)	<ul style="list-style-type: none">• nateglinide (Starlix)• repaglinide (Prandin)

What Do These Drugs Have In Common?

- All of the above drugs for diabetes lower the HbA1C (glycosylated hemoglobin) test of average blood sugar.
- No evidence shows that any of these drugs are better for people who are overweight.

What Are the Key Differences Among These Drugs?

- **Glyburide** is better than chlorpropamide in preventing reninopathy (damaged blood vessels in the eye due to diabetes). Other drugs lack enough data for comparison.
- Chlorpropamide has more side effects than glyburide. Nateglinide, tolazamide, and tolbutamide lack data for comparison. All others did not differ in side effects

Ask Your Health Care Practitioner During Your Next Visit:

- Am I taking the most effective drug for my condition?
- Are alternative drugs available that are equally effective?
- Are alternative drugs available that are effective, but less costly?
- Is there a generic available for my brand name drug?
- Will this drug interact with other medications I take?

Evidence-Based Drug Reviews are available at <http://www.oregonrx.org> Click on Oregon's Research. Click on Evidence-Based Reports. Click on desired One Page Consumer Report.