

July 17, 2007

Study finds old diabetes drugs safe, cheap

Researchers give high marks to a generic costing less than \$10 a month

By MARILYNN MARCHIONE
Associated Press

Here are some findings of a comparison review of new and old diabetes drugs:

- **Weight** : Metformin and acarbose (sold as Precose) do not increase weight. Others add 2 to 11 pounds.
- **Cholesterol** : Bad cholesterol drops by about 10 milligrams per deciliter of blood with metformin and increases by that amount with Avandia or Actos, made by Takeda Pharmaceuticals.
- **Sugar** : Glimepiride, glipizide, glyburide and repaglinide lead to too-low blood sugar more often than other drugs do.
- **Heart** : Actos and Avandia significantly raise the risk of heart failure.

Older, cheaper diabetes drugs are as safe and effective as newer ones, concludes an analysis that is good news for diabetics and may further hurt sales of Avandia, a blockbuster pill recently tied to heart problems.

The clear winner: metformin, sold as Glucophage and generically for about \$100 a year. It works as well as other diabetes pills but does not cause weight gain or too-low blood sugar, the analysis found. It also lowers LDL or bad cholesterol.

"It looks to be the safest," said Dr. Shari Bolen, a Johns Hopkins University researcher who led the review, which was published online Monday by the Annals of Internal Medicine.

Consumer Reports also published a consumer guide of the results. Besides metformin, it rates glipizide and glimepiride, sold as Amaryl and Glucotrol, as best bets.

"This is truly significant information for the millions of people with diabetes struggling to control their disease, but also struggling with the high cost of their medications," said Gail Shearer, project director of Consumer Reports Best Buy Drugs.

All diabetes pills can cause problems, so patients should pick the medication based on what side effects matter most in their own situation, the guide advises.

Diabetes is epidemic, afflicting more than 18 million Americans or 7 percent of the population. Most have Type 2, which occurs when the body makes too little insulin or cannot use what it does produce. Being overweight raises this risk.

First in-depth comparison

The federal Agency for Healthcare Research and Quality commissioned the analysis of diabetes drugs in 2005, long before a study published in May suggested Avandia, made by GlaxoSmithKline PLC, raised the risk of heart attacks. The new analysis says that evidence is insufficient to settle this issue.

The goal was to do the first in-depth comparison of oral medications that have come out in the last decade, as well as older ones like sulfonylureas that have been sold for 50 years. The report did not evaluate insulin or other injected diabetes drugs.

Researchers reviewed more than 200 published studies and obtained unpublished information from some drug companies and the federal Food and Drug Administration.

They found that most oral diabetes drugs lower "A1c" levels – a key measure of high blood sugar – by about one percentage point – from 8 to 7, for example (5 is normal for non-diabetics).

Taking two medications can improve blood sugar control, but also costs more and can raise the risk of side effects.

Despite heavy marketing for newer drugs, which cost as much as \$262 a month, "we didn't find any benefit" unless a patient could not tolerate an older one, Bolen said.

Avandia's safety will be debated at an FDA hearing July 30. GlaxoSmithKline says Avandia is safe but has not denied reports that sales are off about 30 percent since May 21, when a study linked it to heart attacks.

Company spokeswoman Mary Anne Rhyne said the analysis published Monday was done before one study had been completed that showed Avandia to better control blood sugar than two rival medications.

Metformin is "an incredibly inexpensive generic drug, which is why we found it so appealing," Dr. David Nathan, diabetes chief at Massachusetts General Hospital, said.

But it can cause a rare but dangerous side effect called lactic acidosis, the buildup of lactic acid in the blood. It also should not be given to diabetics who have moderate kidney disease or heart failure. This is true of many other diabetes pills, too.