



Avandia, Diabetes & Heart Disease by Ann Gerhardt, MD (02/2008)

Bottom Line at the Top: Avandia, a diabetes medication, may increase heart disease.

Avandia (generic name rosiglitazone) is proof of the not-all-drugs-in-a-class-are-equal lesson. Avandia is a diabetes medication of the TZD class. TZD's treat diabetes by improving insulin sensitivity and fat metabolism. In the RECORD trial diabetics taking Avandia died more often than those taking 2 other common diabetes medications.

Heart disease eventually afflicts all diabetics, if they don't die of something else first. This is because diabetics have abnormal cholesterol and triglyceride profiles, clotting, blood vessel damage and spasticity, inflammation and oxidation. Usually TZD's as a class help to reverse many of these.

Unfortunately, though Avandia lowers blood sugar and improves some aspects of metabolism, it is not one of the TZD's that improves cholesterol and triglycerides. Instead of lowering them, it raises LDL-cholesterol (the bad) and has no effect on triglycerides. At best it modestly improves HDL-cholesterol (the good). The over-all effect of a drug is the sum of all its positive and negative effects. For Avandia, that sum does not improve heart disease.

Actos, the other TZD available in the U.S., lowers triglycerides, raises HDL-cholesterol and only slightly raises LDL-cholesterol. In the PROACTIVE trial, Actos reduced the incidence of heart attack and stroke.