

THIAZOLIDINEDIONES

Benefits:

Thiazolidinediones, also known as TZDs, are type 2 diabetes medications that increase insulin sensitivity. The brand names for TZDs are Actos (Pioglitazone) and Avandia (Rosiglitazone). TZDs are thought to decrease glucose output from the liver and increase glucose use in the muscle and fat tissue. This medication is currently being prescribed for type 2 diabetes only.

Some studies show it may lower A1c by 0.5%-1%.

Side Effect and Contraindications:

A common side effect of taking a TZD medication is weight gain due to fluid retention and swelling. There is also an increased risk of bone fractures, bladder cancer, decreased blood counts, heart failure or worsening of existing heart disease. The first generation of TZDs increased the risk of liver cancer, but this has been ruled out in the second generation medications. As a precaution, it is recommended that people who take TZDs and have existing liver problems continue to monitor liver enzymes with their doctor.

The use of TZDs is contraindicated in people with active liver disease, congestive heart failure, and type 1 diabetes or on insulin.

TZDs may have some beneficial effect on lipid markers, decrease triglycerides, and increase HDL (good cholesterol) levels.

Dosing:

Name of Drug	Dosing of Drug
Actos (pioglitazone)	15 mg, 30 mg, and 45 mg (once daily)
Avandia (rosiglitazone)	2 mg, 4 mg, and 8 mg (daily or twice daily)

This medication should be taken with meals.

Combinations:

TZDs may be prescribed alone or as a combined medication if needed. Pioglitazone is combined with metformin (Actoplus Met) and glimepiride (Duetact). Rosiglitazone is combined with metformin (Avandamet) and glimepiride (Avandaryl).

*NOTE: this medication is not considered safe in pregnancy and safety has not been established for type 1 diabetes.