

### Medication Names

Pioglitazone (Actos)

### Therapeutic Use

Type 2 diabetes mellitus, with or without drug therapy with insulin or metformin (Glucophage)

### Adverse Drug Reactions

Fluid retention

Hepatotoxicity (potential)

Increased serum lipid levels

Increased risk for bladder cancer

Upper respiratory tract infection

Headaches

Myalgia

### Nursing Interventions

Monitor for edema, weight gain, or indications of heart failure.

Hepatotoxicity

Obtain serum alanine aminotransferase (ALT) levels: Baseline and every 3 to 6 months thereafter.

Stop drug therapy for indications of liver injury.

Monitor serum lipid levels.

Watch for increases in triglycerides

Watch for increases in both high-density (favorable) and low-density (unfavorable) lipoproteins.

### Drug Administration

Give orally once per day with or without food.

### Patient Education

Follow instructions provided in access program.

Report swelling, weight gain, or shortness of breath immediately.

Report jaundice, dark urine, abdominal pain, vomiting, or fatigue

Expect periodic cholesterol testing.

Report chest pain or discomfort, diaphoresis, or atypical fatigue.

Report swelling, rapid weight gain, dyspnea

### Contraindications

Cardiovascular disease, including hypertension

Severe heart failure

Active hepatic disease

Type 1 diabetes

Diabetic ketoacidosis

### Precautions

Mild heart failure, risk for heart failure

Hepatic impairment

Pioglitazone – may increase risk of bladder cancer after 1 year of use

Caution should be used in clients with a history of bladder cancer.

### Interactions

Insulin increases the risk of heart failure and edema.

Gemfibrozil (Lopid) and ketoconazole increase hypoglycemic effects.

Reduced effectiveness of contraceptives.

Glucosamine can have a negative impact on blood glucose control

Chromium as well as coenzyme Q10 can increase hypoglycemic effects.

