# Rosiglitazone Tied to Fracture Risk in Men

### BY CAROLINE HELWICK

Revertebral fractures among men in a small cross-sectional study.

Most previous studies on the effect of thiazolidinediones on bone have been done in postmenopausal women, who are already at risk for osteoporosis. The present study provides evidence that osteoporotic fractures may be a general complication of this treatment, said Dr. Tatiana Mancini of San Marino (Italy) Hospital, and her associates.

On the basis of their findings, the investigators advocated that health care providers use spine x-ray in combination with dual-energy x-ray absorptiometry (DXA) to assess bone status in diabetic patients treated with these agents (Bone 2009;25:784-8). Of 43 men with type 2 dia-

betes (mean age 69 years), 22 men used metformin alone and 21 used metformin plus rosiglitazone; 22 nondiabetic men from an outpatient bone clinic served as controls. Bone mineral density (BMD) was assessed by DXA, and quantitative morphometric analysis was used to identify radiological vertebral fractures.

Vertebral fractures were found in 46.5% of the men with diabetes with a significantly higher prevalence in pa-

tients treated with rosiglitazone plus metformin (66.7%) versus metformin alone (27.3%) or versus controls (22.7%).

Compared with diabetic men who received only metformin, those who received both drugs were significantly younger and had greater body mass index. Multivariate analysis corrected for these and other factors but still demonstrated a significant 6.5-fold increased risk associated with rosiglitazone.

Humalog (insulin lispro injection [rDNA origin]) is for use in patients with diabetes mellitus for the control of hyperglycemia. Humalog should be used with longer-acting insulin, except when used in combination with sulfonylureas in patients with type 2 diabetes.

Humalog is contraindicated during episodes of hypoglycemia and in patients sensitive to Humalog or one of its excipients.

#### **Important Safety Information**

Humalog differs from regular human insulin by its rapid onset of action as well as a shorter duration of action. Therefore, when used as a mealtime insulin, Humalog should be given within 15 minutes before or immediately after a meal.

Due to the short duration of action of Humalog, patients with type 1 diabetes also require a longer-acting insulin to maintain glucose control (except when using an insulin pump). Glucose monitoring is recommended for all patients with diabetes.

The safety and effectiveness of Humalog in patients less than 3 years of age have not been established. There are no adequate and well-controlled clinical studies of the use of Humalog in pregnant or nursing women.

Starting or changing insulin therapy should be done cautiously and only under medical supervision.

#### Hypoglycemia

Hypoglycemia is the most common adverse effect associated with insulins, including Humalog. Hypoglycemia can happen suddenly, and symptoms may be different for each person and may change from time to time. Severe hypoglycemia can cause seizures and may be life-threatening.

#### **Other Side Effects**

Other potential side effects associated with the use of insulins include: hypokalemia, weight gain, lipodystrophy, and hypersensitivity. Systemic allergy is less common, but may be life-threatening. Because of the difference in action of Humalog, care should be taken in patients in whom hypoglycemia or hypokalemia may be clinically relevant (eg, those who are fasting, have autonomic neuropathy or renal impairment, are using potassium-lowering drugs, or taking drugs sensitive to serum potassium level).

#### Please see full user manual that accompanies the Pen.

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#### Reference

1. Data on file, Lilly USA, LLC. KwikPen Design Validation User Study. HUM20071024A.

## Also Available

Find out more at www.humalog.com

Original Prefilled Pen Humalog<sup>®</sup> is also available by prescription in the original Humalog Prefilled Pen.



**Please note:** When prescribing Humalog KwikPen, you will need to write a separate prescription for BD needles.

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insulin lispro injection (rDNA origin)

