



## MEDICAL TIPS

### K-PIO TABLETS

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### **Efficacy of lower doses of pioglitazone after stroke or transient ischemic attack in patients with insulin resistance**

*Spence JD et al. Diabetes, Obesity & Metabolism 2022; 24(6): 1150-1158.*

- Pioglitazone is a potent insulin sensitizing drug with anti-atherosclerotic properties, for which the benefits and the risks of lower vs higher doses of pioglitazone was assessed in the Insulin Resistance Intervention in Stroke Trial.
- 1938 patients, randomized to receive <15mg/d, 15mg/d, 30mg/d and 45 mg/d were assessed for its efficacy (MI or recurrent stroke, new-onset diabetes) and adverse outcomes (oedema, weight gain, heart failure and bone fracture).
- There was no significant effect on stroke/MI or new onset diabetes for 15mg/d dose, but for <15mg/d and 30mg/d the pooled adjusted hazard ratio for stroke/MI was 0.48, for 45mg/day was 0.74 and for new onset diabetes was 0.34 and 0.31 respectively.
- For oedema, weight gain and heart failure, the risk estimates for pioglitazone were lower for subjects taking <45mg/d.

**Lower doses of pioglitazone appear to confer much of the benefit with less adverse effects than the full dose.**

