▼Liraglutide for type 2 diabetes – new data

In May this year, we published an article on ▼*Liraglutide for type 2 diabetes* (*DTB* 2010; 48: 50–3). At the time, there were no published randomised controlled trials comparing liraglutide with ▼sitagliptin. However, since then, there has been publication of a 26-week non-blinded randomised trial that compared subcutaneous liraglutide 1.2mg and 1.8mg daily with oral sitagliptin 100mg daily, all in addition to metformin, in 665 patients with type 2 diabetes and inadequate glycaemic control (HbA_{1c} 7.5–10.0%) despite treatment with metformin (at least 1,500mg daily) for 3 months or longer.[1]

At 26 weeks, in this study, the mean change in HbA_{1c} levels (the primary outcome measure) from a baseline of around 8.5% was greater with both doses of liraglutide than with sitagliptin (1.2mg: –1.24%, 95% CI –1.37 to –1.11; 1.8mg: –1.50%, 95% CI –1.63 to –1.37; sitagliptin –0.90%, 95% CI –1.03 to –0.77). In terms of secondary outcome measures, mean weight loss was greater with both doses of liraglutide than with sitagliptin (1.2mg: –2.86kg, 95% CI –3.39 to –2.32; 1.8mg: –3.38kg, 95% CI –3.91 to –2.84; sitagliptin: –0.96kg, 95% CI –1.50 to –0.42), but neither drug reduced systolic blood pressure significantly. More patients developed adverse events with liraglutide (66% with 1.2mg and 73% with 1.8mg) than with sitagliptin (58%), the most common being gastrointestinal symptoms, particularly nausea that diminished over time.

The results of this study show that liraglutide reduces HbA_{1c} levels more than sitagliptin, but do not affect the conclusion of *DTB*'s review on liraglutide for type 2 diabetes. This stated that "liraglutide is expensive and currently lacks long-term safety data. Therefore, we believe that it should be considered only after conventional oral hypoglycaemic therapy (including a glitazone) has failed, and where the avoidance of weight gain is crucial, insulin therapy is contraindicated, or the individual is unable to tolerate exenatide."

[R=randomised controlled trial; M=meta-analysis]

R 1. Pratley RE et al. Liraglutide versus sitagliptin for patients with type 2 diabetes who did not have adequate glycaemic control with metformin: a 26-week, randomised, parallel-group, open-label trial. *Lancet* 2010; 375: 1447–56.