Is metformin still the most efficacious first-line oral hypoglycaemic drug in treating type 2 diabetes? A network meta-analysis of randomized controlled trials (RCTs).

Jia Y et al. Obes Rev. 2019 Jan; 20(1):1-12.

- In this meta-analysis, researchers compared 11 major oral hypoglycaemic drugs under five categories evaluated by RCTs as drug monotherapy for the patients with T2DM, measuring glycosylated haemoglobin (HbA1c) or fasting plasma glucose (FPG) as outcomes.
- Seventy-five RCTs including <u>33,830 patients</u> were identified.
- With regard to HbA1c, top three anti-diabetics were repaglinide (HbA1c reduction: -1.39%), gliclazide (-1.37%) and metformin (-1.13%) against placebo.
- Regarding FPG, top three anti-diabetics were repaglinide, metformin and glipizide against placebo. There was no difference between metformin and repaglinide.

This meta-analysis showed that repaglinide and metformin would be the most efficacious oral drugs for first-line monotherapy of T2DM.