Prolonged-release Metformin
Presumed advantage not confirmed

mw D.M. Corbijn, BSc, mw drs M.A.E. Nieuwhof
Nr 4 | 2019 (53) | Page 38-43 | Main article

Tags
metformin  diabetes mellitus

Metformin, Glucient® SR (Consilient Health), prolonged-release tablets 500, 750 and 1000 mg
In theory, prolonged-release metformin as a diabetes drug should cause fewer gastro-intestinal adverse effects than metformin without prolonged release. This is, however, not convincingly proven by research studies. The manufacturer of Glucient® SR previously claimed on its website that prolonged-release metformin has ‘a favourable gastrointestinal profile’, a claim which was based on low-quality studies. Interestingly, the manufacturer has since removed this claim from its website, possibly because they realised that the evidence was very meagre. This is also made clear by this Ge-Bu article. The registration procedure for Glucient® SR did not include the adverse effects profile as an evaluation criterion. What remains of the presumed advantages of prolonged-release metformin is its ease of use for patients with diabetes (once a day dosage), which could imply greater compliance. However, the influence of this improved compliance on HbA1c values or on microvascular or macrovascular endpoints has not been investigated. Ge-Bu therefore rates prolonged-release metformin, which was recently authorised for the Dutch market, as ‘-’.

Ge-Bu Indication

- A new prolonged-release formulation of the diabetes drug metformin, claimed to have fewer gastrointestinal adverse effects, has recently been introduced on the Dutch market.
- Research studies of fairly low quality show that there is no clear evidence that prolonged-release metformin does indeed have fewer gastrointestinal adverse effects than normal metformin.
- Prolonged-release metformin is two to three times as expensive as normal metformin.
- If gastrointestinal adverse effects arise, its dosage can be reduced, and patients can additionally be prescribed gliclazide.
- If a patient does not tolerate metformin at all, they can switch to gliclazide.
- In view of the lack of evidence to show that Glucient® SR provides added value compared to normal-release metformin, and in view of the higher costs, Ge-Bu rates this drug as ‘-’.

Literature references


The literature refers to the Dutch text.

---

**Related articles**

- Ten years of sitagliptin
  
  02-05-2018 | mw drs M.A.E. Nieuwhof