

Darbepoetin Alfa Is Proficient in Enhancing Hemoglobin Levels Effectively



Does darbepoetin alfa, given less frequently (weekly or biweekly) to treat renal anemia, show similar effectiveness and safety to epoetin alfa?

Chen *et al.* studied darbepoetin alfa's efficacy and safety in treating renal anemia in hemodialysis patients, comparing it to epoetin alfa.



Study design

Phase III, randomized, open-label, parallel-group, multicenter, noninferiority clinical study carried out from April 2013 to April 2014 at 25 sites

Study population and intervention

Patients (n=95) aged 18–70 years were randomized into a once per week intravenous darbepoetin alfa group (n=56) and a twice or three times per week intravenous epoetin alfa group (n=39) for 28 weeks.



Endpoints

Primary efficacy endpoint: Mean Hb level during the evaluation period (from week 21 to 28)

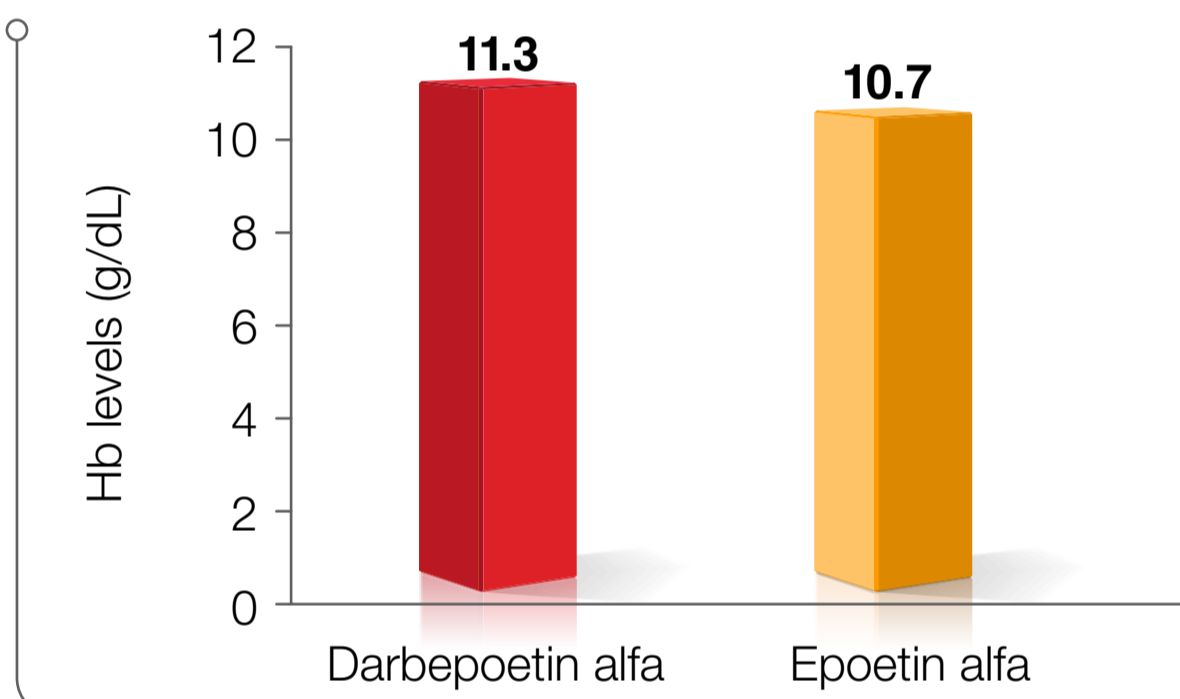
Secondary efficacy endpoints: Hemoglobin increase rate from week 0 to 4, target Hb achievement cumulative rate and time, target Hb maintenance ratio from week 0 to 28

Safety endpoint: Incidence of AEs



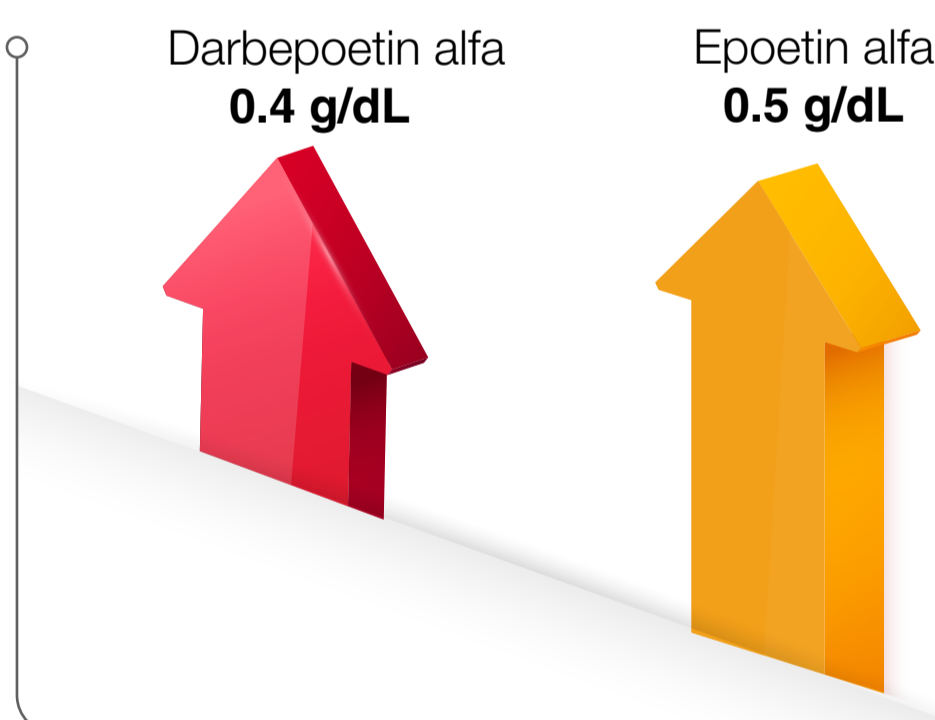
The intravenous administration of darbepoetin emerges as an effective approach for addressing renal anemia.

The mean Hb level (g/dL) in the evaluation period



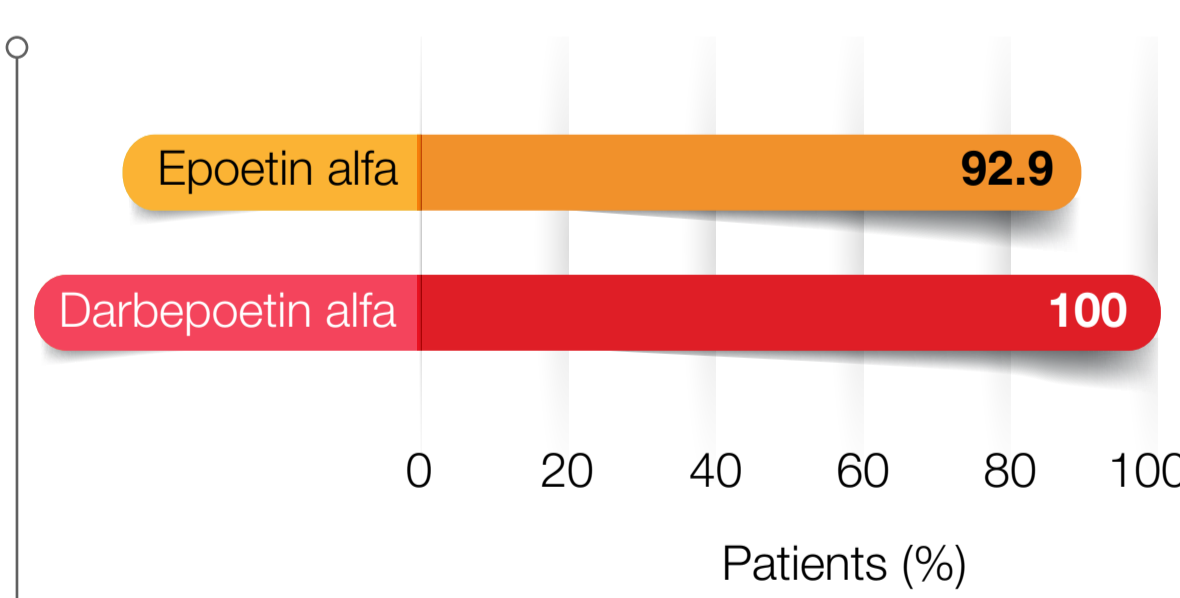
During the evaluation period, the darbepoetin alfa group sustained a **slightly elevated Hb level** compared to the epoetin alfa group.

Hb increase rate from week 0 to 4



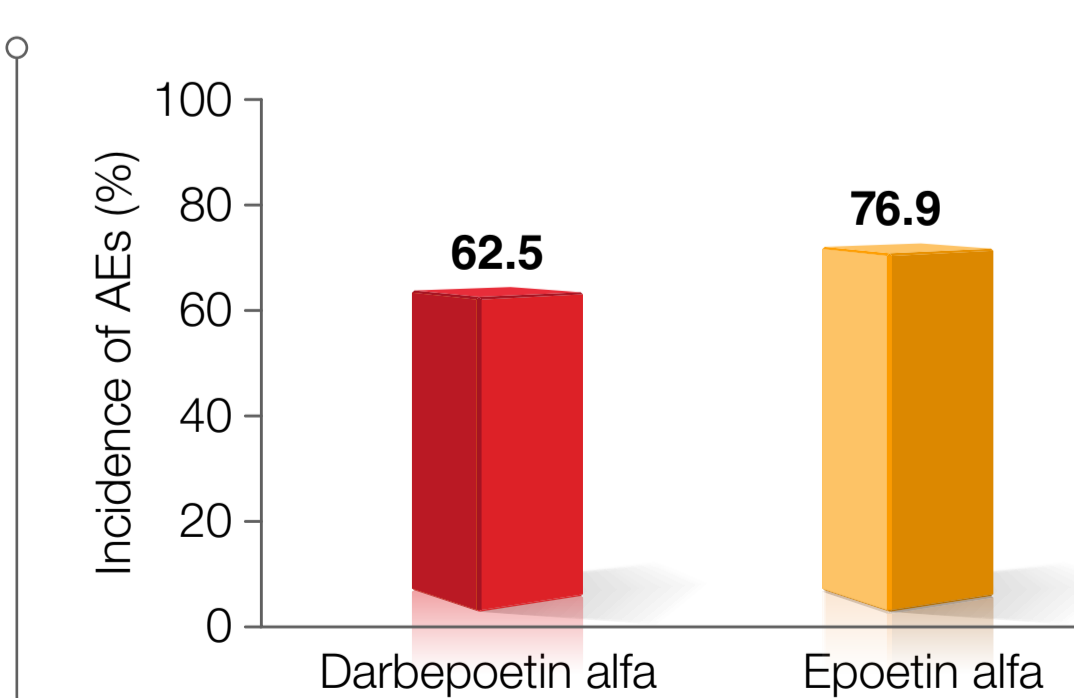
No significant differences in the Hb increase rates between the two groups

Target Hb achievement cumulative rate



The target Hb concentration **achievement rates were similar** across the two groups.

Incidences of AEs



The darbepoetin alfa group and epoetin alfa group had **similar incidences and compositions of AEs.**

For hemodialysis patients, weekly intravenous darbepoetin alfa effectively raises Hb levels, corrects anemia, and keeps Hb concentrations within the target range.