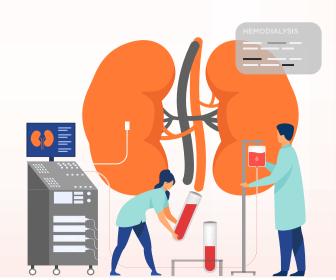




# Darbepoetin Alfa Proves to be Economically Efficient in the Treatment of Renal Anemia





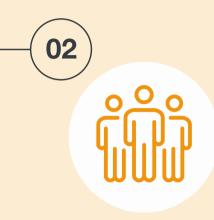
Does administering darbepoetin alfa at a lower dosage frequency contribute to cost savings?

Woodland *et al.* compared the cost of darbepoetin alfa and epoetin alfa and determined the dose conversion ratio over a 12-month period.



#### Study design

Prospective, parallel-group, randomized controlled trial of intravenous EPO and DA in hemodialysis patients



### Study population and intervention

50 adult hemodialysis patients requiring ESA therapy (24 were randomized to the epoetin alfa arm and 26 to the darbepoetin arm).



#### **Endpoints**

Primary outcome: ESA cost (Can\$)

per patient over 12 months

Secondary outcome: Dose conversion ratio and number of dose changes



Predicting the dose conversion ratio is key to determining the relative cost of ESA agents.

## Dose conversion ratio

Run-in phase

280:1

3 months

360:1

6 months

382:1

Darbepoetin dose: epoetin dose

# Total ESA cost (median cost over 12 months) 178 The median cost over 12 months)

4000 4000 3000 1000 Darbepoetin alfa

F=0.02

2302

Darbepoetin alfa

Epoetin alfa

The median cost of darbepoetin alfa was \$1875.78 less per year than that of epoetin alfa.

# Dose stabilization

### Run-in phase

Median number of dose changes was 0 in both groups (p=0.38).

#### **Active phase**

Median number of dose changes was 2 in both groups.

# 04 WEEKS

# Hemoglobin stability

Median number of weeks required to reach Hb stability by both groups (p=0.43)

Darbepoetin alfa demonstrates a considerable cost advantage compared to epoetin alfa, with a dose conversion ratio exceeding 350:1 per patient per year, supporting its cost-effectiveness.

Change for Better...Change to



Abbreviations: DA: Darbepoetin alfa; EPO: Epoetin alfa; ESA: Erythropoietin-stimulating agent; Hb: Hemoglobin.

Reference: Woodland AL, Murphy SW, Curtis BM, et al. Costs associated with intravenous darbepoetin versus epoetin therapy in hemodialysis patients: A randomized controlled trial. Can J Kidney Health Dis. 2017;4:2054358117716461.