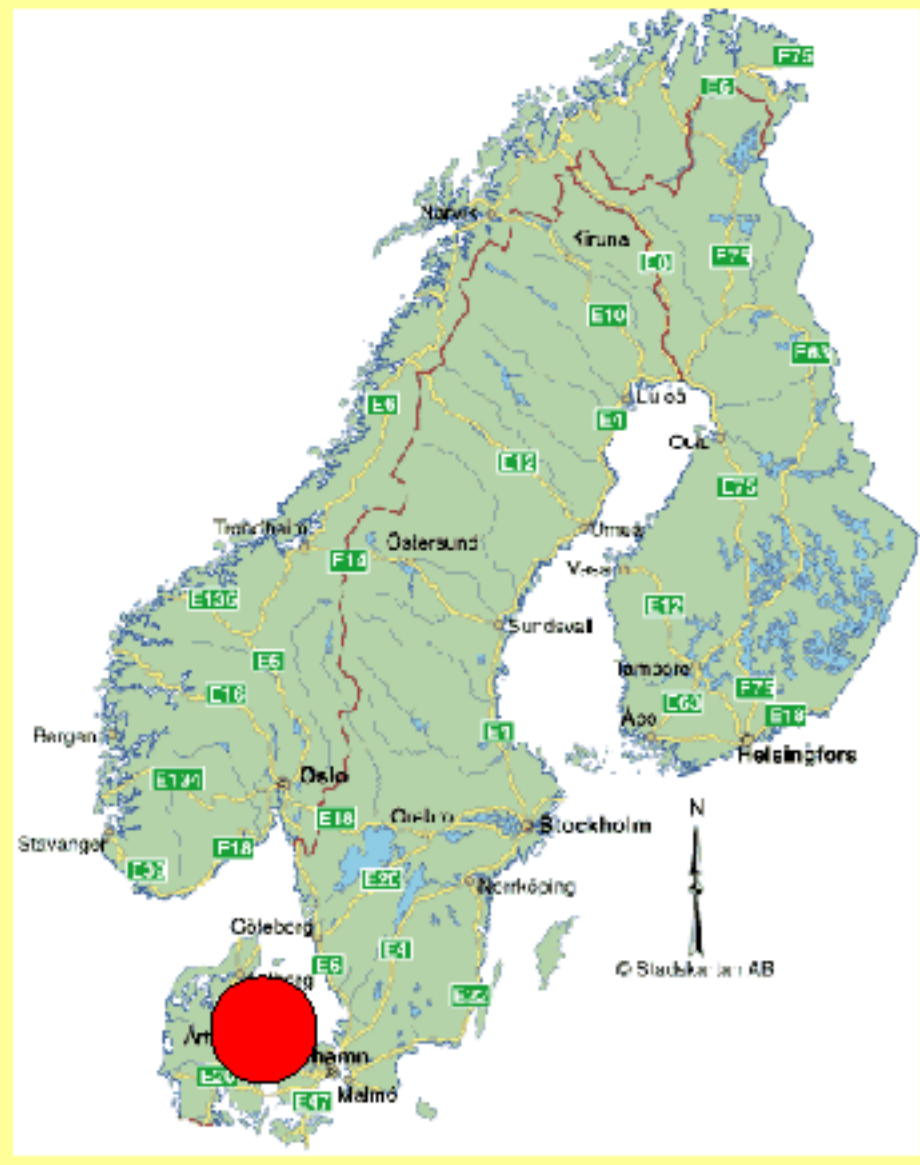


CHANGING FROM DARBEPOETIN TO EPOETIN ZETA – WHAT IS THE CONVERSION FACTOR IN HEMODIALYSIS PATIENTS?



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Objectives:

With the rise of bio similar erythropoiesis-stimulating agents (ESAs) the choice of treatment for renal anemia increased as well as the need for converting from one ESA to another. Especially, the conversion factor between darbepoetin and erythropoetin is still not established (1).

Methods:

79 hospital-based hemodialysis patients at the Department of Nephrology at Skåne University Hospital, Malmö and Lund, who could be followed for six months after changing from darbepoetin to epoetin zeta, were included.

Observation period 1: darbepoetin once a week iv was switched to epoetin zeta once a week iv. The majority of the patients were on regular intravenous iron (Venofer®). The initial epoetin zeta dose was calculated according to the conversion factor previously reported, when switching from epoetin beta to darbepoetin, 257:1 (2). The final conversion factor was calculated as the mean of each patient's individual factor.

Observation period 2: After 6 months the patients requiring an epoetin zeta dose exceeding 5000 U per week were converted from once to twice a week iv. This subgroup of patients was also followed for 6 months. Results are given as mean values±SD.

Results:

Observation period 1

	Hb before, g/L	Hb after, g/L	Darb dose before ug/week	Epo zeta dose after U/week	Conversion factor epo zeta/darb
N=79	117±11	114±13	47±34	11963±7084	296

Observation period 2

	Hb before, g/L	Hb after, g/L	Epo zeta dose before U/week	Epo zeta dose after, U/week
N=45	109±10	119±12	15756±7183	15311±6615

Conclusions:

In this clinical follow-up study a conversion factor of 1:296 was required to maintain a stable hemoglobin when changing darbepoetin once weekly iv to epoetin zeta once weekly iv. We found a significant gain in hemoglobin level when giving epoetin zeta twice instead of once per week at an equivalent dose.

References:

1. KDOQI-US 2006 Update on hemoglobin target
2. Sterner G, Prütz KG. Conversion from epoetin beta to darbepoetin: what is the equivalent dose ? Nephrol Dial Transpl 2008; 23(1): 301.

