

FACTORS ASSOCIATED WITH ERYTHROPOIESIS-STIMULATING AGENT (ESA) DOSE REQUIREMENTS AND HEMOGLOBIN (HB) RESPONSE IN HEMODIALYSIS (HD) PATIENTS: BASELINE (BL) DATA FROM A PROSPECTIVE OBSERVATIONAL REGISTRY. Irene Agodoa, Jessica Droge, Xiang Ling, Mahesh Krishnan, Amgen Inc., Thousand Oaks, CA, USA.

Recently, much attention has been focused on the relationship between ESA dose and Hb response. To identify factors associated with differences in ESA dose requirements and help optimize anemia management, here we describe select BL patient characteristics and clinical measures from a subset of patients enrolled in a 2-year observational study conducted in US CKD stage 4/5 patients.

CKD stage 5 HD patients receiving Epoetin alfa (EA) or no ESA were included for analysis (n=473). BL data were analyzed by EA dose quartile. Data shown in the table are BL mean $\pm$ SD or %.

Age and iPTH level remained relatively uniform across EA dose quartiles. Within the highest EA dose quartile, relative to the lowest dose quartile, a greater proportion of the patients were black, diabetic, or women. Hb levels were similar across quartiles in patients receiving EA therapy.

	Weekly EA Dose (Units)				
	No ESA n=64	$\leq 8K$ n=107	$>8K$ - $\leq 18K$ n=112	$>18K$ - $\leq 30K$ n=91	$>30K$ n=99
Sex, men	67%	62%	52%	53%	49%
Race, Wht/Blk	47/42%	44/48%	30/63%	35/60%	31/59%
Age, yrs	52 $\pm$ 14	56 $\pm$ 14	58 $\pm$ 13	56 $\pm$ 14	55 $\pm$ 14
Vintage, mo	74 $\pm$ 95	49 $\pm$ 43	44 $\pm$ 40	47 $\pm$ 49	51 $\pm$ 46
Diabetic	41%	43%	51%	46%	52%
iPTH, pg/mL	533 $\pm$ 569	486 $\pm$ 475	507 $\pm$ 418	492 $\pm$ 372	446 $\pm$ 331
Hb, g/dL	13.7 $\pm$ 3.9	12.1 $\pm$ 1.2	11.8 $\pm$ 1.2	12.5 $\pm$ 2.7	12.1 $\pm$ 1.4

Patients who were black, women, or diabetic were most likely to receive the highest EA doses. However, similar Hb levels were achieved across the quartiles reflecting the importance of individualized dosing. Further analysis of this registry will potentially identify treatment paradigms that modify the ESA dose-Hb response relationship.