

Supplemental List:

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Supplemental Table 1. Analysis cohort size by region.

Month/year ²	Europe ¹		Japan		U.S.		
	Facilities	Patients	Facilities	Patients	Facilities	Patients (Black)	Patients (Non-black)
08/2010	72	2187	58	1709	93	1053	2451
12/2011	72	2103	57	1673	108	1261	2797
04/2013	72	2014	55	1681	94	1099	2199

¹'Europe' includes DOPPS facility samples in Germany, Italy, Spain, and the UK.

²Facility sample transitioned from DOPPS 4 to DOPPS 5 during January-April 2012.

Supplemental Table 2. Prescribed ESA dose (scaled by post-dialysis body weight) quantiles by region, route of administration, and drug type.

Drug/route	Europe							Japan					
	Date	N	P10	P25	P50	P75	P90	N	P10	P25	P50	P75	P90
IV epoetin (u/wk)	08/2010	745	31	52	94	166	261	415	18	33	56	92	137
	12/2011	422	26	48	84	165	287	466	14	31	60	104	162
	04/2013	706	27	51	88	139	235	372	20	39	64	106	141
SQ epoetin (u/wk)	08/2010	80	31	51	88	154	270	[N <10]					
	12/2011	62	31	52	95	137	258	[N <10]					
	04/2013	52	26	43	64	103	160	44	23	39	71	96	125
Darbepoetin (mcg/wk)	08/2010	544	0.13	0.23	0.46	0.77	1.33	416	0.13	0.22	0.38	0.62	1.01
	12/2011	308	0.13	0.25	0.44	0.76	1.31	515	0.15	0.23	0.36	0.61	0.98
	04/2013	388	0.13	0.22	0.39	0.60	0.92	644	0.16	0.24	0.40	0.63	0.87
Mircera (mcg/wk)	08/2010	160	0.22	0.32	0.48	0.71	1.02	[N <10]					
	12/2011	90	0.17	0.25	0.49	0.82	1.31	[N <10]					
	04/2013	12	0.14	0.19	0.56	0.84	1.40	32	0.24	0.40	0.64	0.94	1.12
	US Black							US Non-black					
Drug/route	Date	N	P10	P25	P50	P75	P90	N	P10	P25	P50	P75	P90
IV epoetin (u/wk)	08/2010	805	49	85	172	318	563	1706	42	89	167	310	578
	12/2011	848	37	64	132	233	398	1521	38	62	118	220	374
	04/2013	812	35	56	106	223	402	1357	25	48	98	185	346
SQ epoetin (u/wk)	08/2010	18	65	96	147	221	296	33	24	52	95	133	166
	12/2011	21	27	56	82	133	136	75	32	46	85	155	218
	04/2013	[N <10]						36	29	68	94	132	203
Darbepoetin (mcg/wk)	08/2010	[N <10]						97	0.16	0.20	0.40	0.72	0.93
	12/2011	[N <10]						148	0.09	0.15	0.37	0.80	1.31
	04/2013	[N <10]						88	0.07	0.14	0.24	0.46	0.74
Mircera (mcg/wk)	08/2010	[N <10]						[N <10]					
	12/2011	[N <10]						[N <10]					

04/2013

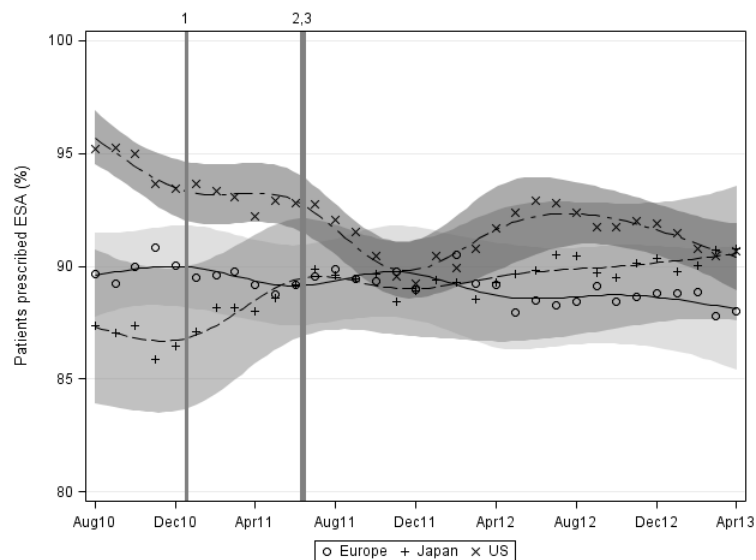
[N <10]

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Supplemental Figures 1A-B. Temporal trends and 95% confidence bands for ESA prescription (A), prescribed ESA dose/hemoglobin ratio (B), by region and month, August 2010 to April 2013.

Markers indicate monthly observed means. Regional trend lines and confidence bands were estimated using a restricted cubic spline model with 7 knots. Vertical lines indicate significant changes to U.S. dialysis reimbursement policy or regulatory updates. Abbreviations: PPS, Medicare ESRD Prospective Payment System; QIP, Medicare ESRD Quality Incentive Payment program; ESA, erythropoiesis-stimulating agent. ESA dose conversions: subcutaneous epoetin, x1.15; darbepoetin (IV or subcutaneous), x250 u/mcg; peglyated epoetin beta (IV or subcutaneous), x208 u/mcg. Footnotes: ¹Introduction of revised PPS, January 2011; ²ESA label revision, June 2011; ³ESRD QIP proposed rule, July 2011.

(A) Proportion of patients prescribed an ESA



(B) Prescribed ESA dose/hemoglobin ratio

