

CHAPTER 9

Chronic Kidney Disease – Mineral and Bone Disorder

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Table 9.1.1 Phosphate Binder in HD patients, 2002-2011

Year	Number of patients	Number of patients On CaCO ₃		Number on patients on Al(OH) ₃		Number of patients on Lanthanum		Number of patients on Sevelamer Hcl	
		n	%	n	%	n	%	n	%
2002	6108	5536	91	171	3	0	0	0	0
2003	7018	6425	92	118	2	0	0	0	0
2004	8164	7408	91	106	1	0	0	0	0
2005	9351	8568	92	98	1	0	0	0	0
2006	11682	10776	92	71	1	15	0	0	0
2007	12907	11868	92	57	0	37	0	1	0
2008	15399	14141	92	72	0	86	1	3	0
2009	17968	16445	92	34	0	247	1	0	0
2010	19509	17805	91	27	0	377	2	6	0
2011	22742	20854	92	35	0	514	2	88	0

Table 9.1.2 Phosphate Binder in PD patients, 2002-2011

Year	Number of patients	Number of patients On CaCO ₃		Number on patients on Al(OH) ₃		Number of patients on Lanthanum		Number of patients on Sevelamer Hcl	
		n	%	n	%	n	%	n	%
2002	891	713	80	6	1	0	0	0	0
2003	1543	1306	85	15	1	0	0	0	0
2004	1842	1552	84	24	1	0	0	0	0
2005	2207	1862	84	21	1	0	0	0	0
2006	2787	2373	85	14	1	5	0	2	0
2007	3577	3142	88	8	0	22	1	1	0
2008	4044	3495	86	14	0	42	1	0	0
2009	3482	2945	85	12	0	78	2	1	0
2010	3844	3391	88	4	0	93	2	2	0
2011	5087	4376	86	8	0	176	3	42	1

Table 9.1.3: Phosphate Binders by Sector in HD patients

Year	Sector	Lanthanum Carbonate		Sevelamer Hcl		Aluminium binder	
		n	%	n	%	n	%
2002	Public	0		0		113	66
	Private	0		0		23	13
	NGO	0		0		35	20
	TOTAL	0	0	0	0	171	99
2003	Public	0		0		70	59
	Private	0		0		30	25
	NGO	0		0		18	15
	TOTAL	0	0	0	0	118	99
2004	Public	0		0		49	46
	Private	0		0		31	29
	NGO	0		0		26	25
	TOTAL	0	0	0	0	106	100
2005	Public	0		0		54	55
	Private	0		0		20	20
	NGO	0		0		24	24
	TOTAL	0	0	0	0	98	99
2006	Public	6	40	0		42	59
	Private	1	7	0		21	30
	NGO	8	53	0		8	11
	TOTAL	15	100	0	0	71	100

Year	Sector	Lanthanum Carbonate		Sevelamer Hcl		Aluminium binder	
		n	%	n	%	n	%
2007	Public	13	35	0	0	25	44
	Private	1	3	1	100	3	5
	NGO	23	62	0	0	29	51
	TOTAL	37	100	1	100	57	100
2008	Public	17	20	0	0	25	35
	Private	19	22	0	0	13	18
	NGO	50	58	3	100	34	47
	TOTAL	86	100	3	100	72	100
2009	Public	90	36	0		11	32
	Private	61	25	0		7	21
	NGO	96	39	0		16	47
	TOTAL	247	100	0	0	34	100
2010	Public	146	39	2	33	18	67
	Private	111	29	0	0	5	18
	NGO	120	32	4	67	4	15
	TOTAL	377	100	6	100	27	100
2011	Public	225	44	10	14	19	63
	Private	136	26	25	35	2	7
	NGO	153	30	36	51	9	30
	TOTAL	514	100	71	100	30	100

Table 9.2.1: Distribution of corrected serum calcium, HD patients, 2002-2011

Year	Number of patients	Mean	SD	Median	LQ	UQ	% patients ≥ 2.1 & ≤ 2.37 mmol/L
2002	5485	2.3	0.3	2.3	2.2	2.5	43
2003	6466	2.3	0.2	2.3	2.2	2.4	46
2004	7536	2.3	0.2	2.3	2.2	2.4	47
2005	8630	2.3	0.2	2.3	2.2	2.4	49
2006	10881	2.3	0.2	2.3	2.1	2.4	50
2007	12275	2.2	0.2	2.2	2.1	2.4	52
2008	14478	2.3	0.2	2.3	2.1	2.4	53
2009	16850	2.3	0.2	2.3	2.2	2.4	52
2010	18655	2.3	0.2	2.3	2.2	2.4	52
2011	21696	2.3	0.2	2.3	2.1	2.4	53

Figure 9.2.1 Cumulative distribution of corrected serum calcium, HD patients, 2002-2011

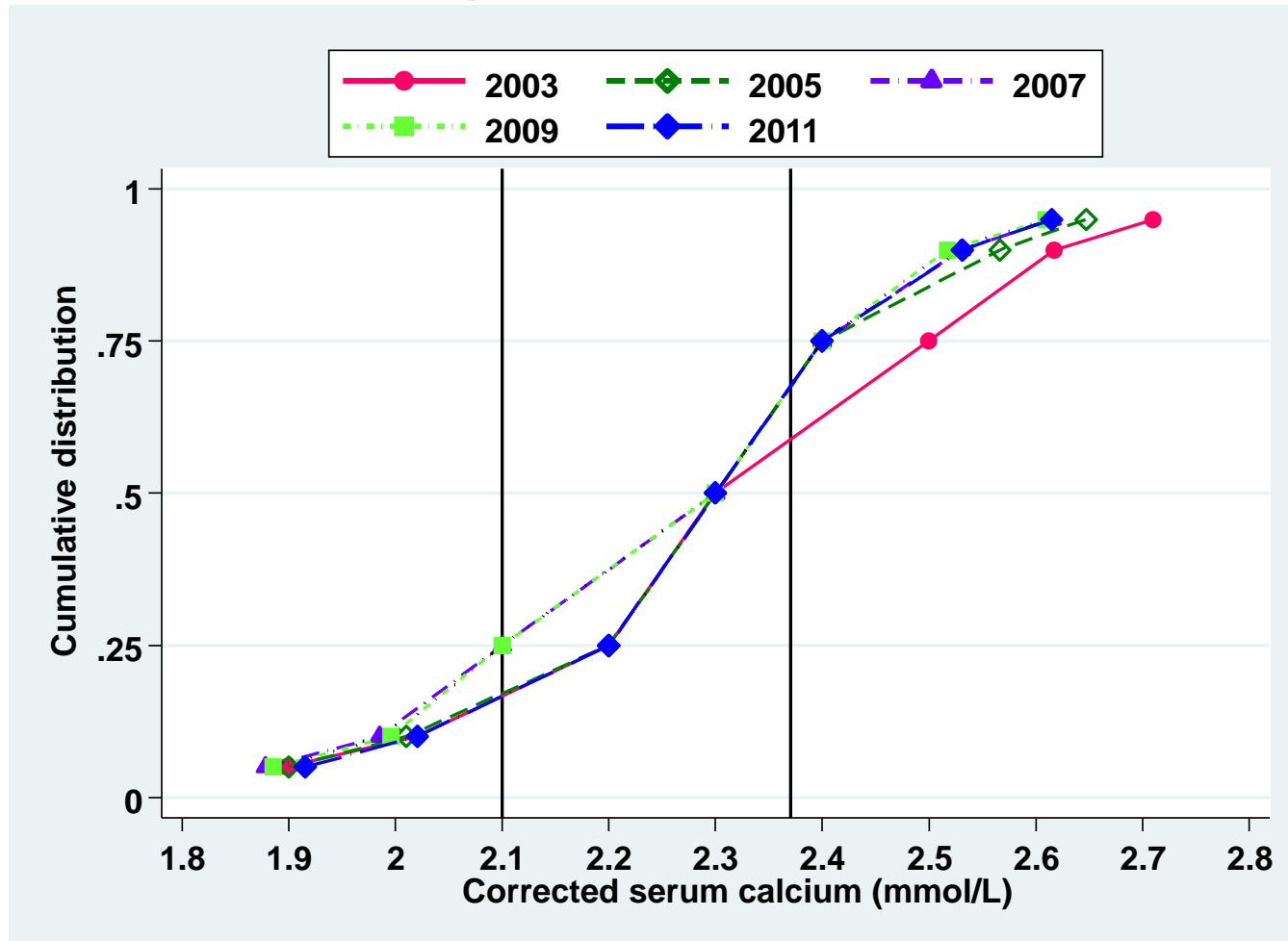


Table 9.2.2: Distribution of corrected serum calcium, PD patients, 2002-2011

Year	Number of patients	Mean	SD	Median	LQ	UQ	%patients ≥ 2.1 & ≤ 2.37 mmol/L
2002	859	2.5	0.2	2.5	2.3	2.6	24
2003	1167	2.4	0.2	2.5	2.3	2.6	27
2004	1276	2.5	0.2	2.5	2.3	2.6	23
2005	1338	2.4	0.2	2.4	2.3	2.6	30
2006	1495	2.4	0.2	2.4	2.3	2.5	38
2007	1748	2.4	0.2	2.4	2.2	2.5	42
2008	2017	2.4	0.2	2.4	2.3	2.5	38
2009	2135	2.4	0.2	2.4	2.2	2.5	39
2010	2301	2.4	0.2	2.4	2.3	2.5	37
2011	2506	2.4	0.2	2.4	2.3	2.5	38

Figure 9.2.2: Cumulative distribution of corrected serum calcium, PD patients, 2002-2011

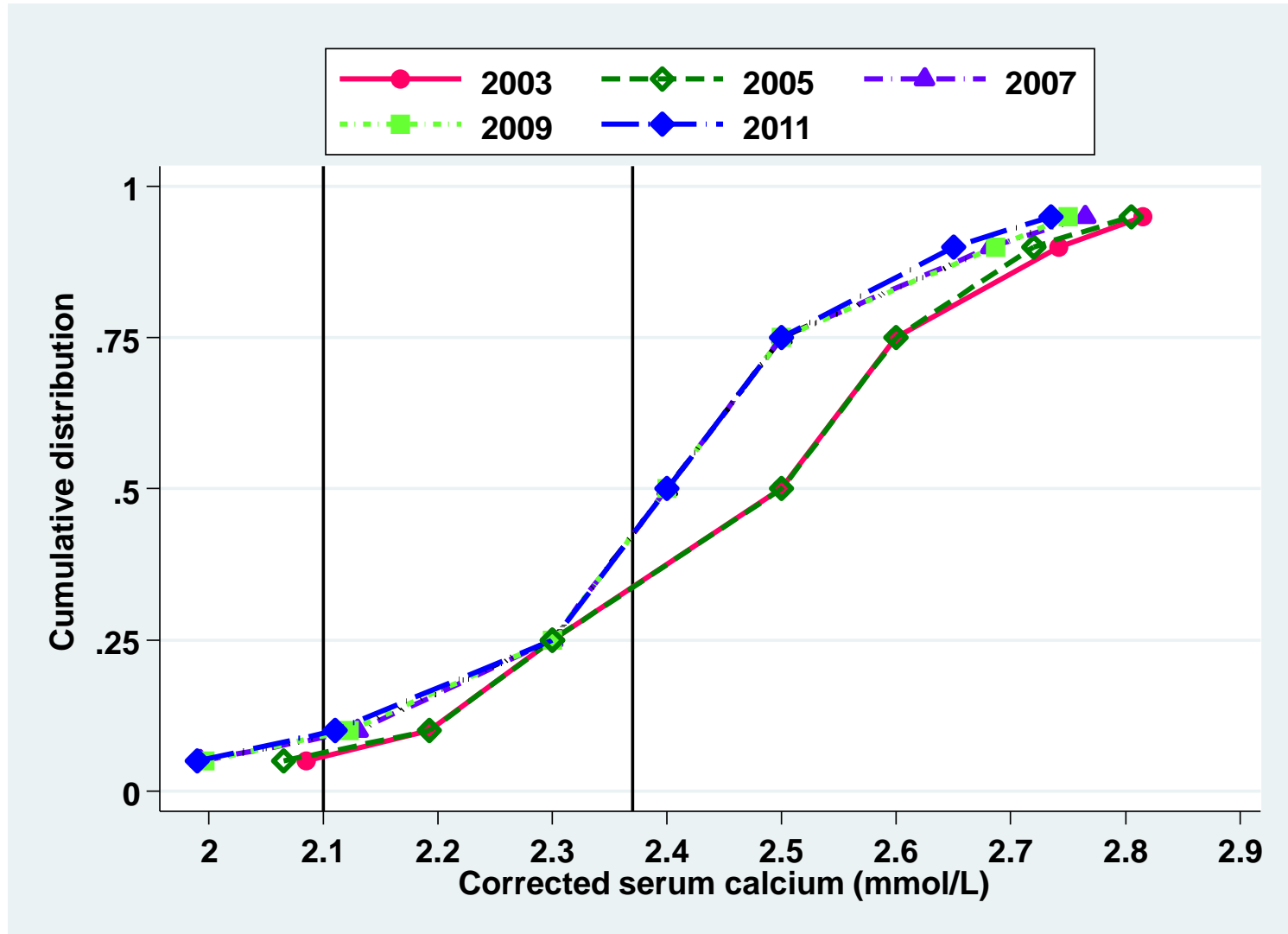


Table 9.2.3: Distribution of serum phosphate, HD patients, 2002-2011

Year	Number of patients	mean	SD	Median	LQ	UQ	%patients <0.8 mmol/L	%patients ≥0.8&<1.3 mmol/L	%patients ≥1.3&<1.8 mmol/L	%patients ≥1.8&<2.2 mmol/L	%patients >2.2 mmol/L
2002	5679	1.9	0.5	1.8	1.5	2.2	1	12	34	27	26
2003	6588	1.8	0.5	1.8	1.5	2.2	2	13	36	26	24
2004	7620	1.8	0.5	1.8	1.5	2.2	1	14	37	25	23
2005	8834	1.8	0.5	1.7	1.4	2.1	2	16	38	25	19
2006	11129	1.8	0.5	1.7	1.4	2.1	1	17	39	25	18
2007	12424	1.8	0.5	1.7	1.4	2.1	1	16	40	25	18
2008	14874	1.7	0.5	1.7	1.4	2	1	17	41	24	17
2009	17246	1.8	0.5	1.7	1.4	2.1	1	15	40	26	18
2010	18880	1.8	0.5	1.7	1.4	2.1	1	15	40	26	19
2011	22127	1.8	0.5	1.7	1.4	2.1	1	15	40	26	18

Figure 9.2.3: Cumulative distribution of serum phosphate, HD patients, 2002-2011

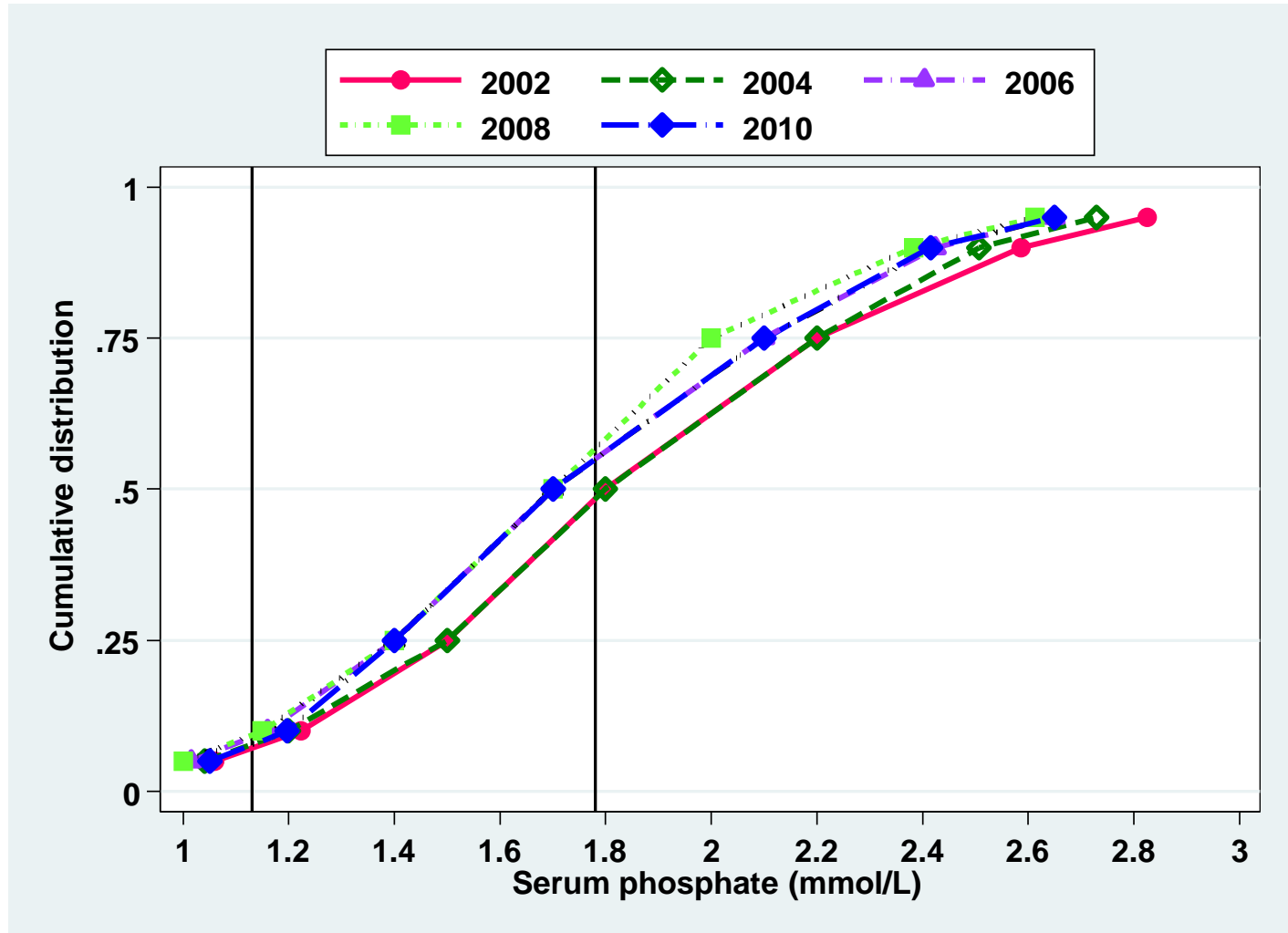


Table 9.2.4: Distribution of serum phosphate, PD patients, 2002-2011

Year	Number of patients	mean	SD	Median	LQ	UQ	%patients <0.8 mmol/L	%patients ≥0.8&<1.3 mmol/L	%patients ≥1.3&<1.8 mmol/L	%patients ≥1.8&<2.2 mmol/L	%patients >2.2 mmol/L
2002	862	1.5	0.5	1.5	1.2	1.8	3	30	42	16	9
2003	1173	1.6	0.5	1.5	1.2	1.9	2	29	40	19	10
2004	1278	1.6	0.5	1.6	1.3	1.9	2	27	39	20	11
2005	1343	1.6	0.5	1.6	1.3	1.9	2	26	40	20	12
2006	1511	1.6	0.5	1.6	1.3	1.9	2	24	43	19	12
2007	1757	1.6	0.5	1.6	1.3	1.9	2	23	44	18	13
2008	2022	1.6	0.5	1.5	1.3	1.9	2	27	42	17	12
2009	2147	1.6	0.5	1.5	1.2	1.9	2	27	41	18	12
2010	2303	1.6	0.5	1.5	1.2	1.9	2	28	40	18	11
2011	2535	1.6	0.5	1.5	1.3	1.9	2	27	41	19	12

Figure 9.2.4: Cumulative distribution of serum phosphate, PD patients, 2002-2011

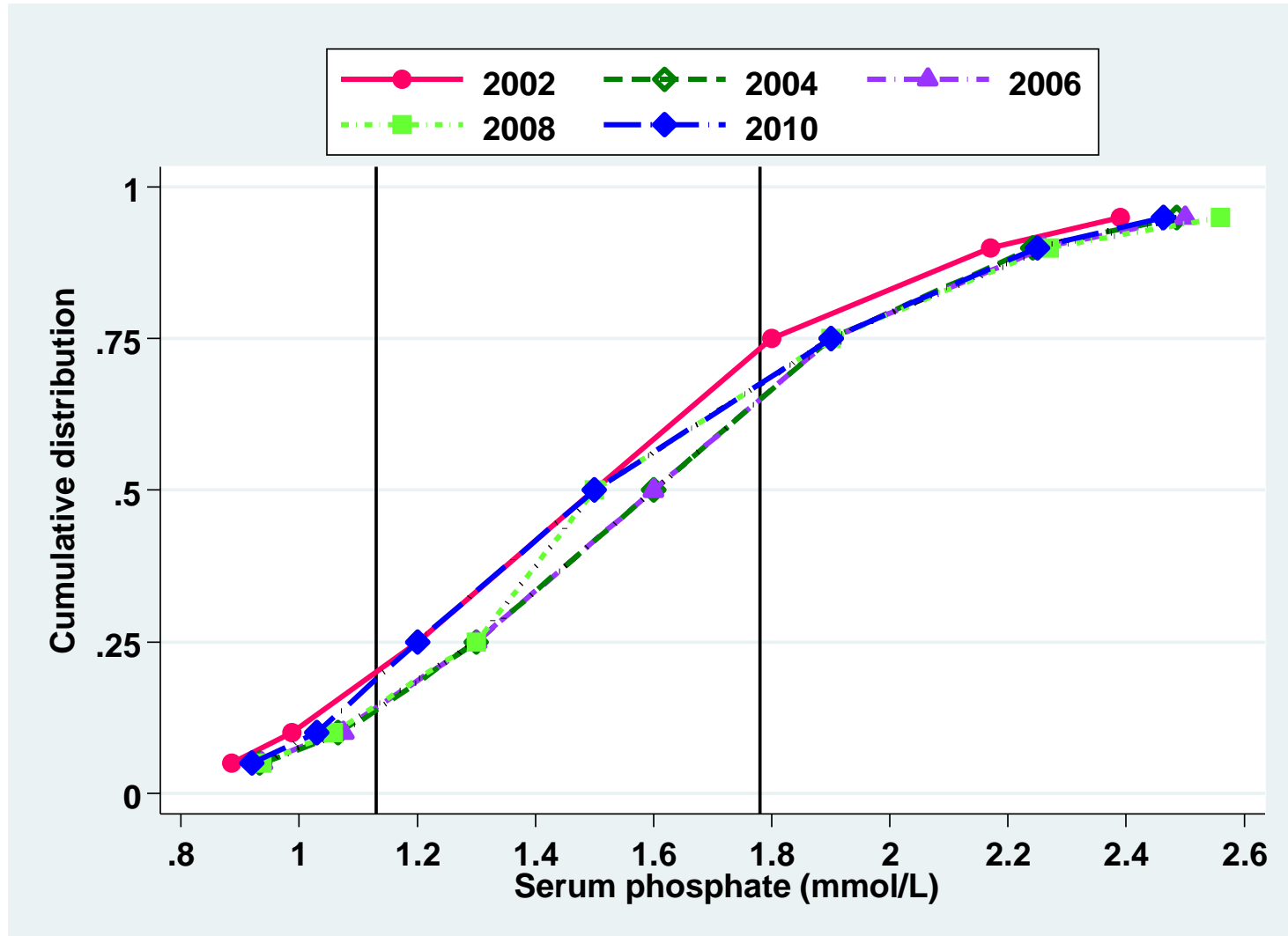


Table 9.2.5: Distribution of corrected calcium x phosphate product, HD patients 2002-2011

Year	Number of patients	mean	SD	Median	LQ	UQ	Percent patients with calcium phosphate product:			
							<3.5 mmol ² /L ²	≥3.5 & <4.5 mmol ² /L ²	≥4.5 & <5.5 mmol ² /L ²	≥5.5 mmol ² /L ²
2002	5403	4.4	1.3	4.3	3.4	5.2	27	31	24	19
2003	6383	4.2	1.3	4.1	3.3	5.1	30	31	23	16
2004	7414	4.2	1.3	4.1	3.3	5	32	32	22	15
2005	8496	4	1.3	3.9	3.2	4.8	36	32	20	12
2006	10758	4	1.2	3.8	3.1	4.7	38	32	19	11
2007	12172	3.9	1.2	3.8	3.1	4.6	38	33	19	10
2008	14360	3.9	1.2	3.8	3.1	4.6	39	33	19	9
2009	16713	4	1.2	3.9	3.2	4.7	36	34	20	11
2010	18535	4	1.2	3.9	3.2	4.8	34	34	21	11
2011	21543	4	1.2	3.9	3.2	4.7	36	34	20	11

Figure 9.2.5: Cumulative distribution of corrected calcium x phosphate product, HD patients 2002-2011

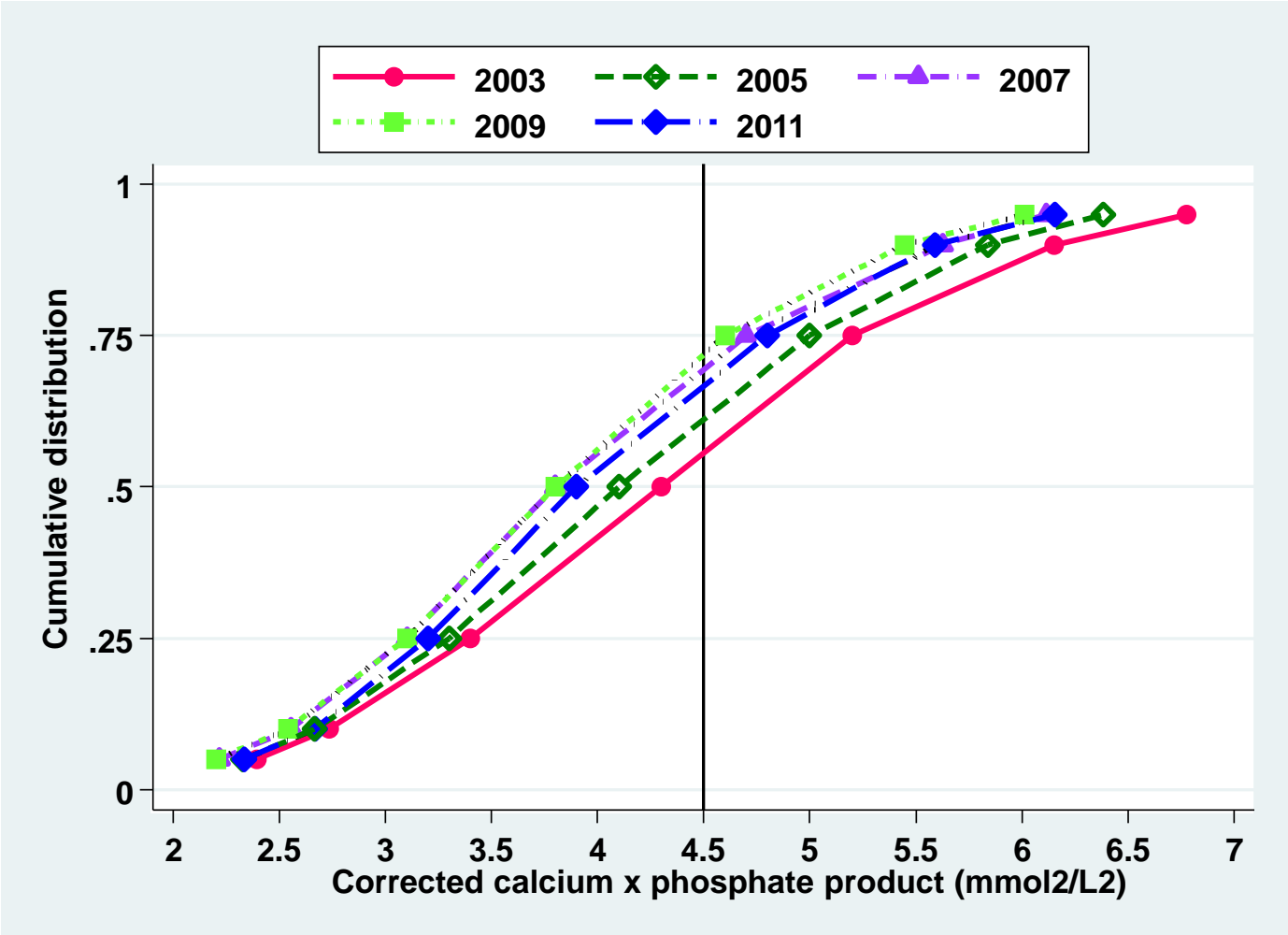


Table 9.2.6: Distribution of corrected calcium x phosphate product, PD patients 2002-2011

Year	Number of patients	mean	SD	Median	LQ	UQ	Percent patients with calcium phosphate product:			
							<3.5 mmol ² /L ²	≥3.5 & <4.5 mmol ² /L ²	≥4.5 & <5.5 mmol ² /L ²	≥5.5 mmol ² /L ²
2002	856	3.8	1.2	3.6	2.9	4.5	45	29	18	8
2003	1162	3.9	1.2	3.7	3	4.6	43	29	17	10
2004	1274	4	1.2	3.8	3	4.7	41	30	18	12
2005	1333	3.9	1.3	3.7	3	4.6	43	29	17	11
2006	1494	3.9	1.2	3.7	3.1	4.6	43	31	17	9
2007	1745	3.8	1.2	3.6	3	4.5	46	29	15	10
2008	2009	3.8	1.2	3.6	3	4.5	47	28	15	10
2009	2130	3.8	1.2	3.6	2.9	4.5	46	29	15	11
2010	2289	3.8	1.2	3.6	2.9	4.5	47	29	15	10
2011	2499	3.8	1.2	3.6	3	4.6	45	28	17	9

Figure 9.2.6: Cumulative distribution of corrected calcium x phosphate product, PD patients 2002-2011

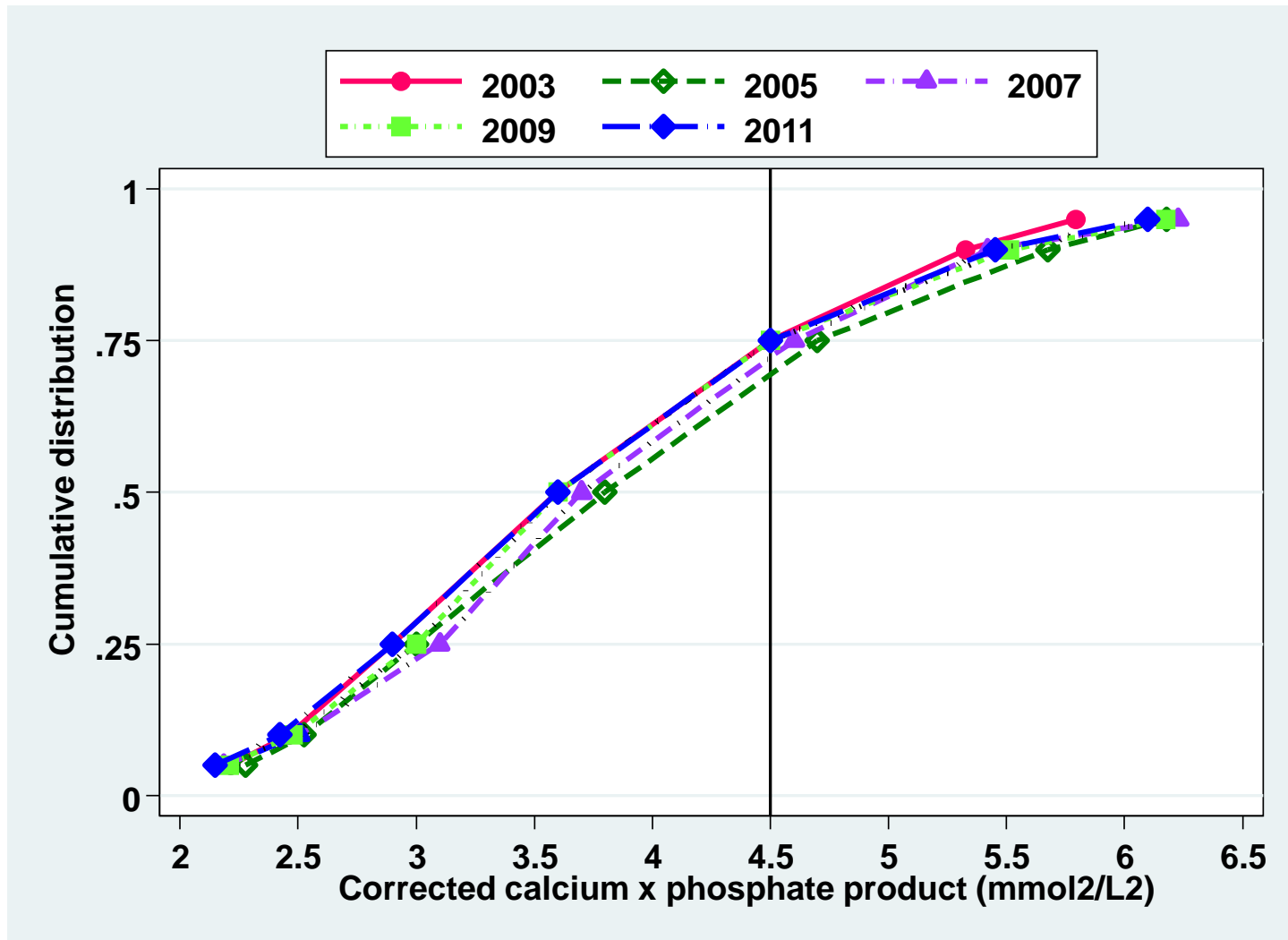


Table 9.2.7(a): Variation in corrected median serum calcium level among HD centres 2002-2011

Year	Number of centres	Min	5th Centile	LQ	Median	UQ	95th Centile	Max
2002	139	1.9	2.1	2.2	2.3	2.4	2.5	2.6
2003	171	2	2.1	2.2	2.3	2.4	2.5	2.5
2004	203	1.9	2.1	2.2	2.3	2.4	2.4	2.5
2005	233	1.8	2	2.2	2.3	2.4	2.4	2.5
2006	277	1.9	2.1	2.2	2.3	2.3	2.4	2.5
2007	315	1.8	2	2.2	2.3	2.3	2.4	2.5
2008	364	1.8	2.1	2.2	2.2	2.3	2.4	2.6
2009	398	1.5	2.1	2.2	2.3	2.3	2.4	2.6
2010	435	1.8	2.1	2.2	2.3	2.3	2.4	2.5
2011	496	1.6	2.1	2.2	2.3	2.3	2.4	2.6

Figure 9.2.7(a): Variation in median serum calcium among HD patients, HD centres, 2011

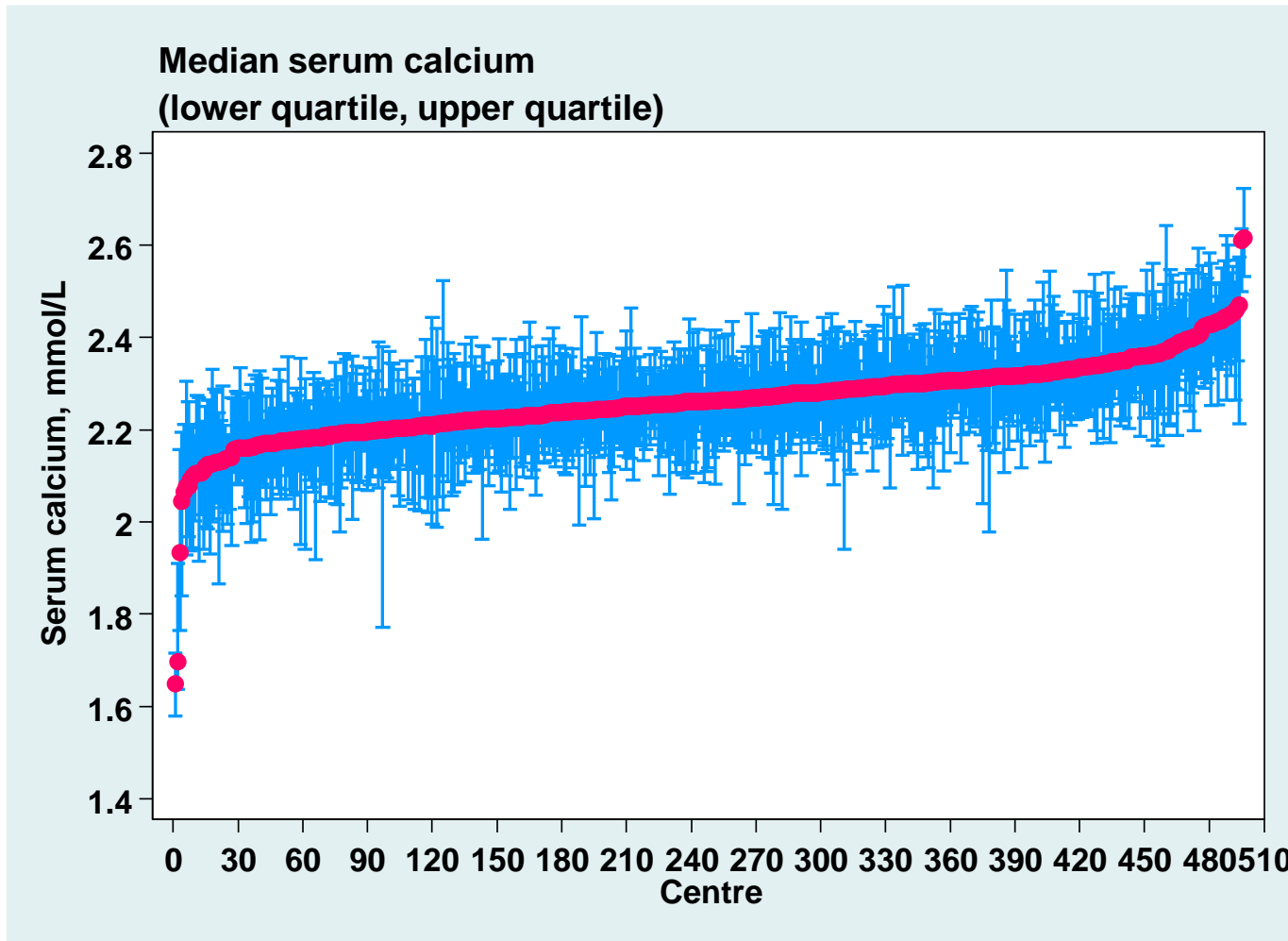


Table 9.2.8(a): Variation in corrected median serum calcium level among PD centres 2002-2011

Year	Number of centres	Min	5th Centile	LQ	Median	UQ	95th Centile	Max
2002	15	2.4	2.4	2.4	2.5	2.5	2.6	2.6
2003	18	2.2	2.2	2.4	2.4	2.5	2.6	2.6
2004	18	2.3	2.3	2.4	2.4	2.5	2.5	2.5
2005	19	2.2	2.2	2.4	2.4	2.5	2.6	2.6
2006	22	2.2	2.2	2.3	2.4	2.4	2.5	2.6
2007	22	2.2	2.2	2.3	2.3	2.4	2.4	2.5
2008	23	2.2	2.2	2.3	2.4	2.5	2.6	2.6
2009	24	2.2	2.3	2.3	2.4	2.4	2.5	2.6
2010	25	2.2	2.3	2.3	2.4	2.5	2.5	2.5
2011	27	2.1	2.3	2.3	2.4	2.4	2.5	2.5

Figure 9.2.8(a): Variation in median serum calcium level among PD patients, PD centres, 2011

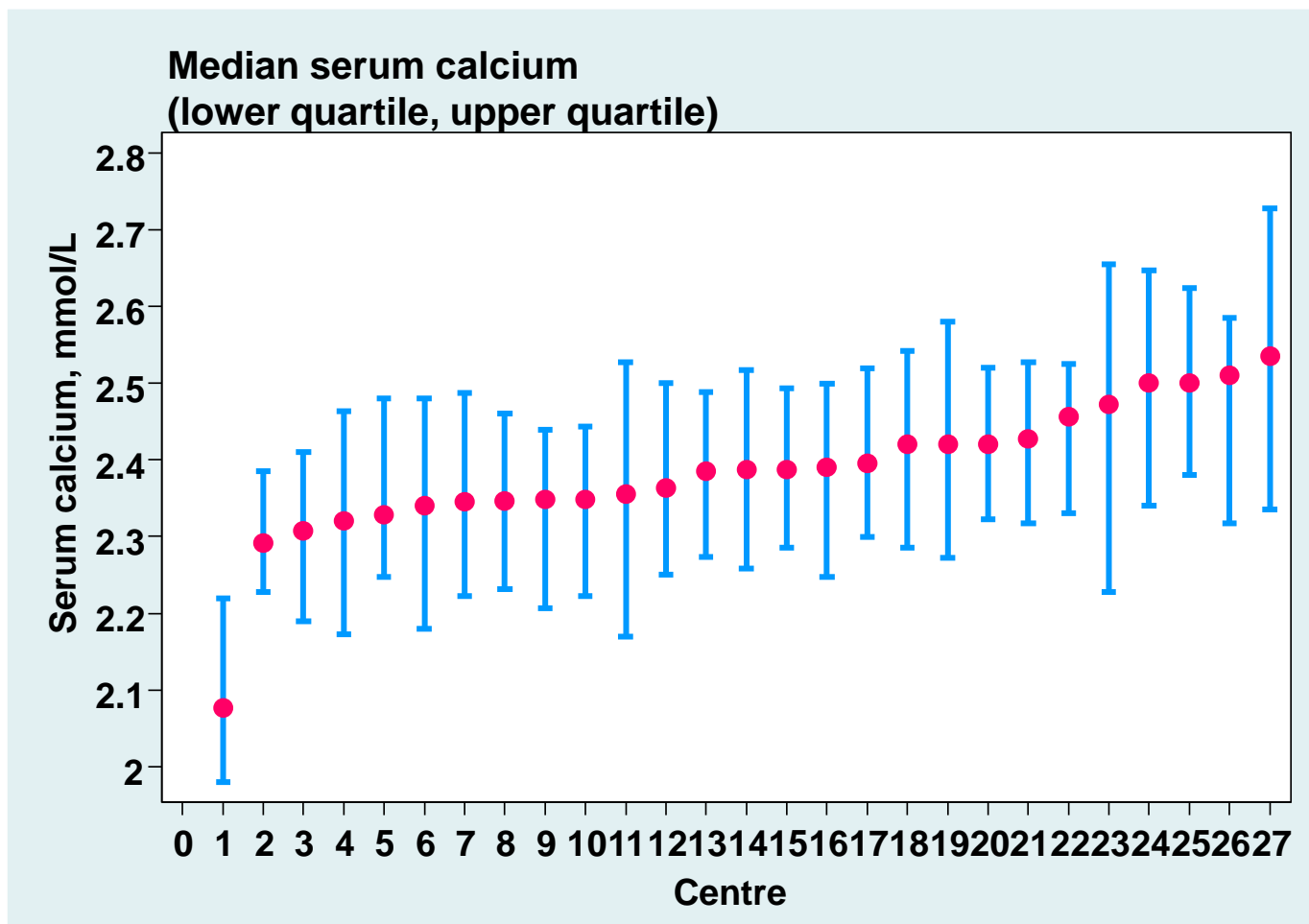


Table 9.2.7(b): Proportion of patients with serum calcium 2.1 to 2.37 mmol/L, HD centres, 2002- 2011

Year	Number of centres	Min	5th Centile	LQ	Median	UQ	95th Centile	Max
2002	139	5	17	33	43	53	69	71
2003	171	11	24	35	45	56	70	91
2004	203	7	22	37	47	58	72	83
2005	233	0	19	38	49	56	70	91
2006	277	13	30	42	50	59	73	90
2007	315	9	29	44	52	61	72	93
2008	364	8	29	46	54	60	73	100
2009	398	0	27	44	53	61	72	93
2010	435	6	32	44	53	61	72	93
2011	496	0	32	46	54	62	74	89

Figure 9.2.7(b): Variation in proportion of patients with serum calcium 2.1 to 2.37 mmol/L, HD centres, 2011

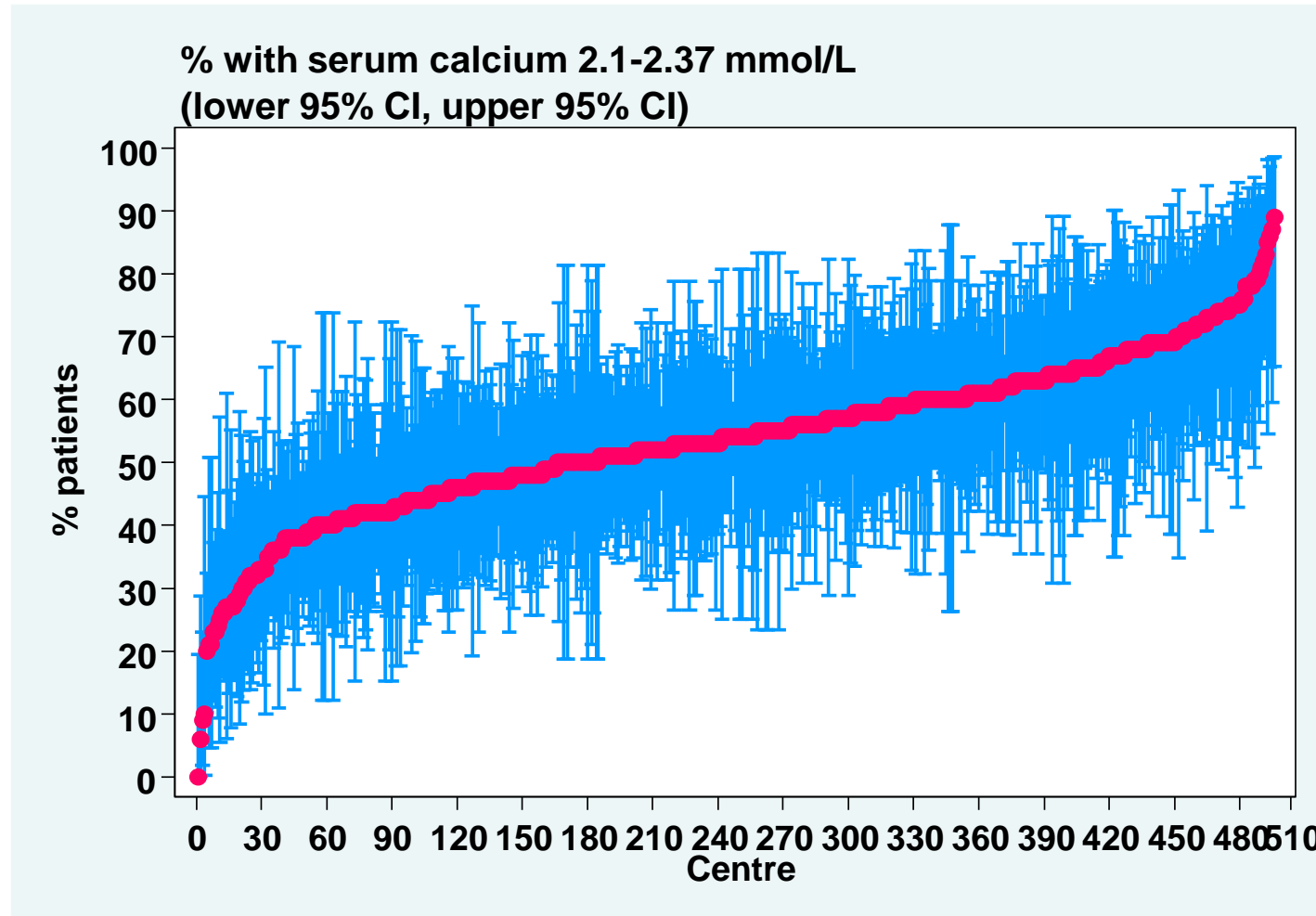


Table 9.2.8(b): Proportion of patients with serum calcium 2.1 to 2.37 mmol/L, PD centres

Year	Number of centres	Min	5th Centile	LQ	Median	UQ	95th Centile	Max
2002	15	12	12	20	25	34	41	41
2003	18	9	9	19	32	39	58	58
2004	18	11	11	18	24.5	31	53	53
2005	19	17	17	25	35	41	51	51
2006	22	16	25	35	42.5	49	59	76
2007	22	19	23	33	45	50	62	63
2008	23	9	15	30	44	52	58	65
2009	24	12	13	30.5	41	51	58	63
2010	25	15	18	28	35	50	57	58
2011	27	8	11	31	37	43	58	62

Figure 9.2.8(b): Variation in proportion of patients with serum calcium 2.1 to 2.37 mmol/L, PD centres, 2011

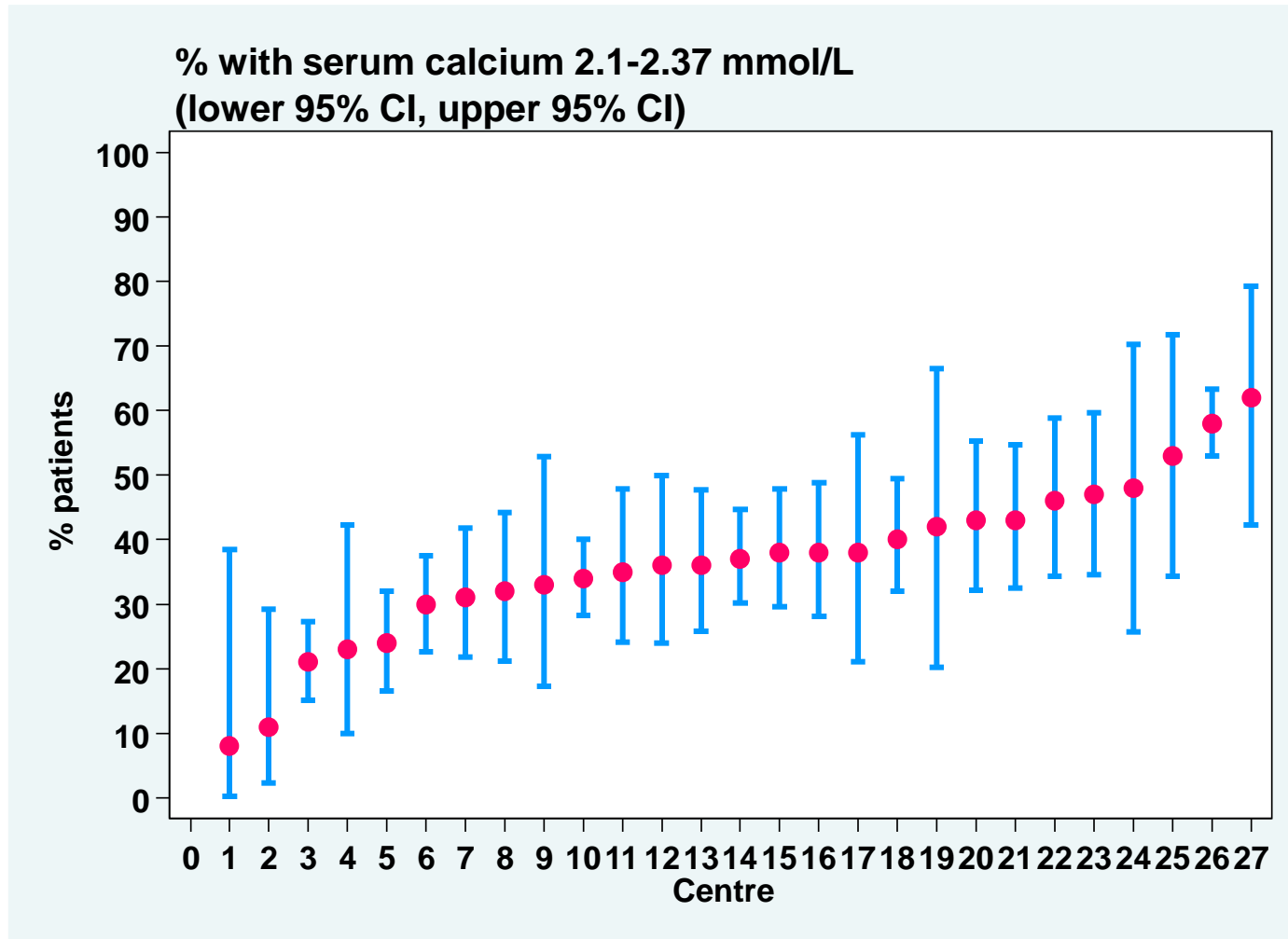


Table 9.2.9(a): Variation in median serum phosphate level among HD centres, 2002- 2011

Year	Number of centres	Min	5th Centile	LQ	Median	UQ	95th Centile	Max
2002	147	1.3	1.5	1.8	1.9	2	2.2	2.4
2003	176	0.9	1.5	1.7	1.8	1.9	2.2	2.4
2004	208	1.4	1.5	1.7	1.8	1.9	2.1	2.4
2005	234	0.9	1.4	1.6	1.7	1.9	2	2.2
2006	282	1	1.5	1.6	1.7	1.8	2.1	2.2
2007	317	1.1	1.4	1.6	1.7	1.8	2	2.3
2008	368	1.1	1.4	1.6	1.7	1.8	2	2.5
2009	404	1.1	1.5	1.6	1.7	1.8	2	2.3
2010	441	1.3	1.5	1.6	1.7	1.9	2	2.8
2011	498	1	1.5	1.6	1.8	1.8	2	2.5

Figure 9.2.9(a): Variation in median serum phosphate level among HD patients, HD centres, 2011

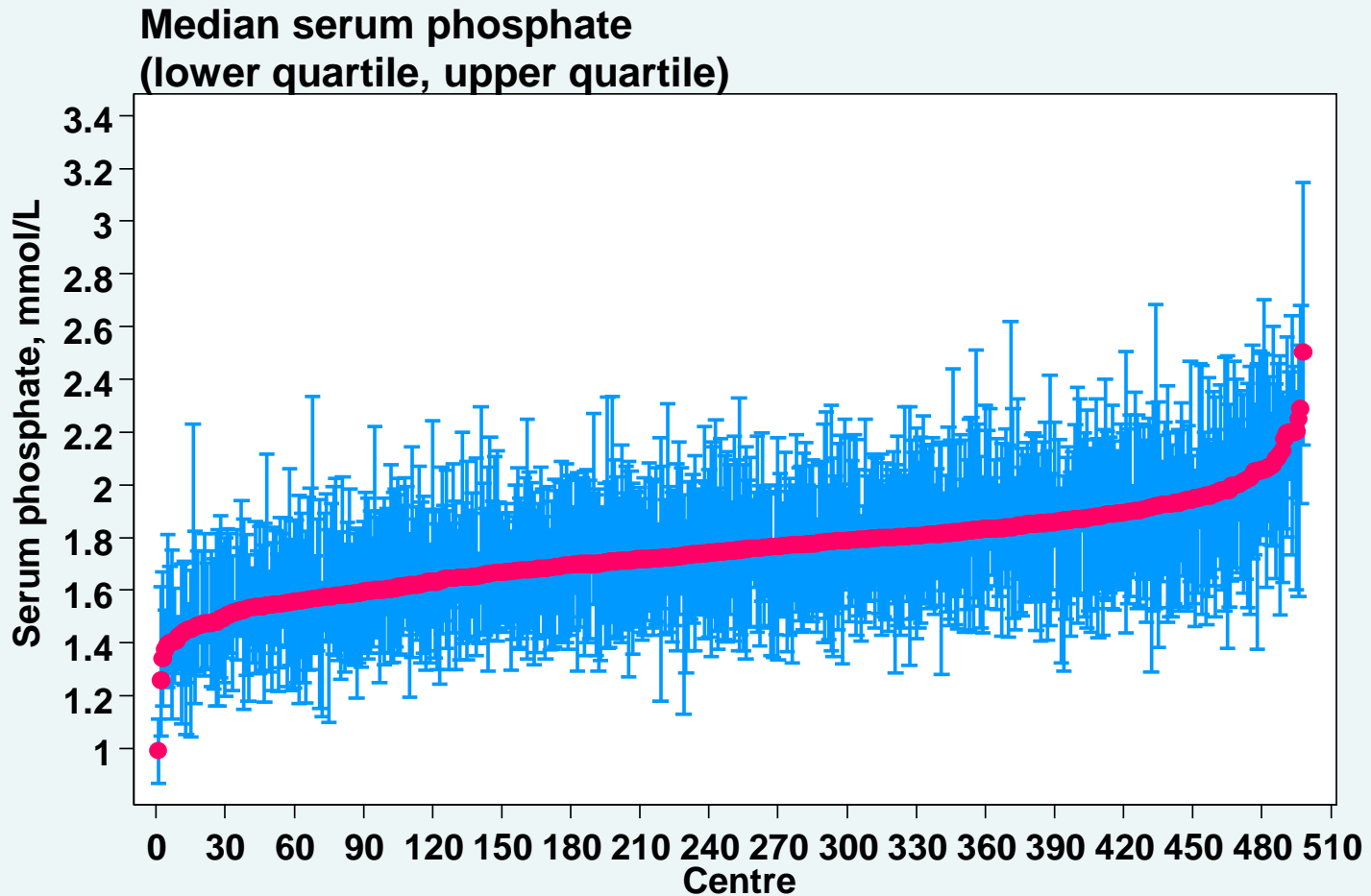


Table 9.2.10(a): Variation in median serum phosphate levels among PD centres 2002-2011

Year	Number of centres	Min	5th Centile	LQ	Median	UQ	95th Centile	Max
2002	15	1.4	1.4	1.4	1.5	1.6	2.1	2.1
2003	18	1.3	1.3	1.5	1.5	1.6	1.7	1.7
2004	18	1.3	1.3	1.5	1.5	1.7	1.8	1.8
2005	19	1.4	1.4	1.5	1.5	1.7	1.9	1.9
2006	22	1.3	1.4	1.5	1.6	1.7	1.8	1.9
2007	22	1.3	1.4	1.5	1.6	1.7	1.8	1.9
2008	23	1.3	1.4	1.5	1.6	1.8	1.8	2.1
2009	24	1.3	1.4	1.5	1.6	1.7	1.9	2.2
2010	25	1.3	1.3	1.4	1.6	1.8	1.8	1.9
2011	27	1.3	1.3	1.5	1.6	1.7	1.9	1.9

Figure 9.2.10(a): Variation in median serum phosphate level among PD patients, PD centres 2011

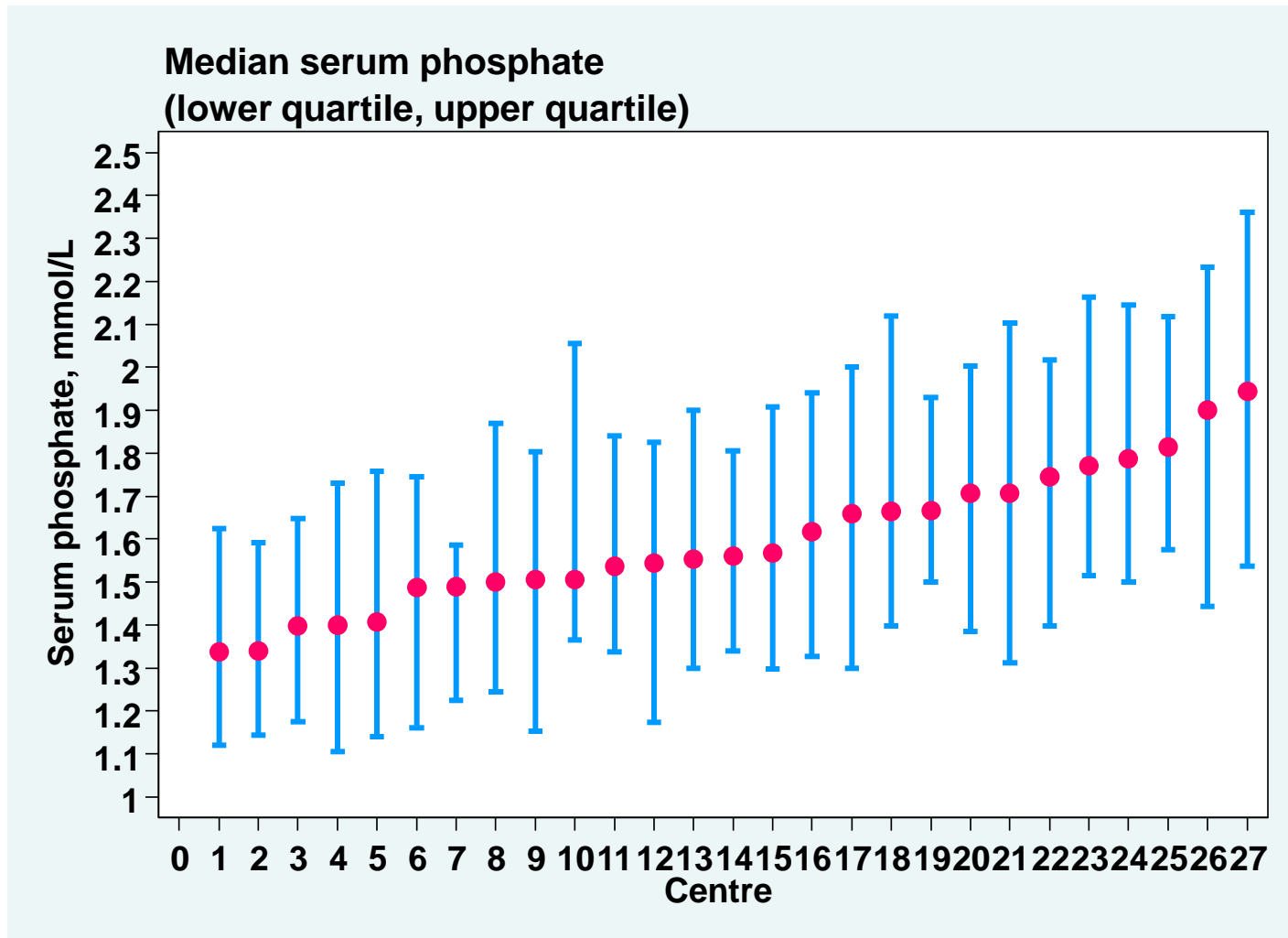


Table 9.2.9(b): Proportion of patients with serum phosphate 1.13-1.78 mmol/L, HD centres, 2002-2011

Year	Number of centres	Min	5th Centile	LQ	Median	UQ	95th Centile	Max
2002	147	9	17	29	36	47	66	90
2003	176	9	19	31	40	48	64	92
2004	208	0	18	31	41	50	68	92
2005	234	11	25	36	43	53	71	90
2006	282	14	26	39	45.5	54	68	88
2007	317	18	28	39	47	55	67	92
2008	368	12	28	39	48	56	67	93
2009	404	7	27	38	47	53	65	81
2010	441	4	24	38	46	54	65	82
2011	498	0	26	38	47	54	68	100

Figure 9.2.9(b): Variation in proportion of patients with serum phosphate 1.13-1.78 mmol/L, HD centres, 2011

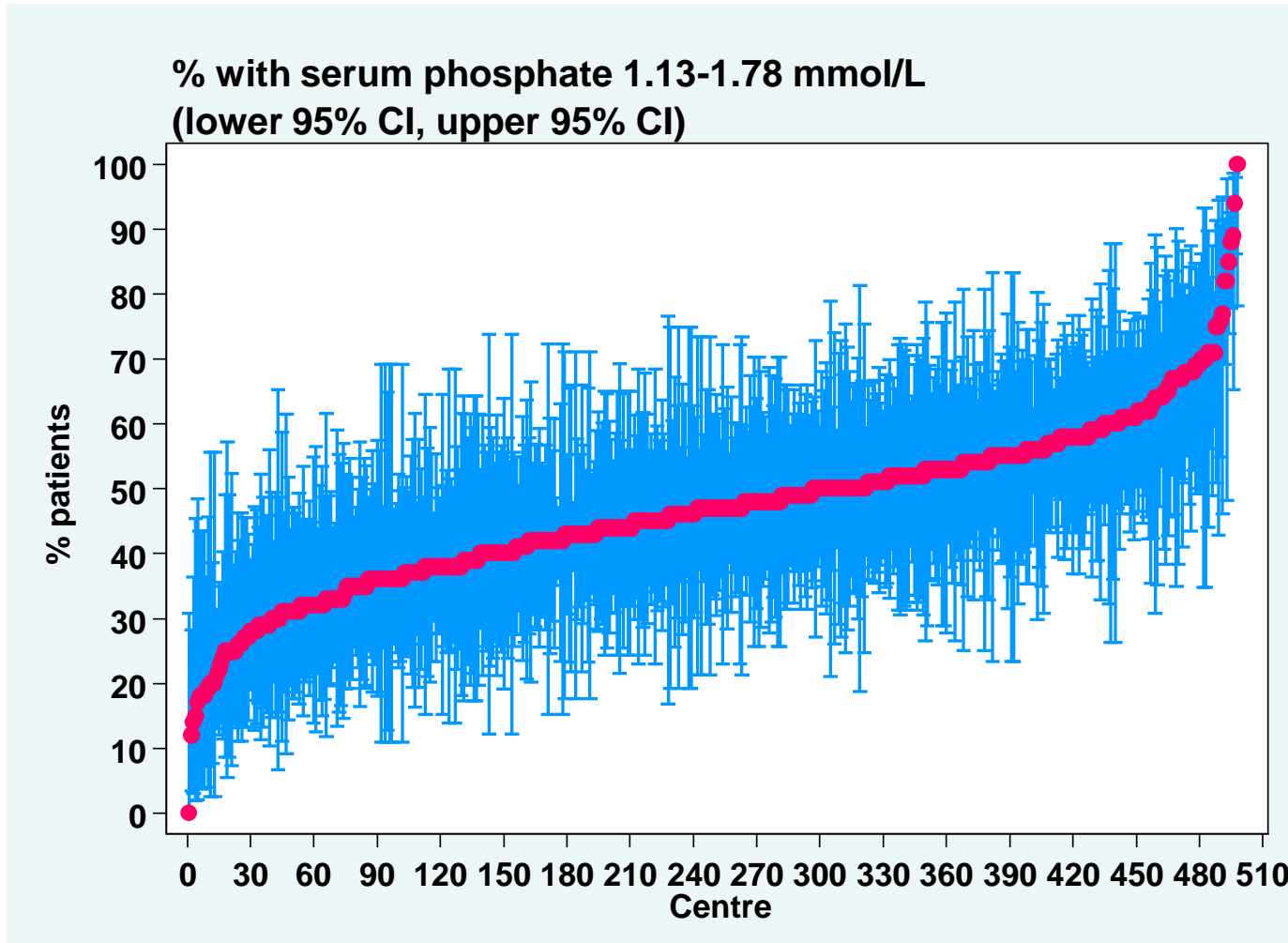


Table 9.2.10(b): Proportion of patients with serum phosphate 1.13-1.78 mmol/L, PD centres 2002-2011

Year	Number of centres	Min	5th Centile	LQ	Median	UQ	95th Centile	Max
2002	15	43	43	47	53	60	83	83
2003	18	43	43	52	54	58	77	77
2004	18	37	37	49	53	59	76	76
2005	19	38	38	46	53	58	76	76
2006	22	39	44	48	52.5	58	66	68
2007	22	39	43	50	54	57	73	78
2008	23	30	39	48	52	60	65	71
2009	24	20	39	48.5	52.5	57	66	75
2010	25	35	38	44	50	58	66	69
2011	27	35	36	47	53	60	75	81

Figure 9.2.10(b): Variation in proportion of patients with serum phosphate 1.13-1.78 mmol/L, PD centres 2011

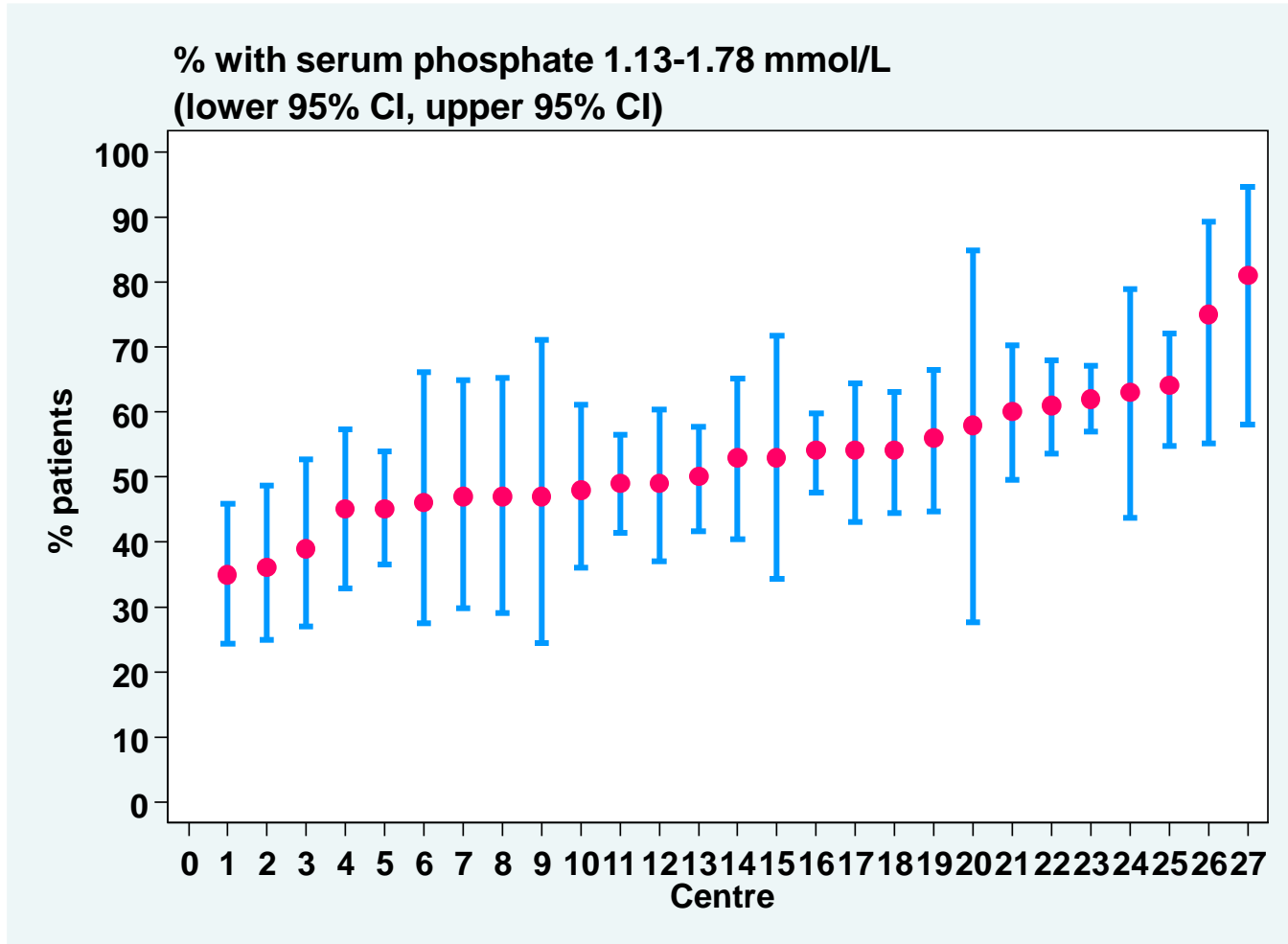


Table 9.2.9(c): Proportion of patients with serum phosphate 0.8-1.3 mmol/L, HD centres, 2011

Year	Number of centres	Min	5th Centile	LQ	Median	UQ	95th Centile	Max
2002	147	0	0	6	12	18	28	56
2003	176	0	0	7	12	17.5	31	45
2004	208	0	0	7	13	18.5	29	46
2005	234	0	0	8	15	21	32	52
2006	282	0	3	9	15	22	33	50
2007	317	0	3	10	16	21	31	48
2008	368	0	3	9	15	22	33	55
2009	404	0	0	9	14	20.5	31	41
2010	441	0	0	8	14	19	29	47
2011	498	0	0	9	14	19	30	83

Figure 9.2.9(c): Variation in proportion of patients with serum phosphate 0.8-1.3 mmol/L, HD centres, 2011

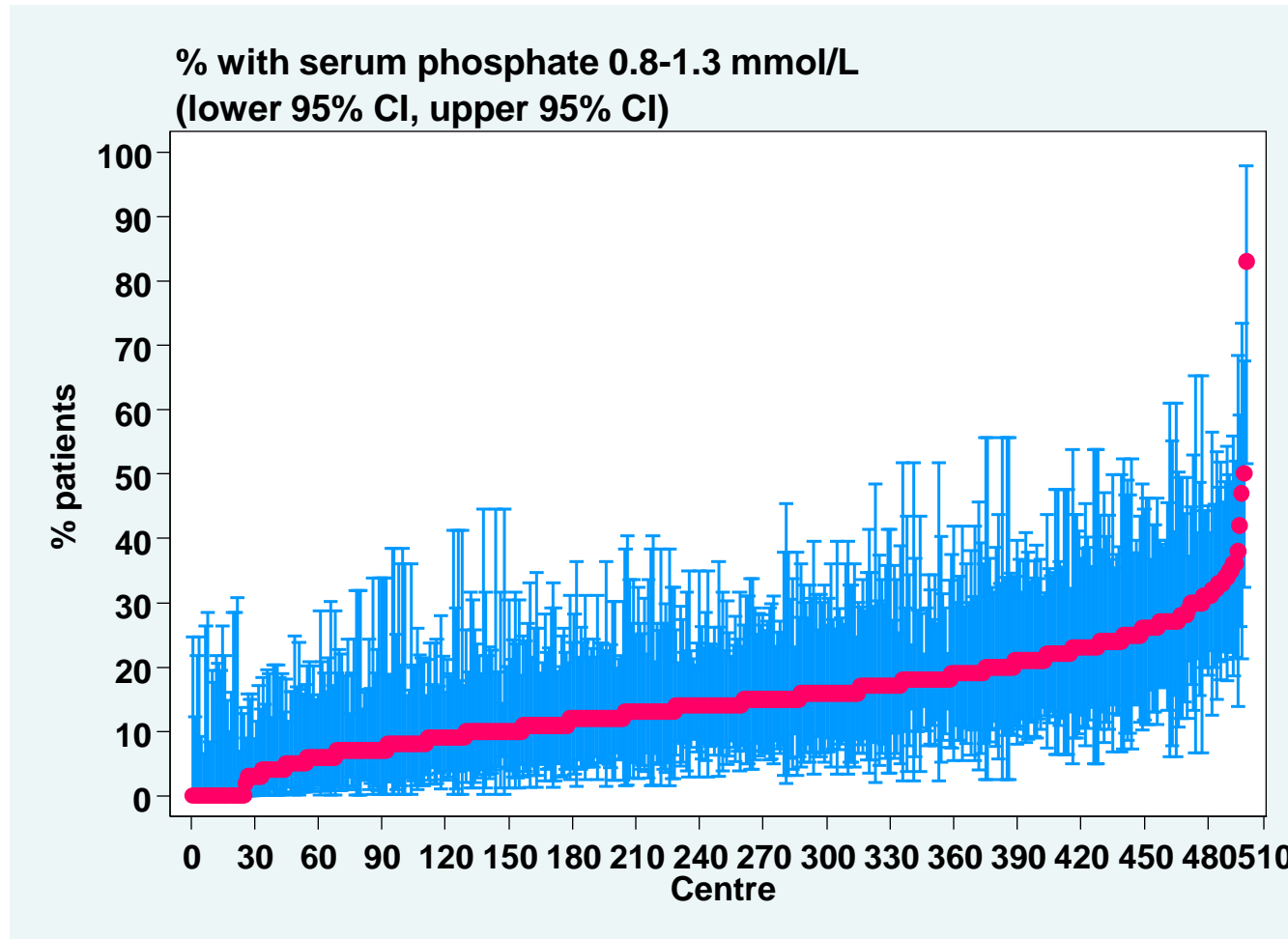


Table 9.2.10(c): Proportion of patients with serum phosphate 0.8-1.3 mmol/L, PD centres, 2011

Year	Number of centres	Min	5th Centile	LQ	Median	UQ	95th Centile	Max
2002	15	0	0	18	30	36	50	50
2003	18	12	12	23	28	34	42	42
2004	18	8	8	17	25.5	32	48	48
2005	19	8	8	16	25	29	44	44
2006	22	0	0	14	18	25	35	54
2007	22	4	4	18	19	25	34	43
2008	23	4	7	19	23	30	36	47
2009	24	4	9	19	25	30.5	43	46
2010	25	4	8	15	25	32	43	44
2011	27	0	0	15	22	33	44	47

Figure 9.2.10(c): Variation in proportion of patients with serum phosphate 0.8-1.3 mmol/L, PD centres 2011

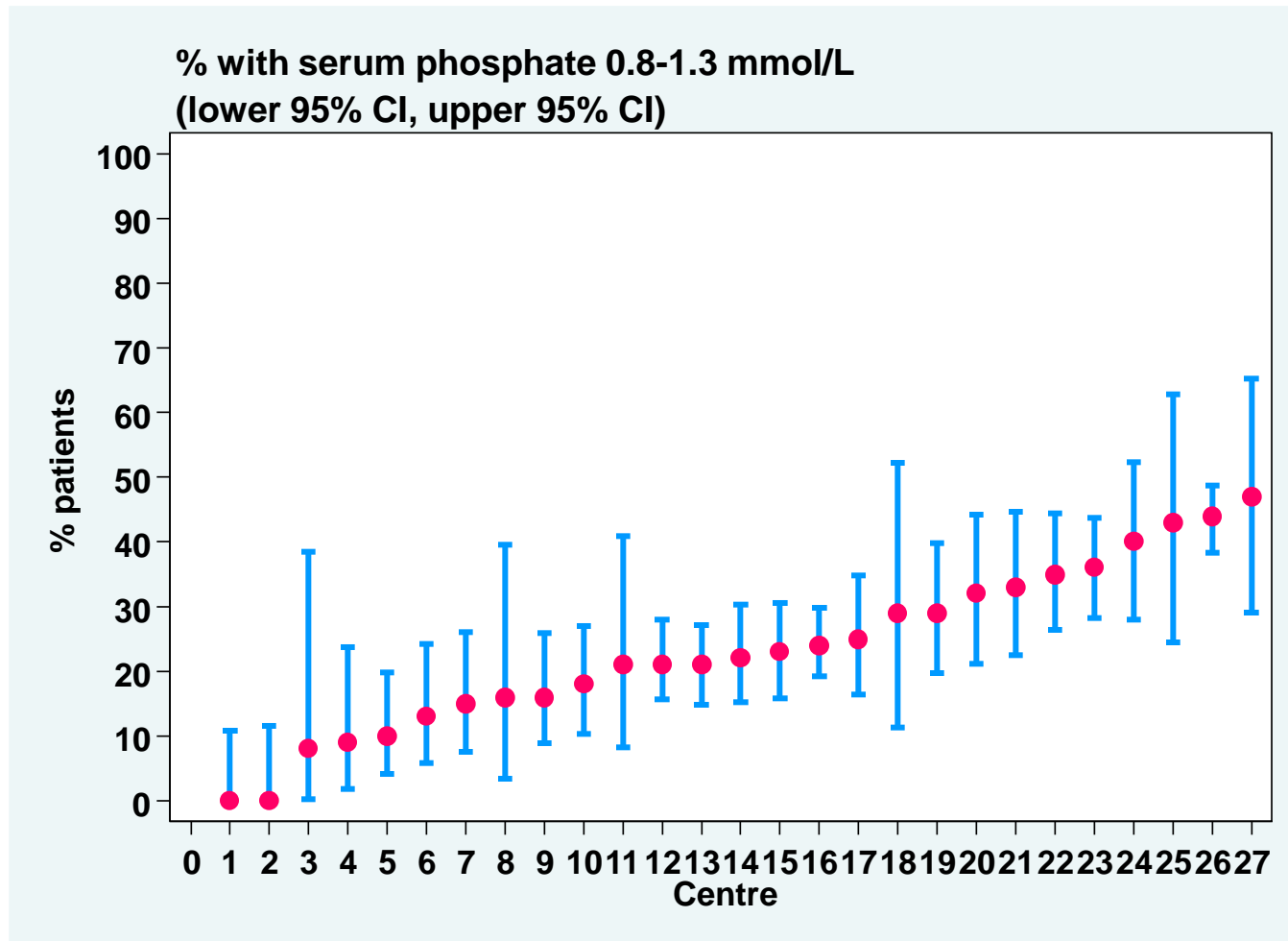


Table 9.2.11(a): Variation in corrected median calcium x phosphate product HD centres 2002-2011)

Year	Number of centres	Min	5th Centile	LQ	Median	UQ	95th Centile	Max
2002	139	2.9	3.5	4	4.3	4.6	5.1	6
2003	171	2.2	3.3	3.8	4.1	4.5	4.9	5.5
2004	202	2.9	3.3	3.8	4.1	4.4	4.9	5.6
2005	226	2.1	3.2	3.6	3.9	4.2	4.8	5.6
2006	275	2.1	3.2	3.6	3.9	4.1	4.6	5.2
2007	313	2.5	3.2	3.6	3.8	4.1	4.5	5
2008	362	2.4	3.2	3.6	3.8	4.1	4.5	5.7
2009	396	2.6	3.3	3.6	3.9	4.1	4.7	5.9
2010	434	2.8	3.4	3.7	3.9	4.2	4.7	6.3
2011	495	2	3.3	3.7	3.9	4.2	4.7	5.6

Figure 9.2.11(a): Variation in median corrected calcium x phosphate product among HD patients, HD centres, 2011

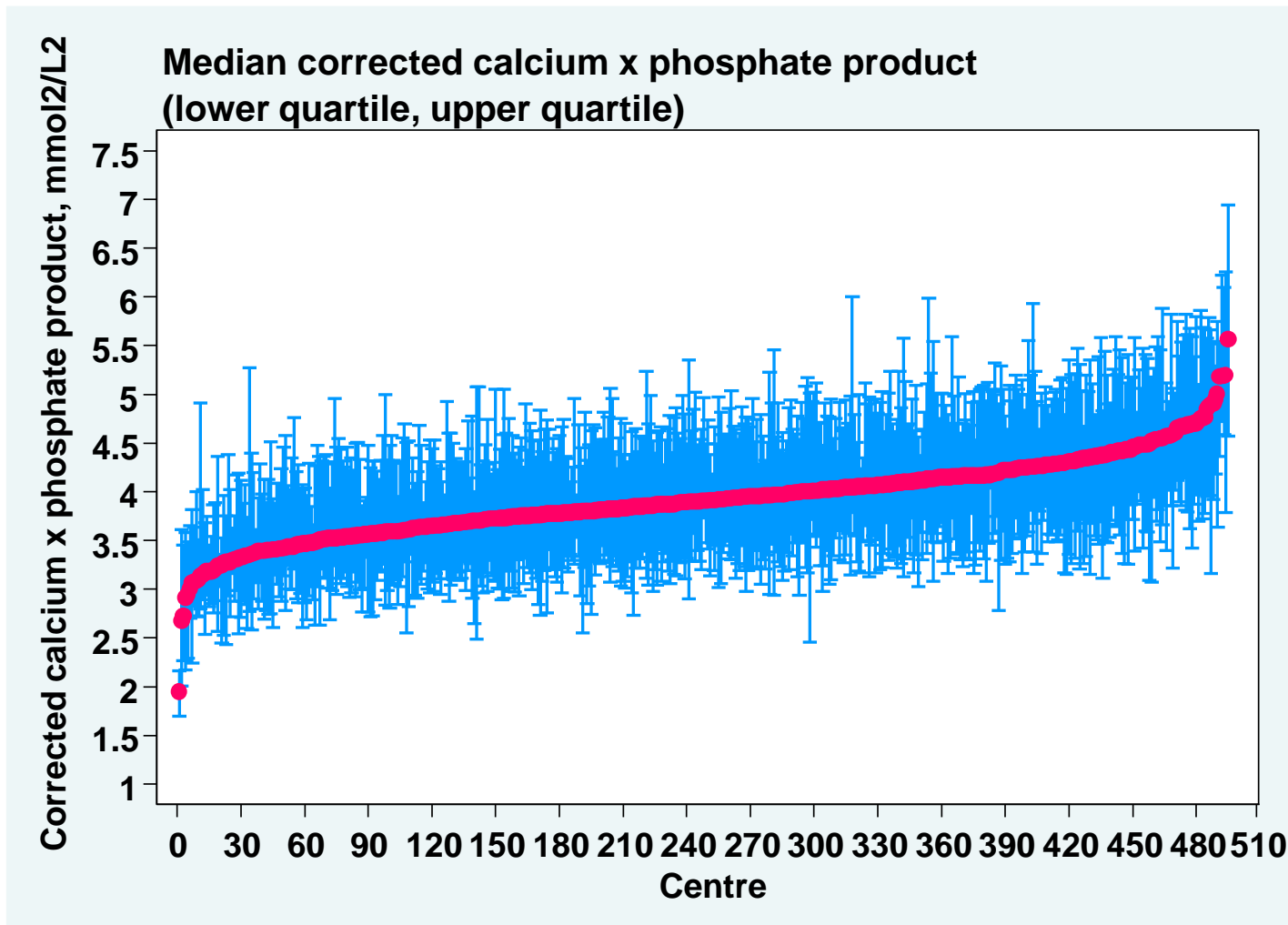


Table 9.2.12(a): Variation in corrected median calcium x phosphate product PD centres 2002-2011

Year	Number of centres	Min	5th Centile	LQ	Median	UQ	95th Centile	Max
2002	15	3.3	3.3	3.4	3.6	4	4.9	4.9
2003	18	3.2	3.2	3.4	3.7	3.9	4.1	4.1
2004	18	3.2	3.2	3.5	3.8	4	4.4	4.4
2005	19	3.3	3.3	3.5	3.7	4	4.3	4.3
2006	22	3	3.3	3.6	3.7	4	4.3	4.4
2007	22	3.1	3.3	3.5	3.8	4.2	4.3	4.3
2008	23	3.1	3.1	3.4	3.7	4.1	4.6	5.1
2009	24	3.3	3.3	3.5	3.7	4	4.6	4.8
2010	25	3.1	3.2	3.4	3.8	4	4.5	4.6
2011	27	3	3	3.4	3.8	4.1	4.6	4.6

Figure 9.2.12(a): Variation in median corrected calcium x phosphate product among PD centres, to 2011

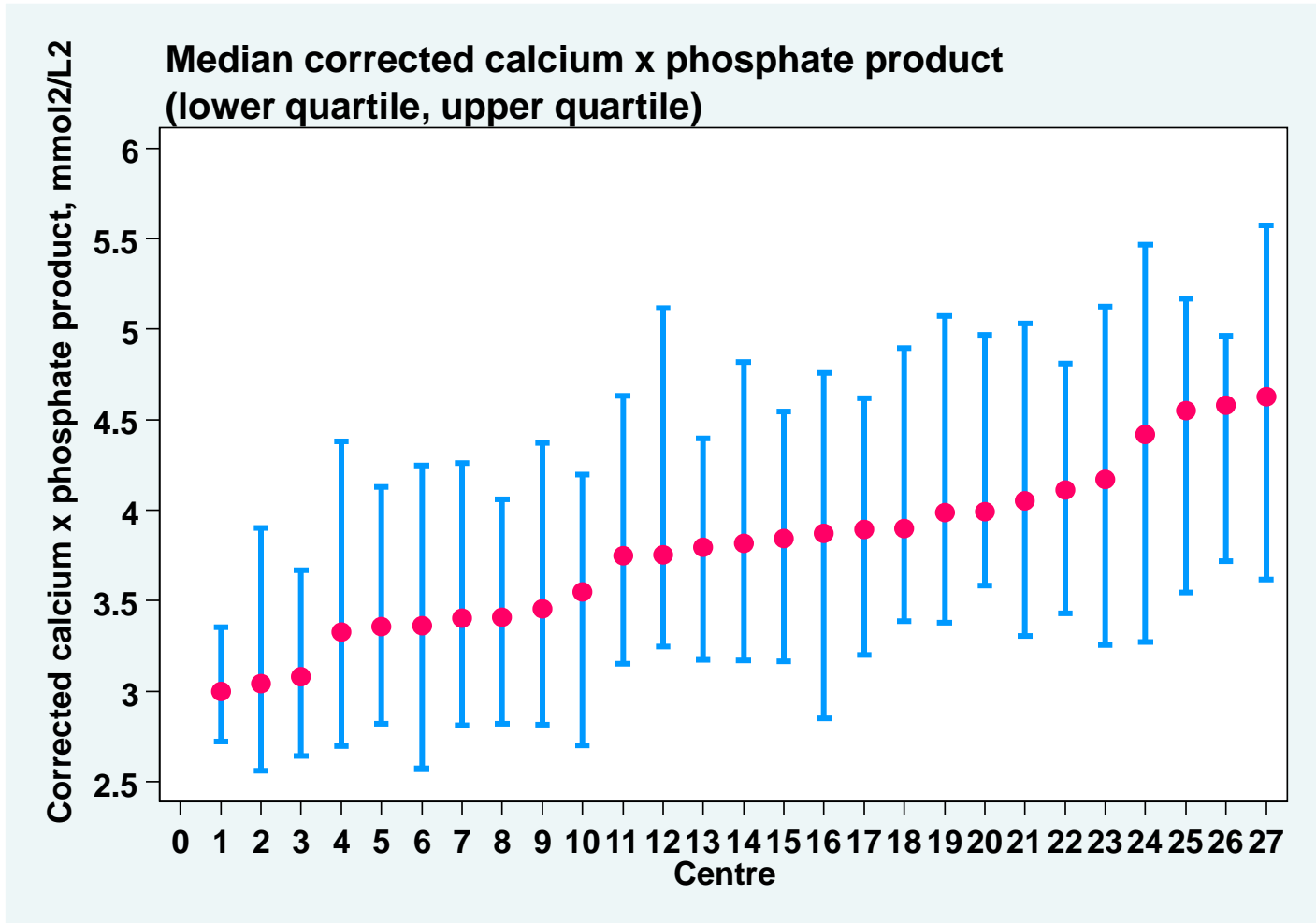


Table 9.2.11(b): Proportion of patients with corrected calcium x phosphate < 4.5 mmol²/L², HD centres

Year	Number of centres	Min	5th Centile	LQ	Median	UQ	95th Centile	Max
2002	139	18	32	48	57	67	90	100
2003	171	25	33	50	61	71	84	100
2004	202	15	39	53	63	71	88	100
2005	226	24	45	58	68	77	91	100
2006	275	30	46	62	70	79	91	100
2007	313	33	48	63	73	81	92	100
2008	362	26	50	64	72	81	90	100
2009	396	27	44	62	70.5	79	89	96
2010	434	8	43	60	70	77	88	94
2011	495	23	47	61	70	79	90	100

Figure 9.2.11(b): Variation in proportion of patients with corrected calcium x phosphate product $< 4.5 \text{ mmol}^2/\text{L}^2$, HD centres 2011

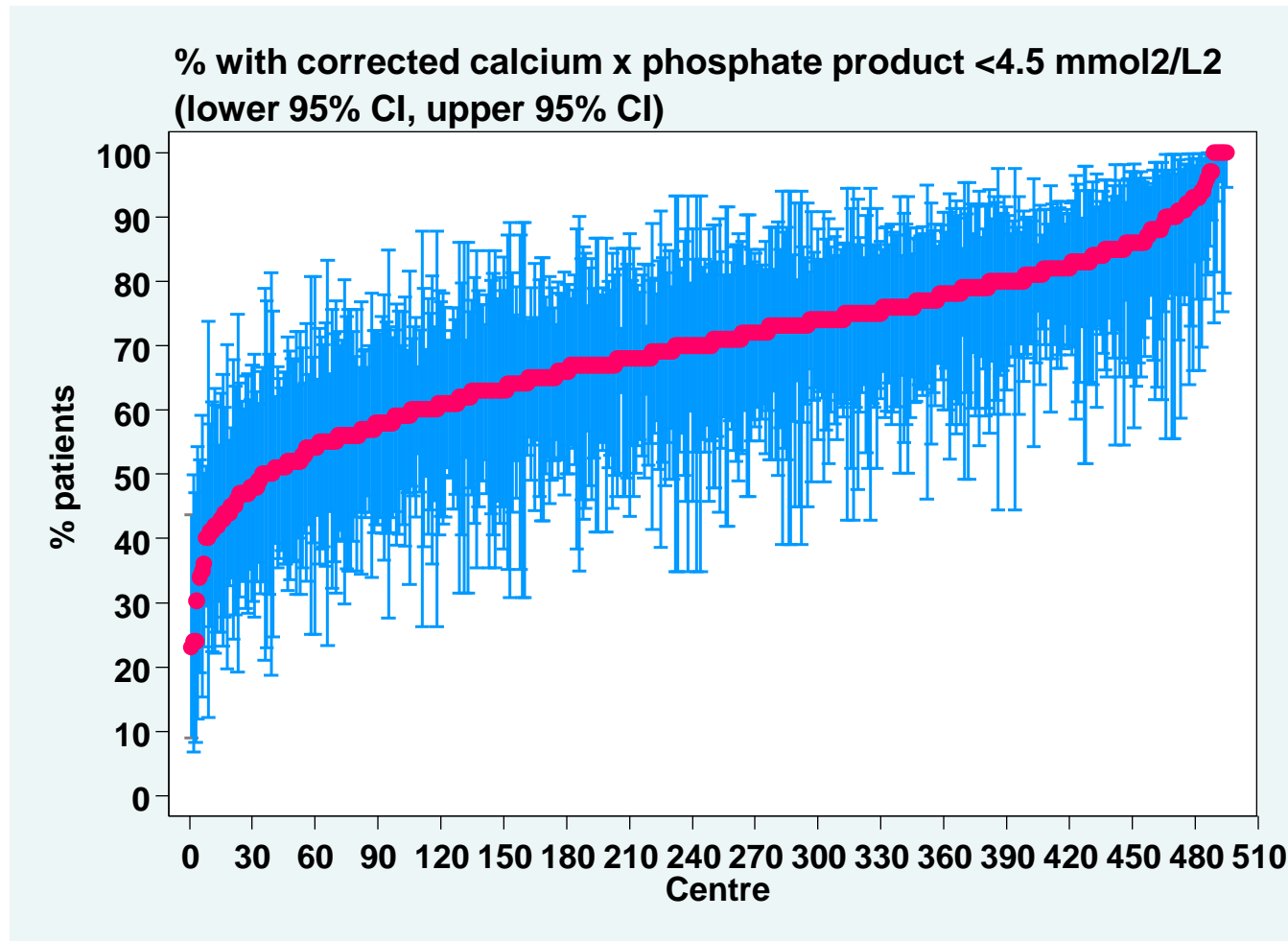


Table 9.2.12(b): Proportion of patients with corrected calcium x phosphate < 4.5 mmol²/L², PD

Year	Number of centres	Min	5th Centile	LQ	Median	UQ	95th Centile	Max
2002	15	43	43	65	78	82	88	88
2003	18	61	61	64	74.5	82	89	89
2004	18	57	57	66	72	79	89	89
2005	19	54	54	63	73	78	85	85
2006	22	52	56	67	71	79	88	96
2007	22	51	58	64	72.5	79	88	98
2008	23	40	43	63	71	81	89	97
2009	24	40	48	66	76.5	80	85	86
2010	25	48	48	68	75	81	89	89
2011	27	45	47	63	71	80	92	95

Figure 9.2.12(b): Variation in proportion of patients with corrected calcium x phosphate product $< 4.5 \text{ mmol}^2/\text{L}^2$, PD centres, 2011

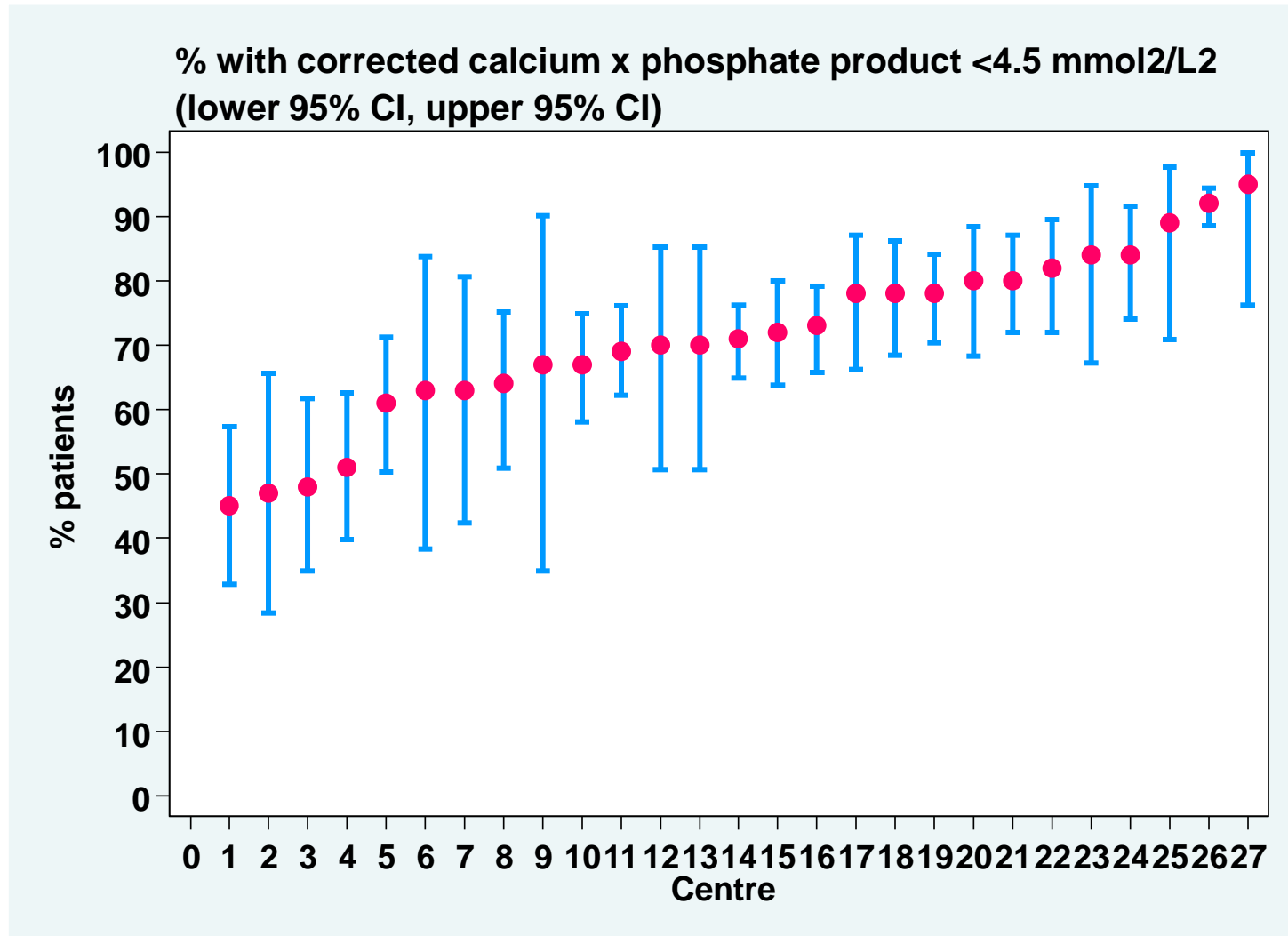


Table 9.3.1a: Treatment of hyperparathyroidism in HD patients, 2002-2011

Year	Number of patients	Number of patients on calcitriol		Number of patients on Paricalcitol		Number of patients had Parathyroidectomy	
		n	%	n	%	n	%
2002	6108	1375	23	0	0	0	0
2003	7018	1690	24	0	0	0	0
2004	8164	2029	25	0	0	0	0
2005	9351	2556	27	0	0	43	0
2006	11682	3817	33	34	0	152	1
2007	12907	4927	38	58	0	181	1
2008	15399	5897	38	43	0	174	1
2009	17968	7339	41	82	0	167	1
2010	19509	8561	44	154	1	170	1
2011	22742	10486	46	132	1	178	1

Table 9.3.1b: Treatment of hyperparathyroidism in PD patients, 2002-2011

Year	Number of patients	Number of patients on calcitriol		Number of patients on Paricalcitol		Number of patients had Parathyroidectomy	
		n	%	n	%	n	%
2002	891	130	15	0	0	0	0
2003	1543	311	20	0	0	0	0
2004	1842	439	24	0	0	0	0
2005	2207	534	24	0	0	8	0
2006	2787	658	24	6	0	27	1
2007	3577	1019	28	9	0	22	1
2008	4044	1148	28	6	0	26	1
2009	3482	1129	32	5	0	16	0
2010	3844	1467	38	4	0	11	0
2011	5087	1800	35	24	0	25	0

Table 9.3.2(a): Distribution of iPTH, HD patients, 2002-2011

Year	Number of Patients	Mean	SD	Median	LQ	UQ	Percent patients with iPTH:			
							<150 pg/ml	≥150 & ≤300 pg/ml	>300 & ≤500 pg/ml	>500 pg/ml
2002	3391	161.6	248	64	19	191	70	14	8	8
2003	4068	219.1	328.8	79	24.3	263.3	64	14	9	14
2004	4748	212.1	325.6	74.3	22.6	257.3	65	13	9	13
2005	5826	221.6	312.5	83.8	26.5	297	61	14	11	14
2006	7744	219.1	307.2	88	29	292	61	14	11	13
2007	9151	245.8	332.7	105	30.4	335.5	58	15	12	16
2008	10753	260.8	330.9	127	36	361	54	17	13	17
2009	12642	269.4	337.3	140.1	40	367.1	52	18	13	17
2010	14364	235.6	319.3	98.5	30.5	319.8	58	15	11	15
2011	16712	222.9	312.6	86.9	29.2	302.4	61	14	12	14

Figure 9.3.2(a): Cumulative distribution of iPTH, HD, 2002-2011

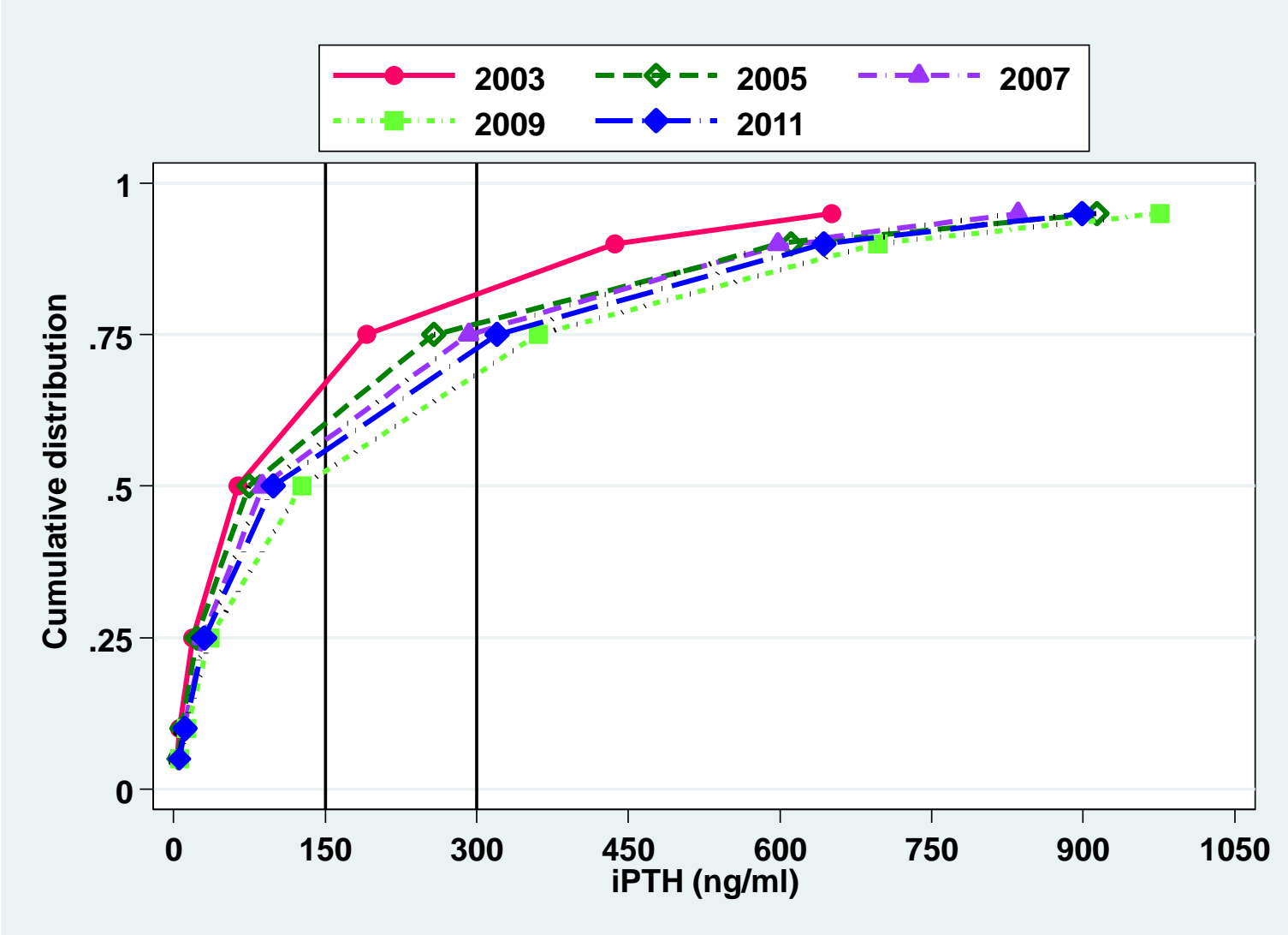


Table 9.3.2(b): Distribution of iPTH, diabetic HD patients, 2002-2011

Year	Number of Patients	Mean	SD	Median	LQ	UQ	Percent patients with iPTH:			
							<150 pg/ml	≥150 & ≤300 pg/ml	>300 & ≤500 pg/ml	>500 pg/ml
2002	938	90.9	157.4	34.9	10.9	97	83	10	4	3
2003	1204	120.1	209.3	40.2	13.3	120.3	79	10	6	5
2004	1532	111.4	193.6	38	14	114.4	80	10	5	5
2005	2107	149.5	246.1	47.4	16.1	170.5	72	12	8	8
2006	3069	155	253.2	54	20.8	173.5	72	12	8	7
2007	3681	183.1	267.4	70.7	23	235.5	66	14	10	10
2008	4593	208.9	275.3	99	29.1	286.5	59	17	12	12
2009	5640	218.3	284.1	111.1	33.7	292	57	18	12	12
2010	6570	189.7	269	75	26	255.8	64	15	11	10
2011	7540	182.4	263.7	66.9	24.6	241.5	66	13	10	10

Figure 9.3.2(b): Cumulative distribution of iPTH, diabetic HD patients, 2002-2011

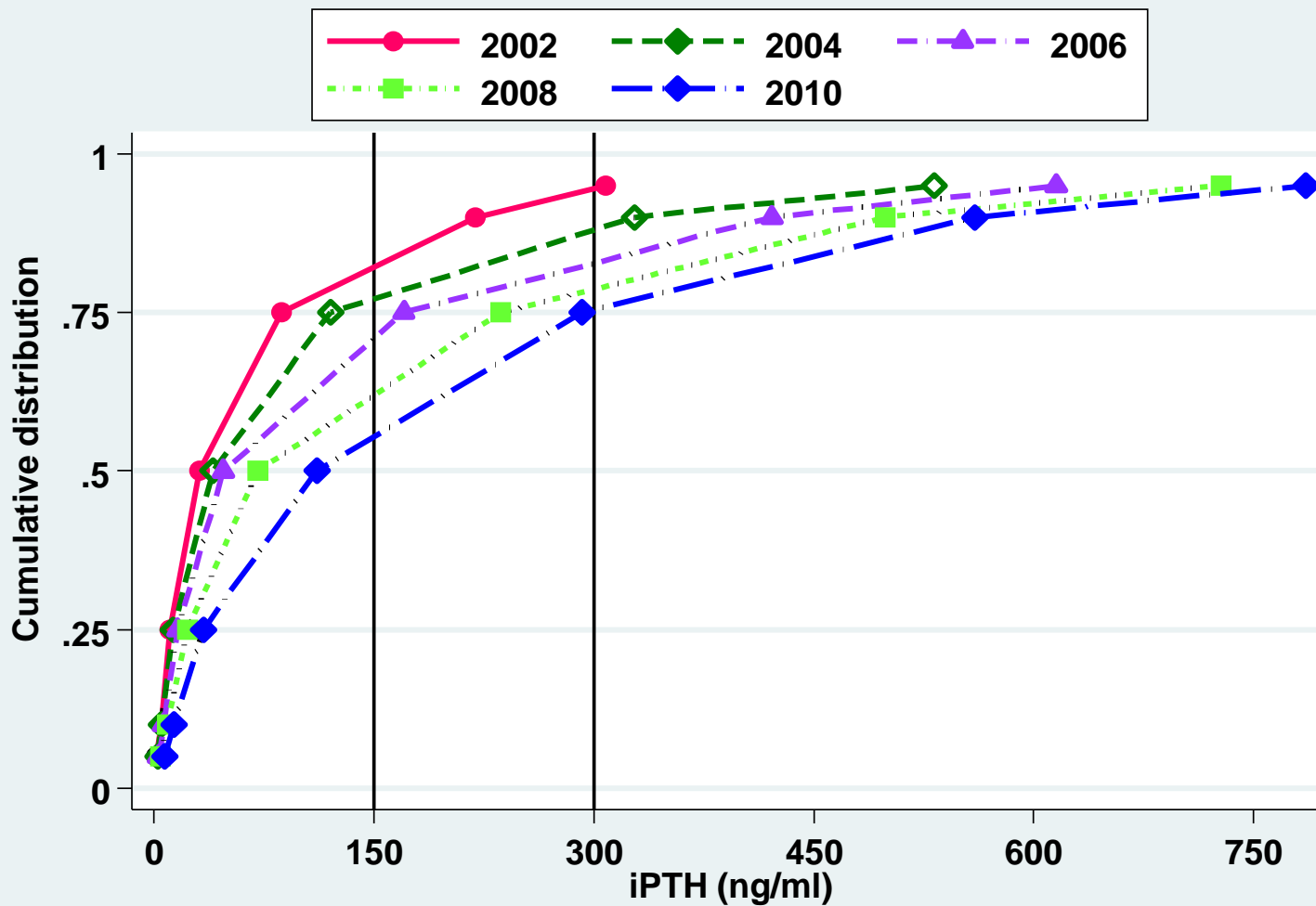


Table 9.3.2(c): Distribution of iPTH, non-diabetic HD patients, 2002-2011

Year	Number of Patients	Mean	SD	Median	LQ	UQ	Percent patients with iPTH:			
							<150 pg/ml	≥150 & ≤300 pg/ml	>300 & ≤500 pg/ml	>500 pg/ml
2002	2453	188.7	270.1	84	26	235	65	15	10	10
2003	2864	260.7	359.6	108	33.5	330.5	57	16	10	17
2004	3216	260.1	362.7	102.3	30.5	338.8	58	14	11	17
2005	3719	262.5	337.8	114.1	35.5	364.5	55	15	13	17
2006	4675	261.2	331.4	122.8	39	362.5	54	16	13	17
2007	5470	288	364.2	135.1	38.7	403	52	15	13	19
2008	6160	299.5	362.2	155	42.6	418	49	16	14	21
2009	7002	310.6	369.5	170.5	47.8	433.5	47	17	14	21
2010	7794	274.4	351.6	126.7	36.5	386	54	15	12	19
2011	8871	258.1	344.7	108.1	34.7	357.5	56	14	13	17

Figure 9.3.2(c): Cumulative distribution of iPTH, non-diabetic HD patients, 2002-2011

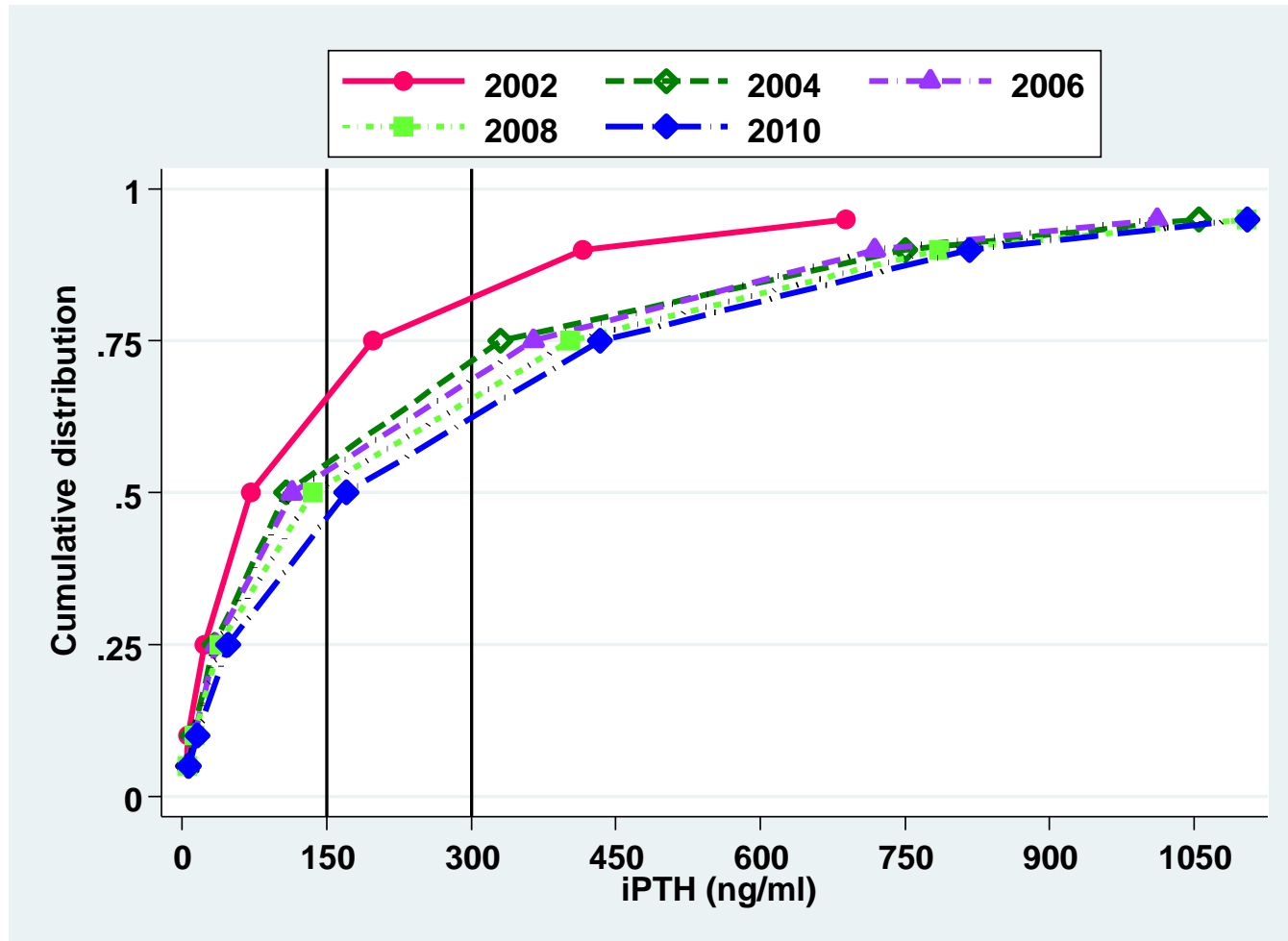


Table 9.3.3(a): Distribution of iPTH, PD patients, 2002-2011

Year	Number of Patients	Mean	SD	Median	LQ	UQ	Percent patients with iPTH:			
							<150 pg/ml	≥150 & ≤300 pg/ml	>300 & ≤500 pg/ml	>500 pg/ml
2002	681	160.6	219.1	82	26	196	67	17	8	7
2003	938	230.3	340.3	95	37.4	260	61	18	9	12
2004	1115	216.4	302.9	105	39.5	260	60	19	10	11
2005	1071	247.1	306.4	125.3	39	352	54	18	13	15
2006	1265	224.6	271.9	128	41.5	318	54	20	14	12
2007	1436	248.4	297.1	152.5	51	332.8	50	22	15	14
2008	1608	264.2	295.3	170.3	57.3	357.7	46	22	18	15
2009	1824	270.6	292.7	174.2	67.8	381	45	22	16	16
2010	1905	261.5	294.8	163	51	371	48	20	16	16
2011	2093	248.4	283.7	157.5	48.7	342	48	22	15	14

Figure 9.3.3(a): Cumulative distribution of iPTH, PD patients, 2002-2011

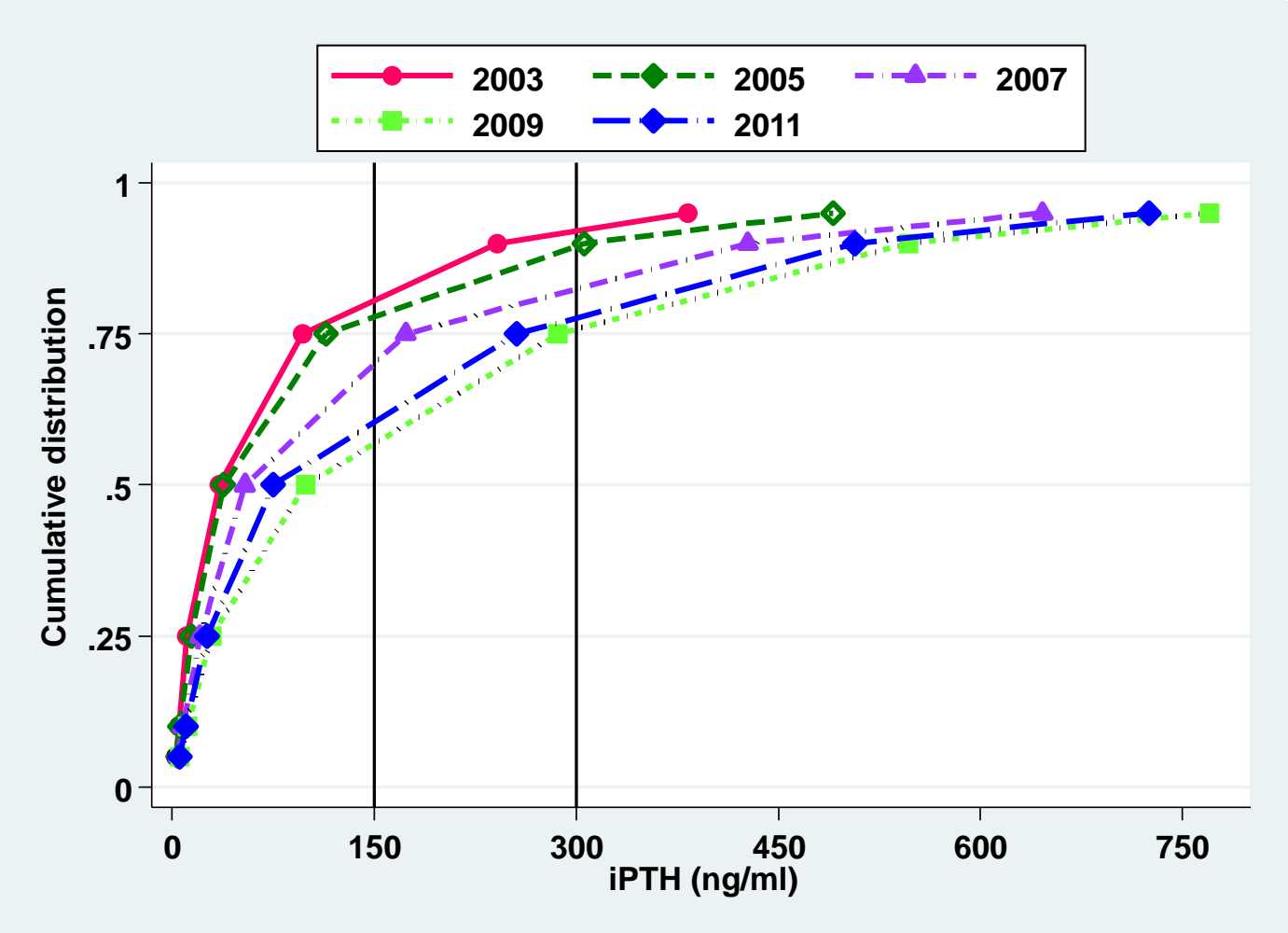


Table 9.3.3(b): Distribution of iPTH, diabetic PD patients, 2002-2011

Year	Number of Patients	Mean	SD	Median	LQ	UQ	Percent patients with iPTH:			
							<150 pg/ml	≥150 & ≤300 pg/ml	>300 & ≤500 pg/ml	>500 pg/ml
2002	194	98.5	158.3	52.8	15	125.8	82	12	3	3
2003	312	122.6	179.7	65.6	29	146.8	75	15	6	4
2004	358	127	187.1	63.3	24.1	145	75	15	4	5
2005	348	161.4	241.4	67	22.5	192.3	70	15	8	7
2006	434	149.5	198.4	88.9	32.5	186.5	68	19	8	5
2007	544	176.4	204.6	113	41.8	237.8	58	25	11	6
2008	692	211.3	228.4	141.2	56.3	293.8	51	24	17	8
2009	750	186.8	184.9	132	57.5	255.5	54	26	13	7
2010	661	197.4	216.8	131	42	295	54	21	16	8
2011	653	189.2	208.2	128	44	272.5	54	24	16	6

Figure 9.3.3(b): Cumulative distribution of iPTH, diabetic PD patients, 2002-2011

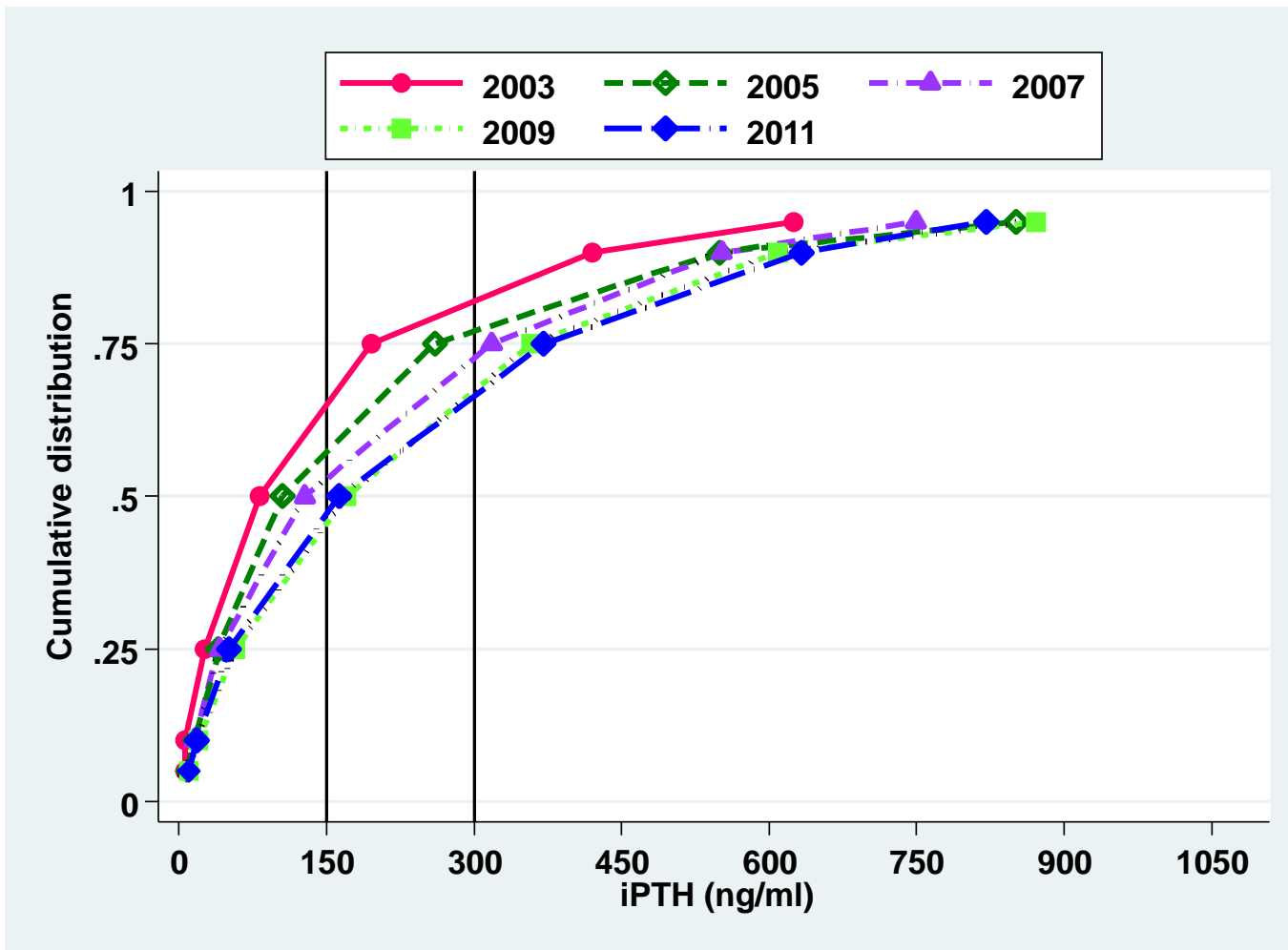


Table 9.3.3(c): Distribution of iPTH, non diabetic PD patients, 2002-2011

Year	Number of Patients	Mean	SD	Median	LQ	UQ	Percent patients with iPTH:			
							<150 pg/ml	≥150 & ≤300 pg/ml	>300 & ≤500 pg/ml	>500 pg/ml
2002	487	185.3	234.7	100	33	241	62	19	10	9
2003	626	284	385.8	130.8	49.9	321.5	54	19	10	17
2004	757	258.6	336.3	138	50	325	53	20	12	14
2005	723	288.3	325.3	172	48.8	413.5	47	19	15	19
2006	831	263.8	295.9	164	50	386	47	21	16	16
2007	892	292.3	334	191	57.5	404.8	44	20	18	18
2008	916	304.1	331.7	208.4	57.5	422.5	41	20	18	20
2009	1074	329.1	336.7	224.6	80	461	39	20	19	22
2010	1244	295.6	323.8	186.3	56.6	423.7	45	20	15	20
2011	1387	277.6	307.7	182.7	55.6	387.5	45	22	16	17

Figure 9.3.3(c): Cumulative distribution of iPTH, non diabetic PD patients, 2002-2011

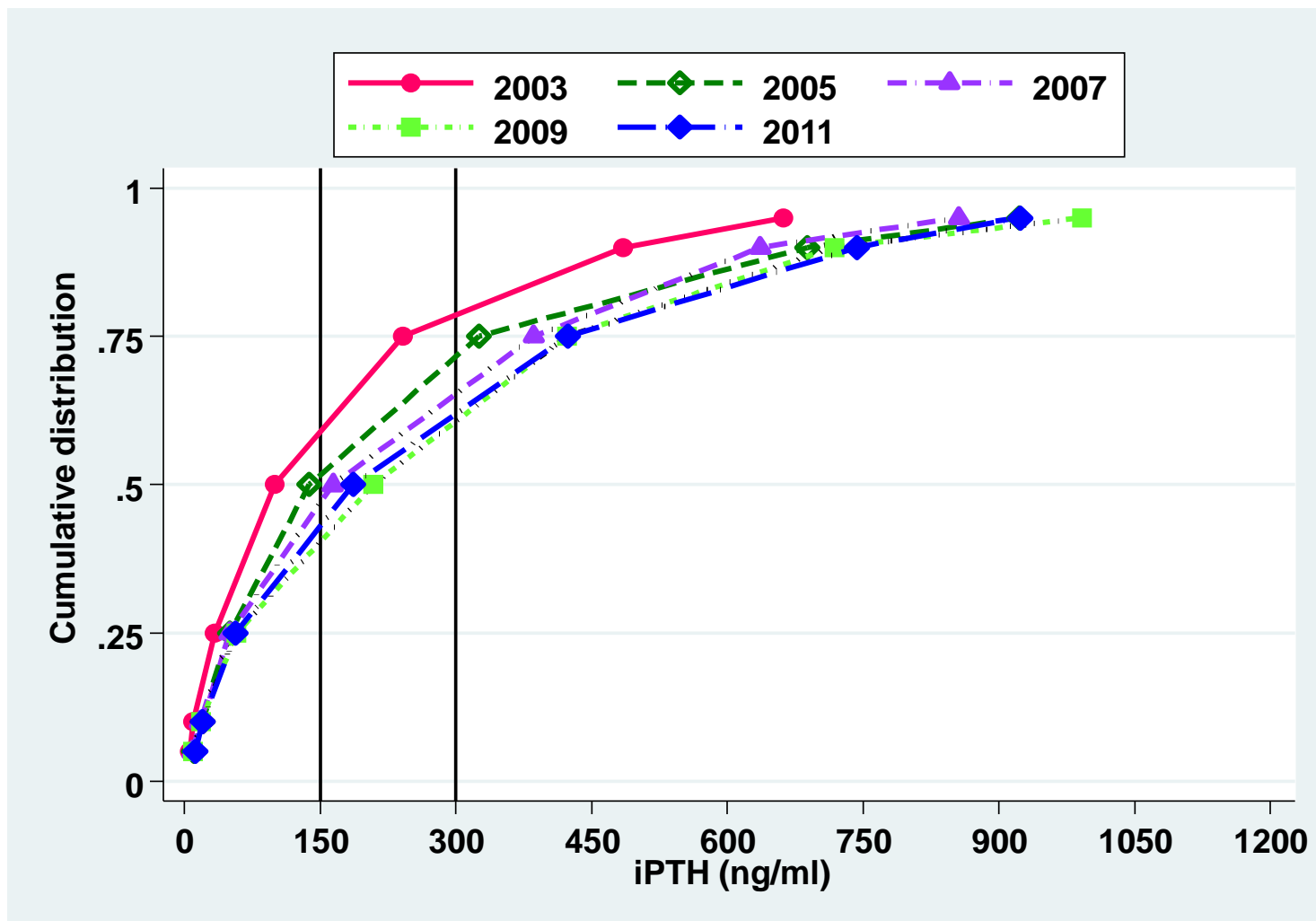


Table 9.3.4(a): Variation in iPTH among HD centres 2002-2011

Year	Number of centres	Min	5th Centile	LQ	Median	UQ	95th Centile	Max
2002	95	1.4	11.9	28.4	50.4	139	309.8	660.3
2003	114	4.2	10	35.2	83.2	182.7	375.2	624.5
2004	137	3.6	12	30	73.8	211.5	398.8	708
2005	170	6.1	14.3	37	95.3	229	409.5	626.4
2006	219	7.7	15.9	42	88.8	201.6	377.6	632.8
2007	244	11.8	19	45.5	115.5	238.3	411.1	643
2008	292	8.8	22.4	58.3	138.5	239.1	417.3	712.5
2009	331	2.6	26.7	66.6	155	246.9	402.8	1073.9
2010	364	5.5	20.4	40.9	104.8	238.7	384.8	629
2011	429	3.3	19.1	41.8	92	224.8	420.1	1217.5

Figure 9.3.4(a): Variation in median iPTH among HD patients, HD centres 2011

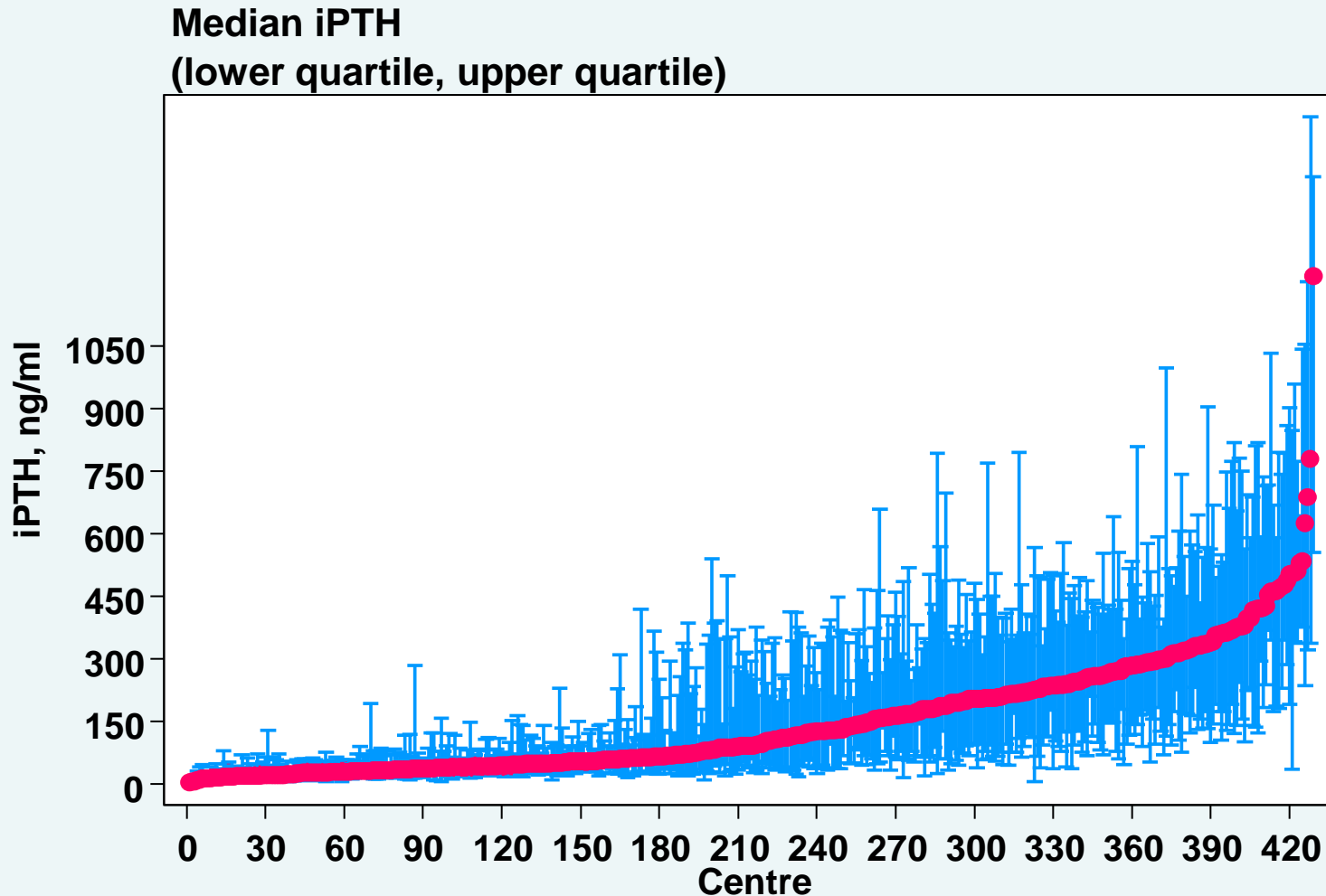


Table 9.3.4(b): Variation in proportion of patients with iPTH 150-300pg/ml, HD centres, 2002-2011

Year	Number of centres	Min	5th Centile	LQ	Median	UQ	95th Centile	Max
2002	95	0	0	0	10	22	32	45
2003	114	0	0	6	13.5	21	36	42
2004	137	0	0	6	10	19	36	50
2005	170	0	0	7	13	20	33	47
2006	219	0	0	7	13	20	30	46
2007	244	0	0	8	14	21	31	53
2008	292	0	0	9	16	23	31	43
2009	331	0	0	10	17	24	35	63
2010	364	0	0	7	15	21	34	43
2011	429	0	0	5	13	20	32	54

Figure 9.3.4(b): Variation in proportion of patients with iPTH 150-300pg/ml, HD centres, 2011

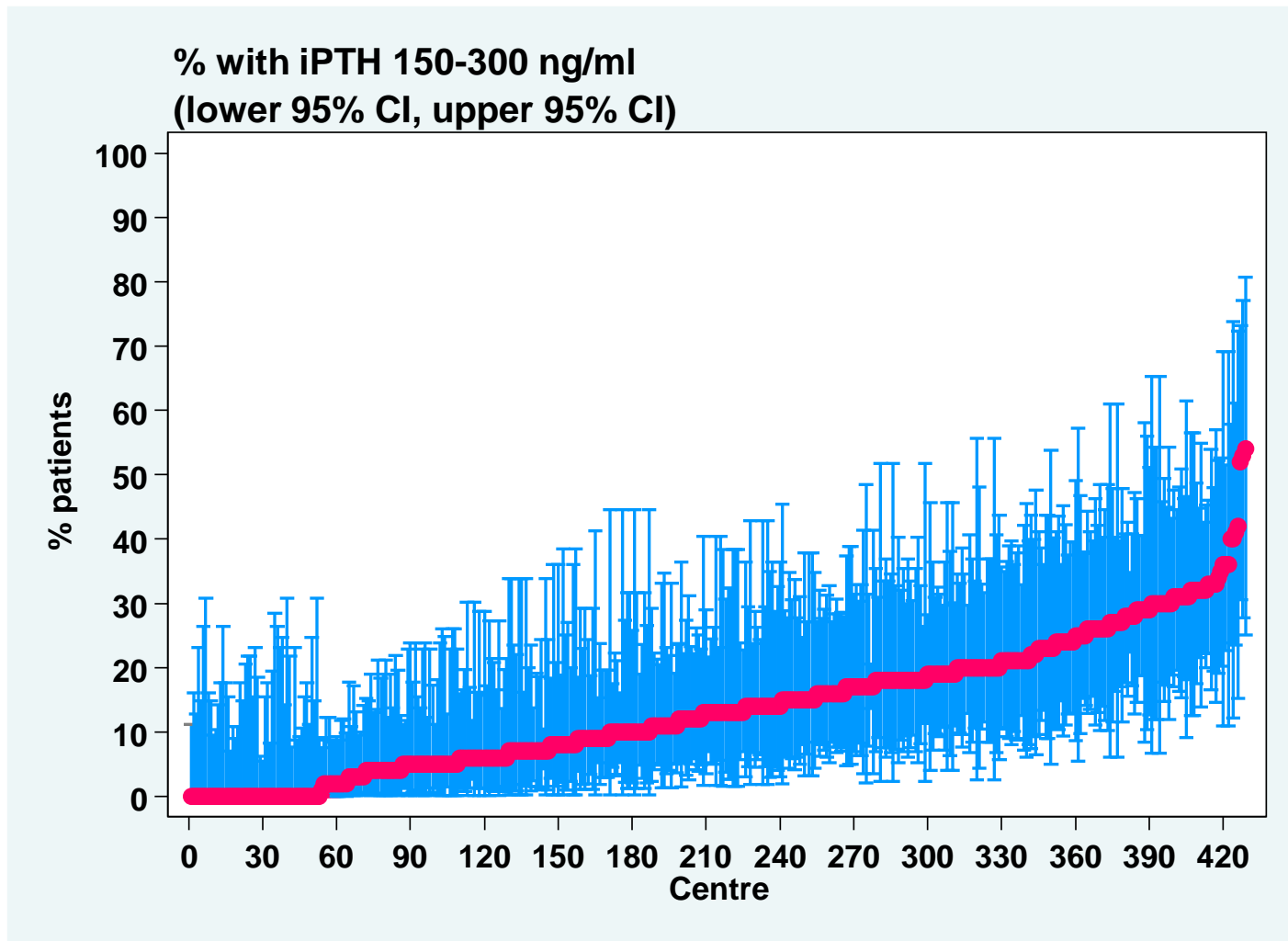


Table 9.3.5(a): Variation in median iPTH among PD patients 2002-2011

Year	Number of centres	Min	5th Centile	LQ	Median	UQ	95th Centile	Max
2002	14	27.3	27.3	50	82.9	107	280.5	280.5
2003	17	22.4	22.4	70	135	175	309.5	309.5
2004	18	41	41	74.5	138.8	169.3	329.6	329.6
2005	18	25.5	25.5	85	140.6	262	493.3	493.3
2006	21	35.3	36.9	102.5	166.5	243	367	376.8
2007	22	26.3	32	107.5	204.1	290.5	431	513.9
2008	22	34.5	47	120.3	185.9	310.9	352.3	450
2009	23	38.5	51	129.1	197.5	285.8	434.8	1047
2010	24	29.4	31.8	131.3	213.5	287.8	570.5	783.2
2011	25	25.9	26.8	94.3	199.1	281	421.5	477.6

Figure 9.3.5(a): Variation in median iPTH among PD patients, PD centres, 2011

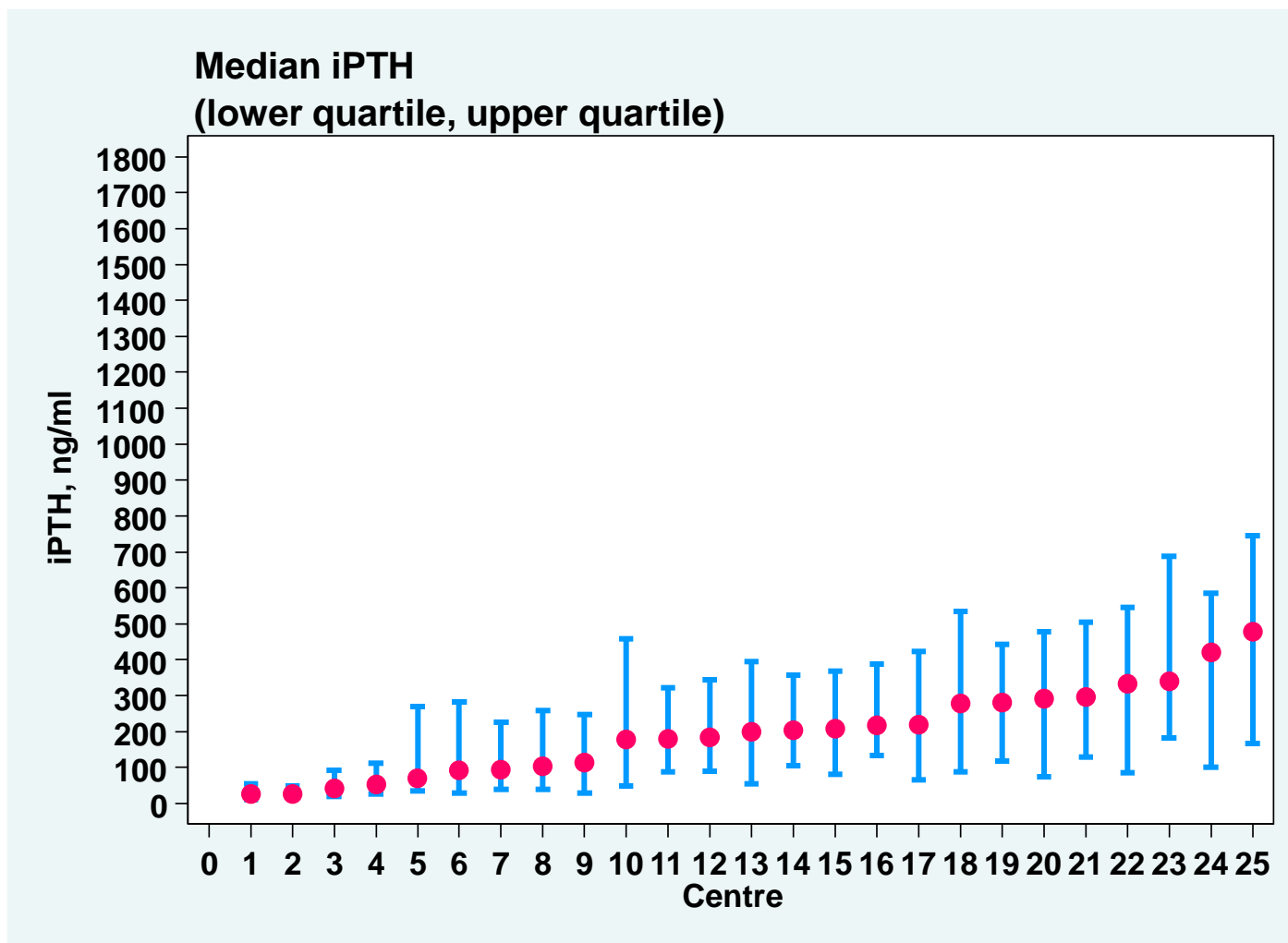


Table 9.3.5(b): Proportion of patients with iPTH 150-300pg/ml

Year	Number of centres	Min	5th Centile	LQ	Median	UQ	95th Centile	Max
2002	14	0	0	10	15.5	21	24	24
2003	17	2	2	12	18	22	33	33
2004	18	7	7	14	20	24	30	30
2005	18	0	0	9	15.5	23	31	31
2006	21	5	6	13	20	26	32	40
2007	22	0	3	15	21	27	31	39
2008	22	0	7	15	19.5	27	31	34
2009	23	0	11	15	23	26	28	28
2010	24	0	4	13.5	20	26	31	43
2011	25	3	4	13	22	28	31	39

Figure 9.3.5(b): Variation in proportion of patients with iPTH 150-300pg/ml, PD centres 2011

