

International Postnatal Growth Standards for Preterm Infants



INTERGROWTH-21st

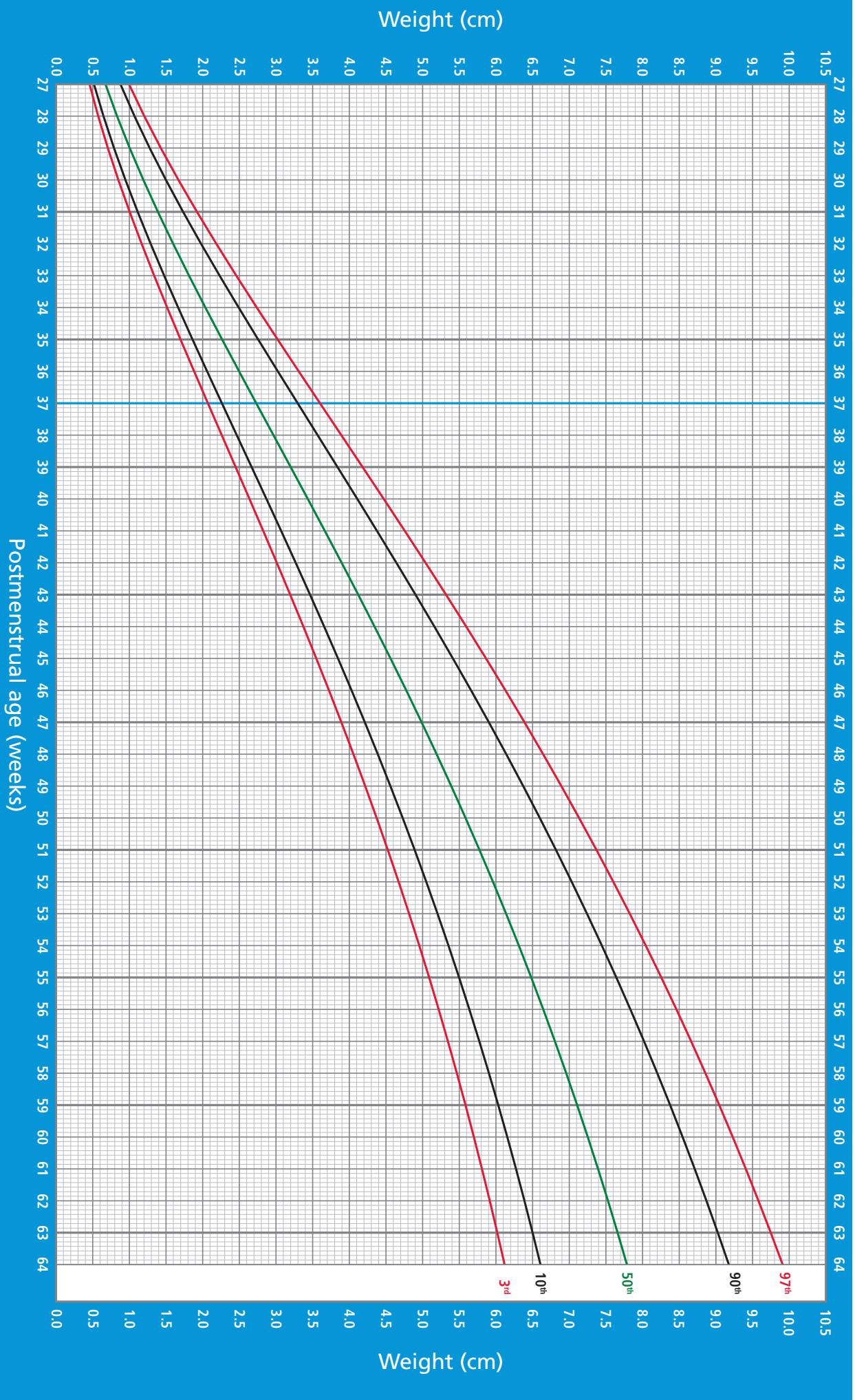
Weight (kg) Boys



Postmenstrual age (exact weeks)	Centiles						
	3 rd	5 th	10 th	50 th	90 th	95 th	97 th
27	0.45	0.48	0.51	0.67	0.88	0.95	0.99
28	0.57	0.60	0.64	0.83	1.07	1.15	1.20
29	0.70	0.74	0.79	1.00	1.27	1.37	1.43
30	0.85	0.88	0.94	1.19	1.50	1.60	1.67
31	1.00	1.04	1.11	1.39	1.73	1.84	1.92
32	1.17	1.21	1.29	1.60	1.98	2.10	2.18
33	1.34	1.39	1.47	1.81	2.23	2.36	2.46
34	1.51	1.57	1.66	2.04	2.49	2.64	2.74
35	1.70	1.76	1.86	2.26	2.75	2.91	3.02
36	1.88	1.95	2.06	2.50	3.02	3.19	3.31
37	2.07	2.14	2.26	2.73	3.29	3.48	3.60
38	2.26	2.34	2.46	2.96	3.57	3.76	3.89
39	2.45	2.53	2.67	3.20	3.84	4.04	4.18
40	2.64	2.73	2.87	3.43	4.11	4.32	4.47
41	2.82	2.92	3.07	3.66	4.38	4.60	4.76
42	3.01	3.11	3.27	3.89	4.64	4.88	5.04
43	3.19	3.30	3.46	4.12	4.90	5.15	5.32
44	3.37	3.48	3.66	4.34	5.16	5.42	5.59
45	3.55	3.66	3.84	4.56	5.41	5.68	5.86
46	3.72	3.84	4.03	4.78	5.66	5.94	6.13
47	3.89	4.01	4.21	4.99	5.90	6.19	6.39
48	4.06	4.18	4.39	5.19	6.14	6.44	6.64
49	4.22	4.35	4.56	5.39	6.37	6.68	6.89
50	4.37	4.51	4.73	5.59	6.60	6.92	7.13
51	4.52	4.66	4.89	5.77	6.82	7.15	7.37
52	4.67	4.82	5.05	5.96	7.03	7.37	7.60
53	4.81	4.96	5.20	6.14	7.24	7.59	7.83
54	4.95	5.11	5.35	6.31	7.45	7.80	8.04
55	5.09	5.24	5.50	6.48	7.64	8.01	8.26
56	5.22	5.38	5.64	6.65	7.83	8.21	8.46
57	5.34	5.51	5.77	6.80	8.02	8.41	8.66
58	5.47	5.63	5.90	6.96	8.20	8.59	8.86
59	5.58	5.76	6.03	7.11	8.38	8.78	9.05
60	5.70	5.87	6.15	7.25	8.55	8.96	9.23
61	5.81	5.99	6.27	7.39	8.71	9.13	9.41
62	5.92	6.10	6.39	7.53	8.87	9.30	9.58
63	6.02	6.20	6.50	7.66	9.03	9.46	9.75
64	6.12	6.31	6.61	7.79	9.18	9.62	9.91

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International Postnatal Growth Standards for Preterm Infants Weight (Boys)



International Postnatal Growth Standards for Preterm Infants



INTERGROWTH-21st

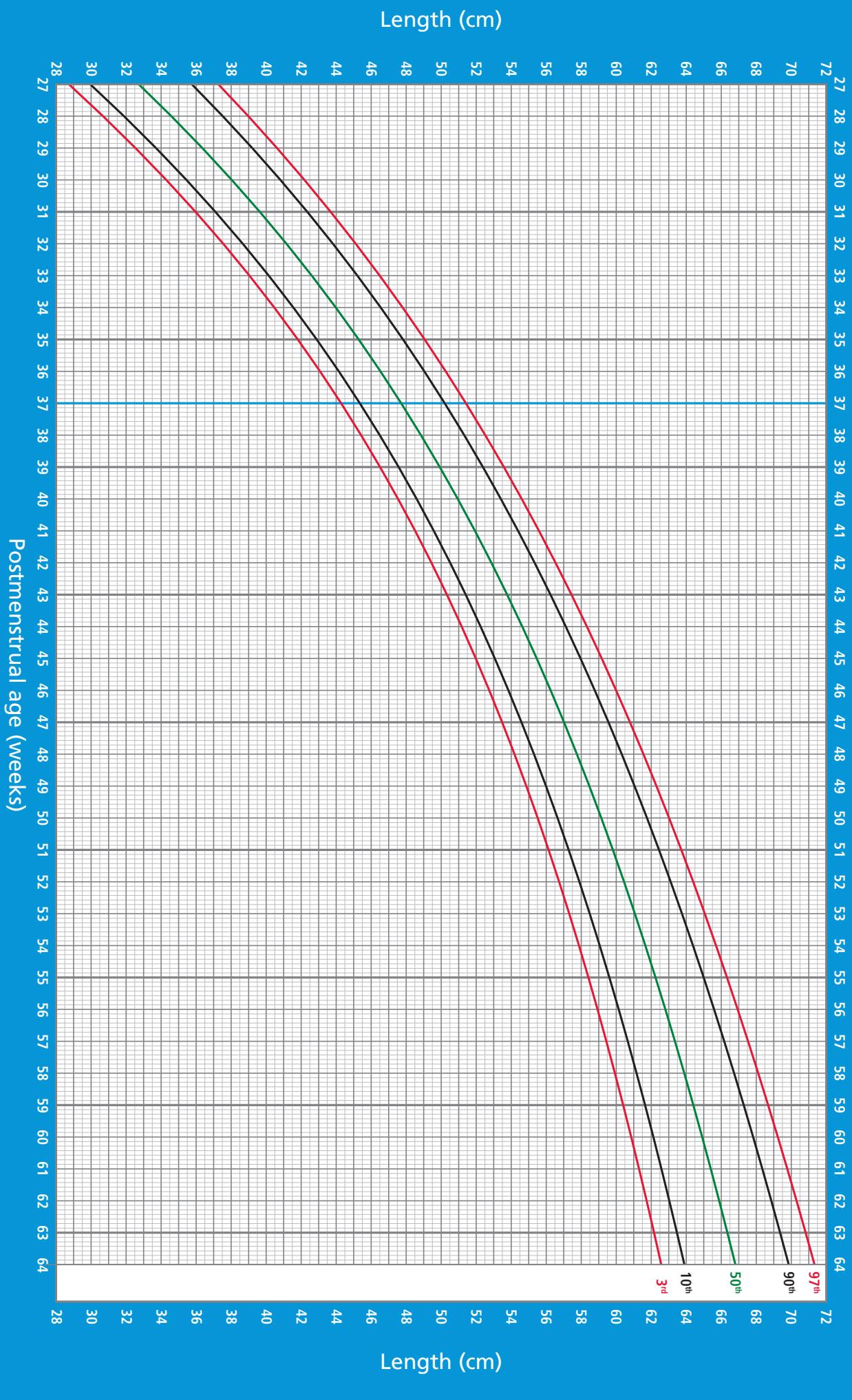
Length (cm) Boys



Postmenstrual age (exact weeks)	Centiles						
	3 rd	5 th	10 th	50 th	90 th	95 th	97 th
27	28.7	29.2	29.9	32.7	35.7	36.7	37.3
28	30.7	31.1	31.9	34.6	37.5	38.4	39.0
29	32.5	33.0	33.7	36.3	39.2	40.0	40.6
30	34.3	34.7	35.4	38.0	40.8	41.6	42.2
31	36.0	36.4	37.1	39.6	42.3	43.1	43.7
32	37.5	38.0	38.7	41.1	43.8	44.6	45.1
33	39.0	39.5	40.1	42.6	45.2	46.0	46.5
34	40.5	40.9	41.5	44.0	46.5	47.3	47.8
35	41.8	42.2	42.9	45.3	47.8	48.5	49.0
36	43.1	43.5	44.1	46.5	49.0	49.7	50.2
37	44.3	44.7	45.3	47.7	50.2	50.9	51.4
38	45.4	45.8	46.5	48.8	51.3	52.0	52.5
39	46.5	46.9	47.5	49.9	52.4	53.1	53.6
40	47.5	47.9	48.6	50.9	53.4	54.1	54.6
41	48.5	48.9	49.6	51.9	54.4	55.1	55.6
42	49.4	49.8	50.5	52.8	55.3	56.0	56.5
43	50.3	50.7	51.4	53.7	56.2	56.9	57.4
44	51.1	51.6	52.2	54.6	57.1	57.8	58.3
45	51.9	52.4	53.0	55.4	57.9	58.7	59.1
46	52.7	53.1	53.8	56.2	58.7	59.5	60.0
47	53.4	53.9	54.6	57.0	59.5	60.3	60.7
48	54.2	54.6	55.3	57.7	60.3	61.0	61.5
49	54.8	55.3	56.0	58.4	61.0	61.8	62.3
50	55.5	55.9	56.6	59.1	61.7	62.5	63.0
51	56.1	56.5	57.2	59.8	62.4	63.2	63.7
52	56.7	57.1	57.9	60.4	63.1	63.8	64.4
53	57.3	57.7	58.4	61.0	63.7	64.5	65.0
54	57.8	58.3	59.0	61.6	64.3	65.1	65.7
55	58.4	58.8	59.6	62.2	64.9	65.8	66.3
56	58.9	59.4	60.1	62.8	65.5	66.4	66.9
57	59.4	59.9	60.6	63.3	66.1	66.9	67.5
58	59.9	60.4	61.1	63.8	66.7	67.5	68.1
59	60.4	60.8	61.6	64.4	67.2	68.1	68.6
60	60.8	61.3	62.1	64.9	67.8	68.6	69.2
61	61.3	61.8	62.5	65.4	68.3	69.2	69.7
62	61.7	62.2	63.0	65.8	68.8	69.7	70.2
63	62.1	62.6	63.4	66.3	69.3	70.2	70.8
64	62.5	63.0	63.8	66.8	69.8	70.7	71.3

Villar et al.

International Postnatal Growth Standards for Preterm Infants Length (Boys)



International Postnatal Growth Standards for Preterm Infants



INTERGROWTH-21st

Head Circumference (cm) Boys

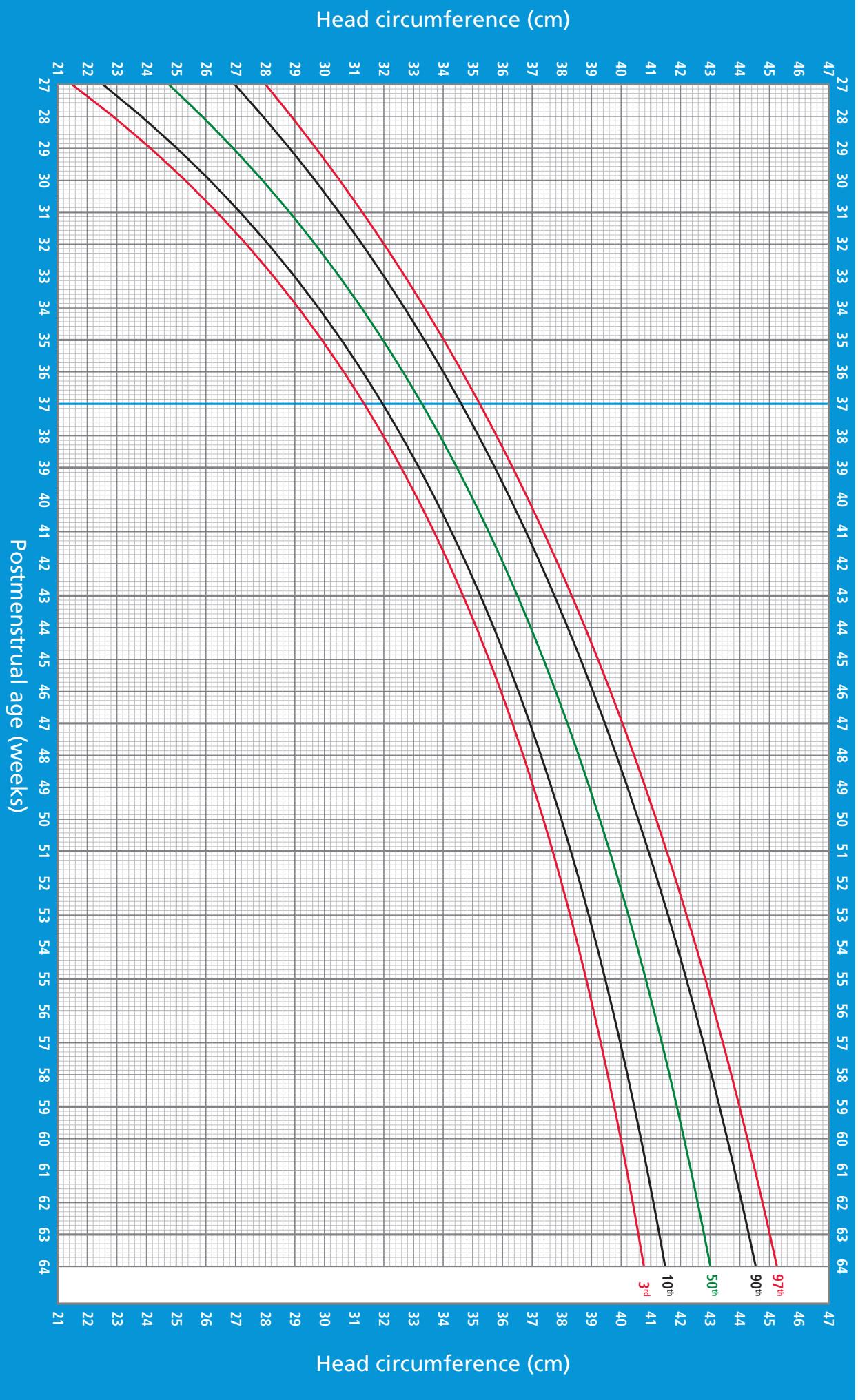


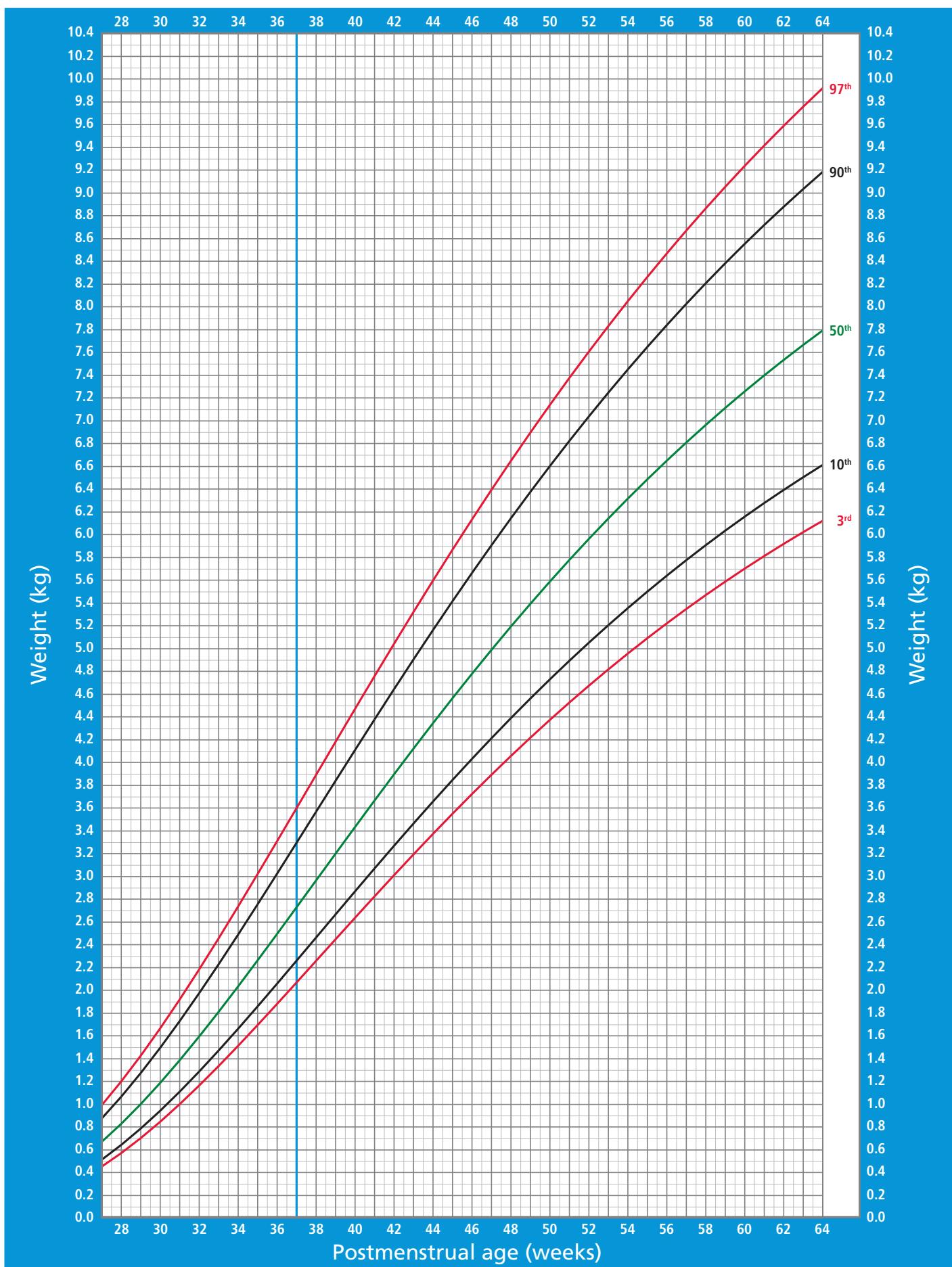
Postmenstrual age (exact weeks)	Centiles						
	3 rd	5 th	10 th	50 th	90 th	95 th	97 th
27	21.5	21.9	22.6	24.8	27.0	27.6	28.0
28	22.9	23.3	23.9	25.9	28.0	28.5	28.9
29	24.2	24.5	25.1	27.0	28.9	29.4	29.7
30	25.3	25.7	26.2	27.9	29.7	30.2	30.5
31	26.4	26.7	27.2	28.9	30.5	31.0	31.3
32	27.4	27.7	28.1	29.7	31.3	31.7	32.0
33	28.3	28.6	29.0	30.5	32.0	32.5	32.7
34	29.2	29.4	29.8	31.3	32.7	33.1	33.4
35	29.9	30.2	30.6	32.0	33.4	33.8	34.0
36	30.7	30.9	31.3	32.7	34.0	34.4	34.7
37	31.4	31.6	32.0	33.3	34.6	35.0	35.3
38	32.0	32.2	32.6	33.9	35.2	35.6	35.8
39	32.6	32.8	33.2	34.5	35.8	36.1	36.4
40	33.2	33.4	33.8	35.0	36.3	36.7	36.9
41	33.7	33.9	34.3	35.6	36.8	37.2	37.4
42	34.2	34.4	34.8	36.1	37.3	37.7	37.9
43	34.7	34.9	35.3	36.5	37.8	38.1	38.4
44	35.1	35.4	35.7	37.0	38.2	38.6	38.8
45	35.6	35.8	36.2	37.4	38.7	39.0	39.2
46	36.0	36.2	36.6	37.8	39.1	39.4	39.7
47	36.4	36.6	36.9	38.2	39.5	39.8	40.1
48	36.7	37.0	37.3	38.6	39.9	40.2	40.5
49	37.1	37.3	37.7	38.9	40.2	40.6	40.8
50	37.4	37.6	38.0	39.3	40.6	41.0	41.2
51	37.7	38.0	38.3	39.6	40.9	41.3	41.6
52	38.0	38.3	38.6	40.0	41.3	41.6	41.9
53	38.3	38.5	38.9	40.3	41.6	42.0	42.2
54	38.6	38.8	39.2	40.6	41.9	42.3	42.5
55	38.8	39.1	39.5	40.8	42.2	42.6	42.9
56	39.1	39.3	39.7	41.1	42.5	42.9	43.2
57	39.3	39.6	40.0	41.4	42.8	43.2	43.4
58	39.6	39.8	40.2	41.6	43.1	43.5	43.7
59	39.8	40.1	40.5	41.9	43.3	43.7	44.0
60	40.0	40.3	40.7	42.1	43.6	44.0	44.3
61	40.2	40.5	40.9	42.4	43.8	44.3	44.5
62	40.4	40.7	41.1	42.6	44.1	44.5	44.8
63	40.6	40.9	41.3	42.8	44.3	44.7	45.0
64	40.8	41.1	41.5	43.0	44.5	45.0	45.3

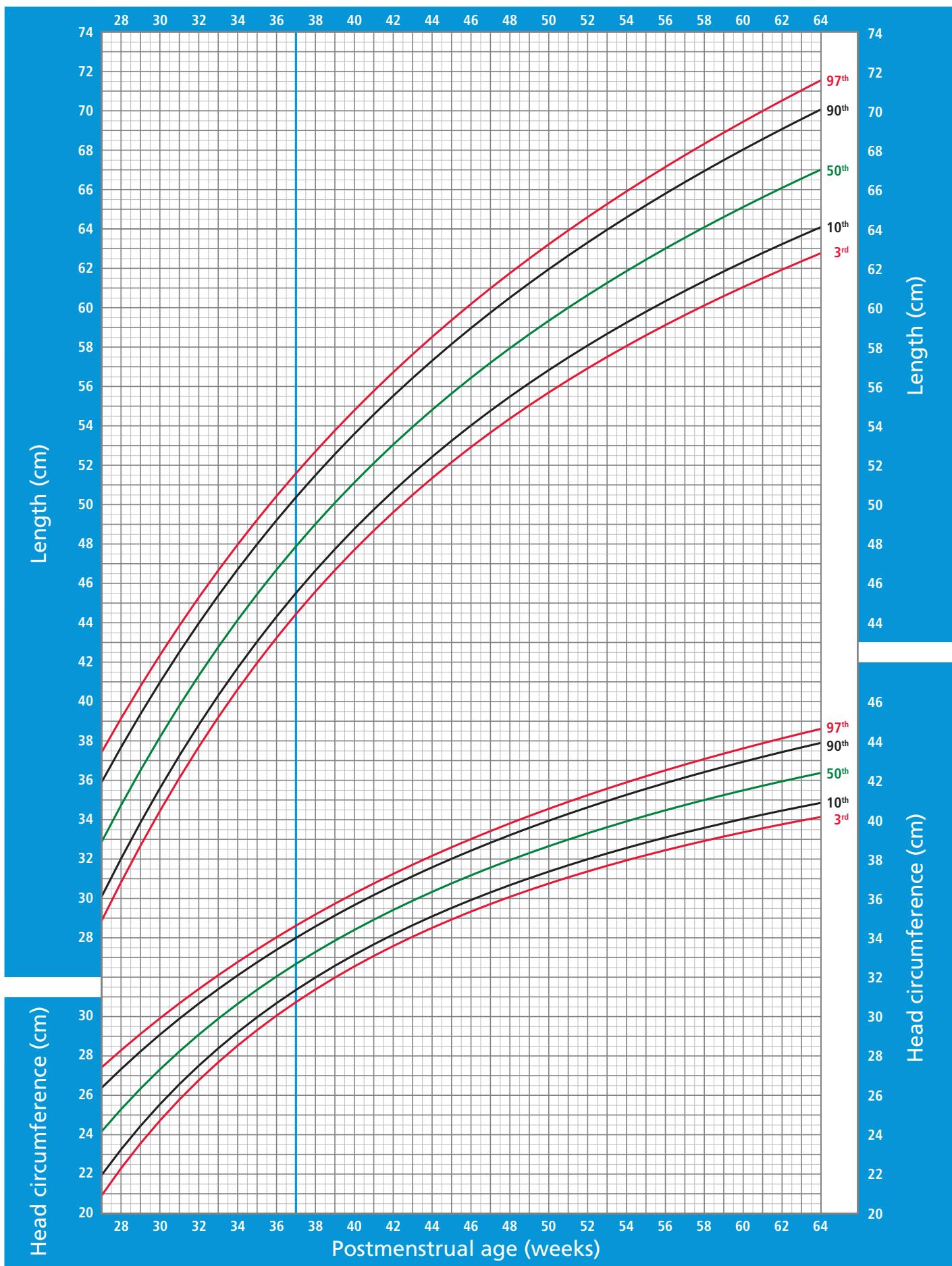
Villar et al.

International Postnatal Growth Standards for Preterm Infants

Head Circumference (Boys)







International Postnatal Growth Standards for Preterm Infants



INTERGROWTH-21st

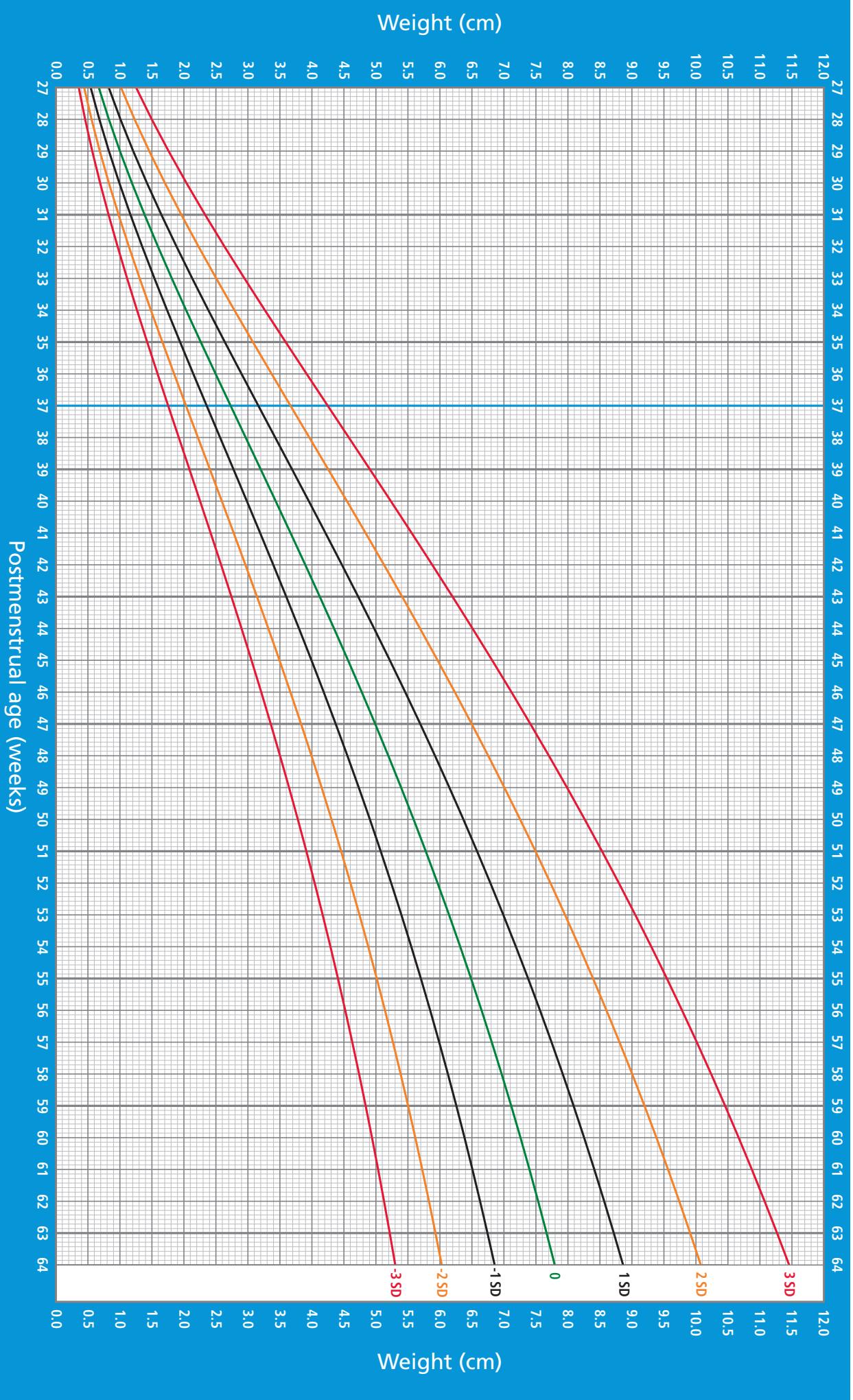
Weight (kg) Boys



Postmenstrual age (exact weeks)	z-scores (Standard Deviations)						
	-3	-2	-1	0	1	2	3
27	0.36	0.44	0.55	0.67	0.83	1.02	1.25
28	0.46	0.56	0.68	0.83	1.01	1.23	1.50
29	0.57	0.69	0.83	1.00	1.21	1.46	1.76
30	0.69	0.83	0.99	1.19	1.42	1.70	2.04
31	0.83	0.98	1.17	1.39	1.65	1.96	2.33
32	0.97	1.14	1.35	1.60	1.89	2.23	2.63
33	1.11	1.31	1.54	1.81	2.13	2.50	2.94
34	1.27	1.49	1.74	2.04	2.38	2.79	3.26
35	1.43	1.66	1.94	2.26	2.64	3.08	3.59
36	1.59	1.85	2.15	2.50	2.90	3.37	3.91
37	1.75	2.03	2.36	2.73	3.16	3.66	4.24
38	1.92	2.22	2.56	2.96	3.42	3.96	4.57
39	2.09	2.41	2.77	3.20	3.69	4.25	4.90
40	2.25	2.59	2.98	3.43	3.95	4.54	5.23
41	2.42	2.78	3.19	3.66	4.21	4.84	5.55
42	2.58	2.96	3.40	3.89	4.47	5.12	5.87
43	2.74	3.14	3.60	4.12	4.72	5.41	6.19
44	2.90	3.32	3.80	4.34	4.97	5.68	6.50
45	3.06	3.49	3.99	4.56	5.21	5.96	6.81
46	3.21	3.66	4.18	4.78	5.45	6.23	7.11
47	3.36	3.83	4.37	4.99	5.69	6.49	7.41
48	3.50	3.99	4.55	5.19	5.92	6.75	7.70
49	3.64	4.15	4.73	5.39	6.14	7.00	7.98
50	3.78	4.30	4.90	5.59	6.36	7.25	8.25
51	3.91	4.45	5.07	5.77	6.58	7.49	8.52
52	4.04	4.60	5.24	5.96	6.78	7.72	8.79
53	4.17	4.74	5.39	6.14	6.98	7.95	9.04
54	4.29	4.88	5.55	6.31	7.18	8.17	9.29
55	4.40	5.01	5.70	6.48	7.37	8.38	9.54
56	4.52	5.14	5.84	6.65	7.56	8.59	9.77
57	4.63	5.26	5.98	6.80	7.74	8.80	10.00
58	4.73	5.38	6.12	6.96	7.91	9.00	10.23
59	4.84	5.50	6.25	7.11	8.08	9.19	10.45
60	4.94	5.61	6.38	7.25	8.25	9.37	10.66
61	5.03	5.72	6.50	7.39	8.40	9.55	10.86
62	5.12	5.83	6.62	7.53	8.56	9.73	11.06
63	5.21	5.93	6.74	7.66	8.71	9.90	11.26
64	5.30	6.02	6.85	7.79	8.85	10.07	11.44

Villar et al.

International Postnatal Growth Standards for Preterm Infants Weight (Boys)



International Postnatal Growth Standards for Preterm Infants



INTERGROWTH-21st

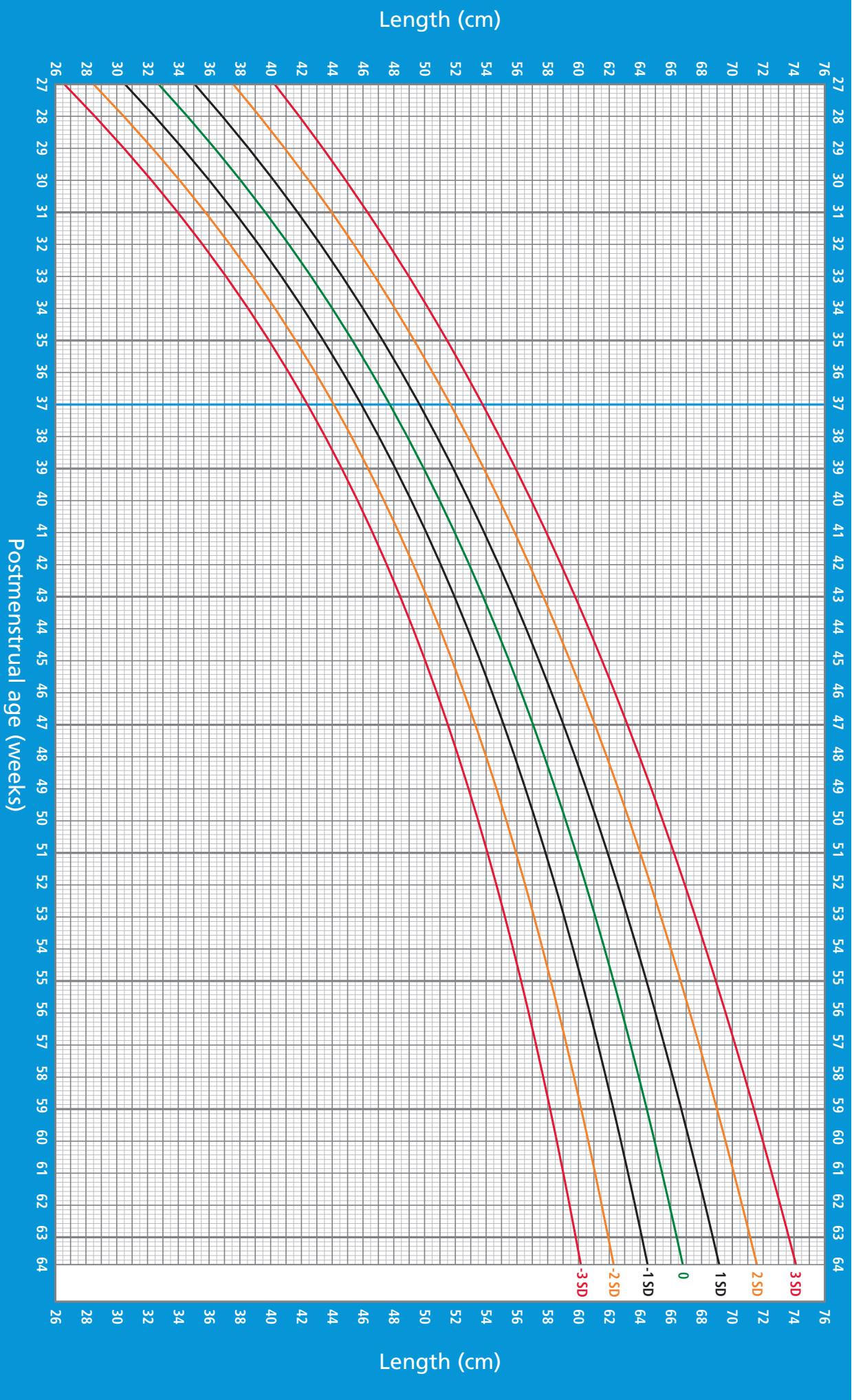
Length (cm) Boys



Postmenstrual age (exact weeks)	z-scores (Standard Deviations)						
	-3	-2	-1	0	1	2	3
27	26.6	28.5	30.5	32.7	35.1	37.6	40.3
28	28.6	30.4	32.4	34.6	36.8	39.3	41.8
29	30.4	32.3	34.3	36.3	38.5	40.9	43.4
30	32.2	34.1	36.0	38.0	40.2	42.4	44.8
31	33.9	35.7	37.6	39.6	41.7	43.9	46.3
32	35.5	37.3	39.2	41.1	43.2	45.4	47.6
33	37.1	38.8	40.7	42.6	44.6	46.7	48.9
34	38.5	40.2	42.1	44.0	45.9	48.0	50.2
35	39.8	41.6	43.4	45.3	47.2	49.3	51.4
36	41.1	42.8	44.6	46.5	48.4	50.5	52.6
37	42.3	44.0	45.8	47.7	49.6	51.6	53.7
38	43.5	45.2	47.0	48.8	50.7	52.7	54.8
39	44.6	46.3	48.0	49.9	51.8	53.8	55.9
40	45.6	47.3	49.1	50.9	52.8	54.8	56.9
41	46.6	48.3	50.1	51.9	53.8	55.8	57.8
42	47.5	49.2	51.0	52.8	54.7	56.7	58.8
43	48.4	50.1	51.9	53.7	55.7	57.6	59.7
44	49.2	50.9	52.7	54.6	56.5	58.5	60.6
45	50.0	51.7	53.5	55.4	57.4	59.4	61.5
46	50.7	52.5	54.3	56.2	58.2	60.2	62.3
47	51.4	53.2	55.1	57.0	58.9	61.0	63.1
48	52.1	53.9	55.8	57.7	59.7	61.8	63.9
49	52.8	54.6	56.5	58.4	60.4	62.5	64.7
50	53.4	55.2	57.1	59.1	61.1	63.2	65.4
51	54.0	55.9	57.8	59.8	61.8	63.9	66.1
52	54.6	56.5	58.4	60.4	62.5	64.6	66.8
53	55.2	57.0	59.0	61.0	63.1	65.3	67.5
54	55.7	57.6	59.6	61.6	63.7	65.9	68.2
55	56.2	58.1	60.1	62.2	64.3	66.5	68.8
56	56.7	58.6	60.7	62.8	64.9	67.2	69.5
57	57.2	59.1	61.2	63.3	65.5	67.8	70.1
58	57.6	59.6	61.7	63.8	66.0	68.3	70.7
59	58.1	60.1	62.2	64.4	66.6	68.9	71.3
60	58.5	60.6	62.7	64.9	67.1	69.5	71.9
61	58.9	61.0	63.1	65.3	67.6	70.0	72.5
62	59.3	61.4	63.6	65.8	68.1	70.5	73.0
63	59.7	61.9	64.0	66.3	68.6	71.1	73.6
64	60.1	62.3	64.5	66.8	69.1	71.6	74.1

Villar et al.

International Postnatal Growth Standards for Preterm Infants Length (Boys)



International Postnatal Growth Standards for Preterm Infants



INTERGROWTH-21st

Head Circumference (cm) Boys

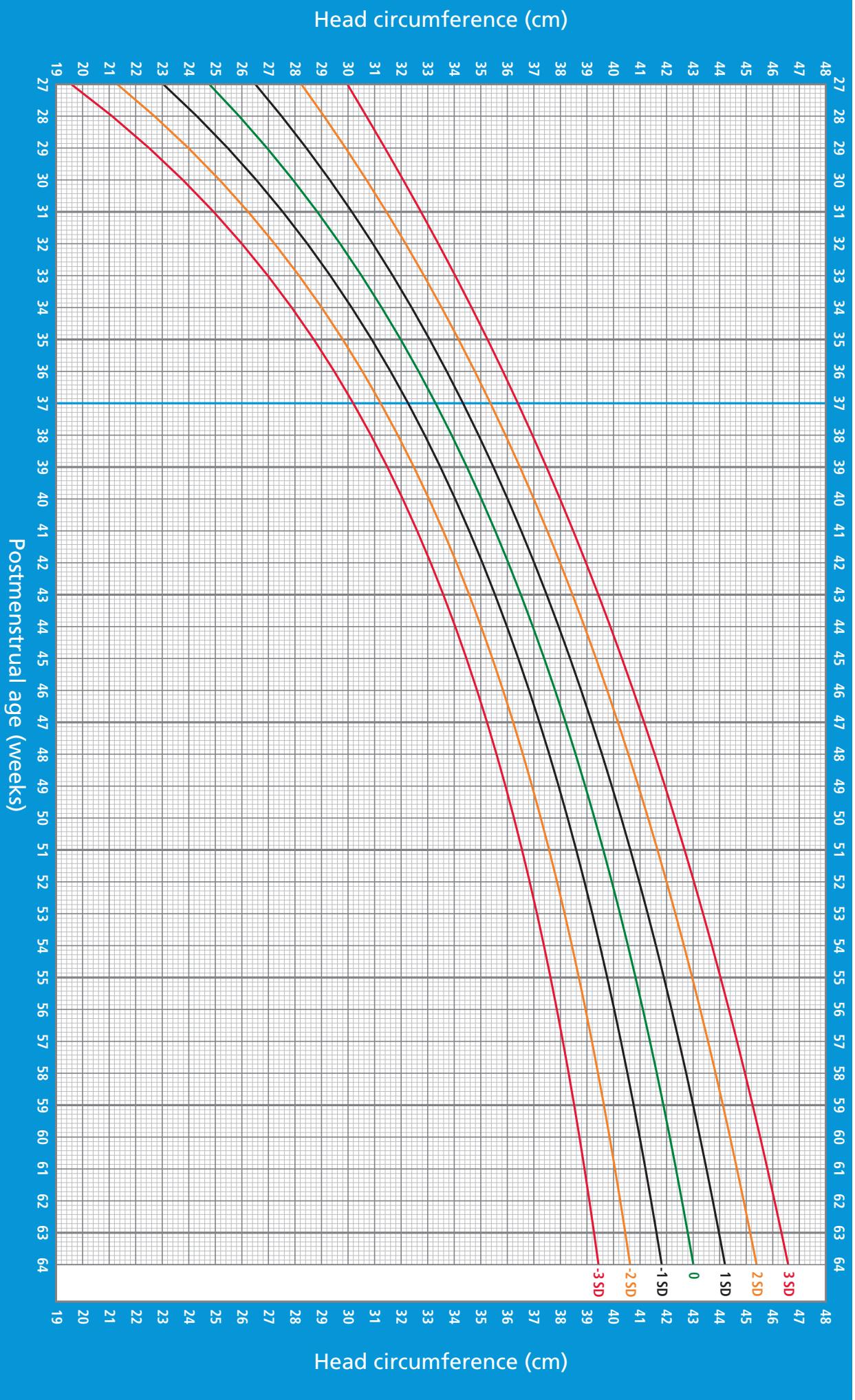


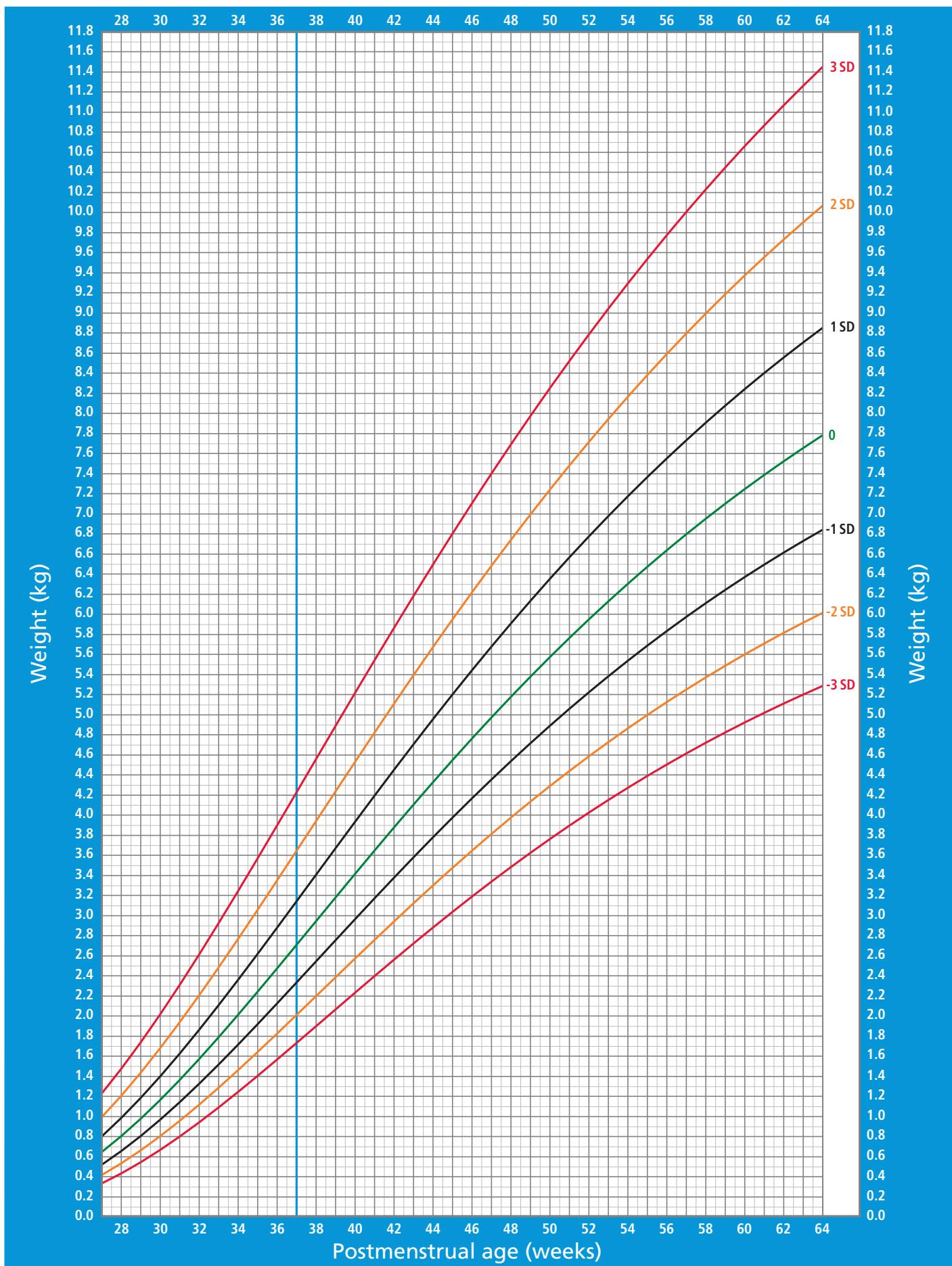
Postmenstrual age (exact weeks)	z-scores (Standard Deviations)						
	-3	-2	-1	0	1	2	3
27	19.6	21.3	23.0	24.8	26.5	28.2	30.0
28	21.1	22.7	24.3	25.9	27.5	29.1	30.7
29	22.5	24.0	25.5	27.0	28.4	29.9	31.4
30	23.8	25.2	26.5	27.9	29.3	30.7	32.1
31	24.9	26.2	27.5	28.8	30.2	31.5	32.8
32	26.0	27.2	28.5	29.7	30.9	32.2	33.4
33	27.0	28.2	29.3	30.5	31.7	32.9	34.0
34	27.9	29.0	30.1	31.3	32.4	33.5	34.7
35	28.7	29.8	30.9	32.0	33.1	34.2	35.3
36	29.5	30.5	31.6	32.7	33.7	34.8	35.8
37	30.2	31.2	32.3	33.3	34.3	35.4	36.4
38	30.9	31.9	32.9	33.9	34.9	35.9	37.0
39	31.5	32.5	33.5	34.5	35.5	36.5	37.5
40	32.1	33.1	34.0	35.0	36.0	37.0	38.0
41	32.6	33.6	34.6	35.6	36.5	37.5	38.5
42	33.1	34.1	35.1	36.0	37.0	38.0	39.0
43	33.6	34.6	35.5	36.5	37.5	38.5	39.4
44	34.0	35.0	36.0	37.0	37.9	38.9	39.9
45	34.5	35.4	36.4	37.4	38.4	39.4	40.3
46	34.9	35.8	36.8	37.8	38.8	39.8	40.8
47	35.2	36.2	37.2	38.2	39.2	40.2	41.2
48	35.6	36.6	37.6	38.6	39.6	40.6	41.6
49	35.9	36.9	37.9	38.9	39.9	40.9	41.9
50	36.3	37.3	38.3	39.3	40.3	41.3	42.3
51	36.6	37.6	38.6	39.6	40.6	41.7	42.7
52	36.9	37.9	38.9	39.9	41.0	42.0	43.0
53	37.1	38.2	39.2	40.3	41.3	42.3	43.4
54	37.4	38.4	39.5	40.6	41.6	42.7	43.7
55	37.6	38.7	39.8	40.8	41.9	43.0	44.0
56	37.9	39.0	40.0	41.1	42.2	43.3	44.4
57	38.1	39.2	40.3	41.4	42.5	43.6	44.7
58	38.3	39.4	40.5	41.6	42.7	43.9	45.0
59	38.5	39.6	40.8	41.9	43.0	44.1	45.3
60	38.7	39.9	41.0	42.1	43.3	44.4	45.5
61	38.9	40.1	41.2	42.4	43.5	44.7	45.8
62	39.1	40.3	41.4	42.6	43.8	44.9	46.1
63	39.3	40.5	41.6	42.8	44.0	45.2	46.3
64	39.4	40.6	41.8	43.0	44.2	45.4	46.6

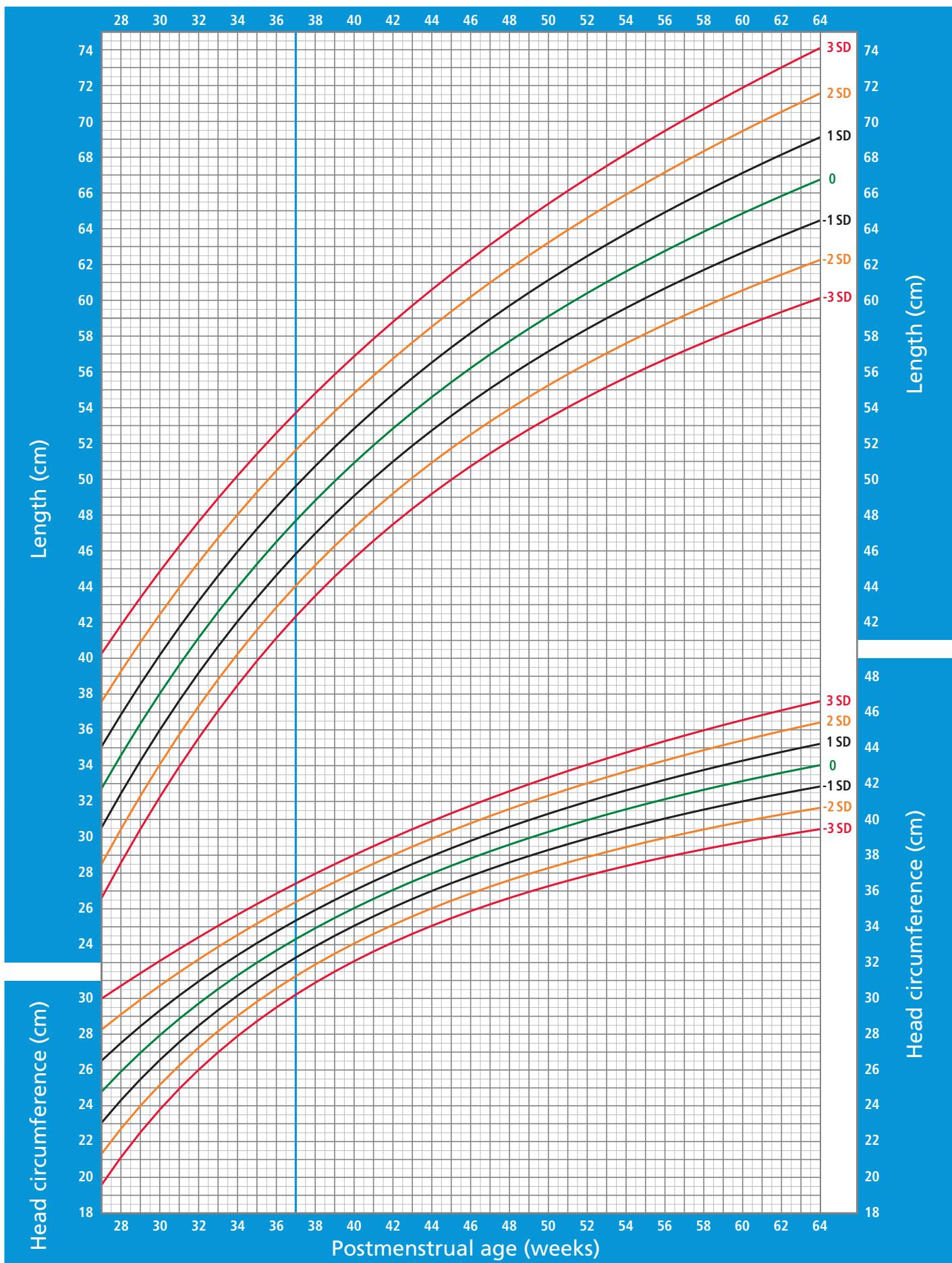
Villar et al.

International Postnatal Growth Standards for Preterm Infants

Head Circumference (Boys)







International Postnatal Growth Standards for Preterm Infants



Weight (kg) Girls

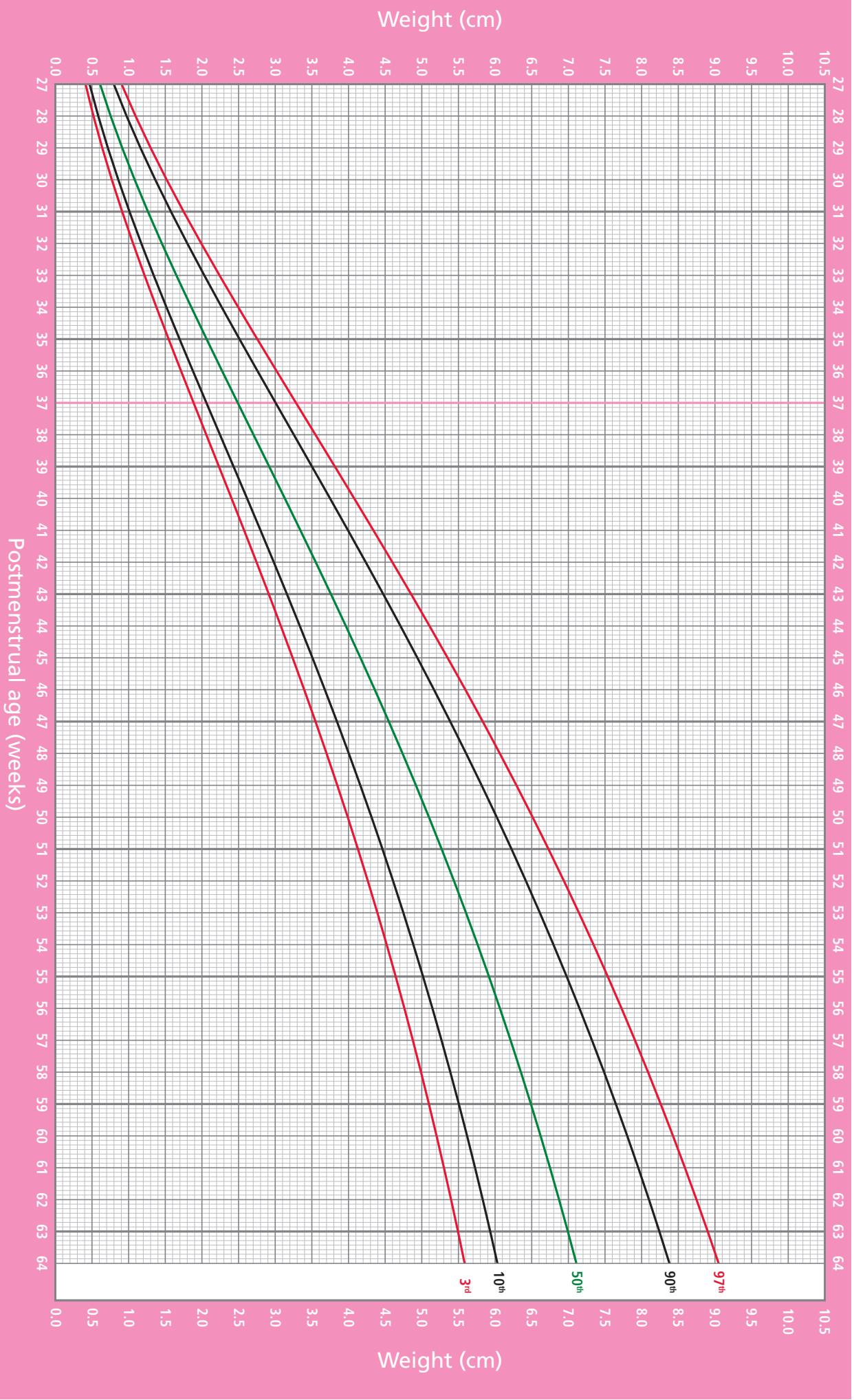
INTERGROWTH-21st



Postmenstrual age (exact weeks)	Centiles						
	3 rd	5 th	10 th	50 th	90 th	95 th	97 th
27	0.41	0.44	0.47	0.61	0.80	0.86	0.91
28	0.52	0.55	0.59	0.76	0.97	1.05	1.10
29	0.64	0.67	0.72	0.91	1.16	1.25	1.30
30	0.77	0.81	0.86	1.09	1.37	1.46	1.52
31	0.91	0.95	1.01	1.27	1.58	1.68	1.75
32	1.06	1.11	1.18	1.46	1.80	1.92	1.99
33	1.22	1.27	1.34	1.65	2.03	2.16	2.24
34	1.38	1.43	1.52	1.86	2.27	2.41	2.50
35	1.55	1.60	1.70	2.07	2.51	2.66	2.76
36	1.72	1.78	1.88	2.28	2.76	2.92	3.02
37	1.89	1.96	2.06	2.49	3.01	3.17	3.29
38	2.06	2.13	2.25	2.71	3.26	3.43	3.55
39	2.23	2.31	2.43	2.92	3.50	3.69	3.82
40	2.41	2.49	2.62	3.13	3.75	3.95	4.08
41	2.58	2.66	2.80	3.35	3.99	4.20	4.34
42	2.75	2.84	2.98	3.55	4.24	4.45	4.60
43	2.91	3.01	3.16	3.76	4.48	4.70	4.85
44	3.08	3.18	3.34	3.96	4.71	4.95	5.11
45	3.24	3.34	3.51	4.16	4.94	5.19	5.35
46	3.40	3.50	3.68	4.36	5.17	5.42	5.60
47	3.55	3.66	3.84	4.55	5.39	5.65	5.83
48	3.70	3.82	4.01	4.74	5.61	5.88	6.06
49	3.85	3.97	4.16	4.92	5.82	6.10	6.29
50	3.99	4.12	4.32	5.10	6.02	6.32	6.51
51	4.13	4.26	4.46	5.27	6.22	6.53	6.73
52	4.26	4.40	4.61	5.44	6.42	6.73	6.94
53	4.40	4.53	4.75	5.60	6.61	6.93	7.14
54	4.52	4.66	4.89	5.76	6.80	7.12	7.34
55	4.64	4.79	5.02	5.92	6.98	7.31	7.54
56	4.76	4.91	5.15	6.07	7.15	7.50	7.73
57	4.88	5.03	5.27	6.21	7.32	7.67	7.91
58	4.99	5.14	5.39	6.35	7.49	7.85	8.09
59	5.10	5.25	5.51	6.49	7.65	8.01	8.26
60	5.20	5.36	5.62	6.62	7.80	8.18	8.43
61	5.30	5.47	5.73	6.75	7.95	8.33	8.59
62	5.40	5.57	5.83	6.87	8.10	8.49	8.75
63	5.49	5.66	5.93	6.99	8.24	8.64	8.90
64	5.58	5.76	6.03	7.11	8.38	8.78	9.05

Villar et al.

International Postnatal Growth Standards for Preterm Infants Weight (Girls)



International Postnatal Growth Standards for Preterm Infants



Length (cm) Girls

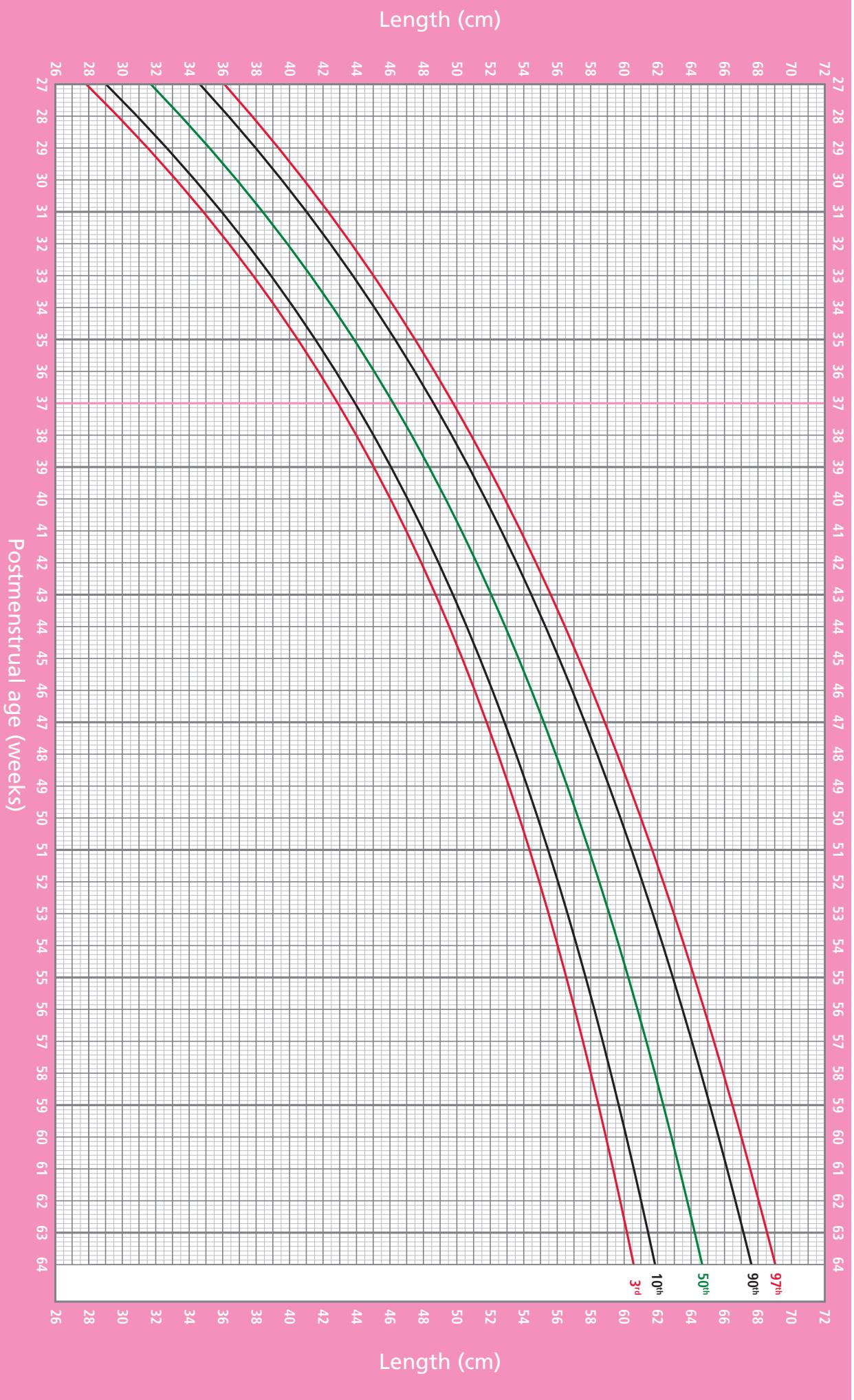
INTERGROWTH-21st



Postmenstrual age (exact weeks)	Centiles						
	3 rd	5 th	10 th	50 th	90 th	95 th	97 th
27	27.8	28.3	29.0	31.7	34.6	35.5	36.1
28	29.7	30.2	30.9	33.5	36.3	37.2	37.8
29	31.5	32.0	32.7	35.2	38.0	38.8	39.3
30	33.2	33.7	34.3	36.8	39.5	40.3	40.9
31	34.8	35.3	35.9	38.4	41.0	41.8	42.3
32	36.4	36.8	37.5	39.9	42.4	43.2	43.7
33	37.8	38.2	38.9	41.3	43.8	44.5	45.0
34	39.2	39.6	40.3	42.6	45.1	45.8	46.3
35	40.5	40.9	41.5	43.9	46.3	47.0	47.5
36	41.7	42.1	42.8	45.1	47.5	48.2	48.7
37	42.9	43.3	43.9	46.2	48.6	49.3	49.8
38	44.0	44.4	45.0	47.3	49.7	50.4	50.9
39	45.0	45.4	46.1	48.3	50.7	51.4	51.9
40	46.0	46.4	47.1	49.3	51.7	52.4	52.9
41	47.0	47.4	48.0	50.3	52.7	53.4	53.8
42	47.9	48.3	48.9	51.2	53.6	54.3	54.7
43	48.7	49.1	49.8	52.1	54.5	55.2	55.6
44	49.6	50.0	50.6	52.9	55.3	56.0	56.5
45	50.3	50.7	51.4	53.7	56.1	56.8	57.3
46	51.1	51.5	52.1	54.5	56.9	57.6	58.1
47	51.8	52.2	52.9	55.2	57.7	58.4	58.9
48	52.5	52.9	53.6	55.9	58.4	59.1	59.6
49	53.1	53.6	54.2	56.6	59.1	59.8	60.3
50	53.8	54.2	54.9	57.3	59.8	60.5	61.0
51	54.4	54.8	55.5	57.9	60.5	61.2	61.7
52	54.9	55.4	56.1	58.5	61.1	61.9	62.4
53	55.5	55.9	56.6	59.1	61.7	62.5	63.0
54	56.0	56.5	57.2	59.7	62.3	63.1	63.6
55	56.6	57.0	57.7	60.3	62.9	63.7	64.2
56	57.1	57.5	58.2	60.8	63.5	64.3	64.8
57	57.6	58.0	58.7	61.3	64.1	64.9	65.4
58	58.0	58.5	59.2	61.9	64.6	65.4	66.0
59	58.5	59.0	59.7	62.4	65.2	66.0	66.5
60	58.9	59.4	60.2	62.9	65.7	66.5	67.0
61	59.4	59.8	60.6	63.3	66.2	67.0	67.6
62	59.8	60.3	61.0	63.8	66.7	67.5	68.1
63	60.2	60.7	61.5	64.2	67.2	68.0	68.6
64	60.6	61.1	61.9	64.7	67.6	68.5	69.1

Villar et al.

International Postnatal Growth Standards for Preterm Infants Length (Girls)



International Postnatal Growth Standards for Preterm Infants



Head Circumference (cm) Girls

INTERGROWTH-21st

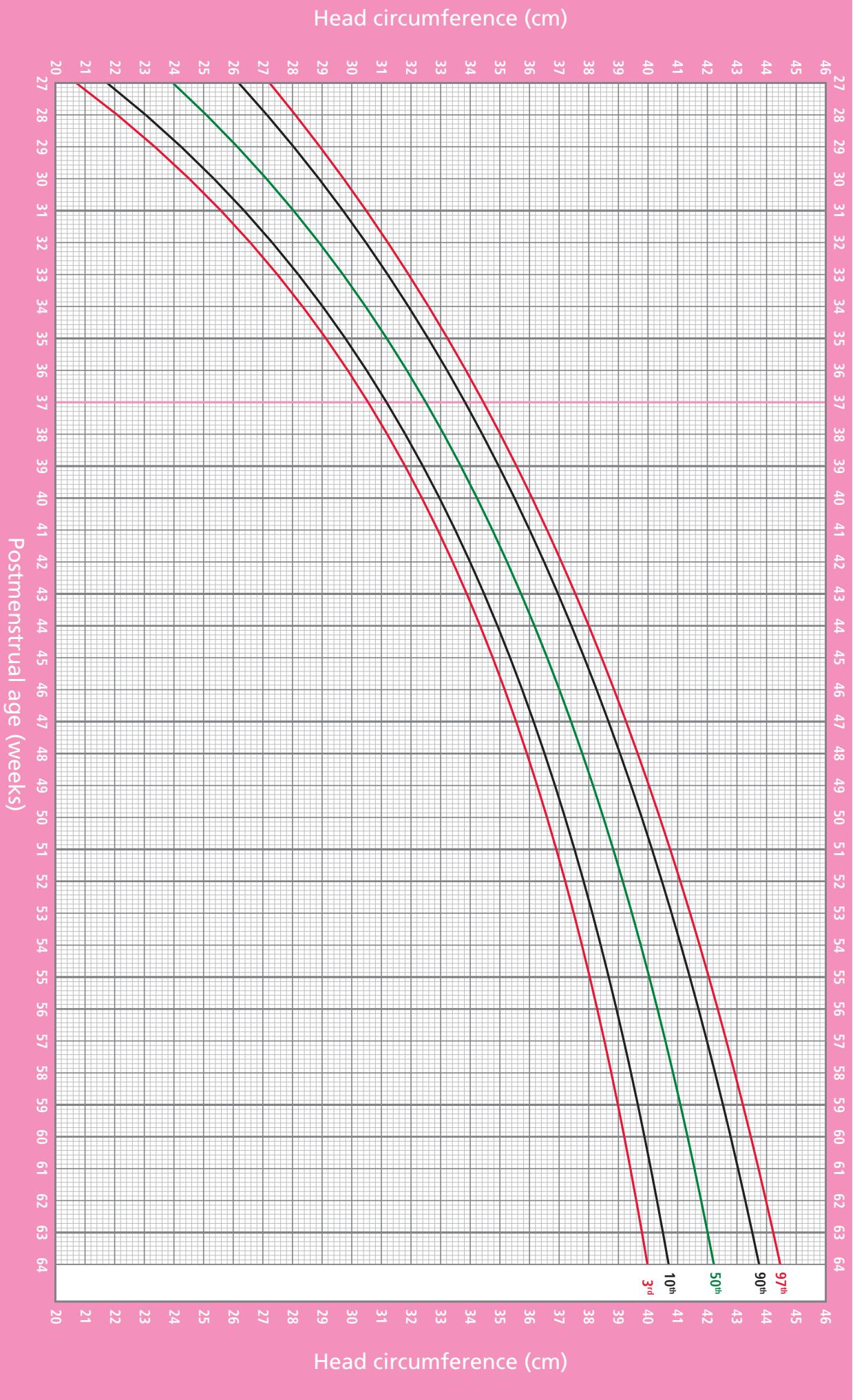


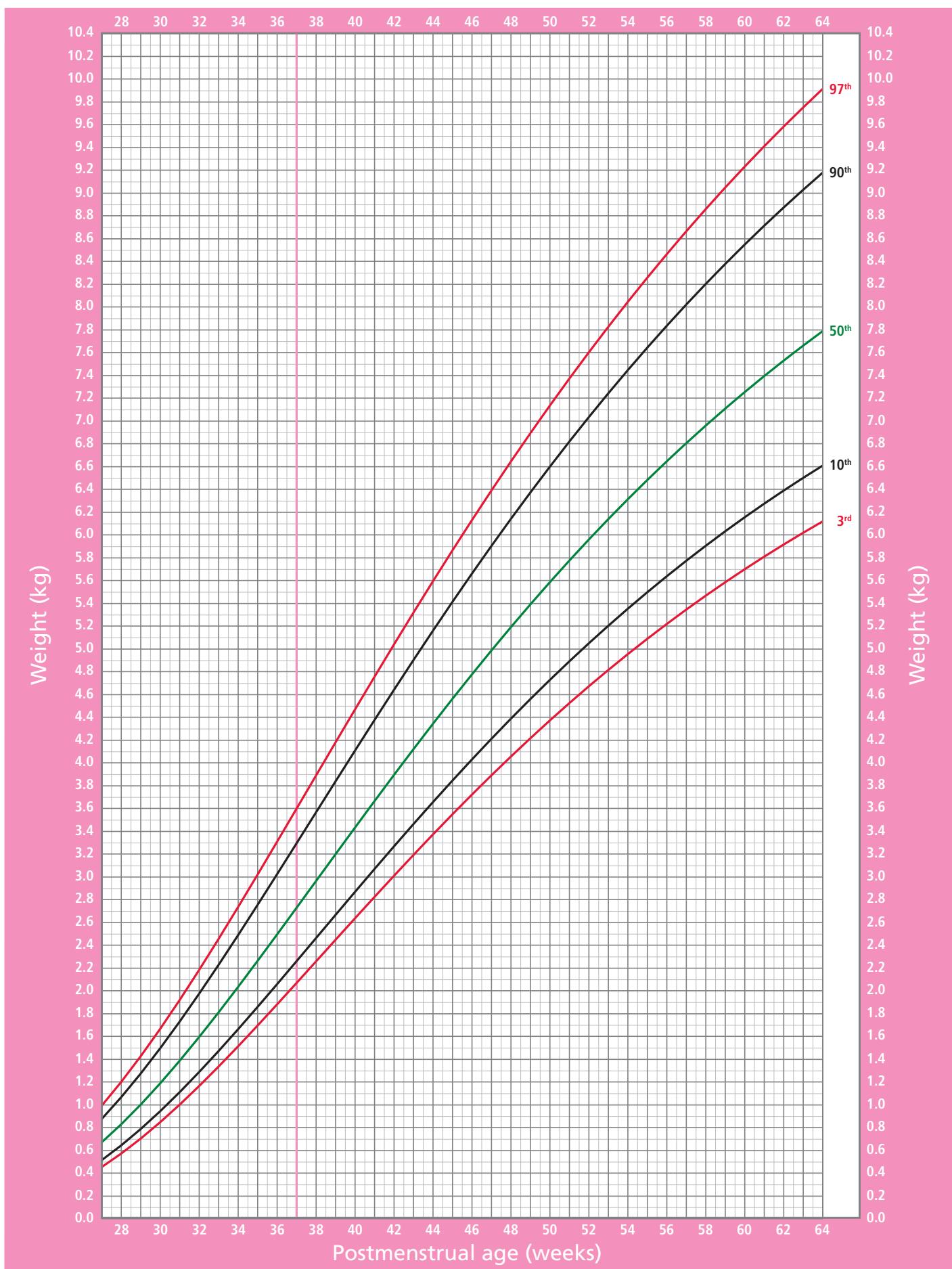
Postmenstrual age (exact weeks)	Centiles						
	3 rd	5 th	10 th	50 th	90 th	95 th	97 th
27	20.7	21.1	21.8	24.0	26.2	26.8	27.2
28	22.1	22.5	23.1	25.1	27.2	27.7	28.1
29	23.4	23.7	24.3	26.2	28.1	28.6	28.9
30	24.5	24.9	25.4	27.1	28.9	29.4	29.7
31	25.6	25.9	26.4	28.1	29.7	30.2	30.5
32	26.6	26.9	27.3	28.9	30.5	30.9	31.2
33	27.5	27.8	28.2	29.7	31.2	31.7	31.9
34	28.4	28.6	29.0	30.5	31.9	32.3	32.6
35	29.1	29.4	29.8	31.2	32.6	33.0	33.2
36	29.9	30.1	30.5	31.9	33.2	33.6	33.9
37	30.6	30.8	31.2	32.5	33.8	34.2	34.5
38	31.2	31.4	31.8	33.1	34.4	34.8	35.0
39	31.8	32.0	32.4	33.7	35.0	35.3	35.6
40	32.4	32.6	33.0	34.2	35.5	35.9	36.1
41	32.9	33.1	33.5	34.8	36.0	36.4	36.6
42	33.4	33.6	34.0	35.3	36.5	36.9	37.1
43	33.9	34.1	34.5	35.7	37.0	37.3	37.6
44	34.3	34.6	34.9	36.2	37.4	37.8	38.0
45	34.8	35.0	35.4	36.6	37.9	38.2	38.4
46	35.2	35.4	35.8	37.0	38.3	38.6	38.9
47	35.6	35.8	36.1	37.4	38.7	39.0	39.3
48	35.9	36.2	36.5	37.8	39.1	39.4	39.7
49	36.3	36.5	36.9	38.1	39.4	39.8	40.0
50	36.6	36.8	37.2	38.5	39.8	40.2	40.4
51	36.9	37.2	37.5	38.8	40.1	40.5	40.7
52	37.2	37.5	37.8	39.2	40.5	40.8	41.1
53	37.5	37.7	38.1	39.5	40.8	41.2	41.4
54	37.8	38.0	38.4	39.8	41.1	41.5	41.7
55	38.0	38.3	38.7	40.0	41.4	41.8	42.1
56	38.3	38.5	38.9	40.3	41.7	42.1	42.4
57	38.5	38.8	39.2	40.6	42.0	42.4	42.6
58	38.8	39.0	39.4	40.8	42.3	42.7	42.9
59	39.0	39.3	39.7	41.1	42.5	42.9	43.2
60	39.2	39.5	39.9	41.3	42.8	43.2	43.5
61	39.4	39.7	40.1	41.6	43.0	43.5	43.7
62	39.6	39.9	40.3	41.8	43.3	43.7	44.0
63	39.8	40.1	40.5	42.0	43.5	43.9	44.2
64	40.0	40.3	40.7	42.2	43.7	44.2	44.5

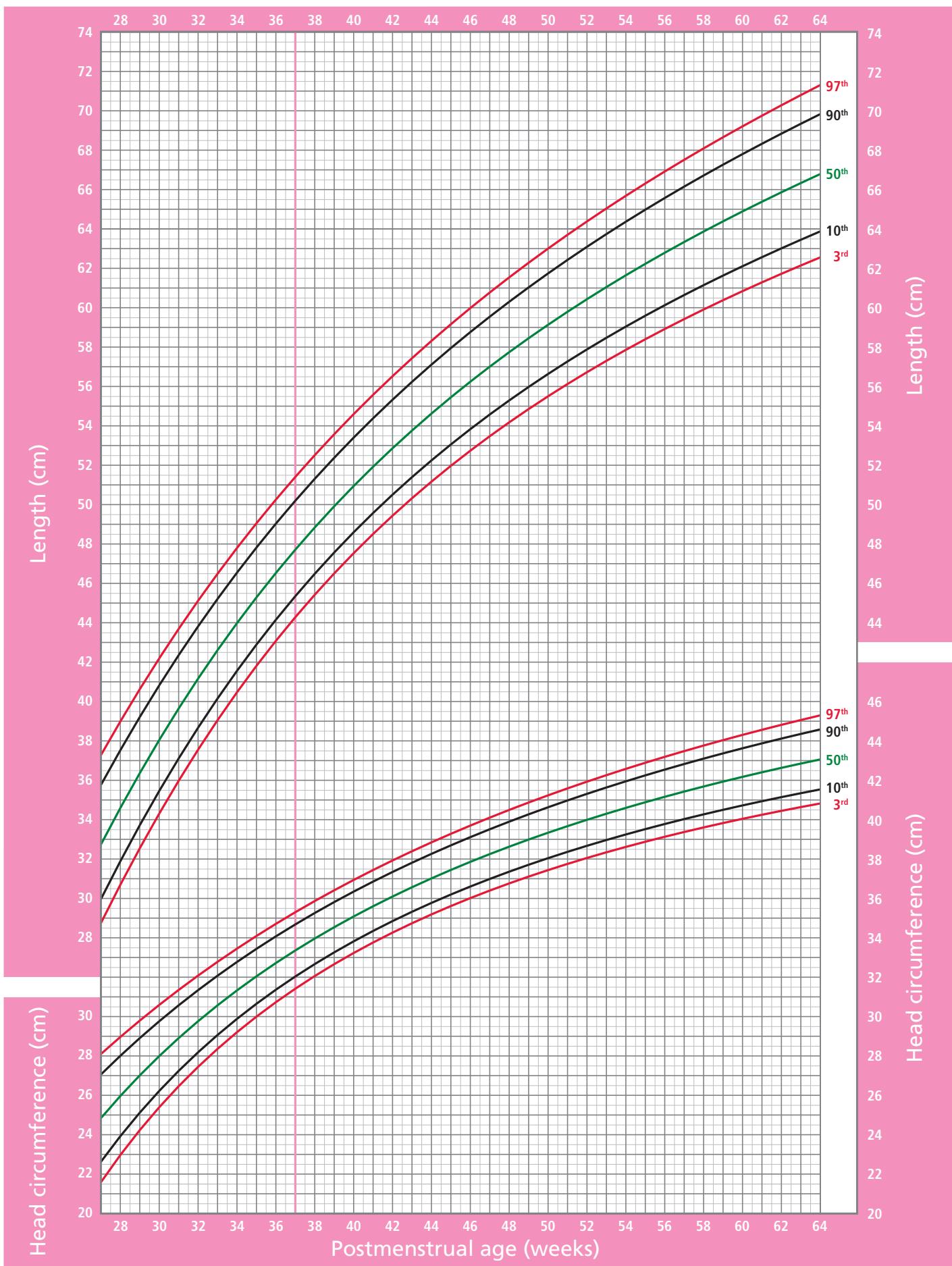
Villar et al.

International Postnatal Growth Standards for Preterm Infants

Head Circumference (Girls)







International Postnatal Growth Standards for Preterm Infants



Weight (kg) Girls

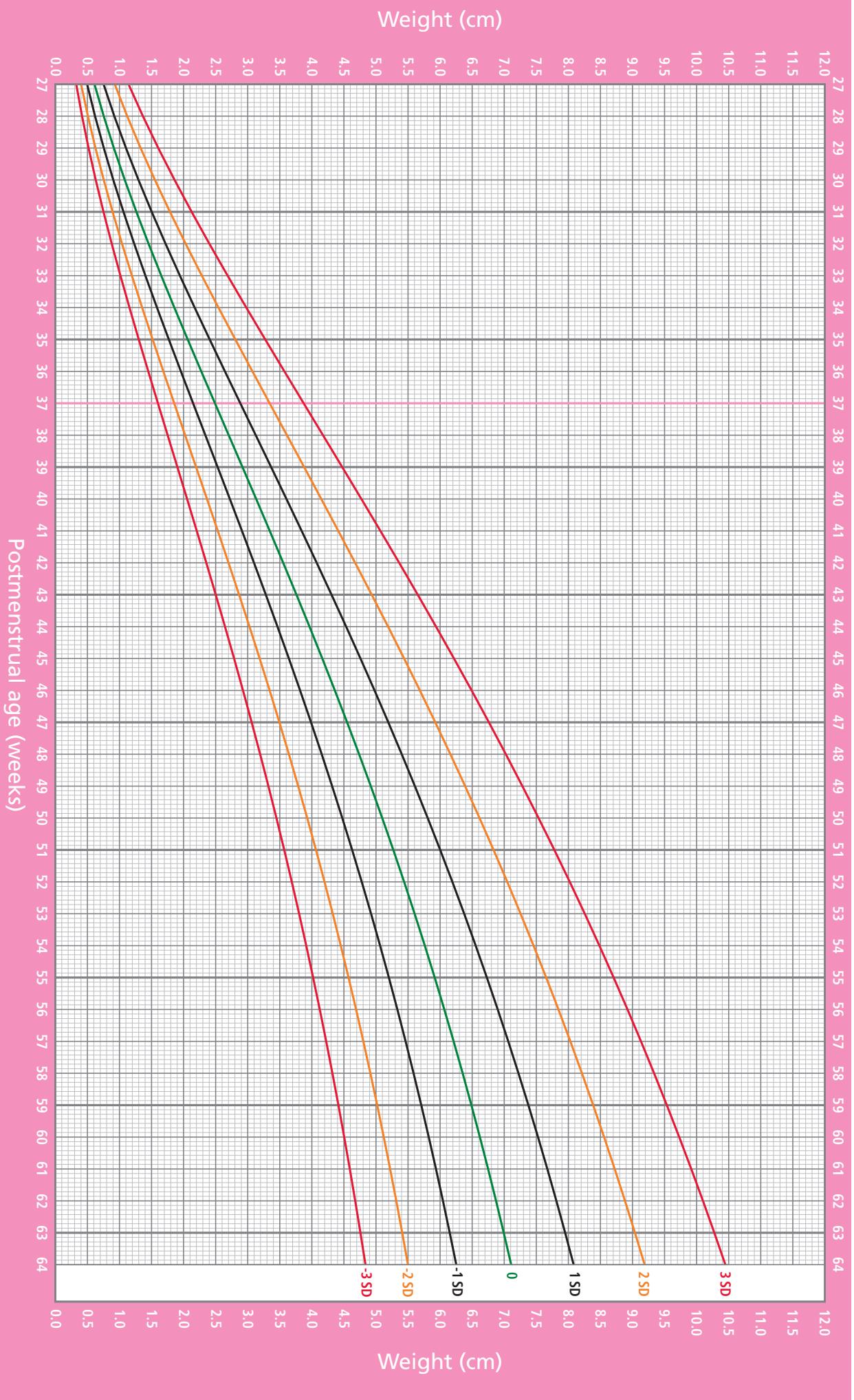
INTERGROWTH-21st



Postmenstrual age (exact weeks)	z-scores (Standard Deviations)						
	-3	-2	-1	0	1	2	3
27	0.33	0.40	0.50	0.61	0.75	0.93	1.14
28	0.42	0.51	0.62	0.76	0.92	1.12	1.37
29	0.52	0.63	0.76	0.91	1.10	1.33	1.61
30	0.63	0.76	0.91	1.09	1.30	1.55	1.86
31	0.75	0.90	1.06	1.27	1.51	1.79	2.13
32	0.88	1.04	1.23	1.46	1.72	2.03	2.40
33	1.02	1.20	1.41	1.65	1.94	2.29	2.69
34	1.16	1.36	1.59	1.86	2.17	2.55	2.98
35	1.30	1.52	1.77	2.07	2.41	2.81	3.27
36	1.45	1.69	1.96	2.28	2.65	3.08	3.57
37	1.60	1.86	2.15	2.49	2.89	3.34	3.87
38	1.75	2.03	2.34	2.71	3.13	3.61	4.17
39	1.91	2.20	2.53	2.92	3.37	3.88	4.48
40	2.06	2.37	2.72	3.13	3.61	4.15	4.77
41	2.21	2.54	2.91	3.35	3.84	4.41	5.07
42	2.36	2.70	3.10	3.55	4.08	4.68	5.36
43	2.50	2.87	3.28	3.76	4.31	4.93	5.65
44	2.65	3.03	3.47	3.96	4.54	5.19	5.94
45	2.79	3.19	3.64	4.16	4.76	5.44	6.22
46	2.93	3.34	3.82	4.36	4.98	5.69	6.49
47	3.06	3.50	3.99	4.55	5.19	5.93	6.76
48	3.20	3.64	4.16	4.74	5.40	6.16	7.03
49	3.32	3.79	4.32	4.92	5.61	6.39	7.28
50	3.45	3.93	4.48	5.10	5.81	6.62	7.54
51	3.57	4.07	4.63	5.27	6.00	6.83	7.78
52	3.69	4.20	4.78	5.44	6.19	7.05	8.02
53	3.80	4.33	4.92	5.60	6.38	7.26	8.26
54	3.91	4.45	5.07	5.76	6.56	7.46	8.48
55	4.02	4.57	5.20	5.92	6.73	7.65	8.71
56	4.12	4.69	5.33	6.07	6.90	7.85	8.92
57	4.23	4.80	5.46	6.21	7.06	8.03	9.13
58	4.32	4.91	5.59	6.35	7.22	8.21	9.34
59	4.42	5.02	5.71	6.49	7.38	8.39	9.54
60	4.51	5.12	5.82	6.62	7.53	8.56	9.73
61	4.59	5.22	5.94	6.75	7.67	8.72	9.92
62	4.68	5.32	6.05	6.87	7.81	8.88	10.10
63	4.76	5.41	6.15	6.99	7.95	9.04	10.28
64	4.84	5.50	6.25	7.11	8.08	9.19	10.45

Villar et al.

International Postnatal Growth Standards for Preterm Infants Weight (Girls)



International Postnatal Growth Standards for Preterm Infants



INTERGROWTH-21st

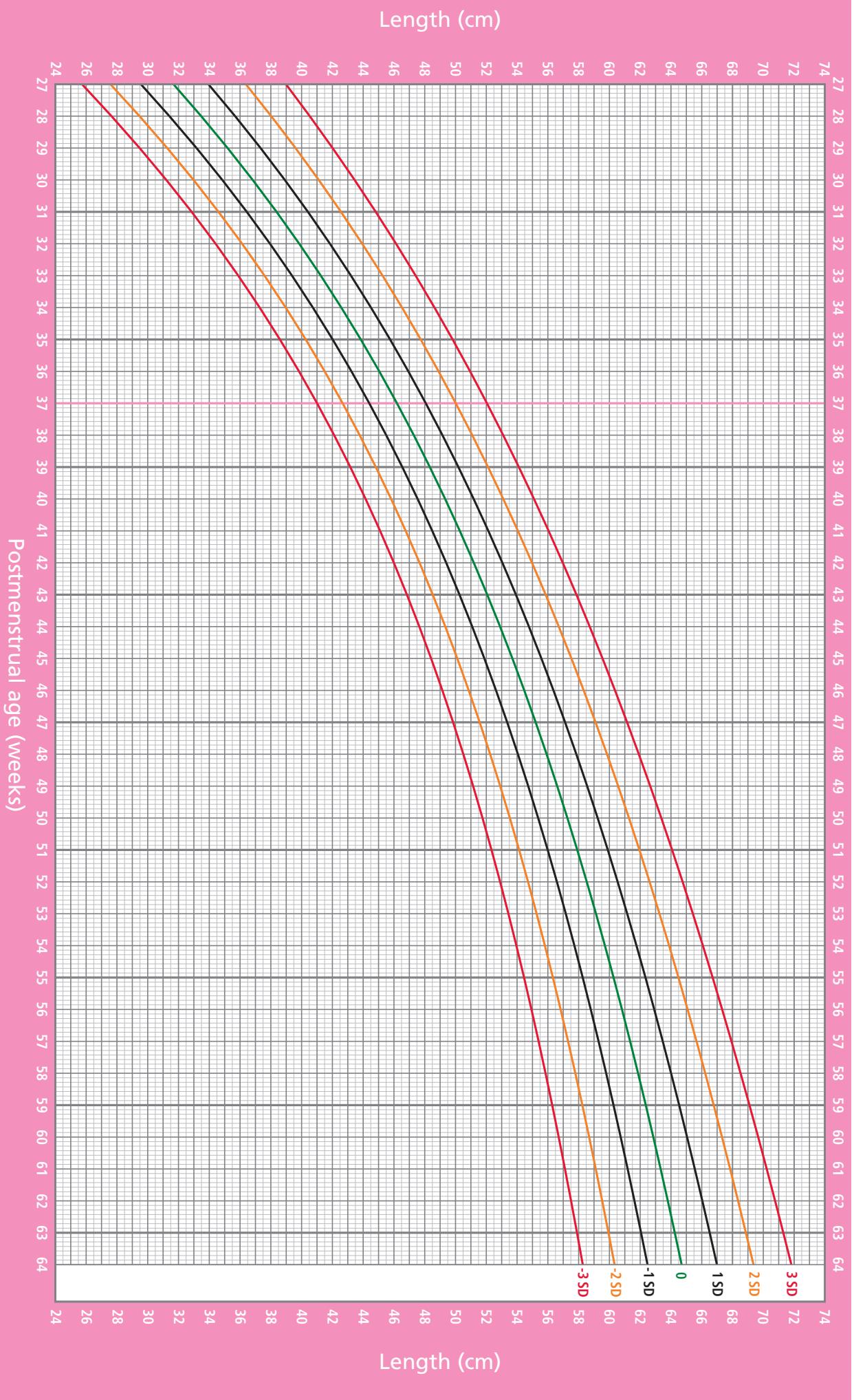
Length (cm) Girls



Postmenstrual age (exact weeks)	z-scores (Standard Deviations)						
	-3	-2	-1	0	1	2	3
27	25.8	27.6	29.6	31.7	34.0	36.4	39.0
28	27.7	29.5	31.4	33.5	35.7	38.0	40.5
29	29.5	31.3	33.2	35.2	37.4	39.6	42.0
30	31.2	33.0	34.9	36.8	38.9	41.1	43.5
31	32.9	34.6	36.5	38.4	40.4	42.6	44.8
32	34.4	36.2	38.0	39.9	41.9	44.0	46.1
33	35.9	37.6	39.4	41.3	43.2	45.3	47.4
34	37.3	39.0	40.7	42.6	44.5	46.5	48.6
35	38.6	40.3	42.0	43.9	45.8	47.7	49.8
36	39.8	41.5	43.3	45.1	46.9	48.9	51.0
37	41.0	42.7	44.4	46.2	48.1	50.0	52.0
38	42.1	43.8	45.5	47.3	49.2	51.1	53.1
39	43.2	44.8	46.6	48.3	50.2	52.1	54.1
40	44.2	45.8	47.6	49.3	51.2	53.1	55.1
41	45.1	46.8	48.5	50.3	52.1	54.1	56.1
42	46.0	47.7	49.4	51.2	53.1	55.0	57.0
43	46.9	48.5	50.3	52.1	53.9	55.9	57.9
44	47.7	49.3	51.1	52.9	54.8	56.7	58.7
45	48.4	50.1	51.9	53.7	55.6	57.5	59.6
46	49.2	50.9	52.6	54.5	56.4	58.3	60.4
47	49.9	51.6	53.4	55.2	57.1	59.1	61.1
48	50.5	52.3	54.1	55.9	57.8	59.8	61.9
49	51.2	52.9	54.7	56.6	58.6	60.6	62.6
50	51.8	53.5	55.4	57.3	59.2	61.3	63.4
51	52.3	54.1	56.0	57.9	59.9	61.9	64.1
52	52.9	54.7	56.6	58.5	60.5	62.6	64.7
53	53.4	55.3	57.2	59.1	61.2	63.2	65.4
54	54.0	55.8	57.7	59.7	61.8	63.9	66.1
55	54.5	56.3	58.3	60.3	62.3	64.5	66.7
56	54.9	56.8	58.8	60.8	62.9	65.1	67.3
57	55.4	57.3	59.3	61.3	63.5	65.7	67.9
58	55.8	57.8	59.8	61.9	64.0	66.2	68.5
59	56.3	58.2	60.3	62.4	64.5	66.8	69.1
60	56.7	58.7	60.7	62.8	65.0	67.3	69.7
61	57.1	59.1	61.2	63.3	65.5	67.8	70.2
62	57.5	59.5	61.6	63.8	66.0	68.3	70.8
63	57.9	59.9	62.1	64.2	66.5	68.9	71.3
64	58.3	60.3	62.5	64.7	67.0	69.4	71.8

Villar et al.

International Postnatal Growth Standards for Preterm Infants Length (Girls)



International Postnatal Growth Standards for Preterm Infants



INTERGROWTH-21st

Head Circumference (cm) Girls



Postmenstrual age (exact weeks)	z-scores (Standard Deviations)						
	-3	-2	-1	0	1	2	3
27	18.8	20.5	22.2	24.0	25.7	27.4	29.2
28	20.3	21.9	23.5	25.1	26.7	28.3	29.9
29	21.7	23.2	24.7	26.2	27.6	29.1	30.6
30	23.0	24.4	25.8	27.1	28.5	29.9	31.3
31	24.1	25.4	26.7	28.1	29.4	30.7	32.0
32	25.2	26.4	27.7	28.9	30.1	31.4	32.6
33	26.2	27.4	28.5	29.7	30.9	32.1	33.2
34	27.1	28.2	29.3	30.5	31.6	32.7	33.9
35	27.9	29.0	30.1	31.2	32.3	33.4	34.5
36	28.7	29.8	30.8	31.9	32.9	34.0	35.0
37	29.4	30.4	31.5	32.5	33.5	34.6	35.6
38	30.1	31.1	32.1	33.1	34.1	35.1	36.2
39	30.7	31.7	32.7	33.7	34.7	35.7	36.7
40	31.3	32.3	33.2	34.2	35.2	36.2	37.2
41	31.8	32.8	33.8	34.8	35.7	36.7	37.7
42	32.3	33.3	34.3	35.3	36.2	37.2	38.2
43	32.8	33.8	34.7	35.7	36.7	37.7	38.6
44	33.2	34.2	35.2	36.2	37.1	38.1	39.1
45	33.7	34.6	35.6	36.6	37.6	38.6	39.5
46	34.1	35.1	36.0	37.0	38.0	39.0	40.0
47	34.4	35.4	36.4	37.4	38.4	39.4	40.4
48	34.8	35.8	36.8	37.8	38.8	39.8	40.8
49	35.1	36.1	37.1	38.1	39.2	40.2	41.2
50	35.5	36.5	37.5	38.5	39.5	40.5	41.5
51	35.8	36.8	37.8	38.8	39.9	40.9	41.9
52	36.1	37.1	38.1	39.2	40.2	41.2	42.2
53	36.3	37.4	38.4	39.5	40.5	41.5	42.6
54	36.6	37.6	38.7	39.8	40.8	41.9	42.9
55	36.8	37.9	39.0	40.0	41.1	42.2	43.2
56	37.1	38.2	39.2	40.3	41.4	42.5	43.6
57	37.3	38.4	39.5	40.6	41.7	42.8	43.9
58	37.5	38.6	39.7	40.8	42.0	43.1	44.2
59	37.7	38.9	40.0	41.1	42.2	43.3	44.5
60	37.9	39.1	40.2	41.3	42.5	43.6	44.7
61	38.1	39.3	40.4	41.6	42.7	43.9	45.0
62	38.3	39.5	40.6	41.8	43.0	44.1	45.3
63	38.5	39.7	40.8	42.0	43.2	44.4	45.5
64	38.6	39.8	41.0	42.2	43.4	44.6	45.8

International Postnatal Growth Standards for Preterm Infants

Head Circumference (Girls)

