

Supplementary Table 1. Age-specific reference ranges of Pi (mg/dL)

Age group	Abbott ARCHITECT		Beckman DxC		Roche cobas 6000		Siemens Vista	
	Female	Male	Female	Male	Female	Male	Female	Male
0–14 Days	5.6–10.5	5.6–10.5	5.9–11.3	5.9–11.3	5.3–9.8	5.3–9.8	5.3–10	5.3–10
15 Days–1 year	4.8–8.4	4.8–8.4	5.0–9.0	5.0–9.0	4.6–7.9	4.6–7.9	4.6–8.0	4.6–8.0
2–5 Years	4.3–6.8	4.3–6.8	4.5–7.2	4.5–7.2	4.1–6.4	4.1–6.4	4.1–6.5	4.1–6.5
6–13 Years	4.1–5.9	4.1–5.9	4.3–6.3	4.3–6.3	4.0–5.6	4.0–5.6	4.0–5.7	4.0–5.7
14–16 Years	3.2–5.5	3.5–6.2	3.3–5.9	3.7–6.5	3.1–5.3	3.5–5.8	3.1–5.3	3.4–5.9
17–19 Years	2.9–5.0	2.9–5.0	3.0–5.3	3.0–5.3	2.9–4.8	2.9–4.8	2.9–4.8	2.9–4.8

Pi, inorganic phosphorus.

Adapted from Adeli et al. Crit Rev Clin Lab Sci 2017;54:358–413.⁵³⁾

Supplementary Table 2. Age and sex-specific reference ranges of ALP (U/L)

Age group	Abbott ARCHITECT		Beckman DxC		Roche cobas 6000		Siemens Vista	
	Female	Male	Female	Male	Female	Male	Female	Male
0–14 Days	90–273	90–273	78–234	78–234	83–248	83–248	82–249	82–249
15 Days–1 year	134–518	134–518	116–442	116–442	122–469	122–469	122–473	122–473
2–10 Years	156–369	156–369	134–315	134–315	142–335	142–335	142–336	142–336
11–13 Years	141–460	141–460	122–393	122–393	129–417	129–417	128–420	128–420
14–15 Years	62–280	127–517	55–240	110–441	57–254	116–468	55–255	115–471
16–17 Years	54–128	89–365	48–111	78–312	50–117	82–331	49–116	81–333
18–19 Years	48–95	59–164	43–83	52–141	45–87	55–149	43–86	53–149

ALP, alkaline phosphatase.

Adapted from Adeli et al. Crit Rev Clin Lab Sci 2017;54:358–413.⁵³⁾

Supplementary Table 3. Age-specific normal values of TP/GFR (mg/dL)

Age group	TP/GFR (mean±SD)
Newborn–1 month	7.0±1.1
1 Month–2 years	5.1±0.9
3–12 Years	4.6±0.6
13–16 Years	4.1±0.6
17–18 Years	3.3±0.3

TP/GFR, ratio of tubular reabsorption of phosphate to glomerular filtration rate.

Adapted and modified from Stark et al. Nephron 1986;44:125–8.⁶⁶⁾

Supplementary Table 4. Age-specific references limits (5th and 95th percentiles) in U_{Pi}:UCreatinine ratio and U_{Calcium}:UCreatinine ratio

Age groups	U _{Pi} :UCreatinine ratio (mol/mol)	U _{Pi} :UCreatinine ratio (mg/mg)	U _{Calcium} :UCreatinine (mol/mol)	U _{Calcium} :UCreatinine (mg/mg)
1 month–1 year	1.2–19.0	0.34–5.24	0.09–2.2	0.03–0.81
1–2 years	1.2–14.0	0.34–3.95	0.07–1.5	0.03–0.56
2–3 years	1.2–12.0	0.34–3.13	0.06–1.4	0.02–0.50
3–5 years	1.2–8.0	0.33–2.17	0.05–1.1	0.02–0.41
5–7 years	1.2–5.0	0.33–1.49	0.04–0.8	0.01–0.30
7–10 years	1.2–3.6	0.32–0.97	0.04–0.7	0.01–0.25
10–14 years	0.8–3.2	0.22–0.86	0.04–0.7	0.01–0.24
14–17 years	0.8–2.7	0.21–0.75	0.04–0.7	0.01–0.24

UPi, urinary inorganic phosphorus; UCreatinine, urinary creatinine.
Adapted from Matos et al. J Pediatr 1997;131:252-7.

Supplementary Table 5. Age-specific reference ranges of 1,25(OH)₂D (pmol/L)

Age group	DiaSorin LIAISON XL
0–1 Year	77–471
1–3 Years	113–363
3–19 Years	108–246

1,25(OH)₂D, 1,25-dihydroxyvitamin D.

Adapted from Higgins et al. Clin Chem Lab Med 2018;56:964-72.⁸³⁾