

Supplemental Digital Content 5: Comparison of Vitamin D status at PICU admission (or first day in PICU) for critically ill children and healthy controls

Trial, Year	Threshold VDD (nmol/L)	%VDD	PICU cohort		Control cohort			95 %CI (UL, LL)	P value
			Average 25(OH)D (nmol/L) ^b	(n ^a)	%VDD	Average 25(OH)D (nmol/L) ^b	Difference in 25(OH)D (nmol/L)		
Gauthier, 1990	22.5	NR	66.8 ^c (±20)	12	NR	82.5 ^c (±25)	-15.7	-33.8, 2.4	0.09
Hebbar, 2014	50	61	59 ^c (±43)	42	23.9	99 ^c (±55)	-40	-58.57, -21.4	0.000
Rey, 2014	50	30	65 (48 – 89.5)	289	16%	76.3 (58-96.5)	-19.5	-25.2, -13.8	0.000
Korwutthikulrangsri, 2015	50	78	41.5 (33.3-48.8)	36	19.5	61 ^c (±12)	-19.0	-30.4, -7.62	0.000
Onwuneme, 2015	50	59	47 ^c (±29)	30	NR	66 ^c (±26)	-19.8	-27.5, -12.0	0.001
Ponnarmeni, 2016	50	51	49.25 (±30)	338	40.2%	68.7 ^c (±40)	-11.3	-17.0, -5.6	0.000
Pooled Mean Difference							-17.3	-14.0, -20.6	0.000

^aTotal number of enrolled patients, by group, for which a measure of vitamin D status was available. ^bReported as median, unless otherwise specified as mean^c. Distribution reported as either IQR (XX-XX) or Standard Deviation (±XX). 25(OH)D = 25 hydroxyvitamin D; CI = Confidence Interval; NR = Not reported; PICU = Pediatric Intensive Care Unit; VDD = Vitamin D deficiency. ^cData provided by authors outside of publication.

