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Vitamin D supplementation for patients with precocious puberty			
Population: Subjects with precocious puberty			
Settings: All studies were conducted in China.			
Intervention: GnRHa + vitamin D			
Comparison: GnRHa			
Outcomes	SMD (95% CI) ^{<i>a</i>}	No. of participants (studies)	Quality of the evidence Comments (GRADE)
LH(mIU/ml)	-3.55(-5.11, -1.99)	512 (7 studies)	$\oplus \oplus \oplus \bigcirc$ MODERATE ^b
FSH(mIU/ml)	-4.35(-5.79, -2.92)	580 (8 studies)	$\oplus \oplus \oplus \bigcirc$ MODERATE ^b
Estradiol(pg/ml)	-1.21(-1.71, -0.71)	580 (8 studies)	$\oplus \oplus \oplus \bigcirc$ MODERATE ^b
Bone age(year)	-3.21(-4.86, -1.56)	358 (5 studies)	$\oplus \oplus \oplus \bigcirc$ MODERATE ^b
Growth rate(cm/year)	9.18(-2.14, 20.50)	170 (3 studies)	$\bigoplus \bigoplus \bigcirc \bigcirc \text{LOW} b.c$
PAH(cm)	0.69(0.43, 0.94)	252 (3 studies)	$\bigoplus \bigoplus \bigcirc \bigcirc \text{LOW} b.c$

Table S3. The Summary of Findings (SoF) with GRADE system (vitamin D supplementation for patients with precocious puberty)

GRADE working group grades of evidence.

High quality: We are very confident that the true effect lies close to that of the estimate of the effect.

Moderate quality: We are moderately confident in the effect estimate: The true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different.

Low quality: Our confidence in the effect estimate is limited: The true effect may be substantially different from the estimate of the effect.

Very low quality: We have very little confidence in the effect estimate: The true effect is likely to be substantially different from the estimate of effect.

Abbreviations: SMD, standard mean deviation; CI, confidence interval; LH: Luteinizing hormone; FSH: Follicle stimulating hormone; PAH: predicted adult height

^a Results for sex hormones and growth parameters in subjects with precocious puberty (GnRHa + vitamin D vs GnRHa).

^b Downgraded by one level due to the quality of original studies, and potential bias risk may exist.

^c Downgraded by one level due to limited numbers of original studies, and results may be inaccurate.