Background and aims Vitamin D has important roles in the regulation of the immune system in Lupus. Seventy percent of lupus patients in Indonesia are experienced hypovitamin D. Curcumin is a natural VDR ligand and has sinergic effect with vitamin D. This study was aimed to determine the effect of adding curcumin on vitamin D supplementation on IFN-γ/IL-4 ratio and IL-17/TGF-β ratio, in SLE patients with hipovitamin D.

Methods This was a randomised controlled trial, double blind study. Forty SLE patients with hypovitamin D were studied, that randomised into two groups: 20 patients (supplementation group) received vitamin D (cholecalciferol 1200 IU daily) with curcumin 20 mg (three times daily); and 20 patients (placebo group) was given vitamin D (cholecalciferol 1200 IU daily) and placebo (3 times daily), for 3 months. Cytokines serum levels (IFN-γ, IL-4, IL-17, TGF-β), were measured by ELISA.

Results After supplementation for 3 months, this study showed that decreased of IFN-γ/IL-4 ratio and IL-17/TGF-β ratio was significantly greater in the supplementation group than in the placebo group. The decreased of IL-17/TGF-β ratio in the supplementation group was also significantly greater than the placebo group.

Conclusions Adding curcumin on vitamin D supplementation can decrease anti-dsDNA serum levels and proteinuria greater than vitamin D supplementation plus placebo in SLE patients with hipovitamin D.

Background and aims Vitamin D has important roles in the regulation of the immune system in Lupus. 71% of lupus patients experienced hypovitamin D. This study was aimed to determine the effect of vitamin D supplementation on the levels of anti ds DNA and degree of urine protein in lupus patients with hypovitamin D.

Methods Thirty nine SLE patients with hypovitamin D were studied, that randomized into two groups: 20 patients was given vitamin D and 19 patients received placebo for 3 months. Anti-ds DNA levels were measured by ELISA and urine protein were measured by dipstick method.

Results Anti-ds DNA levels in the supplement group before and after giving vitamin D were 226.84±82.11 vs 191.72±55 (p=0.00), and the placebo group were 233.69±66.52 vs 227.72±61.21 (p=0.077). The degrees of urine protein in the supplement group before and after treatment were 24 vs 12 U/ml (p=0.003) and the placebo group were 16 vs 10 U/ml (p=0.070).

Conclusions Vitamin D supplementation plays a role on decreasing the levels of anti ds-DNA and urine protein in SLE patients with hypovitamin D.