

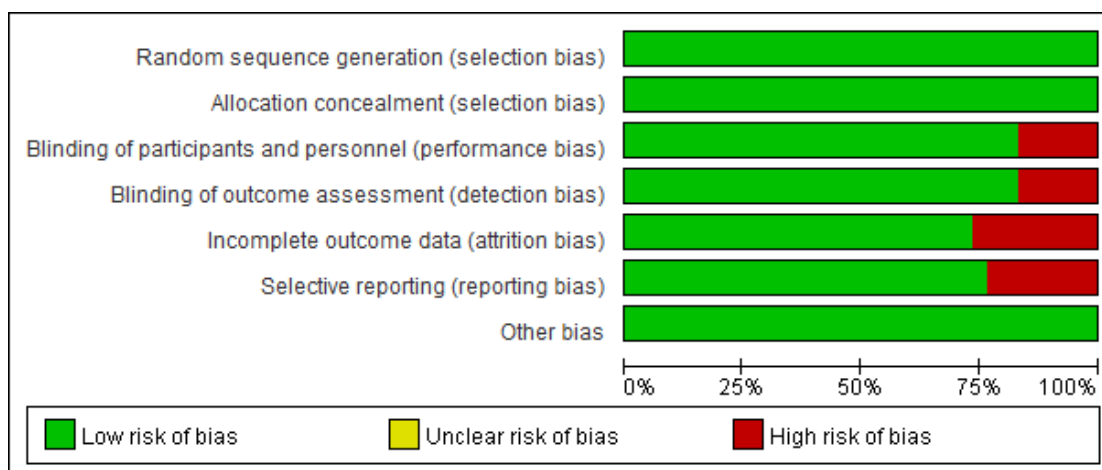
**ONLINE SUPPLEMENTARY DOCUMENT**

**Title: Efficacy of vitamin D supplementation on COPD and asthma control:  
a systematic review and meta-analysis**

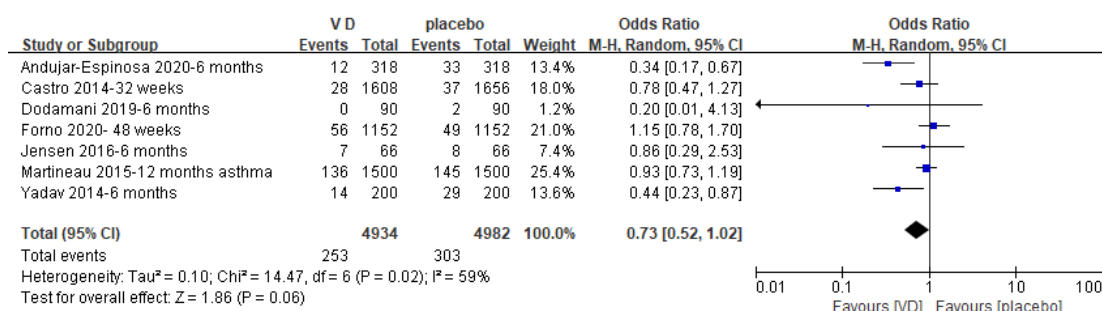
**Authors: Yuhang Wang, Jin Wang, Li Chen, Huan Zhang, Ling Yu, Yulong Chi,**

**Mengli Chen, Yun Cai**

**Fig. S1** Risk of bias assessed by the Cochrane assessment tool



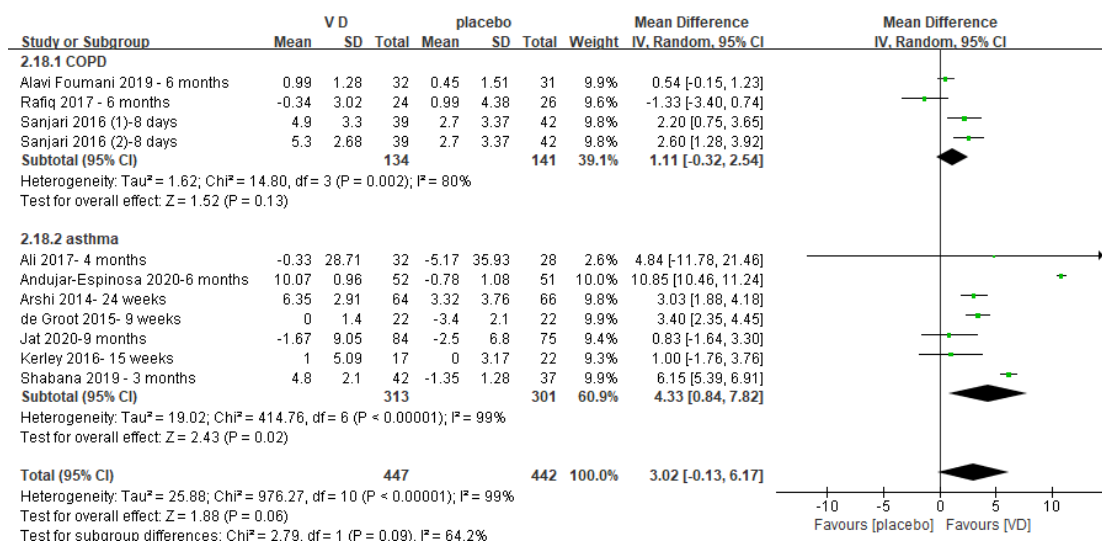
**Fig. S2** Meta-analysis of VD supplementation on number of exacerbations of asthma



The total number is the number of patients multiplied by the month of observation.

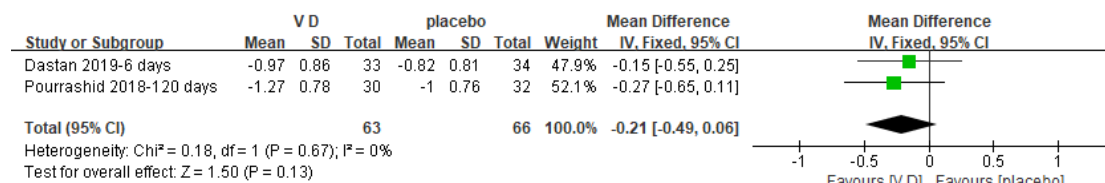
Abbreviations: VD, vitamin D.

**Fig. S3** Meta-analysis of VD supplementation on FEV1/FVC change from baseline to end



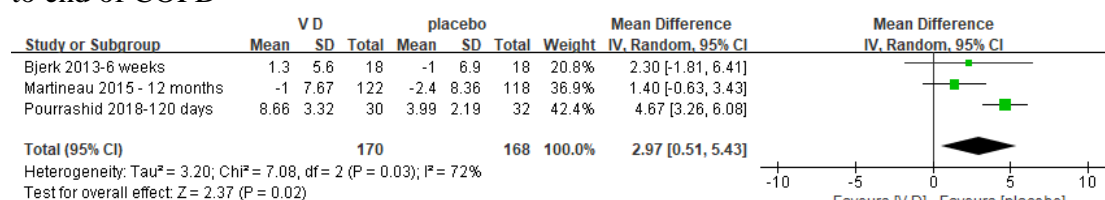
Abbreviations: VD, vitamin D; COPD, chronic obstructive pulmonary disease.

**Fig. S4** Meta-analysis of VD supplementation on mMRC score change from baseline to end of COPD



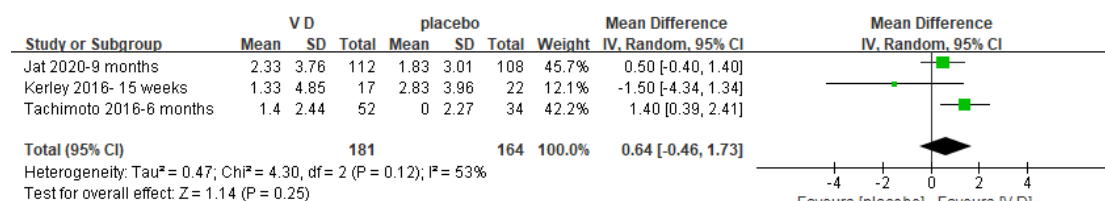
Abbreviations: Mmrc, Modified Medical Research Council; VD, vitamin D; COPD, chronic obstructive pulmonary disease.

**Fig. S5** Meta-analysis of VD supplementation on SGRQ score change from baseline to end of COPD



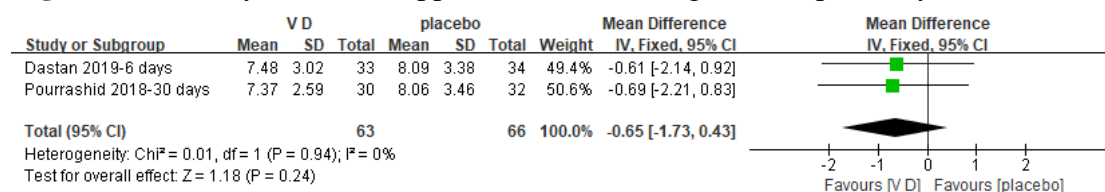
Abbreviations: SGRQ, St George's Respiratory Questionnaire; VD, vitamin D; COPD, chronic obstructive pulmonary disease.

**Fig. S6** Meta-analysis of VD supplementation on ACT score change from baseline to end of asthma



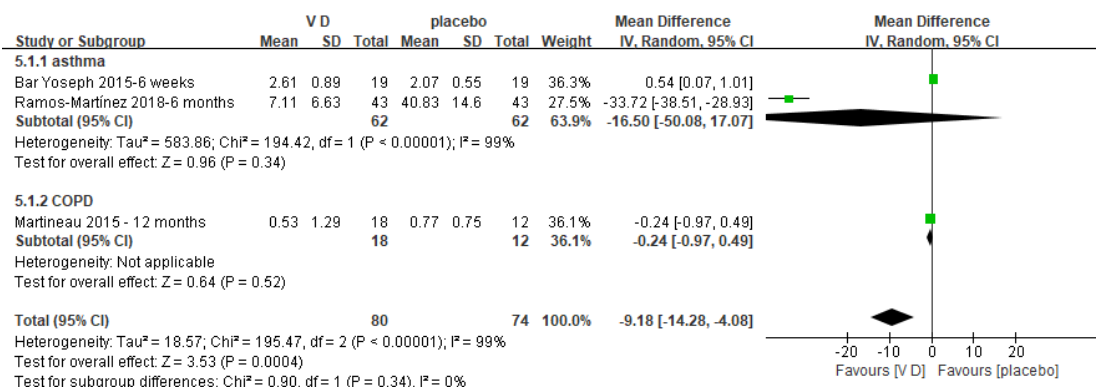
Abbreviations: ACT, asthma control test; VD, vitamin D.

**Fig. S7** Meta-analysis of VD supplementation on length of hospital stay of COPD



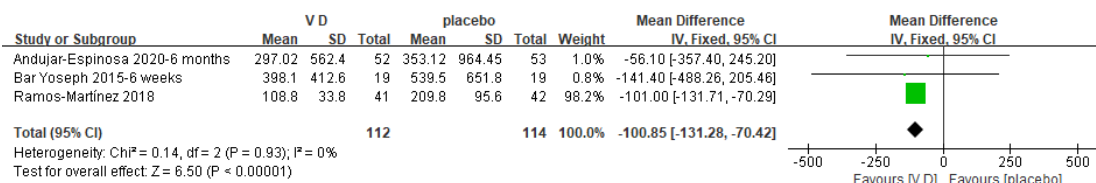
Abbreviations: VD, vitamin D; COPD, chronic obstructive pulmonary disease.

**Fig. S8** Meta-analysis of VD supplementation on IL-5



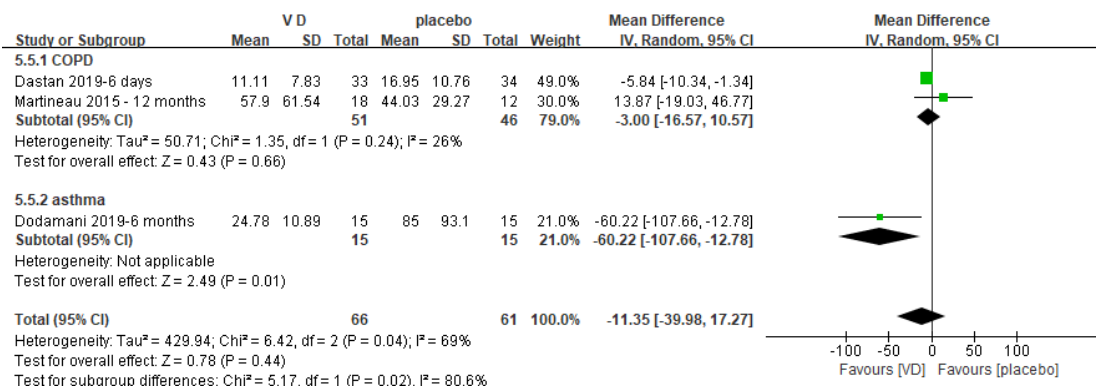
Abbreviations: VD, vitamin D; COPD, chronic obstructive pulmonary disease.

**Fig. S9** Meta-analysis of VD supplementation on IgE of asthma



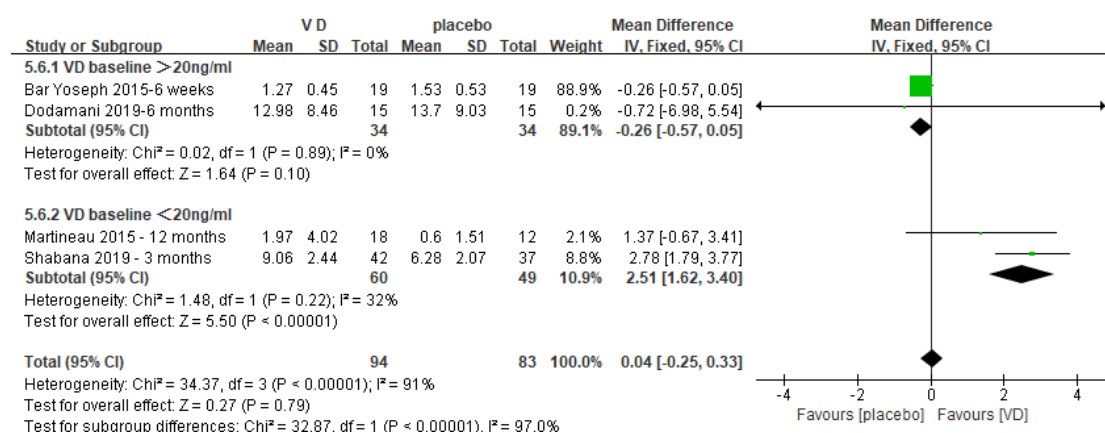
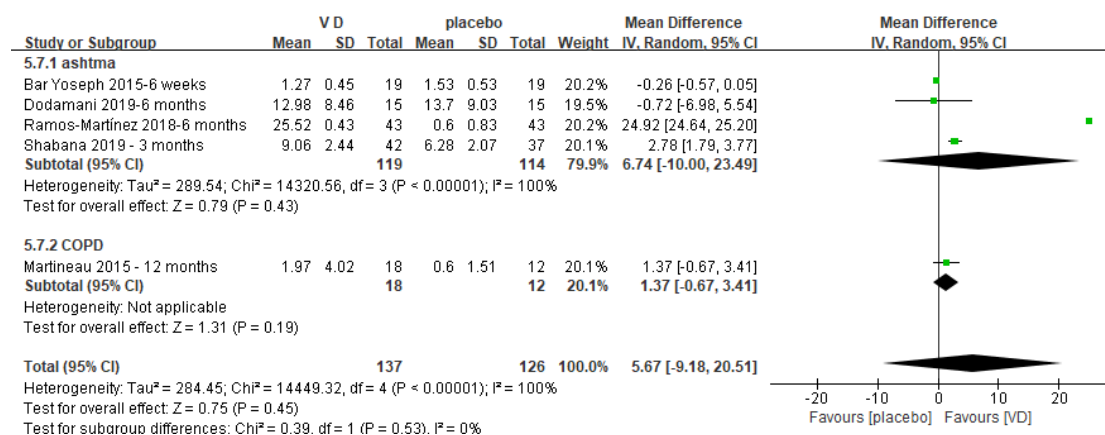
Abbreviations: VD, vitamin D.

**Fig. S10** Meta-analysis of VD supplementation on IL-6



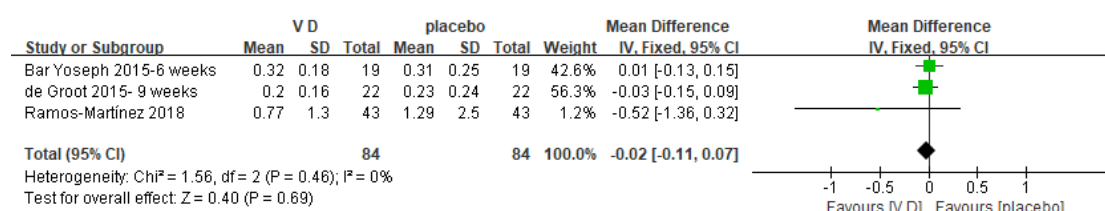
Abbreviations: VD, vitamin D; COPD, chronic obstructive pulmonary disease.

**Fig. S11** Meta-analysis of VD supplementation on IL-10



The research of Ramos-Martínez didn't include the character of VD baseline.  
Abbreviations: VD, vitamin D; COPD, chronic obstructive pulmonary disease.

**Fig. S12** Meta-analysis of VD supplementation on eosinophils of asthma



Abbreviations: VD, vitamin D.