



atherosclerosis. PCSK9 is playing a role in LDL-receptor regulation, its association with atherosclerosis had been investigated but the result is inconsistent. The aim of this study is to see an association of PCSK9 level with atherosclerosis in people with type 2 diabetes.

**Methods.** Literature searching was done in July 18 – September 02, 2020 and registered in PROSPERO. Risk of bias of each study was analyzed with Newcastle Ottawa Scale tools. The studies that involved in this study then narratively analyzed by two independent reviewers.

**Results.** There are 430 subjects involved from 4 studies. Guo, et al. reported that there is a significant association between PCSK9 level with atherosclerosis in type 2 diabetes melitus (OR: 1,12 (CI 95% 1.041 – 1.204), p: 0.002), those association was also reported by Ma et al. with p value <0,05. While a different result came from Xie et al. (p: 0,334 (CI 95% -18 – 10) And Cheng, et al. ( $\delta^{1/2}$ ): 1,08 (IK 95% -0,59 -2,75).

**Conclusions.** There is still insufficient evidence that show the association between PCSK9 level and atherosclerosis in type 2 DM. Longitudinal primary research is needed to see the association.

**Keywords:** Atherosclerosis, PCKS9, Type 2 diabetes mellitus