



Assessment of the link between Vitamin D receptor *TaqI* gene polymorphism and periodontitis: a meta-analysis in a Chinese population

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ABSTRACT. Although a number of studies have been conducted to determine the association between vitamin D receptor (VDR) *TaqI* polymorphism and periodontitis in the Chinese population, this association remains elusive. To assess the influence of VDR *TaqI* polymorphism on the risk of periodontitis, a meta-analysis was performed in a Chinese population. Relevant studies were identified using the databases PubMed, Springer Link, Ovid, Chinese Wanfang Data Knowledge Service Platform, Chinese National Knowledge Infrastructure, and Chinese Biology Medicine, through January 2016. Pooled odds ratios and 95% confidence intervals were used to

assess the strength of the associations. This meta-analysis identified 9 studies, which included 1014 periodontitis cases and 907 controls. In both overall and subgroup analyses, VDR *TaqI* polymorphism was not associated with the risk of periodontitis. Cumulative analysis also suggested a lack of association between VDR *TaqI* polymorphism and the risk of periodontitis in the Chinese population. In conclusion, our meta-analysis showed that VDR *TaqI* polymorphism is not associated with the risk of periodontitis in the Chinese population. Further studies in other ethnic groups are required for definite conclusions.

Key words: Meta-analysis; Vitamin D receptor; Polymorphism; Periodontitis