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## Calcification of atherosclerotic plaques and assessment of their stability

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### Abstract

Presented herein is a review of the literature concerning mechanisms of calcification of atherosclerotic plaques (ASP), showing molecular mechanisms of interaction of processes of calcification with the factors inducing instability of ASPs (anti-inflammatory cytokines, neoangiogenesis, increased level of matrix metalloproteinases, etc.), also describing the effect of the value of volume of scope of calcification on stability of ASPs, followed by discussing the problems related to the role of biominerals (hydroxyapatite calcium phosphate) and  $Mn^{2+}$  in calcification of ASPs and their impact upon stability of the plaque.

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