inflammatory responses. Little is known about the role of MIF in atherosclerotic plaque progression and inflammation.

Methods: Carotid endarterectomy and vessel samples (n=46) were collected from 36 patients/controls (n=10), and higher MIF expressing intensity by MA/TL and MVEC. Strong MIF-staining (2+2+) was detected in MA/TL and MVEC in 80% and 70% of samples, respectively. Strong MIF staining was colocalized with CD40 expression in blood vessels. In blood vessels, CD40 strongly stained MIF expression (2+2+) was detected in 100% and 100% of samples, respectively. Furthermore, MIF expression was detected in blood vessels, MIF positive venous microvessels were identified in 100% of samples, respectively. Additionally, the coexpression with CD40 indicates a pivotal role of MIF in the inflammatory processes and immunological consequences of atherosclerotic plaques.