Objective: To evaluate the association between skin autofluorescence (SAF) and plaque vulnerability in patients with coronary artery disease (CAD).

Methods: A cross-sectional study of 60 patients with first-time coronary angiography. SAF was measured non-invasively by a novel handheld device. OCT findings were then compared between high and low SAF groups. In multivariable analysis, low-density lipoprotein-cholesterol (LDL), diabetes, hypertension, and female gender were independently associated with low SAF. SAF one (less than 2.6) was associated with a greater percentage of calcified plaques.

Conclusion: SAF is a non-invasive marker of plaque vulnerability in patients with CAD. Low SAF groups were associated with calcified plaques.