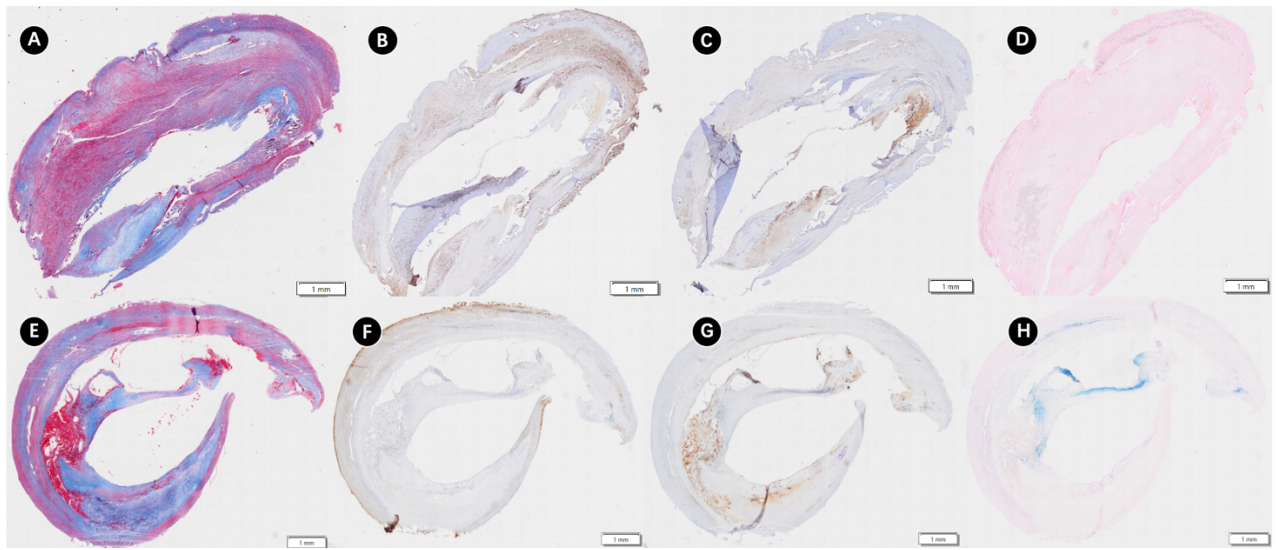


Supplementary Figures

Supplementary Figure 1: Histological images and plaque vulnerability scores



Note: The scale bars in all immunohistochemical images represent 1 mm.

A vulnerable plaque (**A–D**), with a total score of 4 points.

(A) Masson staining shows a low collagen fiber content within the plaque (score: 1).

(B) α -SMA immunohistochemistry shows a low content of contractile smooth muscle cells within the plaque (score: 1).

(C) CD68 immunohistochemistry shows significant macrophage infiltration within the plaque (score: 1).

(D) Prussian blue staining shows evidence of hemorrhage within the plaque (score: 1).

A stable plaque (**E–H**), with a total score of 1 point.

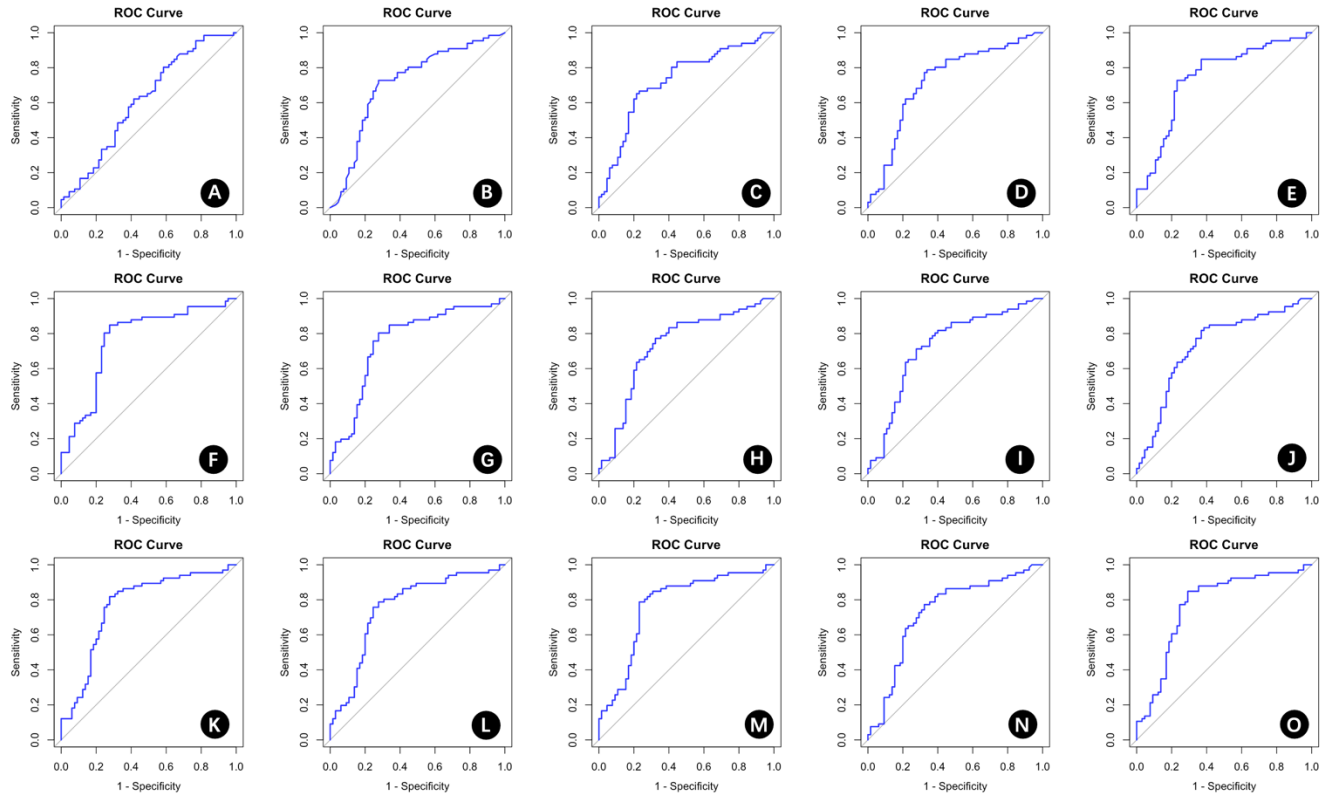
(E) Masson staining shows a high collagen fiber content within the plaque (score: 0).

(F) α -SMA immunohistochemistry shows a low content of contractile smooth muscle cells within the plaque (score: 1).

(G) CD68 immunohistochemistry shows minimal macrophage infiltration within the plaque (score: 0).

(H) Prussian blue staining shows no evidence of hemorrhage within the plaque (score: 0).

Supplementary Figure 2: ROC curves of different prediction models



Note: ROC curves (A–O) represent the predictive performance for Models 1–15, respectively. Each panel (A–O) corresponds to one model, with sensitivity on the y-axis and 1-specificity on the x-axis.