

**Identification of plaque ruptures using a novel discriminative model comprising biomarkers in patients with acute coronary syndrome**

Hyungdon Kook<sup>1</sup>, MD, Duck Hyun Jang<sup>1</sup>, MD, Jong-Ho Kim, PhD<sup>1</sup>, Jae-Young Cho<sup>2</sup>, MD, Hyung Joon Joo<sup>1</sup>, MD, Sang-A Cho<sup>3</sup>, MS, Jae Hyoung Park<sup>1</sup>, MD, Soon Jun Hong<sup>1</sup>, MD, \*Cheol Woong Yu<sup>1</sup>, MD, \*Do-Sun Lim<sup>1</sup>, MD

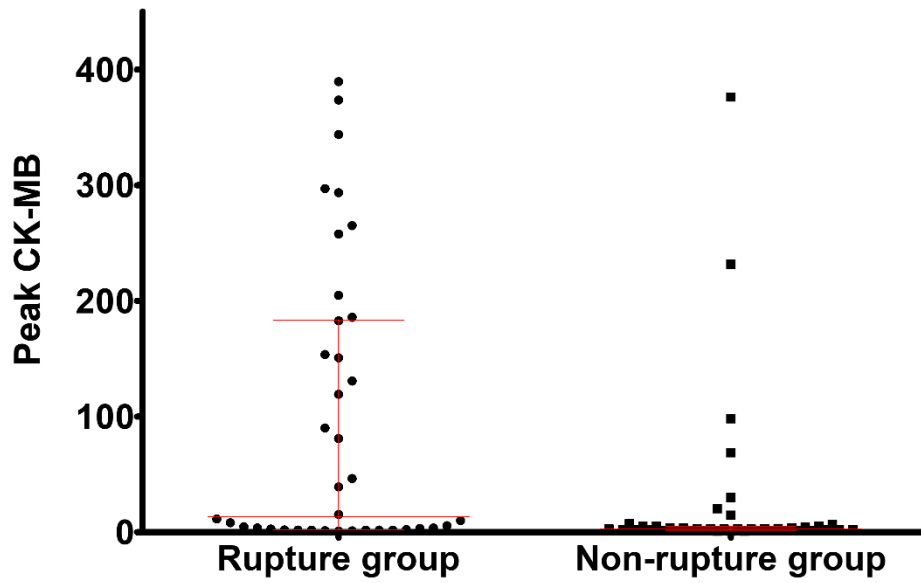
<sup>1</sup>Division of Cardiology, Department of Internal Medicine, Korea University Anam Hospital, Korea University School of Medicine, Seoul, Korea

<sup>2</sup>Department of Cardiovascular Medicine, Regional Cardiocerebrovascular Center, Wonkwang University Medical Center, Iksan, Korea

<sup>3</sup>Health Insurance Review and Assessment Service, Wonju, Korea

\*Last two authors are co-corresponding authors.

Supplementary Figure 1. Scattered plot of peak CK-MB between Rupture group and Non-rupture group. Red lines indicate median value with interquartile range.



Supplementary Table 1. Comparison of biomarker levels between Non-rupture group and Rupture group in patients with MI.

	Rupture group (n=19)	Non-rupture group (n=10)	p-value
Troponin I, ng/mL	13.90±34.00	17.64±34.52	0.791
Peak CK-MB, ng/mL	179.27±123.43	84.30±124.76	0.060
High-sensitivity CRP (mg/L)	10.42±22.84	12.34±27.53	0.862
sLOX-1 (pg/mL)	405.44±324.54	74.61±84.52	<0.001
NGAL (ng/mL)	66.15±22.74	56.73±20.34	0.282
MMP-9 (ng/mL)	23.69±19.11	10.98±7.98	0.018
WBC, x10 <sup>3</sup> /μL	11.27±4.08	8.75±2.37	0.045

Data are presented as mean±standard deviation. MI = myocardial infarction; CK-MB = creatine kinase-muscle/brain; CRP = C-reactive protein; sLOX-1 = soluble lectin-like oxidized low-density lipoprotein receptor-1; NGAL = neutrophil gelatinase-associated lipocalin; MMP-9 = matrix metalloproteinase-9