

SUPPLEMENTAL MATERIAL

PROMISE Trial Organization

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Supplemental Table 1. Predictors of High-Risk CAD in the Final Derivation [50] Model (LM \geq 50% Stenosis *or* Either \geq 50% Stenosis 3VD or 2VD Involving the pLAD)

	Odds Ratio (95% CI)	P-value
Patient age (per 1-year increase)	1.065 (1.049–1.081)	<0.0001
Male gender	3.519 (2.679–4.622)	<0.0001
Diabetes mellitus	2.016 (1.546–2.628)	<0.001
Family history of premature (<55 years) CAD	1.651 (1.274–2.140)	0.0001
Typical/atypical/non-cardiac symptoms (typical vs. atypical)	1.332 (0.949–1.870)	0.0115
Typical/atypical/non-cardiac symptoms (atypical vs non-cardiac)	1.820 (1.089–3.039)	
Typical/atypical/non-cardiac symptoms (typical vs. non-cardiac)	2.424 (1.354–4.341)	
GFR truncated at 95*	0.986 (0.977–0.995)	0.0017
Systolic blood pressure (per 1-mmHg increase)	1.013 (1.005–1.020)	0.0006
Smoker	1.575 (1.223–2.029)	0.0004

Model derivation c-statistic = 0.750 (0.723–0.777).

*Effect of one unit increase up to 95. No additional effect for GFR>95.

Supplemental Table 2. Final Derivation [50] Model Calibration of High-Risk Patients (LM \geq 50% Stenosis *or* Either \geq 50% Stenosis 3VD or 2VD Involving the pLAD)

Decile	N	Observed Number of High-Risk Patients in Decile	Predicted Number of High-Risk Patients in Decile	Observed Proportion of High-Risk Patients in Decile	Mean Predicted Probability in Decile
0	443	3	4.68	0.0068	0.0106
1	444	2	7.95	0.0045	0.0179
2	444	14	10.98	0.0315	0.0247
3	444	15	14.31	0.0338	0.0322
4	444	19	18.15	0.0428	0.0409
5	444	26	22.79	0.0586	0.0513
6	444	28	28.85	0.0631	0.0650
7	444	41	37.58	0.0923	0.0846
8	444	60	52.38	0.1351	0.1180
9	444	85	95.34	0.1914	0.2147

Supplemental Table 3. Predictors of High-Risk CAD in the Final Derivation [70] Model (LM \geq 50% Stenosis *or* Either \geq 70% Stenosis 3VD or 2VD Involving the pLAD)

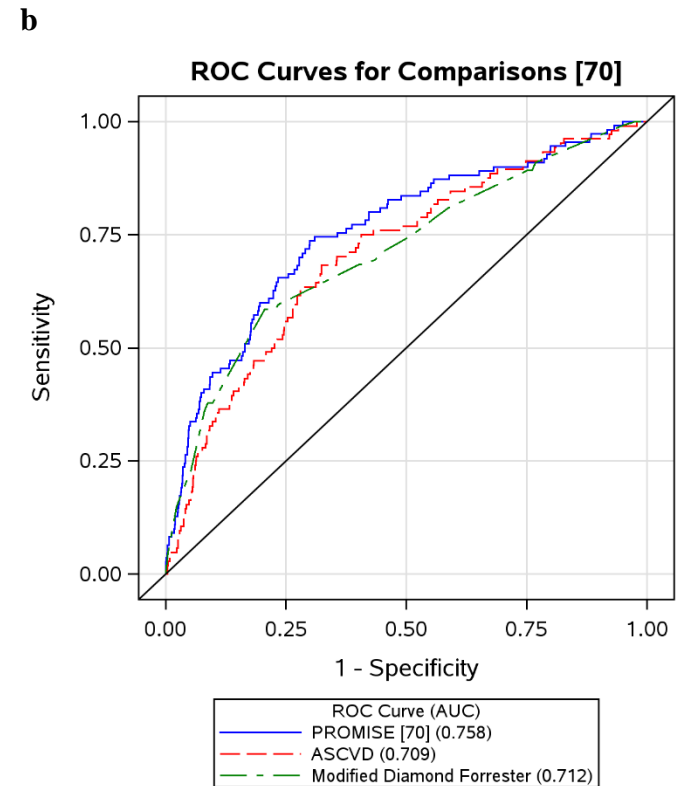
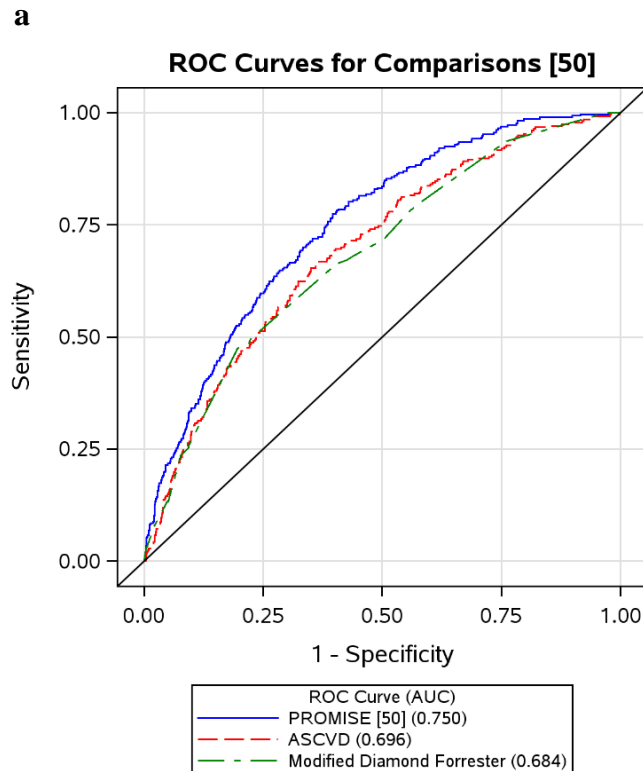
	Odds Ratio [95% CI]	P-value
Patient age (per 1 year increase)	1.065 (1.040–1.090)	<0.0001
Male gender	4.907 (3.105–7.753)	<0.0001
Diabetes mellitus	1.605 (1.048–2.459)	0.0297
Family history of premature (<55 years) CAD	1.613 (1.072–2.428)	0.0219
Typical/atypical/non-cardiac symptoms (typical vs. atypical)	2.342 (1.479–3.708)	0.0007
Typical/atypical/non-cardiac symptoms (typical vs non-cardiac)	2.907 (1.292–6.540)	
Typical/atypical/non-cardiac symptoms (atypical vs. non-cardiac)	1.242 (0.590–2.613)	
GFR (per 1 mL/min/1.73 m ²)	0.988 (0.977–1.000)	0.0476
Systolic blood pressure (per 1-mmHg increase)	1.013 (1.002–1.025)	0.0223
Sedentary lifestyle	1.571 (1.061–2.327)	0.0242

Model derivation c-statistic = 0. 758 (0.709–0.807).

Supplemental Table 4. Final Derivation [70] Model Calibration of High-Risk Patients (LM \geq 50% Stenosis *or* Either \geq 70% Stenosis 3VD or 2VD Involving the pLAD)

Decile	N	Observed Number of Events in Decile	Predicted Number of Events in Decile	Observed Proportion of Events in Decile	Mean Predicted Probability of Event in Decile
0	444	3	1.35	0.0068	0.0030
1	444	5	2.27	0.0113	0.0051
2	445	3	3.29	0.0067	0.0074
3	444	2	4.49	0.0045	0.0101
4	444	5	5.96	0.0113	0.0134
5	445	7	7.70	0.0157	0.0173
6	444	7	9.91	0.0158	0.0223
7	445	15	13.45	0.0337	0.0302
8	444	17	19.92	0.0383	0.0449
9	444	46	41.66	0.1036	0.0938

Supplemental Figure 1: [50] and [70] model comparison with other risk scores. Both the **(a)** [50] model and **(b)** [70] model performed better than the ASCVD and modified DFS in predicting high-risk CAD. **(a)** [50] model versus ASCVD: chi-square=12.22, p=0.0005, [50] model versus modified DFS: chi-square=26.90, p<0.0001. **(b)** [70] model versus ASCVD: chi-square=6.19, p=0.0129, [70] model versus modified DFS: chi-square=9.47, p=0.0021. DF indicates Diamond-Forrester Risk Score; ASCVD indicates the atherosclerotic cardiovascular disease risk score (Pooled Cohort Equation).



Supplemental Figure 2: Comparison of [70] model with the CONFIRM high-risk model. The [70] model performed similarly to the CONFIRM high risk model (chi-square=2.15, p=0.1422).

