

## Supplementary Online Content

Hess PL, Wojdyla DM, Al-Khatib SM, et al. Sudden cardiac death after non–ST-segment elevation acute coronary syndrome. *JAMA Cardiol*. Published online March 16, 2016. doi:10.1001/jamacardio.2015.0359.

**eTable 1.** Baseline Patient Characteristics by Clinical Trial

**eTable 2.** Univariable Factors Associated With Sudden Cardiac Death

**eTable 3.** Multivariable Model of Sudden Cardiac Death in the 4 Trial Populations

This supplementary material has been provided by the authors to give readers additional information about their work.

**eTable 1.** Baseline Patient Characteristics by Clinical Trial

Characteristic	APPRAISE-2 (n=4449)	PLATO (n=11,032)	TRACER (n=12,808)	TRILOGY ACS (n=9266)	All Trials (n=37, 555)
Age, median (IQR), yr	67 (59–74)	64 (58–72)	66 (59–74)	64 (56–72)	65 (57–72)
Male sex, %	65.8	71.8	60.9	68.4	67.4
Race or ethnic group, %					
White	76.3	88.5	78.2	93.2	85.5
Asian	20.3	8.5	21.2	5.4	12.1
Black	2.7	2.4	0.0	1.5	2.1
Other	0.7	0.5	0.6	0.0	0.4
Region of enrollment, %					
Europe	44.9	50.6	44.5	68.1	53.8
North America	17.9	26.1	1.6	13.0	18.1
Latin America	13.5	6.6	25.7	6.4	9.1
Asian	21.1	11.8	24.7	11.1	15.9
Africa	1.5	1.6	2.7	0.9	1.7
Oceania	1.0	3.3	0.7	0.6	1.6
SBP, median (IQR), mm Hg	126 (116–136)	134 (120–150)	130 (117–145)	129 (119–140)	130 (120–141)
DBP, median (IQR), mm Hg	75 (70–80)	80 (70–88)	75 (66–82)	77 (70–80)	77 (70–82)
Heart rate, median (IQR), bpm	70 (62–77)	72 (64–81)	70 (61–79)	69 (62–76)	70 (62–79)
Body mass index	27.3 (24.4–30.8)	27.7 (25.0–31.2)	27.1 (24.2–30.5)	27.5 (24.8–30.5)	27.5 (24.7–30.8)
Killip class, %					
I–II	—	98.9	97.5	99.2	98.6
III–IV	—	1.1	2.5	0.8	1.4
Cardiovascular comorbidities, %					
Dyslipidemia	59.9	62.2	59.2	51.8	58.1
Diabetes	48.5	31.4	38.0	28.2	34.1
Myocardial infarction	43.3	28.9	43.1	25.2	33.0
Peripheral artery disease	18.7	7.1	7.4	7.3	8.6
Atrial fibrillation/flutter	6.0	4.3	7.8	3.2	5.0
Congestive heart failure	30.4	7.4	9.0	17.5	13.1
Other medical history, %					
Chronic obstructive pulmonary disease	—	7.0	—	6.6	6.8
Current smoker	19.8	27.3	18.4	29.6	24.9
Laboratory data					
Positive cardiac biomarker (CK-MB/troponin), %	69.3	81.5	93.7	74.3	83.3
eGFR, median (IQR), mL/min/1.73 m <sup>2</sup>	68.3 (52.6–84.8)	86.4 (68.5–105.8)	69.7 (53.5–86.1)	77.1 (60.5–95.4)	77.1 (59.6–96.1)
Ejection fraction, %					
<35	—	—	5.0	7.1	5.7
35–44	—	—	10.6	13.3	11.6
45–54	—	—	22.0	25.5	23.3
≥55	—	—	62.4	54.1	59.4
ST-segment depression, %	42.1	32.4	51.6	—	40.7

For APPRAISE-2 and PLATO, only patients with acute coronary syndromes without persistent ST-segment elevation were included. Patients with implantable cardioverter-defibrillator were excluded from the analyses. Abbreviations: CK-MB, creatine kinase-MB; DBP, diastolic blood pressure; eGFR, estimated glomerular filtration rate; IQR, interquartile range; SBP, systolic blood pressure.

**eTable 2. Univariable Factors Associated with Sudden Cardiac Death**

Variable	df	Chi-square	P-value	HR represents...	HR (95% CI)
eGFR (2 linear splines, cutpoint 70 mL/min/1.73 <sup>2</sup> )	2	199.3	<0.001	5-unit decrease for eGFR <70 mL/min	1.19 (1.15–1.23)
				5-unit decrease for eGFR ≥70 mL/min	1.05 (1.02–1.08)
Killip class*	2	98.2	<0.001	Class II vs. class I	2.85 (2.22–3.64)
				Class III–IV vs. class I	3.85 (2.54–5.84)
Age	1	92.3	<0.001	5 years in increase	1.23 (1.18–1.28)
Left ventricular ejection fraction <sup>¶</sup>	3	91.8	<0.001	<35% vs. ≥55%	4.46 (3.18–6.27)
				35–44% vs. ≥55%	2.96 (2.17–4.03)
				45–54% vs. ≥55%	1.94 (1.46–2.58)
Heart rate	1	55.3	<0.001	5-bpm increase	1.12 (1.09–1.15)
Diabetes	1	37.4	<0.001	Yes vs. no	1.72 (1.45–2.05)
Prior myocardial infarction	1	32.7	<0.001	Yes vs. no	1.67 (1.40–1.99)
Body mass index (linear <25, constant ≥25)	1	28.5	<0.001	1-unit increase for BMI <25	0.88 (0.84–0.92)
History of peripheral artery disease	1	28.4	<0.001	Yes vs. no	1.95 (1.53–2.50)
History of atrial fibrillation	1	11.7	<0.001	Yes vs. no	1.69 (1.25–2.29)
Race	2	13.3	0.001	Asian vs. white	1.52 (1.21–1.91)
				Other vs. white	0.98 (0.55–1.75)
Region	4	15.2	0.004	North America vs. Europe	1.03 (0.81–1.32)
				Latin America vs. Europe	1.21 (0.91–1.63)
				Asia vs. Europe	1.51 (1.21–1.89)
				Other vs. Europe	0.83 (0.47–1.46)
Smoking	1	6.56	0.010	Yes vs. no	0.75 (0.60–0.93)
Sex	1	6.52	0.0111	Male vs. female	1.28 (1.06–1.56)
Diastolic blood pressure	1	4.18	0.05	10-mmHg increase	0.92 (0.86–1.00)
Dyslipidemia	1	1.84	0.17	Yes vs. no	0.88 (0.74–1.06)
Positive cardiac biomarkers	1	1.44	0.23	Yes vs. no	1.16 (0.91–1.48)
Systolic blood pressure	1	1.07	0.30	10-mmHg increase	0.98 (0.93–1.02)

\*Killip class was not collected in the APPRAISE-2 study. ¶Left ventricular ejection fraction was analyzed in TRACER and TRILOGY ACS trials. Abbreviations: BMI, body mass index; df, degrees of freedom; eGFR, estimated glomerular filtration rate.

**eTable 3. Multivariable Model of Sudden Cardiac Death in the Four Trial Populations\***

<b>Variable</b>	<b><math>\chi^2</math></b>	<b>HR</b>	<b>95% CI</b>	<b>P-value</b>
eGFR (per 5-unit decrease, below 70)	46.2	1.13	1.09–1.17	<0.001
Heart rate (per 5-unit increase)	39.8	1.11	1.07–1.14	<0.001
Age (per 5-year increase)	26.5	1.15	1.09–1.21	<0.001
Sex (male vs. female)	17.9	1.57	1.28–1.94	<0.001
Diabetes	17.8	1.50	1.24–1.81	<0.001
Prior myocardial infarction	16.6	1.48	1.23–1.79	<0.001
History of peripheral artery disease	11.6	1.58	1.21–2.05	<0.001
Race	11.0			0.004
Asian vs. white		1.51	1.18–1.93	
Other vs. white		1.07	0.59–1.96	
Systolic blood pressure (per 10-mmHg increase)	5.2	0.95	0.90–0.99	0.02

C-statistic=0.73, optimism-corrected c-statistic=0.72. \*Includes variables collected in all four trials.

Abbreviations: CI, confidence interval; eGFR, estimated glomerular filtration rate; HR, hazard ratio.