

The BARI 2D Study Group

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Supplemental Table 1: Baseline characteristics by Inclusion in SYNTAX Analysis

Characteristic	All Patients Enrolled in BARI 2D (N=2368)	Included in SYNTAX Analysis (N=1550)	Excluded from SYNTAX Analysis (N=818)	p-value
Age, median, Q1-Q3	62.5, 56.2 - 68.9	62.2, 56.0 - 68.8	62.9, 56.8 - 69.3	0.145
Male, % (n)	70.4 (1666)	70.8 (1098)	69.4 (568)	0.478
Race/Ethnicity, % (n)				0.010
White non-Hispanic	65.9 (1560)	66.3 (1028)	65.0 (532)	
Black non-Hispanic	16.8 (398)	16.6 (258)	17.1 (140)	
Hispanic	12.5 (297)	11.4 (177)	14.7 (120)	
Asian / Other non-Hispanic	4.8 (113)	5.6 (87)	3.2 (26)	
Region of World, % (n)				0.001
USA	63.3 (1499)	54.6 (847)	79.7 (652)	
Canada	14.9 (353)	19.2 (298)	6.7 (55)	
Mexico	3.6 (85)	3.6 (56)	3.5 (29)	
Brazil	15.0 (356)	18.5 (286)	8.6 (70)	
Czech Republic/Austria	3.2 (75)	4.1 (63)	1.5 (12)	
Insulin Providing assignment, % (n)	50.0 (1185)	49.5 (768)	51.0 (417)	0.508
Systolic Blood Pressure, median, Q1-Q3	130.0, 118.0 - 142.0	130.0, 118.7 - 143.3	128.7, 118.0 - 140.0	0.026
Diastolic Blood Pressure, median, Q1-Q3	74.0, 67.3 - 80.7	74.7, 68.0 - 80.7	72.7, 66.0 - 80.7	0.003
Body Mass Index, median, Q1-Q3	31.0, 27.5 - 34.8	30.9, 27.4 - 34.8	31.2, 27.9 - 35.0	0.306
Hypertension Requiring Treatment, % (n)	82.5 (1929)	81.5 (1246)	84.4 (683)	0.081
History of Cigarette Smoking, % (n)	67.0 (1583)	64.1 (991)	72.5 (592)	0.001
History of Myocardial Infarction, % (n)	32.0 (746)	24.2 (370)	46.9 (376)	0.001
History of Congestive Heart Failure, % (n)	6.6 (156)	5.3 (82)	9.2 (74)	0.001
Duration of Diabetes, median, Q1-Q3	8.6, 3.7 - 15.2	8.3, 3.5 - 14.9	9.5, 4.1 - 16.0	0.010

Characteristic	All Patients Enrolled in BARI 2D (N=2368)	Included in SYNTAX Analysis (N=1550)	Excluded from SYNTAX Analysis (N=818)	p-value
HbA1c %, median, Q1-Q3	7.30, 6.40 - 8.50	7.30, 6.50 - 8.50	7.30, 6.40 - 8.50	0.903
LDL mg/dl, median, Q1-Q3	92.0, 73.0 - 115.0	93.0, 74.0 - 116.0	90.0, 72.0 - 111.0	0.013
HDL mg/dl, median, Q1-Q3	37.0, 31.0 - 43.0	37.0, 32.0 - 43.0	36.0, 31.0 - 43.0	0.177
Total Cholesterol mg/dl, median, Q1-Q3	164.0, 141.0 - 192.0	165.0, 141.0 - 193.0	163.0, 141.0 - 189.0	0.276
eGFR (MDRD algorithm), median, Q1-Q3	76.3, 63.1 - 91.5	77.1, 63.4 - 92.0	74.2, 62.2 - 90.8	0.070
Insulin Use at Study Entry, % (n)	27.9 (659)	26.3 (407)	30.8 (252)	0.019
Cerebrovascular Accident TIA, % (n)	9.8 (230)	8.9 (137)	11.4 (93)	0.048
Chronic Renal Dysfunction, % (n)	3.1 (72)	2.2 (34)	4.7 (38)	0.001
Any Major ECG Abnormalities, % (n)	29.5 (679)	28.6 (431)	31.4 (248)	0.152
Q-waves, % (n)	11.2 (266)	10.6 (165)	12.3 (101)	0.212
ST depression, % (n)	1.9 (46)	2.0 (31)	1.8 (15)	0.780
ST elevation, % (n)	4.3 (103)	4.8 (75)	3.4 (28)	0.108
LVEF < 50%, % (n)	17.5 (400)	15.6 (235)	21.2 (165)	0.001
Number Diseased Vessels (>=50% stenosis), % (n)				0.013
1	37.7 (891)	38.6 (598)	35.9 (293)	
2	35.8 (846)	36.8 (569)	33.9 (277)	
3	26.6 (628)	24.6 (381)	30.2 (247)	
Number Lesions, median, Q1-Q3	5.0, 3.0 - 6.0	4.0, 3.0 - 6.0	5.0, 3.0 - 7.0	0.001
Number Lesions >= 50% stenosis, median, Q1-Q3	2.0, 1.0 - 4.0	2.0, 1.0 - 4.0	3.0, 1.0 - 4.0	0.002
Myocardial Jeopardy Index, median, Q1-Q3	43.0, 25.0 - 62.0	45.0, 27.0 - 65.0	39.0, 22.0 - 58.0	0.001
Proximal LAD >= 50% stenosis, % (n)	13.2 (313)	11.9 (184)	15.8 (129)	0.008
Total Occlusions, % (n)	47.0 (351)	48.2 (271)	43.2 (80)	0.239

Supplemental Table 2: Five-year Kaplan Meier Estimates of Cardiovascular Event Rates

CABG Stratum						
5-year estimated rate (n)	Low SYNTAX Score (≤ 22) (n = 370)			Mid/High SYNTAX Score (≥ 23) (n = 207)		
	Medical (n= 190)	Revascularization (n = 180)	p-value Med vs Rev	Medical (n=96)	Revascularization (n = 111)	p-value Med vs Rev
Death	15.9% (27)	13.6% (22)	0.54	18.6% (17)	12.6% (13)	0.34
Cardiac Death	7.5% (12)	7.7% (12)	0.99	10.8% (9)	7.4%(8)	0.60
MI	15.3% (24)	12.5% (19)	0.44	16.5% (14)	3.8% (4)	0.003
Stroke	4.1%(6)	3.1% (5)	0.66	1.1% (1)	0.0% (0)	0.30
Death/MI/Stroke	29.9% (48)	26.1% (40)	0.41	30.3% (26)	15.3% (15)	0.017
PCI Stratum						
5-year estimated rate (n)	Low SYNTAX Score (≤ 22) (n = 849)			Mid/High SYNTAX Score (≥ 23) (n= 124)		
	Medical (n= 424)	Revascularization (n = 425)	p-value Med vs Rev	Medical (n=62)	Revascularization (n = 62)	p-value Med vs Rev
Death	9.0% (34)	8.9% (35)	0.73	10.7% (6)	19.4% (12)	0.074
Cardiac Death	3.0% (11)	3.5% (14)	0.42	4.9% (3)	11.6% (7)	0.17
MI	10.0% (35)	8.4% (31)	0.99	18.0% (10)	22.1% (13)	0.32
Stroke	2.8% (10)	2.9%(11)	0.78	3.4% (2)	6.6% (3)	0.63
Death/MI/Stroke	19.2%(68)	17.8% (67)	0.84	26.5% (15)	35.6% (22)	0.12

Supplemental Table 3: Textiles of SYNTAX Score in BARI 2D

Characteristic	Total (N=1550)	CABG Stratum (N=577)	PCI Stratum (N=973)	p-value
Syntax Score Tertiles, % (n)				
Syntax Score ≤7	30.2 (468)	10.6 (61)	41.8 (407)	<.0001
Syntax Score 8-15	31.7 (491)	30.5 (176)	32.4 (315)	
Syntax Score ≥16	38.1 (591)	58.9 (340)	25.8 (251)	

Supplemental Table 4a: Risk of Cardiovascular Events for Second and Third Tertiles of SYNTAX Score compared with First Tertile of SYNTAX Score for ALL patients

	Combined Strata (N=1550)							
	Unadjusted Hazard Ratio	95% Confidence Interval	p - value	p-value for homogeneity	Adjusted Hazard Ratio*	95% Confidence Interval	p - value	p-value for significance
Death/MI/Stroke								
Syntax [8, 15] (vs. ≤7)	1.65	1.24, 2.20	0.0007	0.0023	1.68	1.26, 2.26	0.0005	0.0023
Syntax ≥16 (vs. ≤7)	1.48	1.12, 1.98	0.0066		1.42	1.06, 1.90	0.02	
Death								
Syntax [8, 15] (vs. ≤7)	1.35	0.93, 1.98	0.12	0.14	1.36	0.92, 2.00	0.12	0.26
Syntax ≥16 (vs. ≤7)	1.43	1.00, 2.06	0.054		1.30	0.90, 1.90	0.17	
Cardiac Death								
Syntax [8, 15] (vs. ≤7)	2.02	1.04, 3.91	0.038	0.017	2.37	1.17, 4.79	0.016	0.0069
Syntax ≥16 (vs. ≤7)	2.49	1.33, 4.66	0.0043		2.98	1.51, 5.86	0.0016	
MI								
Syntax [8, 15] (vs. ≤7)	2.33	1.51, 3.60	0.0001	0.0007	2.34	1.51, 3.62	0.0002	0.0008
Syntax ≥16 (vs. ≤7)	1.81	1.16, 2.81	0.0084		1.80	1.15, 2.83	0.0099	

*HR adjusted for: Insulin assignment, age, gender, history of MI, history of CHF, insulin at baseline, eGFR <60 ml/min/1.73 m².

Supplemental Table 4b: Risk of Cardiovascular Events for Second and Third Tertiles of SYNTAX Score compared with First Tertile of SYNTAX Score for CABG stratum patients

	CABG Stratum (N=577)							
	Unadjusted Hazard Ratio	95% Confidence Interval	p - value	p-value for homogeneity	Adjusted Hazard Ratio*	95% Confidence Interval	p - value	p-value for significance
Death/MI/Stroke								
Syntax [8, 15] (vs. ≤7)	1.33	0.72, 2.45	0.36	0.34	1.28	0.69, 2.38	0.43	0.24
Syntax ≥16 (vs. ≤7)	1.03	0.57, 1.85	0.92		0.94	0.52, 1.71	0.84	
Death								
Syntax [8, 15] (vs. ≤7)	2.26	0.88, 5.80	0.091	0.19	2.13	0.82, 5.49	0.12	0.21
Syntax ≥16 (vs. ≤7)	1.74	0.69, 4.37	0.24		1.59	0.63, 4.00	0.33	
Cardiac Death								
Syntax [8, 15] (vs. ≤7)	2.57	0.58, 11.31	0.21	0.46	2.52	0.57, 11.10	0.22	0.46
Syntax ≥16 (vs. ≤7)	2.34	0.56, 9.86	0.25		2.42	0.57, 10.24	0.23	
MI								
Syntax [8, 15] (vs. ≤7)	1.09	0.49, 2.41	0.83	0.19	1.07	0.48, 2.39	0.86	0.17
Syntax ≥16 (vs. ≤7)	0.68	0.31, 1.48	0.33		0.66	0.30, 1.44	0.29	

*HR adjusted for: Revascularization assignment, Insulin assignment, age, gender, history of MI, history of CHF, insulin at baseline, eGFR <60 ml/min/1.73 m².

Supplemental Table 4c: Risk of Cardiovascular Events for Second and Third Tertiles of SYNTAX Score compared with First Tertile of SYNTAX Score for PCI stratum patients

	PCI Stratum (N=973)							
	Unadjusted Hazard Ratio	95% Confidence Interval	p - value	p-value for homogeneity	Adjusted Hazard Ratio*	95% Confidence Interval	p - value	p-value for significance
Death/MI/Stroke								
Syntax [8, 15] (vs.≤7)	1.59	1.13, 2.24	0.0075	0.014	1.66	1.17, 2.35	0.0045	0.012
Syntax ≥16 (vs.≤7)	1.55	1.08, 2.23	0.017		1.51	1.04, 2.19	0.029	
Death								
Syntax [8, 15] (vs.≤7)	1.03	0.65, 1.63	0.89	0.50	1.07	0.67, 1.72	0.77	0.78
Syntax ≥16 (vs.≤7)	1.30	0.82, 2.08	0.27		1.19	0.74, 1.92	0.48	
Cardiac Death								
Syntax [8, 15] (vs.≤7)	1.52	0.68, 3.38	0.31	0.17	1.89	0.80, 4.46	0.14	0.11
Syntax ≥16 (vs.≤7)	2.13	0.97, 4.69	0.061		2.47	1.06, 5.76	0.037	
MI								
Syntax [8, 15] (vs.≤7)	2.72	1.61, 4.60	0.0002	0.0004	2.73	1.61, 4.64	0.0002	0.0004
Syntax ≥16 (vs.≤7)	2.60	1.50, 4.51	0.0007		2.59	1.48, 4.52	0.0009	

*HR adjusted for: Revascularization assignment, Insulin assignment, age, gender, history of MI, history of CHF, insulin at baseline, eGFR <60 ml/min/1.73 m².

Supplemental Table 5: Revascularization vs Medical Therapy by Revascularization Stratum and SYNTAX Score

CABG Stratum (N=577)					
Outcome Variable	SYNTAX Score	Adjusted Hazard Ratio*	95% Confidence Interval	p-value	Interaction p-value**
Death/MI/Stroke	Syntax ≤15	0.93	0.56, 1.55	0.78	0.15
	Syntax ≥16	0.56	0.35, 0.90	0.018	
Death	Syntax ≤15	0.82	0.42, 1.60	0.56	0.99
	Syntax ≥16	0.82	0.46, 1.47	0.51	
Cardiac Death	Syntax <15	1.08	0.40, 2.91	0.87	0.63
	Syntax ≥16	0.80	0.36, 1.76	0.57	
MI	Syntax <15	1.00	0.50, 1.99	1.00	0.016
	Syntax ≥16	0.26	0.11, 0.61	0.002	
PCI Stratum (N=973)					
Outcome Variable	SYNTAX Score	Adjusted Hazard Ratio*	95% Confidence Interval	p-value	Interaction p-value**
Death/MI/Stroke	Syntax ≤ 7	1.21	0.73, 2.01	0.47	0.73
	Syntax [8, 15]	0.92	0.58, 1.47	0.73	
	Syntax ≥16	1.10	0.65, 1.87	0.72	
Death	Syntax < 7	0.97	0.51, 1.82	0.92	0.54
	Syntax [8, 15]	1.09	0.55, 2.18	0.80	
	Syntax ≥16	1.64	0.80, 3.36	0.18	
Cardiac Death	Syntax < 7	2.07	0.52, 8.30	0.31	0.69
	Syntax [8, 15]	0.99	0.33, 2.97	0.98	
	Syntax ≥16	1.63	0.56, 4.75	0.37	
MI	Syntax ≤ 7	0.99	0.42, 2.33	0.98	0.69
	Syntax [8, 15]	0.90	0.49, 1.66	0.73	
	Syntax ≥16	1.34	0.67, 2.69	0.41	

* HR for Revascularization versus Medical adjusted for: IS/IP assignment, age, sex, history of MI, history of CHF, insulin use at baseline, eGFR <60 ml/min/1.73 m².

** Testing hypothesis of equivalence of Hazard Ratios for Revascularization versus Medical Therapy in the SYNTAX Score strata

Supplemental Table 6. Risk of Cardiovascular Events by Continuous SYNTAX Score

	Combined Strata (N=1550)					
	Unadjusted Hazard Ratio*	95% Confidence Interval	p - value	Adjusted Hazard Ratio**	95% Confidence Interval	p - value
Death/MI/Stroke	1.15	1.04 - 1.27	0.006	1.14	1.03 - 1.26	0.014
Death	1.20	1.05 - 1.36	0.006	1.16	1.01 - 1.32	0.030
Cardiac Death	1.32	1.10 - 1.59	0.003	1.35	1.12 - 1.63	0.002
MI	1.17	1.02 - 1.35	0.024	1.18	1.02 - 1.36	0.024
	CABG Stratum (N=577)					
	Unadjusted Hazard Ratio*	95% Confidence Interval	p - value	Adjusted Hazard Ratio**	95% Confidence Interval	p - value
Death/MI	0.98	0.83 - 1.15	0.791	0.94	0.79 - 1.11	0.473
Death	1.10	0.90 - 1.33	0.369	1.05	0.86 - 1.28	0.648
Cardiac Death	1.09	0.83 - 1.45	0.532	1.07	0.81 - 1.42	0.626
MI	0.88	0.69 - 1.13	0.311	0.86	0.67 - 1.10	0.232
	PCI Stratum, (N=973)					
	Unadjusted Hazard Ratio*	95% Confidence Interval	p - value	Adjusted Hazard Ratio**	95% Confidence Interval	p - value
Death/MI	1.27	1.10 - 1.46	0.001	1.30	1.12 - 1.51	0.0005
Death	1.21	1.00 - 1.47	0.055	1.21	0.99 - 1.48	0.057
Cardiac Death	1.40	1.05 - 1.87	0.022	1.49	1.11 - 1.99	0.008
MI	1.41	1.18 - 1.70	0.0002	1.45	1.20 - 1.75	0.0001

* Hazard Ratio per 10 unit increment in SYNTAX Score

** Hazard Ratio per 10 unit increment in SYNTAX Score adjusted for: Revascularization assignment, Insulin assignment, age, gender, hx of MI, hx of CHF, insulin at baseline, eGFR <60 ml/min/1.73 m².

Supplemental Table 7: Revascularization vs Medical Therapy by Revascularization Stratum and SYNTAX Score

CABG Stratum (N=577)					
	Adjusted Variables	Unadjusted HR, 95% CI	p - value	Adjusted HR*, 95% CI	p - value
Death/MI/Stroke	SYNTAX Score (per 10 units)	1.06, 0.86 - 1.31	0.572	1.04, 0.84 - 1.30	0.720
	Revascularization vs Medical Therapy	1.08, 0.53 - 2.22	0.833	1.15, 0.55 - 2.38	0.715
	SYNTAX Score * Revascularization	0.80, 0.57 - 1.12	0.193	0.78, 0.56 - 1.09	0.147
Death	SYNTAX Score (per 10 units)	1.13, 0.87 - 1.48	0.362	1.11, 0.84 - 1.46	0.468
	Revascularization vs Medical Therapy	0.90, 0.36 - 2.27	0.824	1.01, 0.40 - 2.58	0.983
	SYNTAX Score * Revascularization	0.94, 0.63 - 1.40	0.761	0.90, 0.60 - 1.35	0.613
Cardiac Death	SYNTAX Score (per 10 units)	1.11, 0.75 - 1.63	0.619	1.14, 0.77 - 1.69	0.499
	Revascularization vs Medical Therapy	0.93, 0.25 - 3.44	0.910	1.14, 0.31 - 4.18	0.847
	SYNTAX Score * Revascularization	0.99, 0.56 - 1.73	0.958	0.89, 0.51 - 1.55	0.673
MI	SYNTAX Score (per 10 units)	1.01, 0.75 - 1.36	0.946	1.01, 0.74 - 1.37	0.953
	Revascularization vs Medical Therapy	1.06, 0.36 - 3.11	0.911	1.11, 0.38 - 3.25	0.846
	SYNTAX Score * Revascularization	0.70, 0.41 - 1.20	0.198	0.68, 0.40 - 1.16	0.158
PCI Stratum (N=973)					
	Adjusted Variables	Unadjusted HR, 95% CI	p - value	Adjusted HR*, 95% CI	p - value
Death/MI/Stroke	SYNTAX Score (per 10 units)	1.23, 0.99 - 1.52	0.059	1.25, 1.01 - 1.56	0.039
	Revascularization vs Medical Therapy	1.06, 0.66 - 1.70	0.823	0.98, 0.61 - 1.60	0.943
	SYNTAX Score * Revascularization	1.05, 0.79 - 1.39	0.739	1.06, 0.80 - 1.41	0.679
Death	SYNTAX Score (per 10 units)	1.01, 0.73 - 1.39	0.964	1.00, 0.72 - 1.38	0.986
	Revascularization vs Medical Therapy	0.84, 0.45 - 1.60	0.603	0.75, 0.39 - 1.44	0.394
	SYNTAX Score * Revascularization	1.35, 0.90 - 2.01	0.148	1.40, 0.94 - 2.10	0.101
Cardiac Death	SYNTAX Score (per 10 units)	1.28, 0.77 - 2.12	0.338	1.25, 0.76 - 2.08	0.380
	Revascularization vs Medical Therapy	1.28, 0.43 - 3.84	0.659	0.95, 0.31 - 2.96	0.935
	SYNTAX Score * Revascularization	1.15, 0.62 - 2.12	0.665	1.30, 0.71 - 2.41	0.399
MI	SYNTAX Score (per 10 units)	1.36, 1.03 - 1.81	0.032	1.39, 1.04 - 1.85	0.025
	Revascularization vs Medical Therapy	1.01, 0.51 - 1.99	0.986	0.95, 0.48 - 1.89	0.885
	SYNTAX Score * Revascularization	1.06, 0.73 - 1.54	0.756	1.08, 0.74 - 1.57	0.690

* Additionally adjusted for: Insulin assignment, age, gender, hx of MI, hx of CHF, insulin at baseline, eGFR <60 ml/min/1.73 m².