Supplementary Material: BYPASS-CTCA

Contents

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2. **Table S1. Grafts evaluated during ICA.** Data are reported as number (%)

		CTCA + ICA N=321	ICA N=342	P-value
Number of grafts evaluated at ICA, n (%)	0	38 (11.8%)	11 (3.2%)	<0.001
	1	99 (30.8%)	66 (19.3%)	
	2	94 (29.3%)	104 (30.4%)	
	3	63 (19.6%)	129 (37.7%)	
	4	24 (7.5%)	31 (9.1%)	
	5	3 (0.9%)	1 (0.3%)	
Number of grafts not evaluated, n (%)	0	129 (40.2%)	208 (60.8%)	<0.001
	1	91 (28.4%)	87 (25.4%)	
	2	71 (22.1%)	41 (12.0%)	
	3	23 (7.2%)	6 (1.8%)	
	4	6 (1.9%)	0 (0%)	
	5	1 (0.3%)	0 (0%)	
Reasons for not evaluating, n (%)	CT showed already occluded	150 (46.7%)	0	<0.001
	CT showed graft as patent	77 (24.0%)	0	
	Known Occluded	0 (0%)	58 (17.0%)	
	Assumed occluded	0 (0%)	13 (3.8%)	
	Unable to locate	1 (0.3%)	73 (21.4%)	

3. **Table S2. Subgroup analysis for the primary endpoint of ICA procedural duration.**
   Data reported as mean (SD) minutes and mean difference with 98.33% CI. *Adjusted for baseline creatinine & ACS

	Treatment group		Covariate adjusted*		
	ICA + CTCA N=321	ICA N=342	Difference (98.33% CI)	P-value	Interaction p-value
Non-Caucasian (N=284)	18.2 (10.4)	39.1 (16.3)	-21.0 (-25.0 to -17.0)	<0.001	0.38
Caucasian (N=401)	16.9 (10.2)	39.8 (17.4)	-22.9 (-26.3 to -19.5)	<0.001	
No ACS (N=375)	18.6 (10.3)	39.1 (17.1)	-20.5 (-23.9 to -17.0)	<0.001	0.09
ACS (N=310)	15.9 (10.0)	40.0 (16.7)	-24.1 (-27.9 to -20.3)	<0.001	
No previous angiogram since CABG (N=368)	17.8 (10.1)	41.3 (16.2)	-23.5 (-27.0 to -20.0)	<0.001	0.21
Previous angiogram since CABG (N=317)	17.0 (10.4)	37.8 (17.4)	-20.8 (-24.6 to -17.1)	<0.001	
Junior operator (N=495)	18.6 (9.2)	37.1 (15.0)	-18.6 (-21.5 to -15.6)	<0.001	0.01
Senior operator (N=168)	18.6 (10.9)	44.1 (19.2)	-25.6 (-31.0 to -20.1)	<0.001	

4. **Table S3. Patient Satisfaction Scores with the ICA Procedure.** Data are reported as number (%) aside from the mean scores which are mean (SD). For the mean score, very good = 1 and very poor = 5.

		CTCA + ICA N=321	ICA N=341	P-value
Please rate the preparation and information prior to this test	Very good, n (%)	234 (72.9%)	191 (56.0%)	<0.001
	Good, n (%)	86 (26.8%)	138 (40.5%)	
	Moderate, n (%)	0 (0%)	10 (2.9%)	
	Poor, n (%)	0 (0%)	2 (0.6%)	
	Very poor, n (%)	1 (0.3%)	0 (0%)	
	Mean score (SD)	**1.3 (0.5)**	**1.5 (0.6)**	**<0.001**
Please rate your degree of concern prior to this test	No concern, n (%)	142 (44.2%)	150 (44.0%)	0.58
	Little, n (%)	105 (32.7%)	96 (28.2%)	
	Moderate, n (%)	53 (16.5%)	71 (20.8%)	
	Intense, n (%)	17 (5.3%)	20 (5.9%)	
	Very intense, n (%)	4 (1.3%)	4 (1.2%)	
	Mean score (SD)	**1.9 (1.0)**	**1.9 (1.0)**	**0.47**
Please rate the comfort of this test	Very good, n (%)	101 (31.5%)	32 (9.4%)	<0.001
	Good, n (%)	174 (54.2%)	96 (28.2%)	
	Moderate, n (%)	42 (13.1%)	154 (45.3%)	
	Poor, n (%)	3 (0.9%)	51 (15.0%)	
	Very poor, n (%)	1 (0.3%)	7 (2.1%)	
	Mean score (SD)	**1.8 (0.7)**	**2.7 (0.9)**	**<0.001**
Please rate your degree of helplessness during this test	No helplessness, n (%)	157 (48.9%)	78 (22.9%)	<0.001
	Little, n (%)	131 (40.8%)	70 (20.6%)	
	Moderate, n (%)	26 (8.1%)	137 (40.3%)	
	Intense, n (%)	5 (1.6%)	53 (15.6%)	
	Very intense, n (%)	2 (0.6%)	2 (0.6%)	
	Mean score (SD)	**1.6 (0.8)**	**2.5 (1.0)**	**<0.001**
Please rate your pain during and immediately after this test (0-5)	**Mean score (SD)**	**1.5 (1.2)**	**2.8 (1.5)**	**<0.001**
Please rate your overall satisfaction with this test	Very good, n (%)	178 (55.4%)	67 (19.7%)	<0.001
	Good, n (%)	130 (40.5%)	91 (26.7%)	
	Moderate, n (%)	13 (4.1%)	124 (36.4%)	
	Poor, n (%)	0 (0%)	51 (15.0%)	
	Very poor, n (%)	0 (0%)	8 (2.4%)	
	Mean score (SD)	**1.5 (0.6)**	**2.5 (1.0)**	**<0.001**

5. **Table S4. Subgroup analysis for the primary endpoint of patient satisfaction with the ICA.** Data reported as mean (SD) and mean difference with 98.33% CI. *Adjusted for baseline creatinine & ACS

| | Treatment group | | Covariate adjusted* | | |
	ICA + CTCA N=321	ICA N=341	Difference (98.33% CI)	P-value	Interaction p-value
Non-Caucasian (N=277)	1.5 (0.6)	2.5 (1.0)	-1.0 (-1.2 to -0.7)	<0.001	0.46
Caucasian (N=385)	1.5 (0.6)	2.6 (1.1)	-1.1 (-1.3 to -0.9)	<0.001	
No ACS (N=365)	1.5 (0.6)	2.5 (1.0)	-1.1 (-1.3 to -0.8)	<0.001	0.90
ACS (N=297)	1.5 (0.6)	2.6 (1.1)	-1.0 (-1.3 to -0.8)	<0.001	
No previous angiogram since CABG (N=352)	1.5 (0.6)	2.5 (1.1)	-1.0 (-1.3 to -0.8)	<0.001	0.99
Previous angiogram since CABG (N=310)	1.5 (0.6)	2.5 (1.0)	-1.1 (-1.3 to -0.8)	<0.001	
Junior operator (N=494)	1.5 (0.6)	2.4 (1.0)	-0.9 (-1.1 to -0.8)	<0.001	0.03
Senior operator (N=168)	1.5 (0.5)	2.8 (1.0)	-1.3 (-1.6 to -0.9)	<0.001	

6. **Table S5. Patient Satisfaction Scores with the CTCA Procedure.** Data are reported as number (%) aside from the mean scores which are mean (SD). For the mean score, very good = 1 and very poor = 5.

		CTCA + ICA (n=329)
Please rate the preparation and information prior to this test (1-5)	Very good, n (%)	270 (82.3%)
	Good, n (%)	56 (17.1%)
	Moderate, n (%)	1 (0.3%)
	Poor, n (%)	0 (0%)
	Very poor, n (%)	1 (0.3%)
	Mean score (SD)	**1.2 (0.4)**
Please rate your degree of concern prior to this test (1-5)	No concern, n (%)	265 (80.6%)
	Little, n (%)	38 (11.6%)
	Moderate, n (%)	16 (4.9%)
	Intense, n (%)	8 (2.4%)
	Very intense, n (%)	2 (0.6%)
	Mean score (SD)	**1.3 (0.7)**
Please rate the comfort of this test (1-5)	Very good, n (%)	209 (63.5%)
	Good, n (%)	103 (31.3%)
	Moderate, n (%)	16 (4.9%)
	Poor, n (%)	0 (0%)
	Very poor, n (%)	1 (0.3%)
	Mean score (SD)	**1.4 (0.6%)**
Please rate your degree of helplessness during this test (1-5)	No helplessness, n (%)	130 (69.9%)
	Little, n (%)	76 (23.1%)
	Moderate, n (%)	16 (4.9%)
	Intense, n (%)	5 (1.5%)
	Very intense, n (%)	2 (0.6%)
	Mean score (SD)	**1.4 (0.7)**
Please rate your pain during and immediately after this test (0-5)	**Mean score (SD)**	**0.5 (0.8)**
Please rate your overall satisfaction with this test (1-5)	Very good, n (%)	232 (70.5%)
	Good, n (%)	90 (27.4%)
	Moderate, n (%)	7 (2.1%)
	Poor, n (%)	0 (0%)
	Very poor, n (%)	0 (0%)
	Mean score (SD)	**1.3 (0.5)**

7. **Table S6: Subgroup analysis for the primary endpoint of CIN.** *Adjusted for baseline creatinine & ACS

	Treatment group		Covariate adjusted*		
	ICA + CTCA N=315	ICA N=319	OR (98.33% CI)	P-value	Interaction p-value
Non-Caucasian (N=261)	2 (1.79)	36 (24.16)	0.06 (0.01 to 0.34)	<0.001	0.662
White (N=373)	8 (3.94)	53 (31.18)	0.08 (0.03 to 0.22)	<0.001	
No ACS (N=339)	4 (2.38)	41 (23.98)	0.07 (0.02 to 0.26)	<0.001	0.818
ACS (N=295)	6 (4.08)	48 (32.43)	0.09 (0.03 to 0.25)	<0.001	
No previous angiogram since CABG (N=343)	7 (3.70)	47 (30.52)	0.08 (0.03 to 0.23)	<0.001	0.826
Previous angiogram since CABG (N=291)	3 (2.38)	42 (25.45)	0.07 (0.02 to 0.30)	<0.001	
Junior operator (N=454)	10 (4.07)	59 (28.37)	0.10 (0.04 to 0.24)	<0.001	-
Senior operator (N=161)	0	30 (27.03)	-	<0.001	

8. **Table S7. Percutaneous Coronary Intervention Data.** Data are reported as number (%) aside from the mean scores which are mean (SD).

		CTCA + ICA N=139	ICA N=141	P Value
Number undergoing PCI		139 (40.4%)	141 (41.0%)	0.88
Multi-vessel Intervention		7 (5.0%)	10 (7.1%)	0.47
Total number of vessels treated		148	151	0.47
Vessel Treated	LMS	13	12	0.81
	Cx	37	31	0.37
	Im	0	3	0.25
	LAD	20	17	0.60
	RCA	34	33	0.84
	Graft			-
	LIMA	1	2	0.57
	Radial	1	1	0.99
	VG	42	52	0.24
Adjunctive technique	Rotational Atherectomy	7 (5.0%)	8 (5.7%)	0.71
	Shockwave	2 (1.4%)	1 (0.7%)	
	Laser	0 (0%)	1 (0.7%)	
	None	130 (93.5%)	131 (92.9%)	
Number of stents	0	36 (25.9%)	27 (19.2%)	0.24
	1	68 (48.9%)	68 (48.2%)	
	2	27 (19.4%)	36 (25.5%)	
	3	6 (4.3%)	10 (7.1%)	
	4	2 (1.4%)	0 (0%)	
Total contrast (mls)		126.8 (84.0)	258.7 (76.9)	<0.001
Fluoroscopy Time (mins)		22.8 (13.0)	25.2 (13.8)	0.11
Radiation effective dose (mSv)		6.9 (6.3)	6.2 (4.4)	0.29