

1 **Supplemental Material**

2

3 **Invasive Endotyping in Patients with Angina and No Obstructive Coronary Artery**

4 **Disease: A Randomized Controlled Trial**

5 **Sidik N et al.**

6

Supplementary Methods

7 *Standard care exercise test*

8 Treadmill exercise testing was undertaken before enrolment as part of standard care for the evaluation
9 of chest pain. The classification of the exercise tolerance test findings was based on the American
10 Heart Association Statement for Healthcare Professionals on Exercise Standards for Testing⁴¹.
11 Horizontal or down-sloping ST deviation of ≥ 0.10 mV (1 mm) for 80 ms is classified as a positive test.
12 Horizontal or down-sloping ST deviation ≥ 0.5 mm and < 1.0 mm and up-sloping ST depression ≥ 2.0
13 mm are classified as borderline/indeterminate. Typical angina provoked during the exercise test
14 without any ST deviation was also classified as indeterminate.

Supplementary Results

15

16 *Medical history*

17 Of 144 patients with a diagnosis of microvascular angina, 103 (72%) had undergone treadmill exercise
18 testing. Of these patients, 22 (21.4%) had a normal exercise test result and 81 (78.6%) had an abnormal
19 or inconclusive result.

20 *Seattle Angina Questionnaire Summary Score*

21 When categorized by symptom severity at baseline, there was no difference in the Seattle Angina
22 Questionnaire Summary Score (SAQSS) between the randomized groups across the quartiles of
23 SAQSS. For example, in patients with high symptom burden (SAQSS <25), the SAQSS in the
24 intervention and control groups at 6 months were 25.9 ± 12.4 (a change of 7.0 ± 11.4 from baseline)
25 versus 27.3 ± 16.2 (a change of 12.5 ± 14.3 from baseline), with an overall $p=0.763$. In those with
26 moderate symptom burden (SAQSS 25-49), the SAQSS in the intervention and control groups at 6
27 months were 43.0 ± 17.9 (a change of 4.5 ± 16.9 from baseline) versus 45.0 ± 19.0 (a change of $7.3 \pm$
28 18.0 from baseline), with an overall $p=0.306$. In those with mild symptoms (SAQSS 50-74), the
29 SAQSS in the intervention and control groups at 6 months were 62.8 ± 19.4 (a change of 1.6 ± 17.7
30 from baseline) versus 63.9 ± 18.6 (a change of 2.7 ± 17.7 from baseline), with an overall $p=0.537$. In
31 those with minimal symptoms (SAQSS 75-100), the SAQSS in the intervention and control groups at
32 6 months were 62.8 ± 19.4 (a change of 1.6 ± 17.7 from baseline) versus 63.9 ± 18.6 (a change of 2.7
33 ± 17.7 from baseline), with an overall $p=0.537$.

Supplemental Tables

35 **Table S1.** COVID-19 Timeline for Healthcare Restrictions in NHS Scotland, United Kingdom.

16 March 2020	<p>Suspension of clinical research</p> <p>Deployment of medical research staff to clinical service</p> <p>Non-essential social contact prohibited, and stay-at-home policy implemented</p>
1 June 2020	<p>Clinical research restarted.</p> <p>In-person site visits prohibited</p>
5 November 2020	Second national lockdown
4 January 2021	Third national lockdown
29 March 2021	Stay-at-home order ends
1 July 2021	In-person visits for clinical research restarted

37 **Table S2.** Prevalence of Microvascular Angina by Percentage of Patients with CFR<2.0, IMR
 38 ≥ 25 or Microvascular Spasm or their Combination in the Trial Population (n=231).

Microvascular disease criterion			Endotype, n = 231			
CFR <2.0	IMR ≥ 25	Microvascular spasm	MVA n=127 (%)	VSA n=27 (%)	Mixed (both) n=17 (%)	Non-Cardiac n=60 (%)
Yes	Yes	Yes	5 (3.9)	0	0	0
Yes	Yes	No	13 (10.2)	0	2 (11.8)	0
Yes	No	Yes	5 (3.9)	0	0	0
Yes	No	No	4 (3.1)	0	3 (17.6)	0
No	Yes	Yes	32 (25.2)	0	5 (29.4)	0
No	Yes	No	22 (17.3)	0	4 (23.5)	0
No	No	Yes	45 (35.4)	1 (3.7)	3 (17.6)	0
No	No	No	0	26 (96.3)	0	60 (100)

39 MVA = microvascular angina; VSA = vasospastic angina.

40 **Table S3. Final diagnosis and true endotype in the control and intervention groups, respectively.**

Control group		True endotype				
		Microvascular angina, (n=61)	Vasospastic angina, (n=12)	Mixed (microvascular angina & vasospastic angina), (n=10)	Obstructive coronary artery disease, (n=0)	Normal coronary function, (n=33)
Final diagnosis	Microvascular angina	20 (32.8%)	5 (41.7%)	4 (40.0%)	-	11 (33.3%)
	Vasospastic angina	2 (3.3%)	2 (16.7%)	1 (10.0%)	-	1 (3.0%)
	Mixed (microvascular angina and vasospastic angina)	6 (9.8%)	0 (0%)	1 (10.0%)	-	2 (6.1%)
	Obstructive coronary artery disease	1 (1.6%)	0 (0%)	0 (0%)	-	1 (3.0%)
	Normal coronary function	32 (52.5%)	5 (41.7%)	4 (40.0%)	-	18 (54.5%)

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Intervention group		True endotype				
		Microvascular angina, (n=66)	Vasospastic angina, (n=15)	Mixed (microvascular angina & vasospastic angina), (n=7)	Obstructive coronary artery disease (n=0)	Normal coronary function, (n=27)
Final diagnosis	Microvascular angina	64 (97.0%)	0 (0%)	0 (0%)	-	0 (0%)
	Vasospastic angina	1 (1.5%)	15 (100%)	1 (14.3%)	-	0 (0%)
	Mixed (microvascular angina and vasospastic angina)	1 (1.5%)	0 (0%)	6 (85.7%)	-	0 (0%)
	Obstructive coronary artery disease	0 (0%)	0 (0%)	0 (0%)	-	0 (0%)
	Normal coronary function	0 (0%)	0 (0%)	0 (0%)	-	27 (100%)

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43 **Table S4.** Secondary Outcomes – Changes in Health Status.

	Intervention (N=115)		Control (N=116)		Estimate (95% CI), p-value
	At follow up	Change from baseline	At follow up	Change from baseline	
Quality of Life (EQ5D-5L) Utility Index score					
6 months	0.61 (0.30)	-0.02 (0.24)	0.62 (0.29)	-0.02 (0.21)	-0.01 (-0.08, 0.06), p=0.778
1 year	0.64 (0.27)	-0.03 (0.27)	0.62 (0.27)	-0.03 (0.23)	0.00 (-0.07, 0.07), p=0.998
Long term	0.55 (0.31)	-0.02 (0.19)	0.54 (0.31)	-0.03 (0.21)	0.00 (-0.07, 0.08), p=0.964
					Overall p-value = 0.992
Quality of Life (EQ5D-5L) VAS score					
6 months	64.3 (22.4)	-5.8 (18.5)	63.7 (19.7)	-4.9 (16.3)	-0.56 (-5.81, 4.68), p=0.834
1 year	66.6 (18.1)	-3.0 (16.8)	63.0 (21.1)	-4.9 (16.4)	2.27 (-3.19, 7.73), p=0.415
Long term	60.4 (20.4)	-6.3 (21.1)	59.6 (21.2)	-6.7 (17.7)	-0.72 (-6.87, 5.42), p=0.818
					Overall p-value = 0.822
Illness Perception (BIPQ)					
6 months	49.3 (11.1)	2.7 (8.6)	48.0 (10.6)	-0.9 (10.5)	2.72 (-0.25, 5.69), p=0.073
1 year	49.5 (11.9)	2.2 (8.6)	48.3 (9.7)	-0.1 (10.7)	0.82 (-2.34, 3.98), p=0.611
Long term	49.6 (13.9)	-1.9 (7.8)	52.0 (10.3)	1.2 (11.7)	-1.95 (-5.41, 1.50), p=0.267
					Overall p-value = 0.124
Psychological Distress (PHQ4)					
6 months	3.6 (3.9)	0.4 (3.3)	4.2 (4.1)	0.9 (3.0)	-0.42 (-1.38, 0.54), p=0.391
1 year	3.8 (4.1)	1.2 (3.2)	4.4 (3.9)	1.0 (3.0)	0.05 (-0.93, 1.03), p=0.925
Long term	5.4 (4.3)	0.7 (2.8)	5.1 (4.0)	0.9 (4.2)	0.02 (-1.07, 1.11), p=0.968
					Overall p-value = 0.827
Treatment Satisfaction (TSQM) – Effectiveness					
6 months	65.4 (23.3)	2.7 (22.8)	61.9 (22.5)	-2.3 (22.3)	4.58 (-1.84, 11.00), p=0.162

	Intervention (N=115)		Control (N=116)		Estimate (95% CI), p-value
	At follow up	Change from baseline	At follow up	Change from baseline	
1 year	67.3 (21.8)	5.4 (21.9)	64.1 (23.7)	0.3 (24.3)	4.65 (-1.96, 11.26), p=0.168
Long term	61.7 (19.8)	1.3 (22.8)	58.3 (19.1)	-5.2 (22.2)	5.74 (-1.85, 13.33), p=0.138
					Overall p-value = 0.192
Treatment Satisfaction (TSQM) – Convenience					
6 months	78.4 (19.3)	3.1 (20.1)	73.1 (21.3)	-1.2 (21.1)	4.80 (-1.00, 10.60), p=0.104
1 year	82.6 (17.2)	6.5 (19.0)	73.3 (21.4)	-3.7 (21.3)	9.27 (3.27, 15.27), p=0.002
Long term	72.6 (16.6)	-0.4 (19.3)	75.1 (19.7)	-0.3 (20.5)	0.05 (-6.78, 6.89), p=0.988
					Overall p-value = 0.013
Treatment Satisfaction (TSQM) – Global satisfaction					
6 months	63.4 (25.8)	-0.6 (24.0)	60.7 (26.0)	-3.3 (26.5)	2.80 (-4.20, 9.80), p=0.433
1 year	69.9 (22.8)	7.4 (25.3)	61.7 (26.9)	-2.8 (24.2)	9.24 (1.97, 16.52), p=0.013
Long term	60.4 (22.2)	-1.9 (27.9)	63.6 (18.7)	-5.0 (21.9)	1.74 (-6.41, 9.89), p=0.675
					Overall p-value = 0.095
<p>Values are mean (SD) unless otherwise stated. Estimate (95% CI) is the mean between group difference (intervention minus control) derived from a linear regression model adjusting for baseline score, age, sex, SIMD quintile and Rose Angina questionnaire result at baseline. Follow up time windows: 6 months (4-8 months), 1 year (9-17 months), long term (≥ 18 months). Illness perception: a lower score reflects a less threatening view of the illness. PHQ4: Four-item brief screening tool for anxiety and depression and higher scores indicate greater psychological distress. VAS: visual analogue score of the EQ5D validated health-related quality of life tool and higher scores indicate better quality of life.</p>					

45 **Table S5.** Cardiovascular Medical Therapy at Follow Up.

	Intervention		Control		p-value
	At baseline (N=115)	At follow up (N=91)	At baseline (N=116)	At follow up (N=95)	
Cardiologist recommended antianginal therapy					
Post-cCTA, pre-angiogram	37 (32.2%)	-	43 (37.1%)	-	0.490
Post-angiogram, pre-randomization	46 (40.0%)	-	48 (41.4%)	-	0.894
Post-angiogram, post-randomization	88 (76.5%)	-	48 (41.4%)	-	<0.001
Preventive therapy					
Aspirin	74 (64.3%)	45 (49.5%)	68 (58.6%)	48 (50.5%)	1.000
Statin	76 (66.1%)	74 (81.3%)	70 (60.3%)	68 (71.6%)	0.122
ACE inhibitor or angiotensin receptor blocker	33 (28.7%)	44 (48.4%)	35 (30.2%)	33 (34.7%)	0.103
Angina medication					
Beta-blocker	67 (58.3%)	28 (30.8%)	77 (66.4%)	50 (52.6%)	0.002
Calcium channel blocker	27 (23.5%)	48 (52.7%)	31 (26.7%)	24 (25.3%)	<0.001
Nitrates	18 (15.7%)	25 (27.5%)	18 (15.5%)	13 (13.7%)	0.029
Nicorandil	7 (6.1%)	15 (16.5%)	7 (6.0%)	7 (7.4%)	0.072
Values are n (% with data recorded at baseline and follow up). Between-group p-value is from the Fisher's Exact test and compares the n (%) at follow up.					

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47 **Table S6.** Patients' Self-Reported Compliance with Non-Pharmacological Management at Follow Up.

	Randomized			p-value
	All (N=186)	Intervention (N=91)	Control (N=95)	
Compliance with healthy diet	88 (47.8%)	43 (47.8%)	45 (47.9%)	p=0.884
Compliance with exercise	104 (56.5%)	54 (60.0%)	50 (53.2%)	p=0.464
Increase in body weight	75 (40.8%)	34 (37.8%)	41 (43.6%)	p=0.687
Compliance with cardiac rehabilitation programme	30 (16.3%)	25 (27.8%)	5 (5.3%)	p=0.003
Values are n (%). Between-group p-value is from the Fisher's Exact test.				

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49 **Table S7.** Deaths, Cause of Death and Time of Death Post-Enrollment.

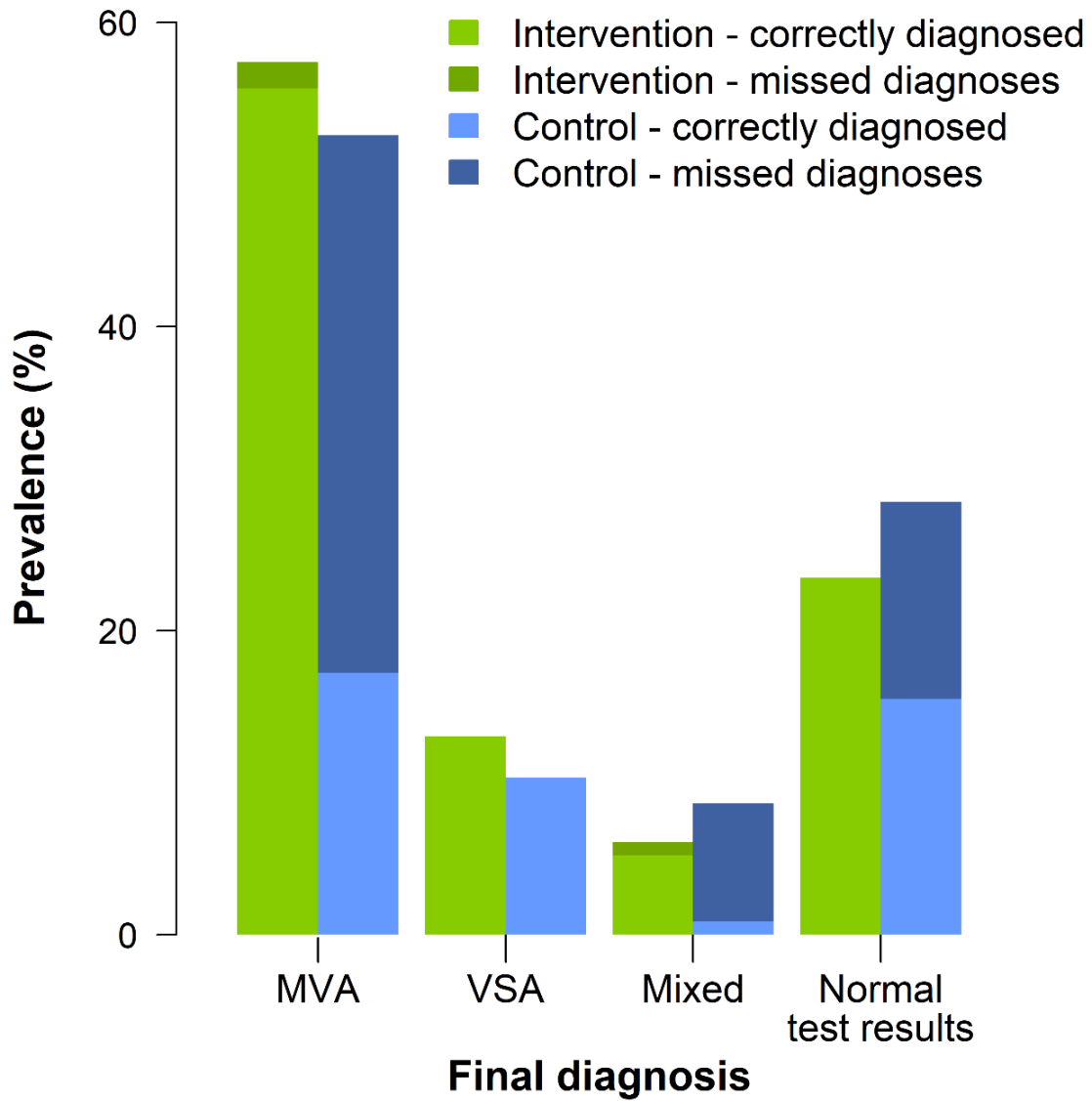
Age	Sex	Randomization group	Diagnosis	Cause of death	Time from randomization to death (months)
61	Female	Intervention	Microvascular angina	Metastatic pancreatic cancer	32
64	Female	Intervention	Microvascular angina	Metastatic pancreatic cancer	26
54	Female	Control	Microvascular angina	Chest sepsis	32

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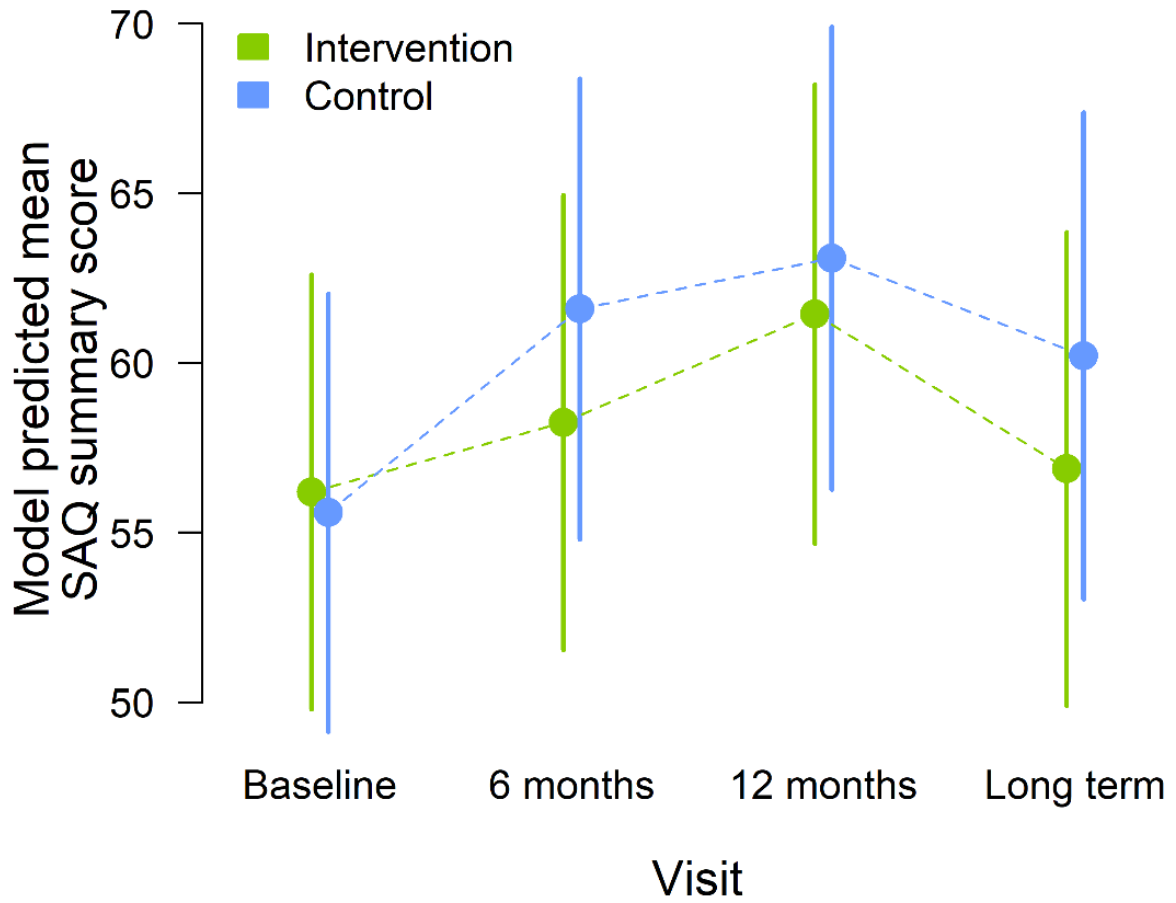
51 **Table S8.** Time From Enrollment to Follow-Up.

		Randomized		
		Intervention (N=115)	Control (N=116)	p-value
Provided 1 st follow up response (<i>questionnaires</i>)	N (%)	92 (80.0%)	89 (76.7%)	0.632
Time to 1 st follow up response (days)	Median (IQR) [Min, Max]	212 (191, 271) [152, 639]	209 (190, 241) [142, 1109]	0.613
Provided 1 st follow up response within 182 (+14) days	N (%) Yes N (%) No	29 (25.2%) 86 (74.8%)	28 (24.1%) 88 (75.9%)	0.880
Completed 2 nd follow up (<i>in-person visit</i>)	N (%)	91 (79.1%)	95 (81.9%)	0.622
Time to 2 nd follow up (days)	Median (IQR) [Min, Max]	581 (388, 800) [236, 1510]	684 (390, 844) [227, 1105]	0.508
Completed 2 nd follow up within 365 (+ 14) days	N (%) Yes N (%) No	19 (16.5%) 96 (83.5%)	21 (18.1%) 95 (81.9%)	0.862
Provided 3 rd follow up response (<i>questionnaires</i>)	N (%)	9 (7.8%)	3 (2.6%)	0.083
Time to 3 rd follow up response (days)	Median [Min, Max]	719 [442, 812]	733 [732, 1077]	0.209
Follow up undertaken during COVID-19 pandemic*	N (%)	79 (68.7%)	74 (63.8%)	0.487
Between-group p-value is from the Fisher's Exact test for categorical variables or the Mann-Whitney U test for continuous variables.				
*Defined as randomization or any follow-up on or after March 16, 2020.				

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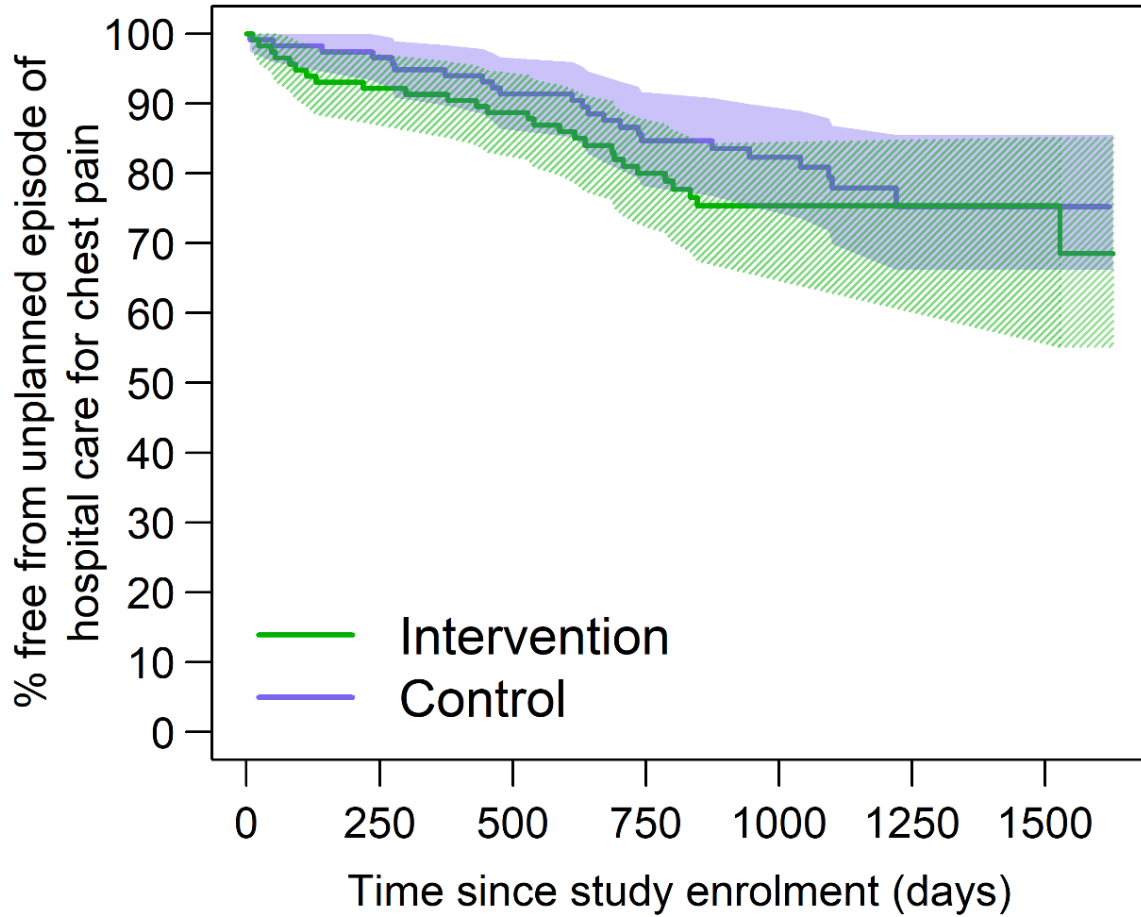
54 **Figure S1.** Prevalence of True Disease Endotypes in the Randomized Population.

56 **Figure S2.** Change in Seattle Angina Questionnaire Summary Score at Follow-up.



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58 **Figure S3.** Unplanned Episodes of Hospital Care for Chest Pain During Follow-Up.



Intervention	115	106	100	72	11	11	11
Control	116	112	98	74	58	0	0

59

60 **Footnote**

61 Kaplan-Meier survival plot of time from study enrollment until first unplanned episode of hospital
 62 care for chest pain, by randomized group. The solid line presents the survival probability estimate and
 63 the shaded area covers the area between the upper and lower 95% confidence intervals. The p-value is
 64 derived from the log-rank test comparing the survival curve of each randomized group. The number
 65 at risk at each time point is presented beneath the x-axis, by randomized group.

66 **Supplemental Appendix - Physician and patient management plans by diagnosis**

67 This medical management guidance was based on guidelines from the European Society of
68 Cardiology (Eur Heart J. 2013 PMID: 23996286 and Eur Heart J 2020, PMID: 31504439).
69 After the angiogram, at the time of discharge from hospital, the guidance document was
70 provided as an adjunct to a discharge letter to the attending cardiologist and general
71 practitioner. A guidance document was also provided to the patient. This guidance document
72 was written in plain English, and it also included web-links to information provided by the
73 British Heart Foundation. These documents were included in Appendices 6 and 7 of the
74 protocol approved by the ethics committee and the hospital.

75 The management plan was specific to the endotype: microvascular angina, vasospastic angina,
76 obstructive coronary artery disease and non-cardiac chest pain. If a patient had a diagnosis of
77 angina due to both microvascular and vasospastic disease then the guidance documents for
78 each of these conditions were used.

79 Physician management plans were focused on microvascular angina and vasospastic angina.
80 Patient guidance documents were provided for microvascular angina, vasospastic angina,
81 obstructive coronary artery disease and non-cardiac chest pain.

82

Physician guidance letter by diagnosis

83 **Diagnosis – Microvascular angina**

84 We have provided guidance to assist in managing microvascular angina based on the 2013
85 ESC guidelines, updated in 2019 (Eur Heart J 2020, PMID: 31504439), and the Scottish
86 Intercollegiate Guidelines Network (SIGN) guidelines.

87 **Pharmacological management**

- 88 • **Calcium antagonists** (e.g. **Verapamil** 40mg BD up-titrated weekly according to
89 response)
 - 90 ○ Or Beta-blockers (e.g. 1.25mg **Bisoprolol** up-titrated or alternatively 3.125 mg
91 of carvedilol twice daily with up-titration if feasible and appropriate, see
92 Summary of Product Characteristics;
93 <https://www.medicines.org.uk/emc/medicine/27714>)
- 94 • **Aspirin, Statin** or **ACEI** may be reasonable (depending on patient characteristics)
- 95 • Short-acting PRN nitrate (e.g. **Sublingual GTN**)
- 96 • **Nicorandil** if refractory symptoms (e.g. 5mg BD up-titrated weekly according to
97 response)
- 98 • Xanthine inhibitors (aminophylline) – if refractory to all above

99 **Non-Pharmacological lifestyle & risk factor control**

- 100 • **Smoking** “Smoking is a strong and independent risk factor for CVD and all smoking,
101 including environmental smoking exposure, must be avoided in all patients with
102 CVD.”
- 103 • **Diet** “A healthy diet reduces CVD risk... Energy intake should be limited to the
104 amount of energy needed to maintain (or obtain) a healthy weight—that is, a BMI <25
105 kg/m².”
- 106 • **Exercise** “moderate-to-vigorous intensity aerobic exercise training ≥ 3 times a week”
107 (30 min)
- 108 • **Weight** “Weight reduction in overweight and obese people is recommended in order
109 to achieve favorable effects on BP, dyslipidemia and glucose metabolism.”
- 110 • **Lipids** – “The goals of treatment are LDL-C below 1.8 mmol/L.”
- 111 • **Hypertension** – “SBP/DBP to values within the range 130–139/80–85 mmHg”
- 112 • **Diabetes** “good control of glycated hemoglobin (HbA1c) to <7.0%...based on
113 individual considerations.”
- 114 • **Psychosocial** “Patients should be assessed for psychosocial distress and appropriate
115 care offered. Refer for psychotherapy, medication or collaborative care in the case of
116 clinically significant symptoms of depression, anxiety and hostility.”

117 • **Cardiac rehabilitation** “A comprehensive risk-reduction regimen, integrated into
118 comprehensive cardiac rehabilitation, is recommended to patients with CAD.”

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1. Task Force M, Montalescot G, Sechtem U, Achenbach S, Andreotti F, Arden C, et al. 2013 ESC guidelines on the management of stable coronary artery disease: the Task Force on the management of stable coronary artery disease of the European Society of Cardiology. *European heart journal*. 2013;34(38):2949-3003.
2. SIGN. Guideline No. 96 - Management of stable angina. Edinburgh: Scottish Intercollegiate Guidelines Network (SIGN); 2007.

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Physician management plan by diagnosis

121 **Diagnosis – Vasospastic angina**

122 We have provided guidance to assist in managing microvascular angina based on the 2013
123 ESC guidelines, updated in 2019 (Eur Heart J 2020, PMID: 31504439), and the Scottish
124 Intercollegiate Guidelines Network (SIGN) guidelines.

125 **Pharmacological management**

- 126 • **Non-dihydropyridine calcium channel blocker** (e.g. **Verapamil** initially 40mg BD
127 increasing at weekly intervals as tolerated up to 240-360 mg daily)
- 128 • +/- **Long-acting nitrates** if symptoms ongoing (scheduled to cover the period of the
129 day in which ischaemic episodes most frequently occur, to prevent nitrate tolerance.
- 130 • β -Blockers should be avoided.
- 131 • **Aspirin, statin and ACE-I** therapy may be reasonable, and is recommended if
132 coronary disease is revealed by coronary angiography (CTCA or invasive)

133 **Non-Pharmacological lifestyle & risk factor control**

- 134 • **Specific to vasospastic angina** – “exclude cocaine/amphetamine use.”
- 135 • **Smoking** “Smoking is a strong and independent risk factor for CVD and all smoking,
136 including environmental smoking exposure, must be avoided in all patients with
137 CVD.”
- 138 • **Diet** “A healthy diet reduces CVD risk... Energy intake should be limited to the
139 amount of energy needed to maintain (or obtain) a healthy weight—that is, a BMI <25
140 kg/m².”
- 141 • **Exercise** “moderate-to-vigorous intensity aerobic exercise training ≥ 3 times a week”
142 (30 min)
- 143 • **Weight** “Weight reduction in overweight and obese people is recommended in order
144 to achieve favorable effects on BP, dyslipidemia and glucose metabolism.”
- 145 • **Lipids** – “The goals of treatment are LDL-C below 1.8 mmol/L.”
- 146 • **Hypertension** – “SBP/DBP to values within the range 130–139/80–85 mmHg”
- 147 • **Diabetes** “good control of glycated hemoglobin (HbA1c) to <7.0%...based on
148 individual considerations.”
- 149 • **Psychosocial** “Patients should be assessed for psychosocial distress and appropriate
150 care offered... Refer for psychotherapy, medication or collaborative care in the case
151 of clinically significant symptoms of depression, anxiety and hostility.”

152 **Cardiac rehabilitation** “A comprehensive risk-reduction regimen, integrated into
153 comprehensive cardiac rehabilitation, is recommended.”
154

1. Task Force M, Montalescot G, Sechtem U, Achenbach S, Andreotti F, Arden C, et al. 2013 ESC guidelines on the management of stable coronary artery disease: the Task Force on the management of stable coronary artery disease of the European Society of Cardiology. *European heart journal*. 2013;34(38):2949-3003.
2. SIGN. Guideline No. 96 - Management of stable angina. Edinburgh: Scottish Intercollegiate Guidelines Network (SIGN); 2007.

156 This guidance is intended for patients in the Disclosed Group. The information is based on
157 guidelines from the European Society of Cardiology and SIGN. The guidance is intended for
158 the patient. Guidance will be provided following the invasive coronary angiogram.
159

160 CorCTCA Study - Discharge guidance

161 Diagnosis – Microvascular angina

162 [https://www.bhf.org.uk/information-support/heart-matters-magazine/medical/ask-the-](https://www.bhf.org.uk/information-support/heart-matters-magazine/medical/ask-the-experts/microvascular-angina)
163 [experts/microvascular-angina](https://www.bhf.org.uk/information-support/heart-matters-magazine/medical/ask-the-experts/microvascular-angina)

165 Medication

166 Taking your medication is important to control your symptoms. If you feel that your
167 symptoms are not adequately controlled, please see your GP to have them adjusted.
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169 Smoking

170 All smoking, including environmental smoking exposure, must be avoided. Smoking is a
171 strong and independent risk factor for heart disease.

172 For more information, visit:

173 <https://www.bhf.org.uk/heart-health/risk-factors/smoking>
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175 Diet

176 A healthy diet reduces the risk of heart disease. Calorie intake should be limited to the
177 amount of energy needed to maintain (or obtain) a healthy weight—that is, a BMI of <25
178 kg/m².

179 For more information, visit:

180 <https://www.bhf.org.uk/heart-health/preventing-heart-disease/healthy-eating>
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182 Exercise

183 Keeping active is important. You should exercise for 30 minutes ≥3 times a week.

184 For more information, visit:

185 <https://www.bhf.org.uk/heart-health/preventing-heart-disease/staying-active>
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187 Weight

188 Weight reduction (if overweight) is recommended to achieve favorable effects on blood
189 pressure, cholesterol, and diabetes control.

190 For more information, visit:

191 <https://www.bhf.org.uk/heart-health/preventing-heart-disease/managing-your-weight>
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193 Cholesterol

194 Aim for a normal cholesterol level. Please have your GP check your cholesterol and modify
195 your medication until this is achieved.

196 For more information, visit:

197 <https://www.bhf.org.uk/heart-health/risk-factors/high-cholesterol>

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High blood pressure

Your blood pressure should be within the range of 130–139/80–85 mmHg – please have your GP check your blood pressure and modify your medication until this is achieved.

For more information, visit:

<https://www.bhf.org.uk/heart-health/risk-factors/high-blood-pressure>

Diabetes

A healthy, low-sugar diet and regular exercise will help.

For more information, visit:

<https://www.bhf.org.uk/heart-health/risk-factors/diabetes>

Stress

If you suffer from anxiety or depression, psychotherapy, medication and collaborative care are available through the primary care service and can be offered to you by your GP.

For more information, visit

<https://www.bhf.org.uk/heart-health/preventing-heart-disease/stress>

<https://www.bhf.org.uk/heart-health/preventing-heart-disease/heart-and-mental-health>

Cardiac rehabilitation

A cardiac rehabilitation programme is recommended to all patients with heart disease. You have been referred to your local cardiac rehabilitation service – please attend for your appointment.

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Patient guidance letter by diagnosis

CorCTCA Study - Discharge guidance

Diagnosis – Vasospastic angina

<https://www.bhf.org.uk/information-support/conditions/vasospastic-angina>

Medication

Taking your medication is important to control your symptoms. If you feel that your symptoms are not adequately controlled, please see your GP to have them adjusted.

Smoking

All smoking, including environmental smoking exposure, must be avoided. Smoking is a strong and independent risk factor for heart disease.

For more information, visit:

<https://www.bhf.org.uk/heart-health/risk-factors/smoking>

Diet

A healthy diet reduces the risk of heart disease. Calorie intake should be limited to the amount of energy needed to maintain (or obtain) a healthy weight—that is, a BMI of <25 kg/m².

For more information, visit:

<https://www.bhf.org.uk/heart-health/preventing-heart-disease/healthy-eating>

Exercise

Keeping active is important. You should exercise for 30 minutes ≥3 times a week.

For more information, visit:

<https://www.bhf.org.uk/heart-health/preventing-heart-disease/staying-active>

Weight

Weight reduction (if overweight) is recommended to achieve favorable effects on blood pressure, cholesterol, and diabetes control.

For more information, visit:

<https://www.bhf.org.uk/heart-health/preventing-heart-disease/managing-your-weight>

Cholesterol

Aim for a normal cholesterol level. Please have your GP check your cholesterol and modify your medication until this is achieved.

For more information, visit:

<https://www.bhf.org.uk/heart-health/risk-factors/high-cholesterol>

High blood pressure

Your blood pressure should be within the range of 130–139/80–85 mmHg – please have your GP check your blood pressure and modify your medication until this is achieved.

For more information, visit:

<https://www.bhf.org.uk/heart-health/risk-factors/high-blood-pressure>

266

267 **Diabetes**

268 A healthy, low-sugar diet and regular exercise will help.

269 For more information, visit:

270 <https://www.bhf.org.uk/heart-health/risk-factors/diabetes>

271

272 **Stress**

273 If you suffer from anxiety or depression, psychotherapy, medication and collaborative care
274 are available through the primary care service and can be offered to you by your GP.

275 For more information, visit

276 <https://www.bhf.org.uk/heart-health/preventing-heart-disease/stress>

277 <https://www.bhf.org.uk/heart-health/preventing-heart-disease/heart-and-mental-health>

278

279 **Cardiac rehabilitation**

280 A cardiac rehabilitation programme is recommended to all patients with heart disease. You
281 have been referred to your local cardiac rehabilitation service – please attend for your
282 appointment.

283 **Patient guidance letter by diagnosis**

284 **CorCTCA Study - Discharge guidance**

285 **Diagnosis – Obstructive Coronary Artery Disease**

286 **Medication**

287 If you've had stent(s) inserted, it is vital that you take your blood thinners (antiplatelets)
288 regularly as directed. They prevent the new stent(s) from blocking up.

289 If you've not had any stents inserted, your prescribed medications are important to reduce the
290 risk of heart attacks and to control your symptoms. If you feel that your symptoms are not
291 adequately controlled, please see your GP to have them adjusted and/or re-referral to the
292 cardiology service.

293

294 **Smoking**

295 All smoking, including environmental smoking exposure, must be avoided. Smoking is a
296 strong and independent risk factor for heart disease.

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298 <https://www.bhf.org.uk/heart-health/risk-factors/smoking>

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302 amount of energy needed to maintain (or obtain) a healthy weight—that is, a BMI of <25
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330 **Diabetes**

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342 **Cardiac rehabilitation**

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344 have been referred to your local cardiac rehabilitation service – please attend for your
345 appointment.

346

Patient guidance letter by diagnosis

347 CorCTCA Study - Discharge guidance

348 Diagnosis – Non-cardiac chest pain

349

350 Symptom management

351 We have excluded heart disease as a cause of your chest discomfort. This is reassuring.
352 If further tests or referrals have been organized for you, please attend your appointment.
353 If your symptoms persist, please see your GP.

354

355 Medication

356 Some or all of your heart medication can now be reduced or stopped.
357 Please discuss this with your GP.

358

359 Prevention of future heart disease – Smoking

360 All smoking, including environmental smoking exposure, must be avoided. Smoking is a
361 strong and independent risk factor for heart disease.

362 For more information, visit:

363 <https://www.bhf.org.uk/heart-health/risk-factors/smoking>

364

365 Prevention of future heart disease – Diet

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367 amount of energy needed to maintain (or obtain) a healthy weight—that is, a BMI of <25
368 kg/m².

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