Appendix 1 – Studies Excluded from the Meta-Analysis

	Subjects Study Type	Exclusion Criteria	Total N of pts with EI-PVC	Exer-cise Proto-col	Mean Age % Male	Patient Charac-teristics Mean EF	Confoun-der Adjust-ment Statistics Method	% with Isch-aemia on Exer-cise Test	EI-PVC Threshold EI-PVC Specification	End-Points	Follow Up (yrs)	RR of End Points in pts with EI-PVCs compared to control
Bruce et al., 1980[16]	Healthy Men Clinically Free from CAD Prospective Cohort	Angina, Previous MI, Apparent Heart Disease, DM, HTN	Hx free of angina and MI, CXR 331	Bruce	44 100%	0% MI 0% DM 0% HTN Not Available	No Adjustment on the Raw Data	Bruce 11%	Any EI-PVC During and Post-exercise No Info on PVC Frequency, Morphology and Proportion of Rest or Recovery PVCs	CV Events – Cardiac Hospital Ad-mission	5.6	**1.5** (0.70-3.07) *Unadjusted*
Califf et al., 1983[10]	Patients who had angiogram and ET. 46% had Angina,39% had TVD; 25% MI Prospective Cohort	None .	236	Bruce	50 N/A	46% had Angina,39% had TVD; 25% MI Mean EF of 58%	No adjustment	Not Avail-able	Any PVC During and Post-Exercise 2% has Rest PVC. No info on PVC Morphology, Frequency or Recovery PVCs	All Cause Mortality	3	**3.0** (2.09-4.31) *Unadjusted* But once angiogram data is controlled for, no predictive power of EI-PVC
Casella et al., 1993[19]	1 year after MI Prospective Cohort	None	228	Bruce	57 91%	100% MI Mean EF of 55%	No adjustment	28%	Any PVC During Exercise 0% had PVC During Recovery, 7.8% had Complex PVC . No Info on Frequency and Rest PVC	All Cause Mortality	2	**0.63** (0.23-1.70) *Unadjusted*
DeBusk et al., 1980[20]	3 wks Post MI Prospective Cohort	Unstable Angina,CCF, Valvular Heart Disease	55	Nau-ghton	52 Not Available	100% MI Not Available	No adjustment	Not Avail-able	Any PVC During and Post-Exercise 28% had Complex PVC (Bigeminy, Couplet or VT). No Info on Rest or Recovery PVC or PVC Frequency	CV Events – MI, Cardiac Arrest or Sudden Death	2	**0.89** (0.24-3.28) *Unadjusted* Logistic Regression Controlling for Age and Ischaemic ET Showed Neutral Effect

Study	Population / Design	Exclusions	N	Protocol		Comorbidities	Adjustment		PVC Definition	Outcome		Hazard Ratio
					100%							
Elhendy et al., 2002[8]	Chest Pain, Interme-diate Pre-Test Probability of CAD. 88% has chest pain or dyspnoea. Prospective Cohort	Previous MI, Previous Revas-culari-sation	146	Bruce	67 / 65%	55% HTN, 9% DM, Mean EF of 57%	No adjustment	19%	>5 PVC/ min or Complex PVC During and Post-exercise. 36% had Complex Multiform PVC. No Rest PVCs. No Info on Recovery PVC or Frequency	CV Events – Non fatal MI, Cardiac death	2.7	**2.5** (1.05-6.12) *Unadjusted* Once Multivariate Cox adjusted for EF and Exercise-RWMA on Stress Echo, EI-PVCs are no longer predictive
Ericsson et al., 1973[21]	3 wks Post MI Prospective Cohort	None	19	Treadmill test at 0.5 m/s	N/A / 93%	100% MI Not Available	No adjustment	Not Avail-able	>5 PVC/min During and Post-Exercise. 10% had Rest PVCs. 42% Multifocal. No Info on Recovery PVC or PVC Freq	All Cause Mortality	0.25	**4.7** (0.61-3.53) *Unadjusted*
Granath et al., 1977[23]	3 wks Post MI Prospective Cohort	None	40	NS	59 / 89%	100% MI Not Available	No adjustment	Not Avail-able	>5 PVC/min or Paired/ Multifocal During and Post-Exercise. No info on Morphology, Frequency, Rest or Recovery PVC	All Cause Mortality	3	**2.9** (1.35-6.26) *Unadjusted*
Henry et al., 1987[24]	Post MI Patients Pre- discharge Prospective Cohort	None	20	Naug-hton	53 / Not Avail-able	100% MI Not Available	No adjustment	42%	5 or more PVCs or Couplets, VT, Multiform During and Post-Exercise. No info on PVC Morphology, Rest or Recovery PVC	All Cause Mortality	2	**3.6** (1.13-11.7) *Unadjusted*

Study	Population / Design	Comorbidities	N	Exercise Test	Age	Risk Factors	Adjustment	Prevalence	PVC Definition	Endpoint	Follow-up	Hazard Ratio
Ivanova et al., 1980[25]	Establ-ished ischaemic heart disease Prospective Cohort	Heart Failure, Unstable Angina	20	Bi-cycle Test	51 100%	100% MI Not Available	No adjustment	34%	>3 PVC/ min or >Lown Grade 2 During and Post-Exercise No Info on Morphology, Freq, Rest or Recovery PVC	Sudden Death – Unexpec-ted Death Within 6 Hrs of Symptom	2	**4.9** (1.25-19.3) *Unadjusted*
Krone et al, 1985[26]	Post MI Patients Pre discharge Prospective Cohort	Life-threaten-ing Co-morbidi-ties	289	Bruce	N/A 80%	100% MI 16% had Couplets. No Info on Morphology, Pre and Post PVCs. Not Available	No adjustment	18%	Any PVC During and Post-Exercise	CV Mortality	1	**2.5** (1.17-5.26) *Unadjusted* Logistic Regression controlling for age and ischaemic ET, EF still showed increased endpoints with EI-PVC
Markiewicz et al, 1977[11]	3-11 Weeks Post MI patients Prospective Cohort	None	19	Naug-hton	54 100%	100% MI Not Available	No adjustment	40%	PVC >3/min, Couplets or VT During and Post-exercise 20% Complex PVC. No info Rest or Recovery PVC	CV Events – sudden death, VF, MI	1.5	**1.78** (0.35-9.16) *Unadjusted*
Meine et al., 2006[36] **(During)**	Patients undergoing Angiogram. 35% MI, 21% has TVD Prospective Cohort	None	399	NS	59 82%	60% HTN, 5.5%. DM, 21% CABG, 36.8% PCI, 35% MI Mean EF of 58%	No adjustment	59% had ischa-emia on MPS	Any PVC During Exercise and Recovery 0% had PVCs in Recovery. No Info on PVC Morphology or Frequency	All Cause Mortality	4.6	**0.65** (0.44-0.97) *Unadjusted* Once Multivariate Cox Controls for Age, risk factors, Angiographic data and Ischaemia on MPS and Angiographic data, EI-PVCs not predictive

Study	Population / Design	Exclusions	N	Protocol	Age		Comorbidities	Adjustment	Ischemia	PVC Definition	Outcome	Follow-up (yrs)	HR (95% CI)
Meine et al., 2006[36] (Post)	Patients undergoing Angiogram.42% MI, 32% TVD Prospective Cohort	None	330	NS	63 71%		67% HTN, 26%.DM 26% CABG, 37% PCI, 42% MI Not Available	None	62% had ischa-emia on MPS	Any PVC During Exercise and Recovery 100% had PVCs During Recovery. No Info on PVC Morphology or Frequency	All Cause Mortality	4.6	**1.49** (1.15-1.83) *Unadjusted* Once Multivariate Cox controls for Age, CVRF, CAD and Ischaemia on MPS and Angiographic data, EI-PVC not predictive
Nair et al., 1983[18]	Chest pain with normal ECG Prospective Cohort	Previous MI, Valvular Heart Disease	76	Bruce	56 71%		58% had significant CAD on angio-gram, 0% MI Not Available	No adjustment	Not Avail-able	>10/min No one had Rest PVCs No Info on PVC Morphology or Recovery PVCs	CV Events – Nonfatal MI, Cardiac Death	3.9	**1.11** (0.44-2.80) *Unadjusted*
Nair et al., 1984[12]	Patients with angiographic proven coronary artery disease Prospective Cohort	Cardio-myo-pathy, Valvular Heart Disease, MI	30	Bruce	59 Not Avail		52% MI Not Available	No Adjustment	16%	Complex EI-PVC: Couplets or Multiform During and Post-Exercise No Info on PVC Morphology, Frequency, Rest and Recovery PVC	CV Mortality	4.1	**1.3** (0.39-4.04) *Unadjusted*
Peduzzi et al., 1986[28]	Veterans Adminis-tration Study Patients; All had Signi-ficant Operable CAD	None	44	Bruce	Not Avail-able		34% MI ; 30% HTN, 49% impaired LV, 38% MI	No Adjustment	23%	Any PVC During and Post-Exercise	Death	7	**2.74** (1.39-5.38) *Unadjusted*

Study	Population	Medication	N	Protocol	Age	Risk Factors	Adjustment	%	PVC Definition	Outcome	Follow-up	Result
Prospective Cohort					Not Available	Not Available			No Info on PVC Morphology, Frequency, Rest or Recovery PVC			Cox regression controlling for angiographic shows EI-PVC is still predictive of death
Sami et al., 1984[29] Prospective Cohort	Stable CAD patients; Post MI	CABG On Anti-Arrhyth-mics	146	Bruce	50 93%	85% Sm, 24% HTN, 67% Angina, 17% MI Mean EF of 52%	No adjustment	Not Avail-able	Any PVC during or in recovery No info on morphology, frequency, rest or recovery PVCs	All Cause Mortality	4.3	**1.27** (0.75-2.14) *Unadjusted* Cox analysis controlling for angiographic and LV function data showed neutral effect
Schweikert et al., 1999[30] Prospective Cohort	Known or suspected CAD	Cardio-myo-pathy, Heart Failure, Valvular Heart Disease	128	Bruce	62 82%	13% Sm, 13% DM, 45%HTN, 7% CAD Not Available	No adjustment	24%	>7 PVC/min, Couplets, Triplets, Bigeminy, Trigenimy No one had Rest PVCs. No Info on PVC Morphology, Freq and Recovery PVC	All Cause Mortality	2	**1.60** (0.64-4.03) *Unadjusted* Multivariate analysis controlling for age, CVRF also found neutral effect
Stone et al., 1986[13] Prospective Cohort	6 months Post MI patients	Inability to Take Exercise Test	130	NS	Not Avail-able Not Avail-able	100% MI Not Available	No adjustment	28%	Any PVC During and Post-Exercise No Info on PVC Morphology, Frequency, Rest or Recovery PVCs	All Cause Mortality	1	**7.43** (1.94-28.5) *Unadjusted*
Verdile et al.,[14]	Athletes without heart disease	None	367	Bicycle Protocol of Institute of Sports Medicine and Science, Italy	Not Avai-lable	Not Available	No adjustment	Not avail-ble	> 1 EI-PVC	Sudden Cardiac Death, MACE	7.4	Zero Endpoints

Study	Population / Design		N	Exercise Protocol		Clinical Characteristics	Adjustment		PVC Description	Outcome		Result
Weld et al., 1981[15]	Post MI Patients Pre-discharge Prospective Cohort	None	102	Modified Bruce	Not Available Not Available	100% MI Not Available	No Adjustment	22%	Any PVC During and Post-Exercise 43% had Multiform, 18% had Couplets, 8% had VT, 24% had at least 10/hour	CV Mortality	1	**4.99** (1.76-14.1) *Unadjusted* Logistic Regression controlling for age and prior MI found increased endpoints with EI-PVC
Weiner et al., 1983[31]	Chest Pain or Known CAD Prospective Cohort	None	86	Bruce	53 90%	76% Angina, 91% significant CAD, 44% MI Mean EF of 56%	No Adjustment	35%	Any PVC During and Post-exercise 40% had Complex PVC No Info on PVC Freq	CV Mortality	5.3	**1.44** (0.55-3.77) *Unadjusted*
Yang et al., 1991[33]	Mixture of Patients 25% Angina, 11% MI Prospective Cohort	None	62	Modified Balke	55 Not Available	MI 33% CABG 13%, 40$ MI Mean EF of 44%	No adjustment	23%	Exercise Induced VT 13% had Rest PVC, 47% During, 45% Post No Info on VT Morphology or Frequency	All Cause Mortality	2.2	**0.70** (0.17-2.90) *Unadjusted*