

RADICAL PC: A Prospective Multicentre Study of Cardiovascular Disease in Men with Prostate Cancer

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INTRODUCTION

Administrative data suggest that cardiovascular (CV) disease develops frequently in men with prostate cancer (PC). Known CV risk factors may account for some of the risk, however PC-specific factors, including androgen deprivation therapy (ADT) may also play a role. The goals of RADICAL PC are to identify the incidence and major determinants of CV disease, and to evaluate whether systematic CV risk factor modification reduces adverse CV events in men with PC. We report the findings for the pilot phase of this study.

METHODS

RADICAL PC recruits consecutive men with a new diagnosis of PC or commencing ADT for the 1st time. Those without a cardiologist are randomized in an open manner to receive a CV intervention (aspirin, statin, blood pressure-lowering to target systolic of 130mmHg, and standardized exercise and dietary counseling). Those not randomized are followed to provide a representative sample. At least 6000 men from at least 15 sites will be recruited and followed for 3 years. Renal function, lipids, and HbA1c will be measured serially. The primary endpoint is the composite of CV death, myocardial infarction, stroke, heart failure, or arterial revascularization.

RESULTS

The characteristics of the first 240 participants, from 3 Canadian sites, are presented. Of these, 229 were newly diagnosed and 49 were receiving ADT for the 1st time. Of all participants, 52% have been randomized, and the remainder are undergoing passive follow up. Of the 169 participants with no known hypertension, 26% had blood pressure in the hypertensive range.

Median age (25-75 th percentile)	68 (61-73)
Metastatic disease, %	6
PC Management	
Prostatectomy	19
Radiotherapy	20
Alcohol, %	
Current	65
Former	9
Never	26
Tobacco, %	
Current	11
Former	45
Never	44
Diabetes, %	17
Coronary disease, %	29
Heart failure, %	3
Atrial fibrillation, %	6
Stroke, %	6
Non-PC cancer, %	24
Chronic obstructive pulmonary disease, %	6
Depression/anxiety, %	12
Arthritis	29
Systolic/diastolic blood pressure, mmHg	140±18 / 84±12
Overweight/obese (body-mass index >25)	74%
Increased ethnicity-specific waist circumference	63%
Median 6-minute walk distance (25-75 th percentile)	490 (399-584)

CONCLUSION

There is a high burden of undertreated CV risk factors among men with newly diagnosed PC.