Supplementary Online Content

Mandsager K, Harb S, Cremer P, Phelan D, Nissen SE, Jaber W. Association of cardiorespiratory fitness with long-term mortality among adults undergoing exercise treadmill testing. *JAMA Netw Open.* 2018;1(6):e20183605.

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This supplementary material has been provided by the authors to give readers additional information about their work.

eMethods. Definitions of Comorbid Conditions

Coronary Artery Disease: prior myocardial infarction or prior coronary revascularization

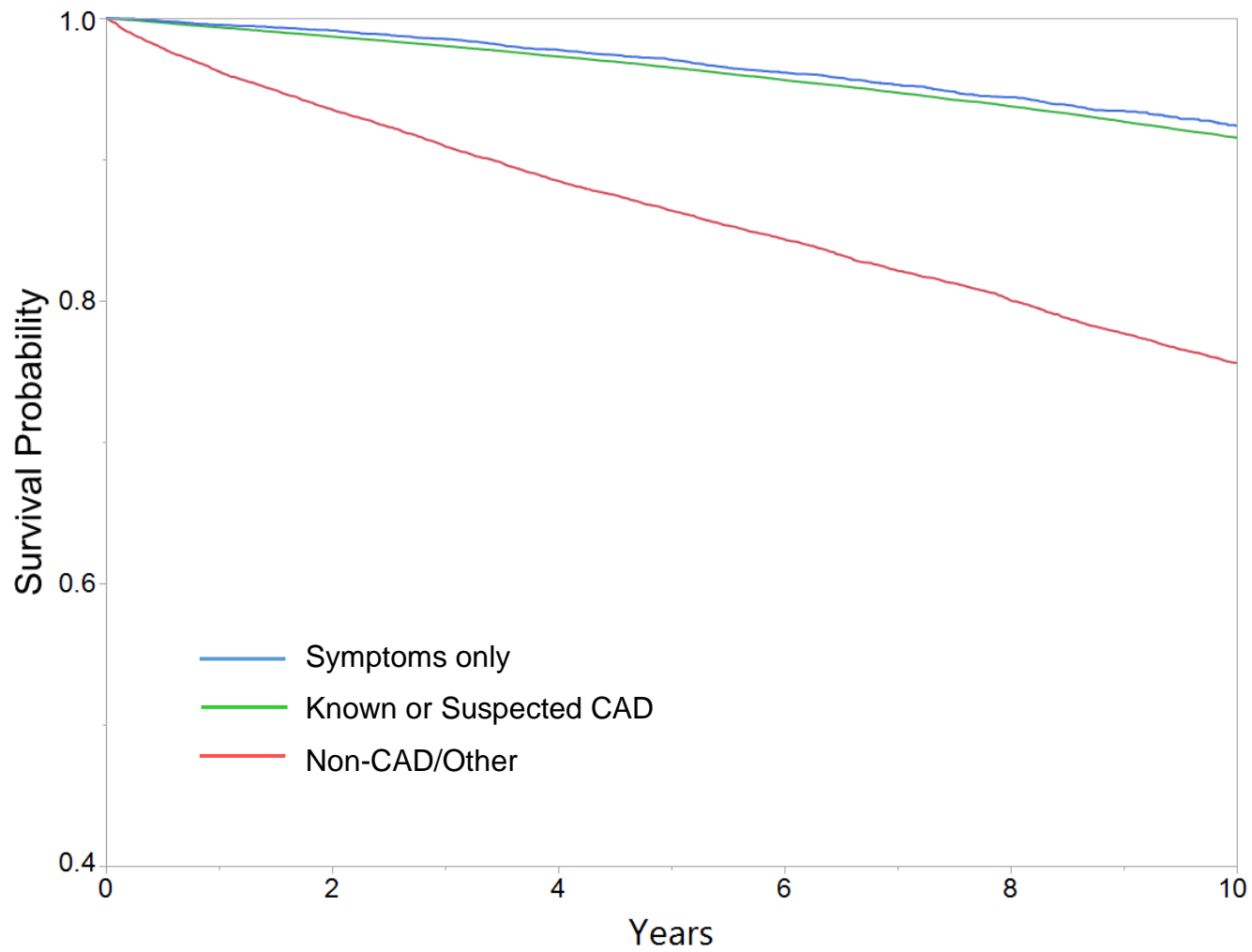*Diabetes Mellitus*: self-reported history or use of glucose-lowering medications

Hypertension: self-reported history or use of anti-hypertensive medications (angiotensin converting enzyme

inhibitors, angiotensin receptor blockers, calcium channel blockers, or thiazide diuretics)

Hyperlipidemia: Abnormal lipid panel (meeting accepted diagnostic criteria at the time of treadmill testing) or use of

statin medications
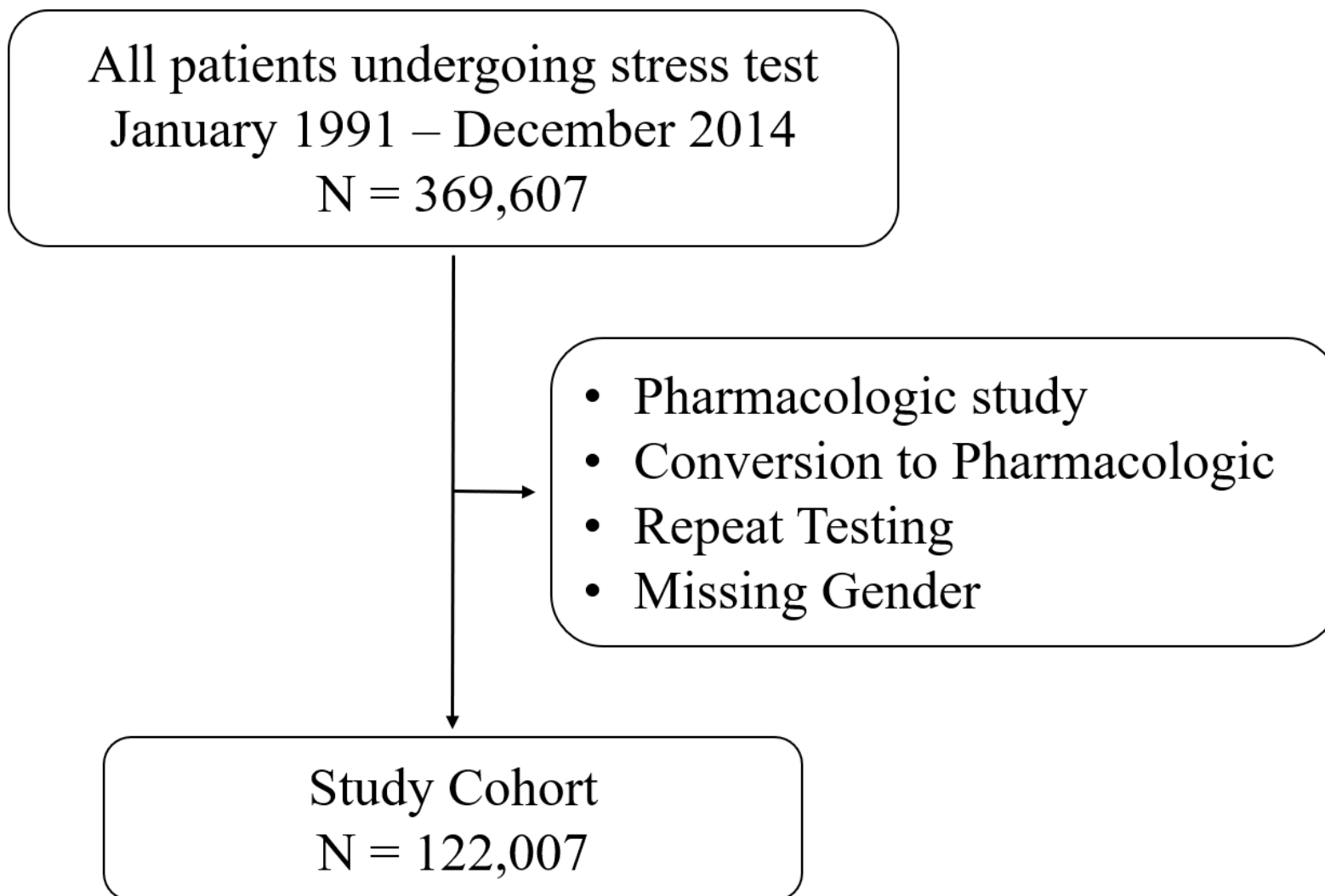
Smoker: current or prior tobacco use

End-stage renal disease: receiving dialysis

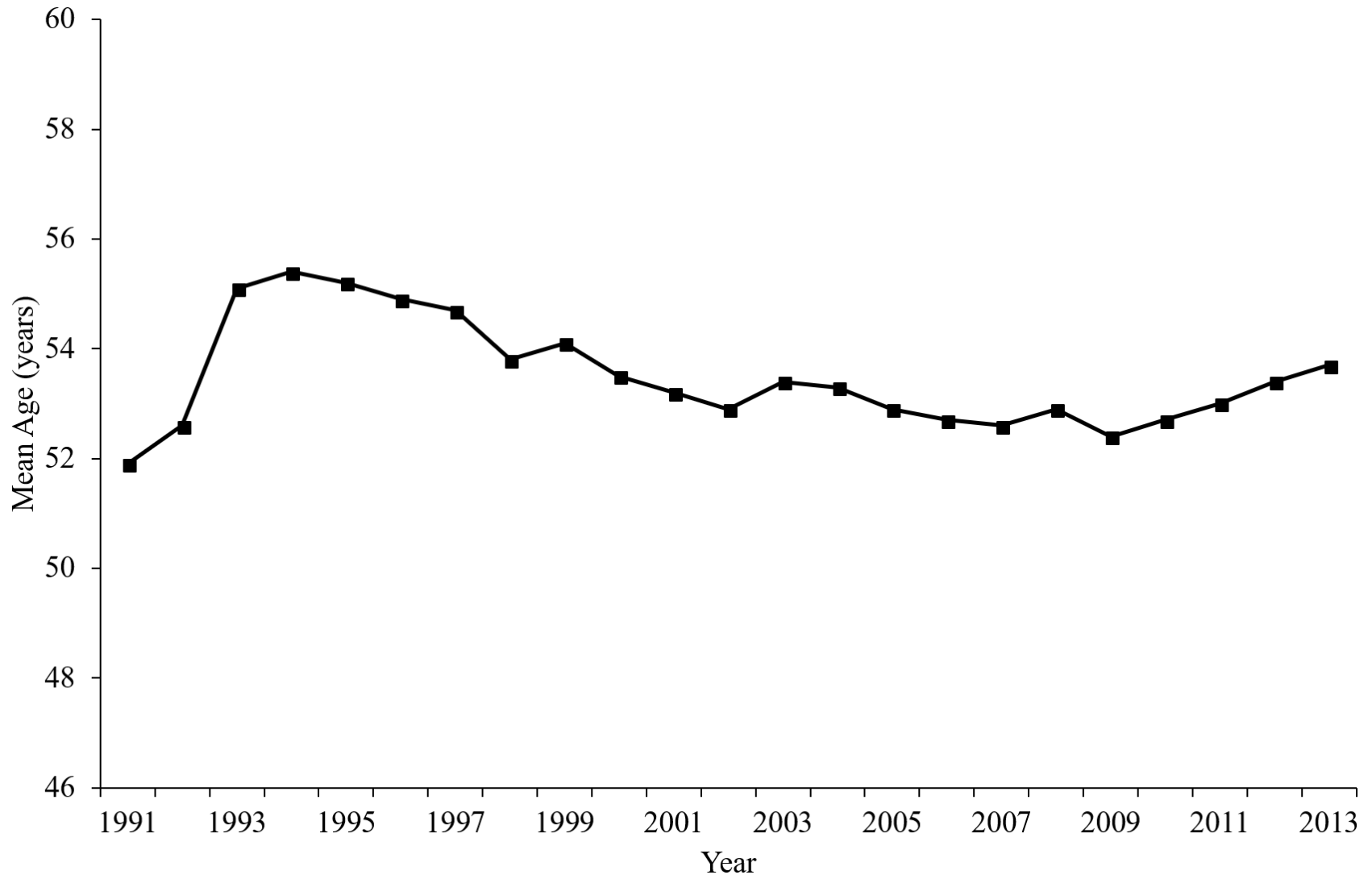**eFigure 1.** Kaplan-Meier Curves by Indication for Exercise Treadmill Testing

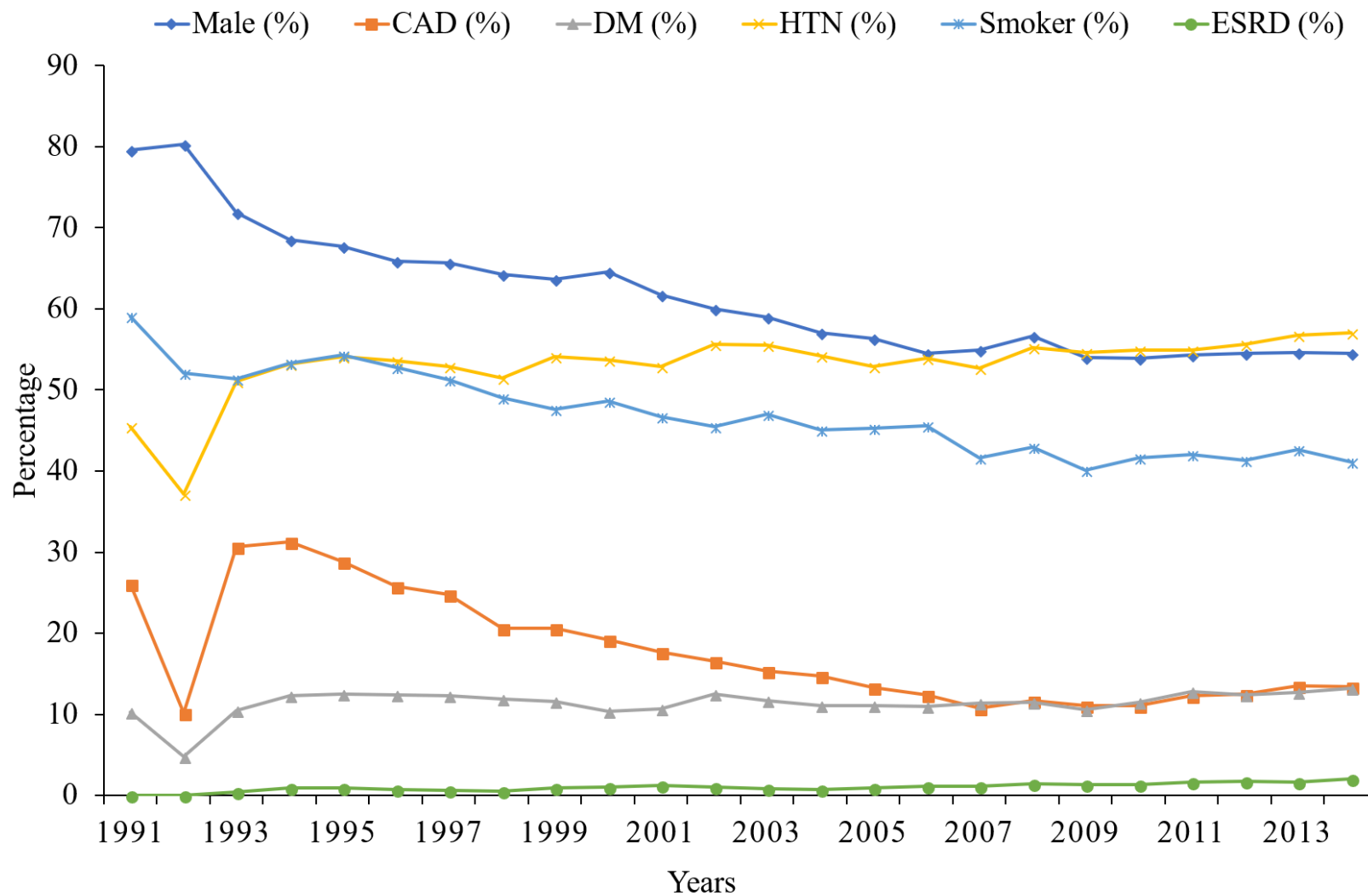

Log rank *p*<0.0001. CAD = coronary artery disease

eFigure 2. Study Cohort Flow Chart

All patients undergoing stress test
January 1991 – December 2014
N = 369,607

- Pharmacologic study
- Conversion to Pharmacologic
- Repeat Testing
- Missing Gender

Study Cohort
N = 122,007

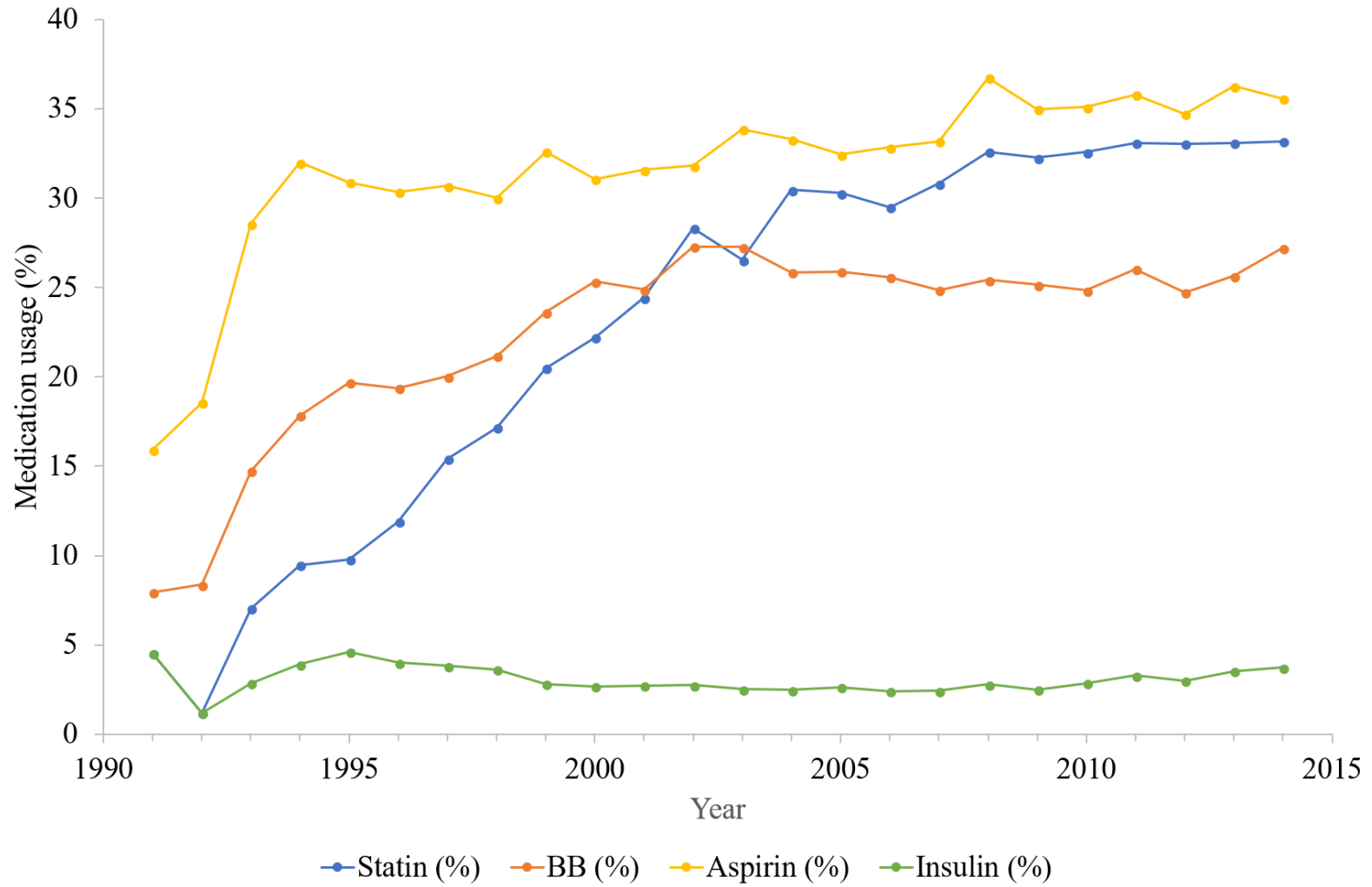**eFigure 3.** Mean Age of the Cohort by Year of Study

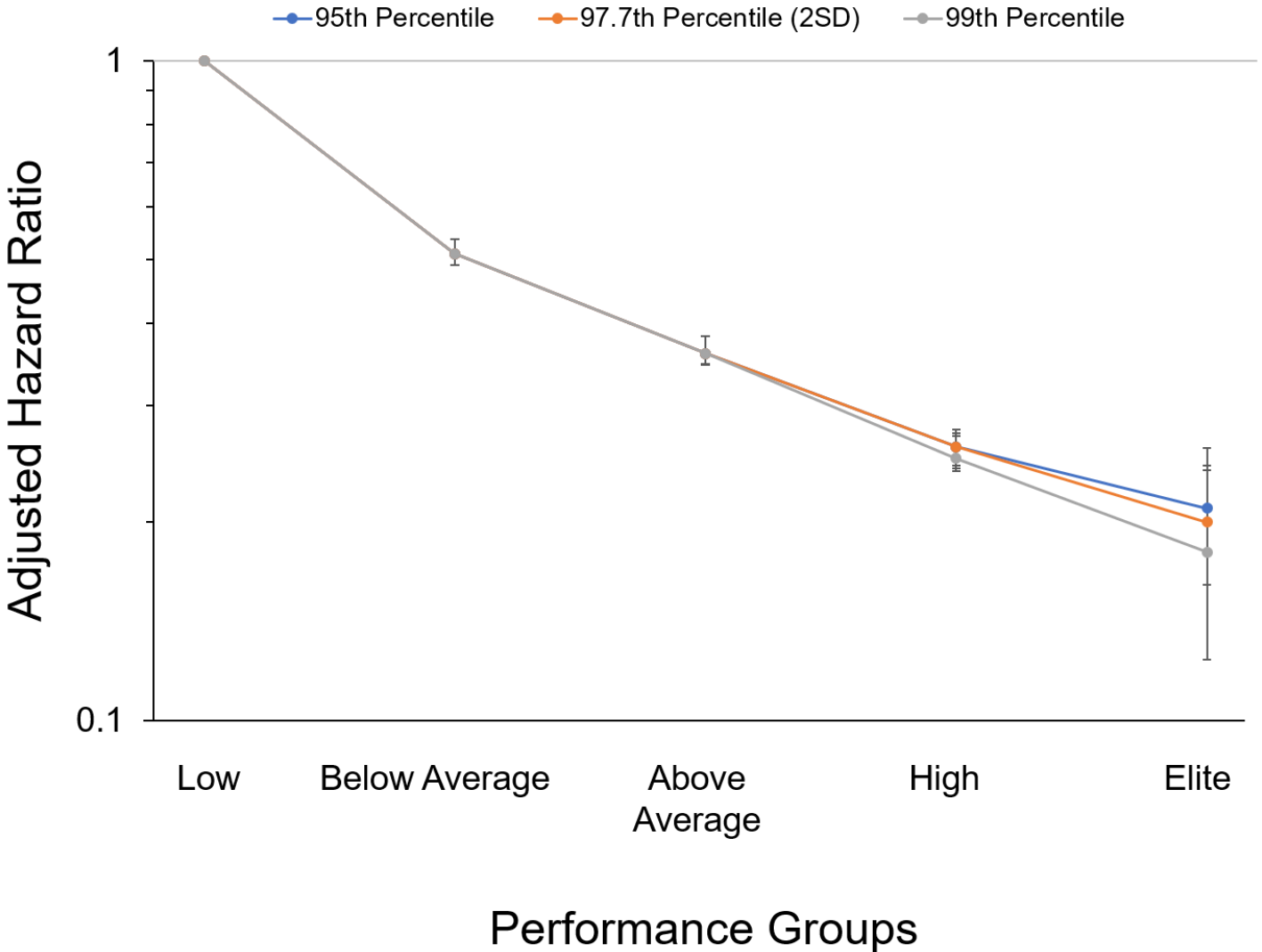**eFigure 4.** Trends in Male Referral and Comorbidities by Year of Study

CAD = coronary artery disease; DM = Diabetes Mellitus; HTN = Hypertension; ESRD = end-stage renal disease.

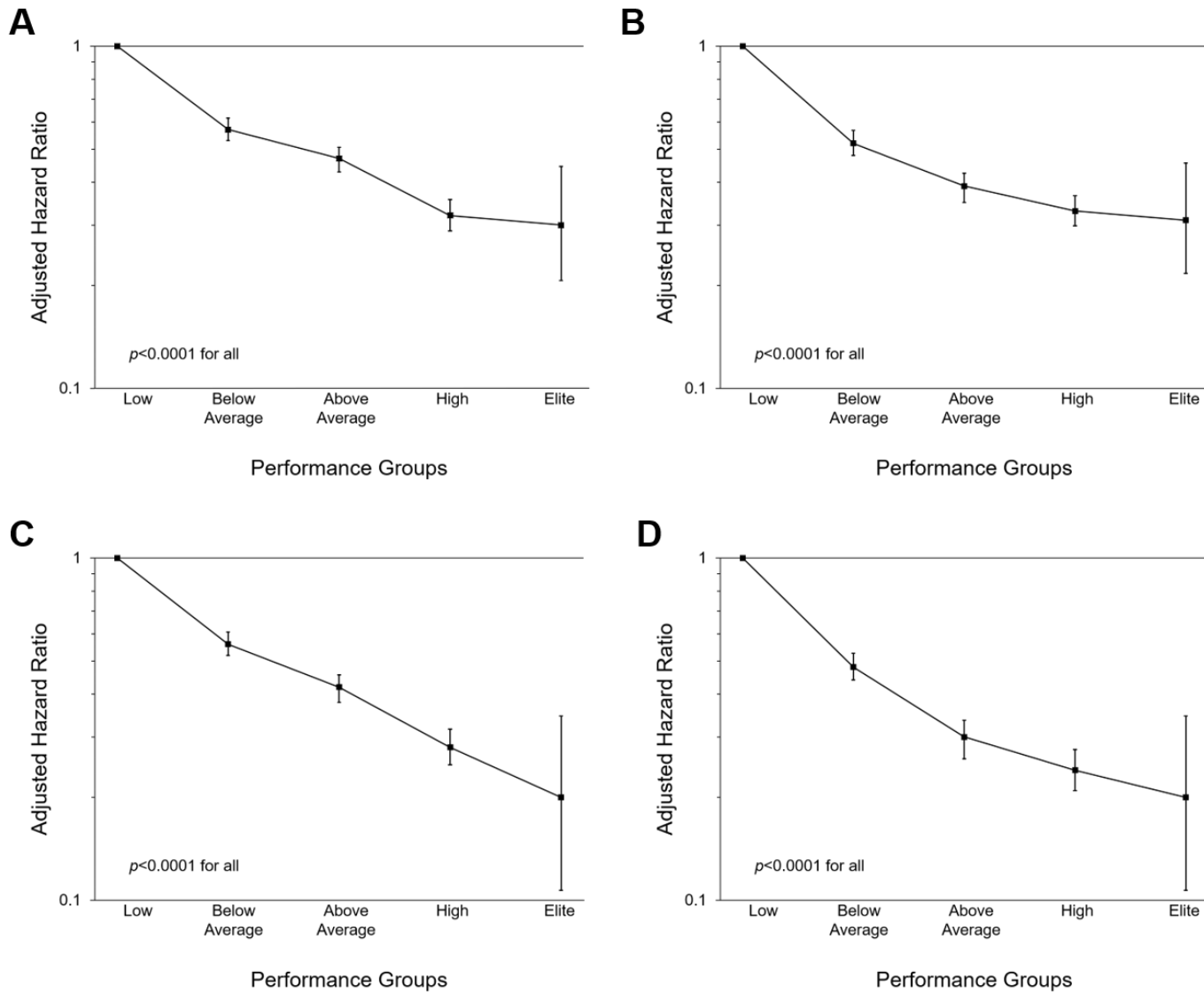**eFigure 5.** Trends in Medication Use by Year of Exercise Treadmill Testing

eFigure 6. Risk-Adjusted All-Cause Mortality by Elite Performance Cutoff

eFigure 7. Adjusted Risk of Death in Patients With Comorbidities

Patients with **(A)** coronary artery disease; **(B)** diabetes; **(C)** hypertension; **(D)** hyperlipidemia. *p*-values compared to low performers.

eTable. Most Common Indications for Exercise Stress Testing

Indication for exercise stress testing	No. (%)
Rule out CAD	80,197 (65.8)
Symptom evaluation	62,461 (51.2)
Risk factors for CAD	20,507 (16.8)
Follow-up known CAD	15,941 (13.0)
Others*	15,474 (12.7)

Indications are not mutually exclusive. *Others with ≥ 4%: preoperative clearance (4%), arrhythmia evaluation (5%) and valvular disease (8%).

CAD = coronary artery disease.