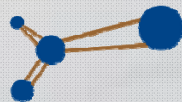


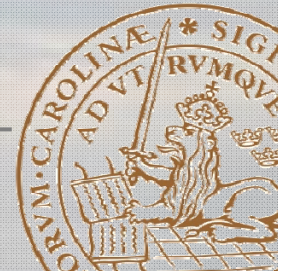
Equal survival in normal myocardial perfusion scintigraphy between stress-only studies and stress + rest studies – a preliminary report

Elin Trägårdh, Mattias Ohlsson, Lars Edenbrandt

Clinical Physiology and Nuclear Medicine, Lund University, Skåne University Hospital, Malmö, Sweden



NUMEMA
NUCLEAR MEDICINE IN MALMÖ



Disclosures

- N/A



Background

- Current MPS imaging guidelines differ in their opinion whether a rest study is necessary or not when the stress study is interpreted as normal.
- Advantages of stress-only approach
 - reduced radiation exposure
 - lowered costs by eliminating unnecessary imaging time and radiopharmacologic doses
 - improved laboratory efficiency by freeing up camera time



Purpose

- The aim of the present study was to determine the prognosis of a normal stress-only MPS compared to a normal stress-rest MPS in a retrospective manner.



Methods

- Patients who underwent MPS 2004-2007 (4919 patients) were considered.
- 91 patients were excluded due to missing data.
- A study interpreted as normal (perfusion assessed to be homogeneous throughout the myocardium), was not followed by a rest study.
- Patients were divided into subgroups based on the final report according to clinical routine.
- Endpoint: ischemic cardiac death, MI, unstable angina

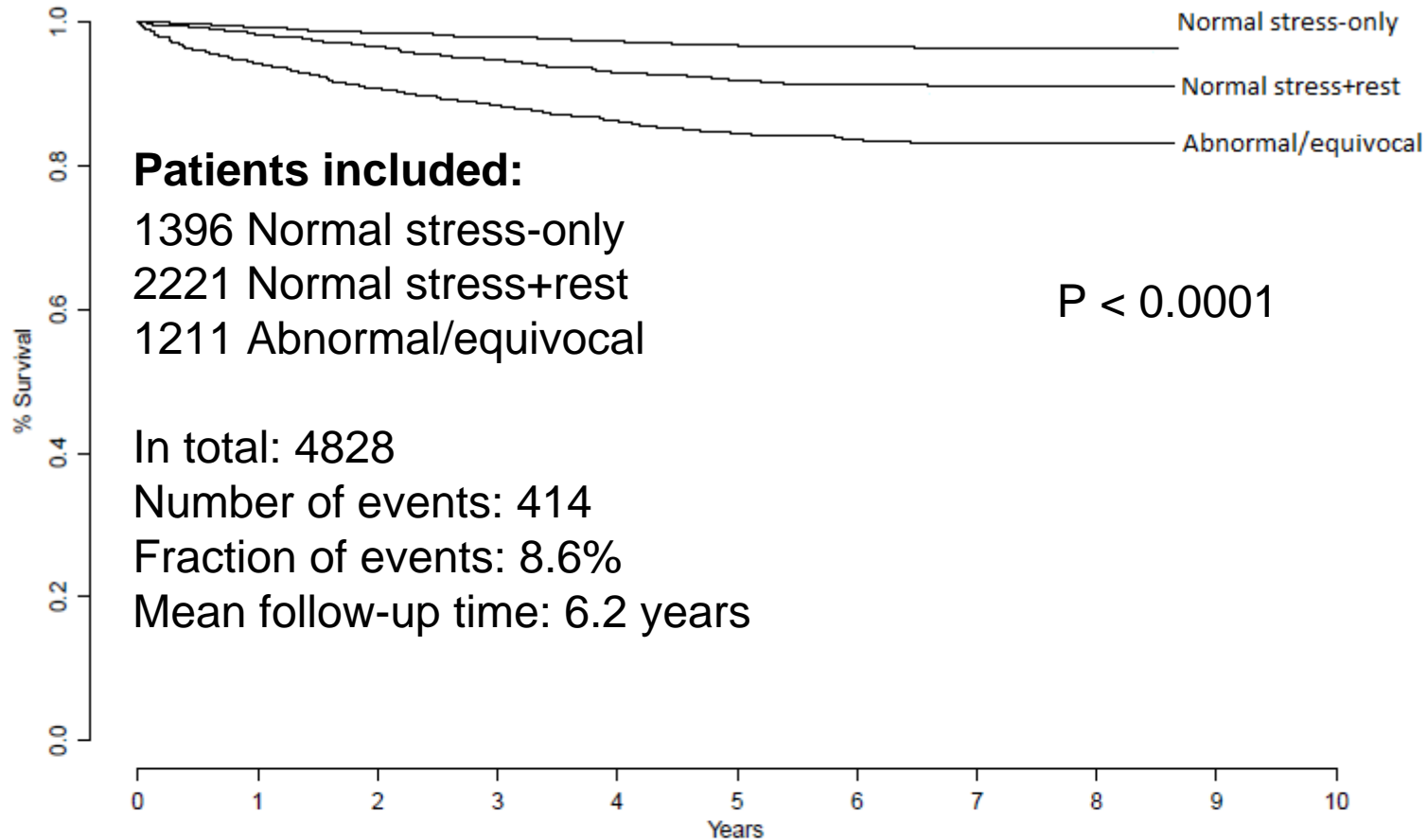


Methods: subdivision of patients

- Perfusion data only:
 - Normal stress-only
 - Normal stress+rest
 - Abnormal/equivocal
- Perfusion data + EF + EDV:
 - Normal stress-only
 - Normal stress+rest
- Perfusion data only:
 - Normal stress-only vs normal stress+rest regarding:
 - Stress (exercise/Adenosine), sex (male/female)



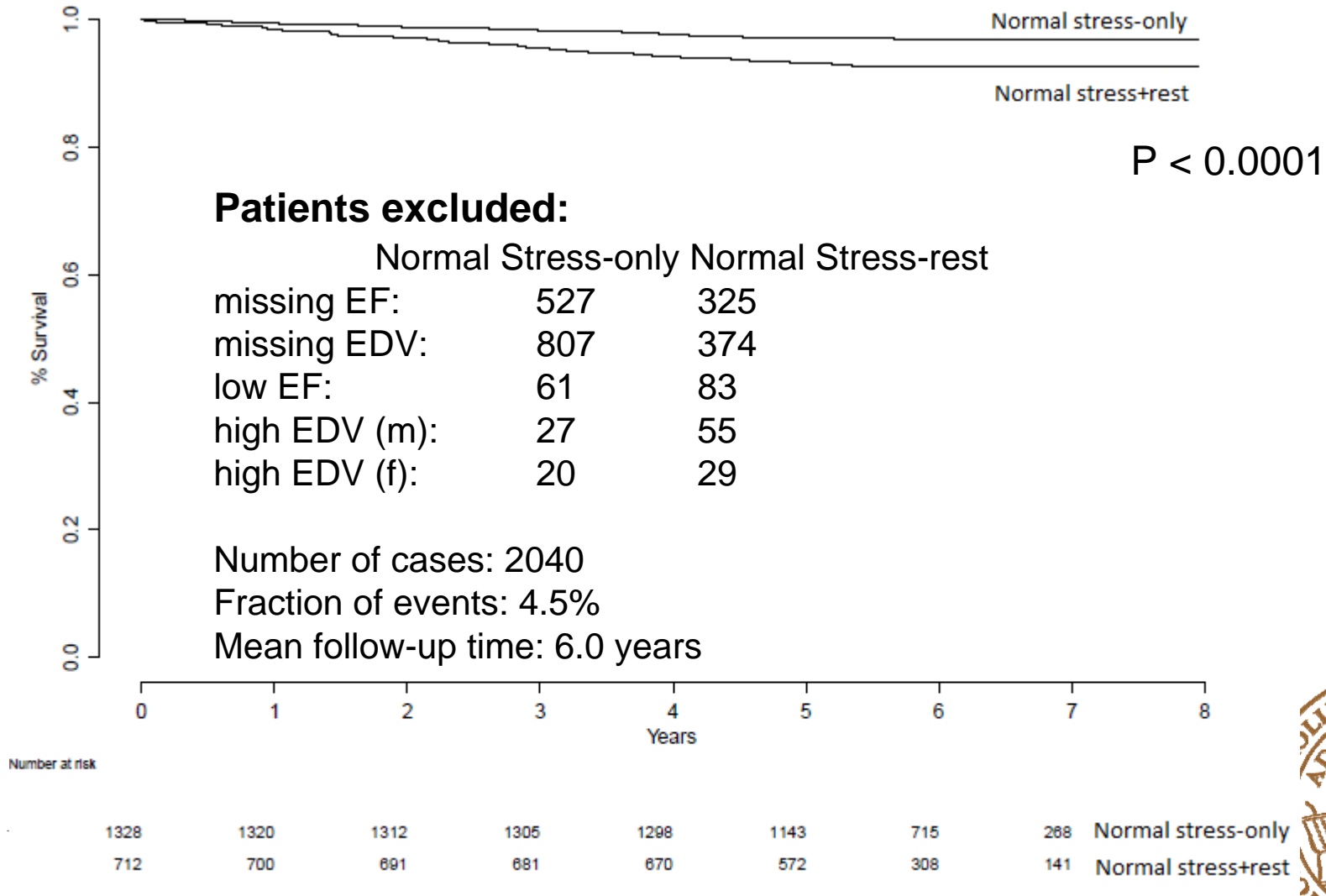
Results: all patients, perfusion data



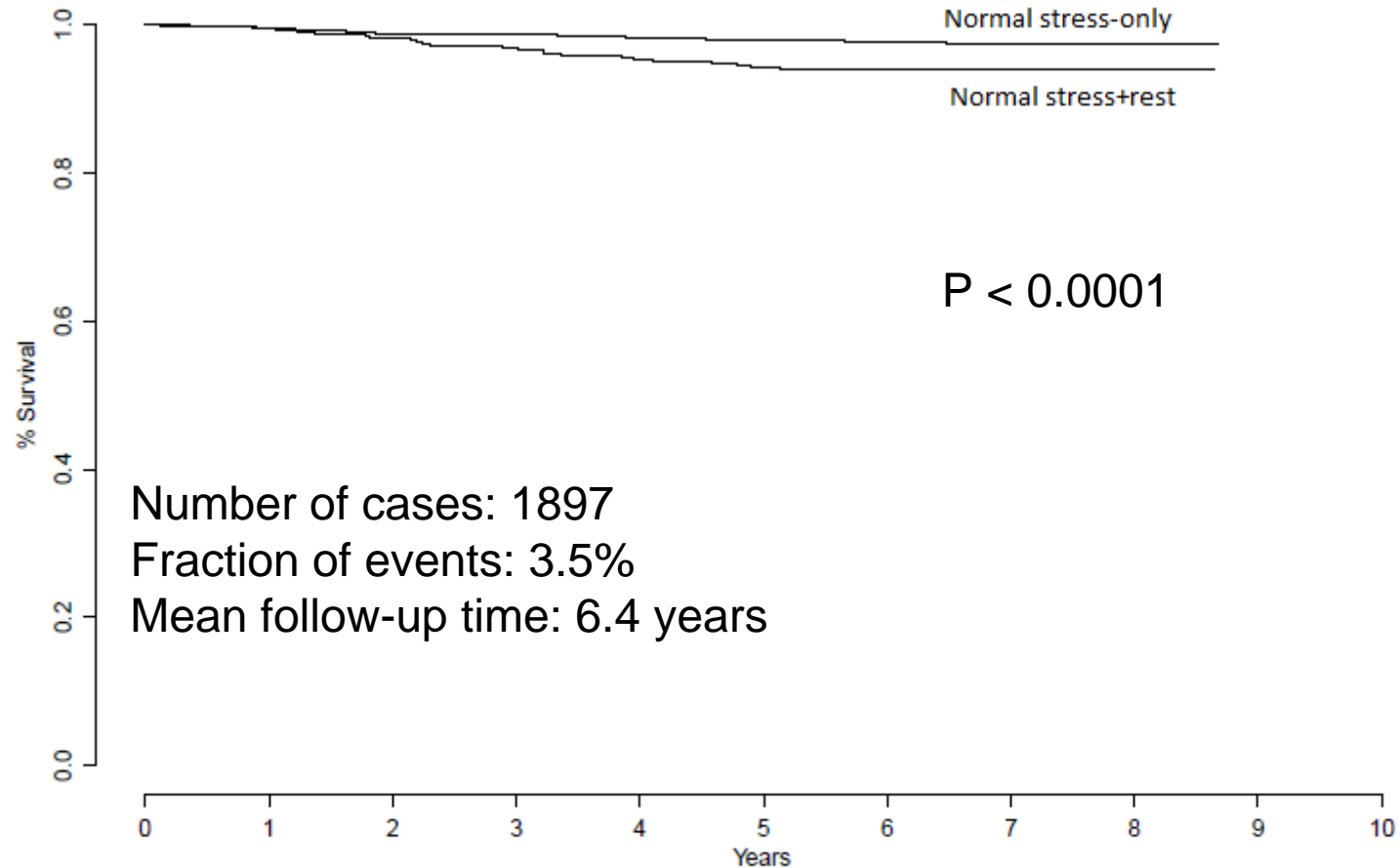
Number at risk											
	0	1	2	3	4	5	6	7	8	9	10
Normal stress-only	1396	1315	1266	1233	1203	1090	774	498	220		
Normal stress+rest	2221	2204	2185	2174	2160	1958	1355	725	270		
Abnormal/equivocal	1211	1190	1168	1148	1126	1003	651	367	144		



Results: normal patients, perfusion and LV data



Results: Women

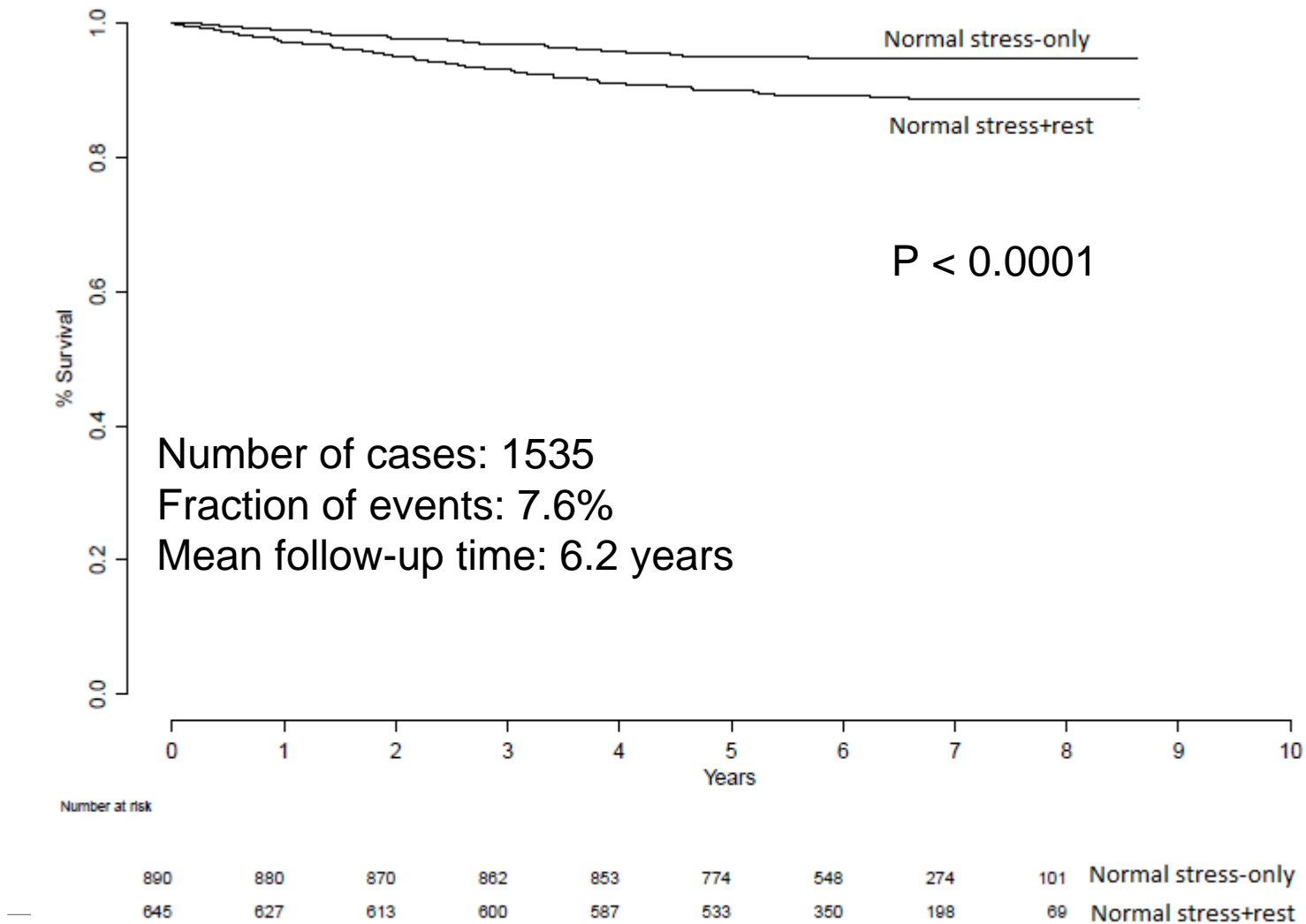


Number at risk

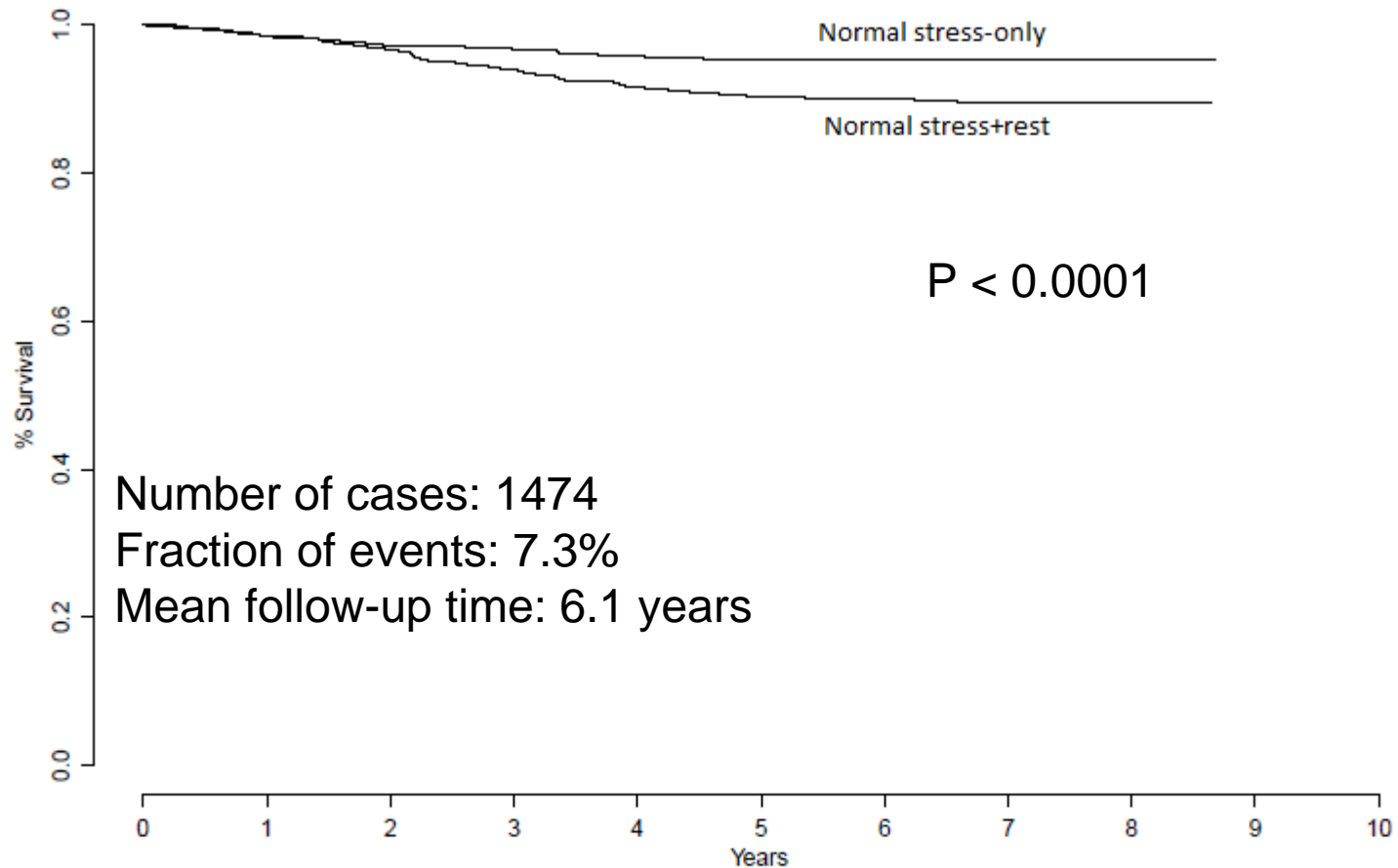
1331	1324	1315	1312	1307	1184	807	451	169	Normal stress-only
566	563	555	548	539	470	301	169	75	Normal stress+rest



Results: Men



Results: Adenosine



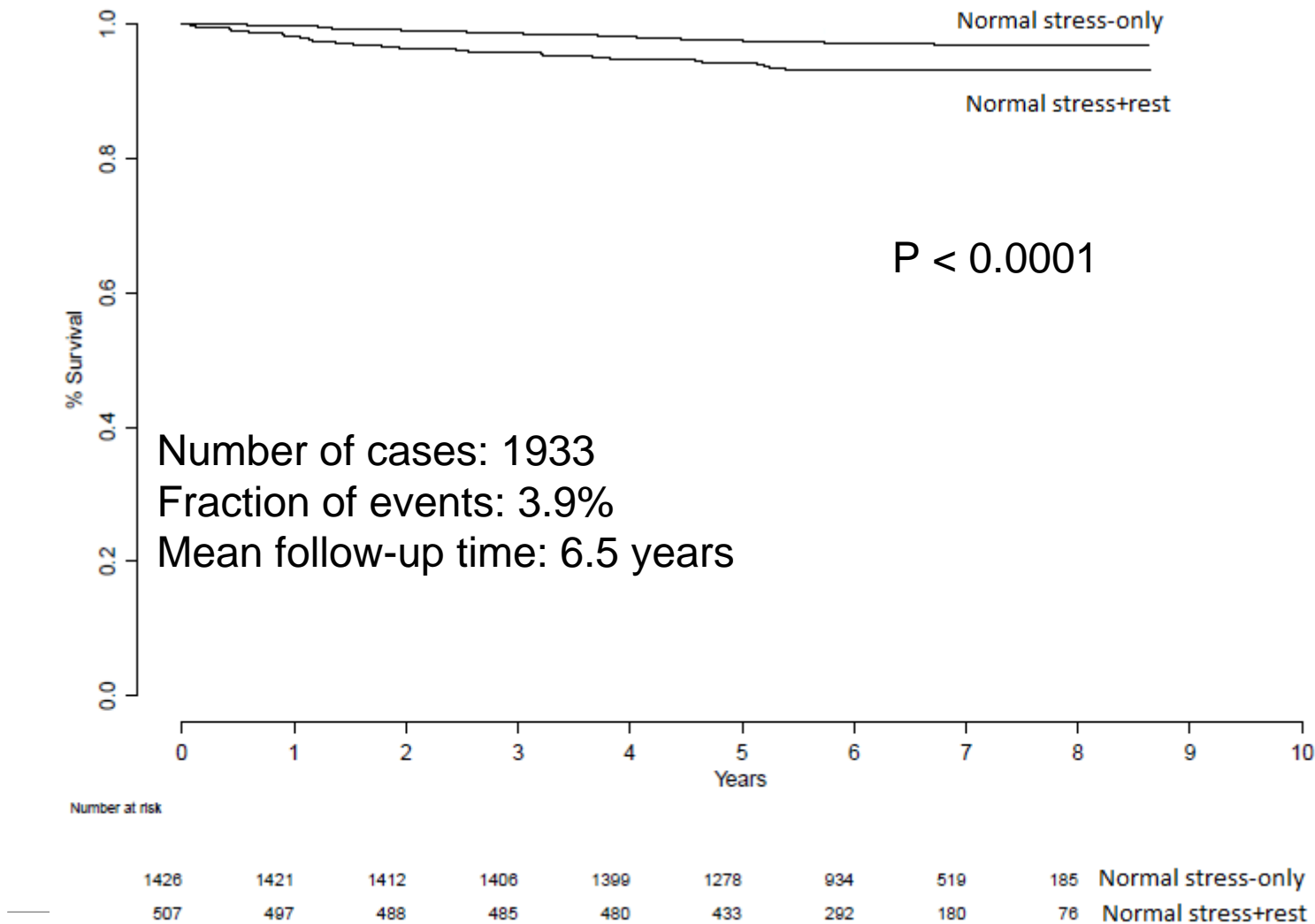
Number of cases: 1474
 Fraction of events: 7.3%
 Mean follow-up time: 6.1 years

Number at risk

790	778	768	763	756	675	417	204	83	Normal stress-only
684	673	660	643	626	552	343	174	62	Normal stress+rest



Results: Exercise



Conclusion

- Patients with a normal stress-only study have better prognosis than patients with normal stress+rest studies
- It is safe to omit the rest study if the perfusion stress study is normal

