SUPPLEMENTARY MATERIAL

SUPPLEMENTARY METHODS

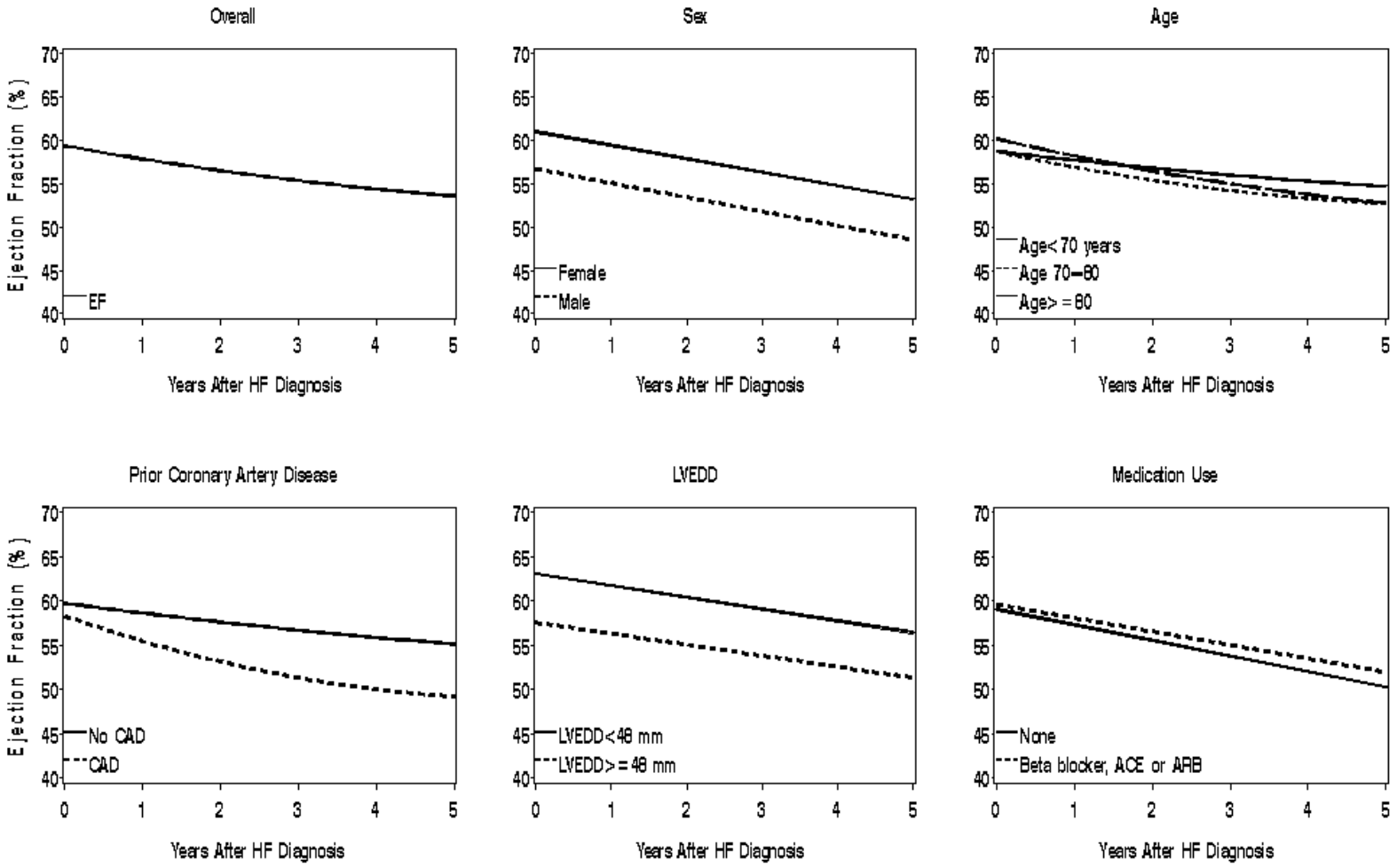
Linear mixed effects regression modeling. The basic formula for the model was EF=time where the parameter estimate of time is the slope of the line and the y intercept is the estimated mean EF at a time point after HF diagnosis. The model uses random intercepts and slopes. The initial EF measurement was included in the model. Including variables (such as sex) allows for different Y intercepts but assumes the slopes of the line are the same by sex. Including an interaction term in the model (such as time*sex) allows for different slopes and intercepts for different patient groups. In addition to overall estimates, the change in EF over time according to age, sex, LVEDD, CAD, and medication use was estimated. Interactions between the variables were examined, and results were further stratified if the interaction term p level was <0.05. To account for non-linear changes in EF over time, a quadratic term was included in the models if statistically significant ($p<0.05$). Based on this criteria, the quadratic term was included in the overall, age, and CAD models for HFrEF and overall and CAD for HFrEF. A completely general (unstructured) covariance matrix was assumed where the covariances are unconstrained.

SUPPLEMENTARY RESULTS

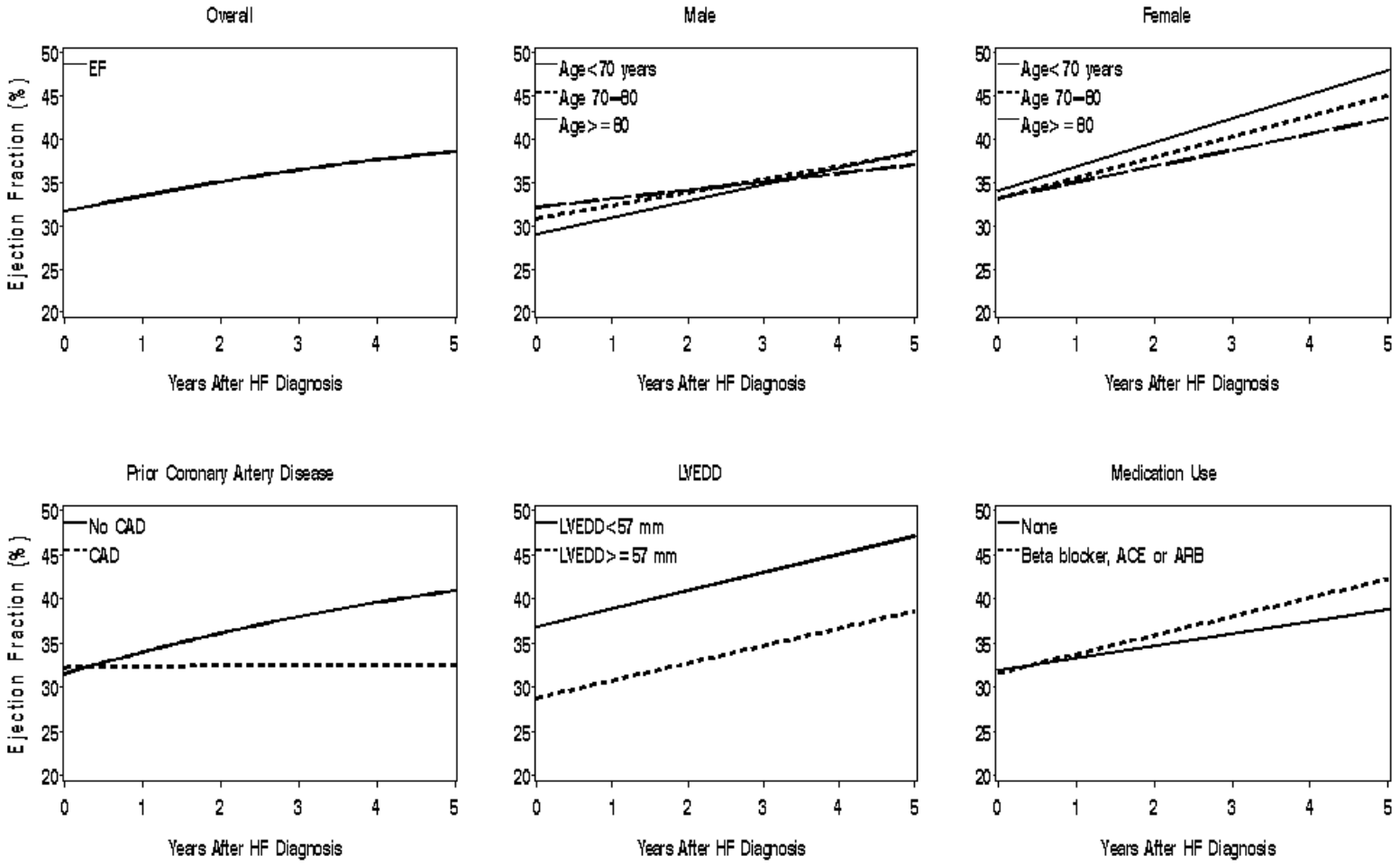
Figure. Change in Ejection Fraction According to Baseline Characteristics in Patients with Preserved and Reduced Ejection Fraction.

The estimated EF for patients who initially had HFpEF (A) and HFrEF (B) are shown according to baseline characteristics. HF=heart failure, CAD= coronary artery disease, LVEDD= left ventricular end-diastolic dimension, ARB= angiotensin receptor blocker, ACE= angiotensin converting enzyme inhibitor

A.


Overall
Ejection Fraction (%)
EF
Years After HF Diagnosis
Sex
Female
Male
Years After HF Diagnosis
Age
Age< 70 years
Age 70–80
Age> = 80
Years After HF Diagnosis
Prior Coronary Artery Disease
Ejection Fraction (%)
No CAD
CAD
Years After HF Diagnosis
LVEDD
LVEDD< 48 mm
LVEDD> = 48 mm
Years After HF Diagnosis
Medication Use
None
Beta blocker, ACE or ARB
Years After HF Diagnosis

B.


Overall
EF
Male
Age<70 years
Age 70–80
Age>=80
Female
Age<70 years
Age 70–80
Age>=80
Prior Coronary Artery Disease
No CAD
CAD
LVEDD
LVEDD<57 mm
LVEDD>=57 mm
Medication Use
None
Beta blocker, ACE or ARB
Ejection Fraction (%)
Years After HF Diagnosis
20
25
30
35
40
45
50
0
1
2
3
4
5