

1 **Supplementary Table 1. Adjusted overall survival for elderly women (age \geq 70 years old)**
 2 **with ductal carcinoma *in situ*, including tumor size as a variable (all patients, $n = 8,976$,**
 3 **Events = 1,779)**

	Hazard ratio (95%CI)	P-value	Overall P-value
Treatment group			< 0.001
Lumpectomy alone	REF	-	
Lumpectomy + Radiation or Mastectomy	0.799 (0.722-0.884)	< 0.001	
Age (years)	1.094 (1.083-1.104)	< 0.001	< 0.001
Year of diagnosis	0.976 (0.956-0.997)	0.02	0.02
Race/Ethnicity			0.003
Non-Hispanic White	REF	-	
Non-Hispanic Black	0.865 (0.726-1.031)	0.11	
Hispanic	0.622 (0.443-0.873)	0.006	
Other	0.683 (0.477-0.976)	0.04	
Charlson/Deyo comorbidity score			< 0.001
0	REF	-	
1	1.503 (1.331-1.696)	< 0.001	
≥ 2	2.392 (1.947-2.938)	< 0.001	
Grade			0.32
1	REF	-	
2	1.092 (0.963-1.238)	0.17	
3	1.028 (0.898-1.176)	0.69	
Tumor size (cm)	0.998 (0.994-1.003)	0.38	0.38
ER status			0.80
ER+	REF	-	
ER-	1.019 (0.878-1.183)	0.80	
PR status			0.009
PR+	REF	-	
PR-	1.188 (1.045-1.351)	0.009	

	Hazard ratio (95%CI)	P-value	Overall P-value
Received endocrine therapy			< 0.001
No	REF	-	
Yes	0.796 (0.708-0.894)	< 0.001	

4 Hazard ratio reported for risk of death. Model also adjusted for income, education, insurance,
5 facility type and location. ER: estrogen receptor; PR: progesterone receptor

6

7