

Supplemental Table 1. Multivariable Cox proportional hazard model of predictors of mortality in young women with endometrial carcinoma by grade.

	Grade 1 HR (95%CI)	Grade 2 or 3 HR (95%CI)
<i>Hormonal therapy</i>		
No	Referent	Referent
Yes	2.26 (1.25 - 4.10)*	2.12 (0.70 - 6.39)
<i>Age</i>		
<35	Referent	Referent
35-39	1.38 (0.81-2.37)	0.95 (0.40-2.22)
40-44	1.34 (0.78-2.31)	2.05 (1.05-4.01)*
45-49	1.63 (1.01-2.63)*	2.71 (1.32-5.56)*
<i>Race</i>		
White	Referent	Referent
Black	1.47 (0.90-2.40)	1.13 (0.74-1.71)
Hispanic	0.67 (0.40-1.12)	0.79 (0.47-1.33)
Other	0.69 (0.32-1.49)	0.55 (0.25-1.21)
Unknown	1.69 (1.09-2.62)*	1.05 (0.67-1.66)
<i>Insurance Status</i>		
Private Insurance	Referent	Referent
Medicaid	2.57 (1.74-3.81)*	2.00 (1.34-2.99)*
Medicare	3.27 (2.07-5.15)*	3.32 (1.82-6.08)*
Not Insured	1.23 (0.73-2.07)	1.47 (0.91-2.38)
Other/Unknown	1.41 (0.70-2.85)	1.49 (0.73-3.05)
<i>Median Income</i>		
< \$30,000	Referent	Referent
\$30,000 - \$35,999	0.92 (0.58-1.45)	0.81 (0.49-1.34)
\$36,000 - \$45,999	0.82 (0.54-1.23)	0.86 (0.57-1.31)
≥\$46,000	0.47 (0.30-0.73)*	0.88 (0.53-1.45)
Unknown	0.85 (0.42- 1.73)	1.02 (0.51-2.05)
<i>Urban/Rural</i>		
Metropolitan	Referent	Referent
Urban	1.07 (0.75-1.54)	0.89 (0.61-1.29)
Rural	1.03 (0.42-2.49)	1.68 (0.85-3.32)
Unknown	1.28 (0.62-2.65)	1.60 (0.89-2.88)
<i>Comorbidity Score</i>		
0	Referent	Referent
1	1.72 (1.18-2.52)*	1.69 (1.24-2.30)*
2	3.15 (2.02-4.90)*	2.20 (1.39-3.46)*
<i>Year of diagnosis</i>	1.01 (0.95-1.08)	0.96 (0.88-1.05)
<i>Stage</i>		
IA	Referent	Referent
IB	3.41 (1.99-5.84)*	2.10 (1.53-2.90)*
INOS	1.44 (0.96-2.15)	1.16 (0.59-2.26)
<i>Grade</i>		
1	-	-
2	-	-

3	-	-
Unknown	-	-

Histology

Endometrioid	Referent	Referent
EM_NOS	0.73 (0.48 - 1.11)	1.28 (0.89 - 1.82)

Cohort derived from propensity score using inverse probability of treatment weighting.

#Year of diagnosis was fit as continuous variable in multivariable regression model.

*P<0.05

Supplemental Table2. Multivariable Cox proportional hazard model of predictors of mortality in young women with endometrial carcinoma.

	Overall cohort HR (95%CI)	Stage IA HR (95%CI)	Stage IB HR (95%CI)	Stage INOS HR (95%CI)	Grade 1 HR (95%CI)	Grade 2 or 3 HR (95%CI)
<i>Hormonal therapy</i>						
No	Referent	Referent	Referent	Referent	Referent	Referent
Yes	1.79 (1.14 - 2.83)*	1.12 (0.54 - 2.32)	4.26 (1.22 - 14.88)*	2.71 (1.26 - 5.86)*	2.24 (1.31 - 3.82)*	1.43 (0.49 - 4.18)
<i>Age</i>						
<35	Referent	Referent	Referent	Referent	Referent	Referent
35-39	1.19 (0.79 - 1.79)	1.21 (0.76 - 1.91)	2.17 (0.54 - 8.69)	0.59 (0.18 - 1.86)	1.35 (0.81 - 2.25)	1.02 (0.47 - 2.20)
40-44	1.52 (1.05 - 2.19)*	1.48 (0.99 - 2.21)	1.95 (0.57 - 6.66)	1.54 (0.62 - 3.82)	1.26 (0.77 - 2.05)	2.05 (1.07 - 3.93)*
45-49	1.83 (1.29 - 2.61)*	1.61 (1.08 - 2.40)*	4.19 (1.31 - 13.36)*	1.91 (0.79 - 4.59)	1.64 (1.03 - 2.61)*	2.19 (1.16 - 4.17)*
<i>Race</i>						
White	Referent	Referent	Referent	Referent	Referent	Referent
Black	1.30 (1.00 - 1.69)*	1.32 (0.98 - 1.77)	0.62 (0.22 - 1.71)	2.36 (1.20 - 4.63)*	1.45 (1.00 - 2.12)	1.22 (0.82 - 1.80)
Hispanic	0.82 (0.60 - 1.11)	0.87 (0.59 - 1.27)	0.56 (0.21 - 1.51)	0.77 (0.31 - 1.89)	0.76 (0.47 - 1.24)	0.87 (0.53 - 1.43)
Other	0.60 (0.37 - 0.99)*	0.57 (0.31 - 1.05)	0.19 (0.02 - 1.53)	1.38 (0.48 - 3.98)	0.67 (0.34 - 1.33)	0.66 (0.32 - 1.39)
Unknown	1.33 (0.98 - 1.80)	1.16 (0.81 - 1.68)	1.54 (0.77 - 3.06)	2.14 (1.13 - 4.06)*	1.65 (1.10 - 2.48)*	1.09 (0.69 - 1.70)
<i>Insurance Status</i>						
Private Insurance	Referent	Referent	Referent	Referent		
Medicaid	2.37 (1.86 - 3.01)**	2.53 (1.92 - 3.34)**	1.57 (0.76 - 3.23)	2.90 (1.52 - 5.52)*	2.59 (1.82 - 3.68)**	1.99 (1.40 - 2.83)*
Medicare	3.22 (2.51 - 4.13)**	3.29 (2.44 - 4.44)**	2.57 (1.40 - 4.72)*	3.33 (1.57 - 7.06)*	3.75 (2.63 - 5.34)**	2.87 (1.99 - 4.13)**
Not Insured	1.52 (1.11 - 2.07)*	1.62 (1.11 - 2.35)*	1.40 (0.61 - 3.20)	1.23 (0.41 - 3.71)	1.47 (0.91 - 2.39)	1.45 (0.90 - 2.33)
Other/Unknown	1.79 (1.21 - 2.67)*	1.52 (0.87 - 2.65)	2.06 (0.61 - 6.94)	2.78 (1.05 - 7.33)*	1.59 (0.82 - 3.08)	1.44 (0.72 - 2.87)
<i>Median Income</i>						
< \$30,000	Referent	Referent	Referent	Referent	Referent	Referent
\$30,000 - \$35,999	0.78 (0.60 - 1.01)	0.74 (0.55 - 0.99)*	0.76 (0.38 - 1.53)	1.03 (0.46 - 2.31)	0.79 (0.56 - 1.13)	0.72 (0.48 - 1.08)
\$36,000 - \$45,999	0.78 (0.61 - 1.01)	0.73 (0.55 - 0.96)*	0.83 (0.43 - 1.63)	1.03 (0.51 - 2.09)	0.65 (0.46 - 0.94)*	0.83 (0.56 - 1.22)
>\$46,000	0.61 (0.47 - 0.79)*	0.58 (0.43 - 0.79)*	0.61 (0.31 - 1.21)	0.95 (0.45 - 2.00)	0.49 (0.34 - 0.73)*	0.71 (0.49 - 1.03)
Unknown	0.87 (0.55 - 1.36)	0.80 (0.47 - 1.34)	1.79 (0.60 - 5.33)	0.28 (0.03 - 3.02)	0.87 (0.45 - 1.68)	0.91 (0.47 - 1.77)
<i>Urban/Rural</i>						
Metropolitan	Referent	Referent	Referent	Referent	Referent	Referent
Urban	1.10 (0.89 - 1.36)	1.16 (0.88 - 1.52)	1.25 (0.72 - 2.17)	0.65 (0.31 - 1.38)	1.21 (0.89 - 1.66)	0.98 (0.70 - 1.36)
Rural	1.38 (0.88 - 2.17)	1.55 (0.93 - 2.59)	0.93 (0.22 - 3.89)	1.37 (0.29 - 6.45)	1.30 (0.58 - 2.91)	1.60 (0.81 - 3.13)
Unknown	1.75 (1.19 - 2.57)*	1.78 (1.12 - 2.82)*	2.01 (0.77 - 5.22)	1.22 (0.26 - 5.80)	1.65 (0.84 - 3.25)	1.81 (1.04 - 3.15)*

<i>Comorbidity Score</i>						
0	Referent	Referent	Referent	Referent	Referent	Referent
1	1.67 (1.36 - 2.04)**	1.71 (1.36 - 2.15)**	1.27 (0.73 - 2.21)	1.65 (0.89 - 3.06)	1.37 (1.01 - 1.85)*	1.87 (1.41 - 2.47)**
2	2.60 (1.93 - 3.51)**	2.16 (1.48 - 3.16)**	2.96 (1.44 - 6.10)*	5.43 (2.77 - 10.63)**	2.71 (1.80 - 4.09)**	2.41 (1.56 - 3.73)**
<i>Year of diagnosis</i>	0.99 (0.95 - 1.02)	0.95 (0.91 - 1.00)	1.07 (0.98 - 1.17)	1.03 (0.93 - 1.15)	1.00 (0.94 - 1.05)	0.97 (0.92 - 1.03)
<i>Stage</i>						
IA	Referent	NA	NA	NA	Referent	Referent
IB	2.08 (1.64 - 2.64)**	NA	NA	NA	2.54 (1.68 - 3.84)**	2.25 (1.67 - 3.03)**
INOS	1.08 (0.85 - 1.38)	NA	NA	NA	1.09 (0.79 - 1.52)	1.00 (0.64 - 1.55)
<i>Grade</i>						
1	Referent	Referent	Referent	Referent	NA	NA
2	1.45 (1.20 - 1.74)*	1.48 (1.19 - 1.83)*	1.15 (0.67 - 1.99)	1.43 (0.82 - 2.50)	NA	NA
3	3.01 (2.34 - 3.88)**	3.22 (2.41 - 4.32)**	2.26 (1.26 - 4.05)*	2.71 (0.96 - 7.69)	NA	NA
Unknown	1.39 (1.01 - 1.92)*	1.56 (1.06 - 2.28)*	0.72 (0.26 - 1.99)	1.32 (0.63 - 2.77)	NA	NA
<i>Histology</i>						
Endometrioid	Referent	Referent	Referent	Referent	Referent	Referent
EM_NOS	1.02 (0.80 - 1.30)	1.04 (0.77 - 1.40)	1.23 (0.68 - 2.24)	0.74 (0.36 - 1.51)	0.89 (0.62 - 1.28)	1.33 (0.94 - 1.89)

