

Supplemental Table 1. Interaction test by lag time intervals for five and ten-year all cause mortality, NIH-AARP Diet and Health Study (n=1400)*

	Body mass index (kg/m ²)	Diagnosis 1995-1998		Diagnosis 1999-2002		Diagnosis 2003-2006	
		HR	95% CI	HR	95% CI	HR	95% CI
Five-year mortality [†]	18.5-<25	1.00		0.69	0.26-1.84	0.82	0.30-2.21
	25-<30	1.42	0.55-3.67	1.30	0.52-3.25	1.33	0.54-3.29
	30-<35	1.79	0.66-4.83	1.61	0.64-4.05	1.09	0.47-3.07
	35+	1.67	0.55-5.07	1.20	0.47-3.07	2.90	0.54-3.29
Ten-year mortality [†]	18.5-<25	1.00		0.47	0.25-0.92	0.64	0.31-1.33
	25-<30	0.90	0.48-1.68	0.99	0.55-1.79	1.08	0.59-1.98
	30-<35	1.10	0.57-2.17	1.18	0.64-2.17	0.91	0.47-1.78
	35+	1.47	0.73-2.95	0.98	0.53-1.80	2.39	1.29-4.40

*Abbreviations: NIH- National Institutes of Health, HR- hazard ratio, CI- confidence interval; Interaction test p=0.145 for five-year models and p=0.056 for ten-year models.

[†]Models were adjusted for categorical tumor grade, tumor stage, surgery, chemotherapy, race, family history of breast cancer, diabetes, and smoking status.

Supplemental Table 2. Associations between pre-diagnosis body mass index (BMI) and five and ten-year all cause mortality, stratified by tumor stage and grade, NIH-AARP Diet and Health Study (n=1400)*

BMI (kg/m ²)	18.5-25 HR	25-<30 HR	95% CI	30-<35 HR	95% CI	35+ HR	95% CI	P trend	Continuous [†]
Five-Year Mortality									
Cancer Stage									
Localized	1.00	2.29	1.07-4.90	1.75	0.75-4.09	3.45	1.58-7.50	.006	1.24 (1.06-1.46)
Regional /Distant	1.00	1.29	0.59-2.80	1.50	0.66-3.39	2.22	0.94-5.24	.062	1.19 (0.99-1.43)
Unknown	1.00	2.29	1.08-4.84	3.13	1.47-6.69	2.85	1.19-6.84	.008	1.24 (1.04-1.48)
Cancer Grade									
Well differentiated	1.00	1.60	0.70-3.65	1.12	0.45-2.80	2.47	1.07-5.72	.081	1.17 (0.97-1.42)
Moderately differentiated	1.00	1.82	0.69-4.80	3.31	1.31-8.37	2.89	1.15-7.25	.011	1.19 (1.01-1.42)
Poorly differentiated	1.00	1.60	0.77-3.31	1.80	0.82-3.93	2.30	0.91-5.82	.078	1.35 (1.09-1.68)
Ten-Year Mortality									
Cancer Stage									
Localized	1.00	1.77	1.03-3.05	1.53	0.84-2.78	2.36	1.34-4.15	.008	1.22 (1.08-1.40)
Regional /Distant	1.00	1.66	0.80-3.43	1.58	0.72-3.45	2.89	1.34-6.26	.013	1.20 (1.01-1.41)
Unknown	1.00	1.63	0.88-3.04	2.72	1.46-5.08	3.01	1.51-6.01	<.001	1.27 (1.10-1.46)
Cancer Grade[‡]									
Well differentiated	1.00	1.09	0.54-2.16	1.12	0.54-2.32	3.10	1.63-5.88	<.001	1.31 (1.13-1.51)
Moderately differentiated	1.00	1.50	0.77-2.91	2.18	1.11-4.28	2.14	1.11-4.09	.012	1.16 (1.01-1.33)
Poorly differentiated	1.00	1.59	0.83-3.05	1.96	0.97-3.96	1.75	0.73-4.19	.115	1.28 (1.05-1.56)

*Abbreviations: NIH-National Institutes of Health, HR- hazard ratio, CI- confidence interval; Models were adjusted for categorical variables of surgery, chemotherapy, race, family history of breast cancer, diabetes, and smoking status, and for tumor grade and stage where appropriate.

[†]Continuous models were scaled for a 5-unit change in BMI.

[‡]There were too few deaths with unknown grade to generate HRs for these women (24 deaths at five years, 32 at ten years).

Supplemental Table 3. Associations between pre-diagnosis body mass index (BMI) and five and ten-year all cause mortality among women with endometrial cancer, without adjusting for stage, NIH-AARP Diet and Health study (n=1400)*

BMI (kg/m ²)	18.5-25		25-<30			30-<35			35+			P trend	Continuous [†]
	N	HR	N	HR	95% CI	N	HR	95% CI	N	HR	95% CI		
Five-year mortality													
All cause	32	1.00	73	1.90	1.24-2.91	56	1.97	1.25-3.09	55	2.59	1.64-4.09	<.001	1.20 (1.09-1.32)
Endometrial	16	1.00	40	1.92	1.06-3.50 [‡]	36	2.62	1.41-4.86	28	2.86	1.48-5.53	<.001	1.22 (1.07-1.39)
Cardiovascular	4	1.00	9	2.07	0.62-6.91	4	1.03	0.24-4.38	8	2.89	0.83-10.12	.205	1.29 (0.99-1.67)
Ten-year mortality													
All cause	51	1.00	94	1.58	1.12-2.24	75	1.69	1.17-2.444	79	2.31	1.60-3.34	<.001	1.19 (1.10-1.29)
Endometrial	23	1.00	41	1.39	0.82-2.36	39	1.90	1.10-3.27	30	2.04	1.14-3.66	.007	1.18 (1.05-1.33)
Cardiovascular	6	1.00	13	1.85	0.69-4.94	10	1.85	0.65-5.25	18	4.20	1.60-11.03	.003	1.36 (1.13-1.65)

* Abbreviations: NIH-National Institutes of Health, HR- hazard ratio, CI- confidence interval; Models are adjusted for categorical variables tumor grade, surgery, chemotherapy, race, family history of breast cancer, diabetes, and smoking status.

[†] Continuous models were scaled by a 5-unit change in BMI.

[‡]Confidence interval changed significance from Table 2. Table 2 CI p-value=0.12, Supplemental Table 3 CI p-value=0.03.

Supplemental Table 4. Associations between pre-diagnosis body mass index (BMI) and five and ten-year all cause mortality among women with endometrial cancer, stratified by smoking status, NIH-AARP Diet and Health study (n=1400)*

BMI (kg/m ²)	Never Smokers		Former Smokers		Current smokers	
	Deaths/total	HR (95% CI) [†]	Deaths/total	HR (95% CI) [†]	Deaths/total	HR (95% CI) [†]
Five-year mortality						
18.5-<25	9/181	Ref.	15/159	Ref.	7/35	Ref.
25-<30	33/197	2.61 (1.22-5.60)	31/149	1.61 (0.85-3.07)	8/149	0.85 (0.24-3.05)
30-<35	26/171	2.66 (1.23-5.77)	21/102	1.45 (0.71-2.96)	6/20	1.72 (0.36-8.19)
35+	28/160	4.39 (2.00-9.62)	23/131	1.83 (0.90-3.74)	3/15	2.18 (0.43-11.01)
P trend		<.001		.158		.264
Continuous [‡]		1.34 (1.16-1.56)		1.06 (0.91-1.24)		1.39 (0.87-2.21)
Ten-year mortality						
18.5-<25	17/181	Ref.	23/159	Ref.	10/35	Ref.
25-<30	44/197	2.29 (1.29-4.08)	40/149	1.51 (0.85-2.58)	9/149	0.54 (0.19-1.57)
30-<35	39/171	2.46 (1.37-4.41)	22/102	1.12 (0.60-2.09)	10/20	1.19 (0.36-3.91)
35+	38/160	3.35 (1.83-6.13)	34/131	1.82 (1.03-3.24)	5/15	2.18 (0.63-7.62)
P trend		<.001		.106		.213
Continuous [‡]		1.26 (1.12-1.42)		1.12 (0.98-1.27)		1.37 (0.96-1.94)

*Abbreviations: NIH-National Institutes of Health, HR- hazard ratio, CI- confidence interval.

[†]Multivariate models were adjusted for categorical variables of tumor grade, tumor stage, surgery, chemotherapy, race, family history of breast cancer, diabetes, and smoking dose where appropriate.

[‡] Continuous models were scaled by a 5-unit change in BMI.