

## Supplementary Table S1

*Association of GRS for longevity with survival to age 90 in WHI and OPACH*

	Tertiles of GRS for longevity <sup>a</sup>			<i>p</i> value for trend <sup>b</sup>
	Low	Medium	High	
WHI (N = 27,131)	n=9,044	n=9,044	n=9,043	
Mortality events	4,563	4,556	4,081	
Crude mortality rate per 1,000 person-years	27.8	27.7	24.4	
Survival to age 90 <sup>c</sup> , OR [95% CI]	1.00 [ref.]	1.29 [1.18, 1.41]	1.37 [1.25, 1.50]	<.001
OPACH (N = 5,446)	n=1,681	n=1,804	n=1,961	
Mortality events	295	381	346	
Crude mortality rate per 1,000 person-years	28.6	34.6	28.8	
Survival to age 90 <sup>d</sup> , OR [95% CI]	1.00 [ref.]	1.30 [0.91, 1.87]	1.68 [1.14, 2.48]	.04

*Note:* OR and 95% CI from multivariable logistic regression models adjusted for age, and race/ethnicity, and the first five principal components to control for population stratification. CI = confidence interval; GSR = genetic risk score; OR = odds ratio; OPACH = Objective Physical Activity and Cardiovascular Health; WHI = Women's Health Initiative

<sup>a</sup> Higher GRS is indicative of higher genetic predisposition for longevity. <sup>b</sup> *p* value corresponds to multivariable logistic regression models using continuous GRS. <sup>c</sup> WHI analytic sample is n = 11,660 eligible to survive to age 90 with complete data.

<sup>d</sup> OPACH analytic sample is n = 1,641 eligible to survive to age 90 with complete data