## Supplemental Digital Content - Appendix 1: Frailty criteria and definitions

Adapted from Fried et al. 17 and Önen et al. 10

Criteria	Definition			
Unintentional weight loss	>10 pounds weight loss documented in last year or ≥5% of previous year's body weight			
Low physical activity*	Participants answering 3 when asked whether their health limits vigorous activities such as running, lifting heavy objects 1= not at all, 2 = yes, limited a little or 3 = yes, limited a lot			
Exhaustion	Participants answering 2 or 3 to either one of two statements –  "How often have you felt that:"  a) Everything you did was an effort or  b) I could not 'get going'  0 = rarely (<1 day), 1= some of the time (1-2 days),  2 = occasionally (3-4 days) or 3 = most of the time (5-7 days)			
Weak grip strength	Male BMI kg/m <sup>2</sup> ≤24 24.1-26.0 26.1-28.0 >28	Kg ≤29 ≤30 ≤30 ≤32	Female BMI kg/m <sup>2</sup> ≤23 23.1-26.0 26.1-29 >29.0	Kg ≤17 ≤17.3 ≤18 ≤21
Slow walking time	Male height (cm)	Seconds	Female height (cm)	Seconds
	≤173	≥7 >6	≤159 >150	≥7 >6
	>173	≥6	>159	≥6

<sup>\*</sup>Estimation of physical activity adopted from Önen et al. 10; the estimation of physical activity described in the original phenotype used a weighted score of kilocalories expended