

Supplementary Data

Supplementary Table S1. A) Balance diagnostics and B) Rubin’s B and R diagnostics for the entire cohort, pre- and post-matching results are shown.

A)	Before matching				After matching				SMD (%bias)	Variance ratio (Treated/Control)
Variable	PEth ≥0.05 (Treated) n = 111	Control n = 394	t	P value (P> t)	PEth ≥0.05 (Treated) n = 107	Control n = 167	t	P value (P> t)	Before → After	After
Age, mean	77.3	83.7	−7.49	<0.001	77.7	77.9	−0.16	0.876	−79.8 → -2.1	1
% Female	57.7	71.3	2.75	0.006	59.8	62.3	0.37	0.71	28.8 → 5.2	1.02
% Frail	33.3	53.8	−3.86	<0.001	34.6	29.9	0.73	0.467	−42.1 → 9.6	

B)	Pseudo-R2	LR chi²	P >chi²	Mean absolute SMD (%bias/SMD)	Median absolute SMD	B	R	%Var
Sample								
Unmatched	0.111	58.87	0	50.2	42.1	85.0 ^a	1.08	0
Matched	0.003	0.9	0.83	5.6	5.2	12.9	1.07	0

^a if B>25%, R outside [0.5; 2]

SMD = standardized mean difference.

Supplementary Table S2. A) Balance diagnostics and B) Rubin's B and R diagnostics for the female cohort, pre- and post-matching results are shown. SMD= standardized mean difference.

A)	Before matching				After matching				SMD (%bias)	Variance ratio (Treated/Control)
Variable	PEth ≥ 0.05 (Treated) n = 64	Control n = 281	t	P value ($P > t $)	PEth ≥ 0.05 (Treated) n = 64	Control n = 106	t	P value ($P > t $)	Before $\rightarrow$ After	After
Age, mean	78	84.3	-5.72	<0.001	78	78.2	-0.16	0.876	-80.4 $\rightarrow$ -2.7	1
% Frail	40.6	56.2	-2.26	0.024	40.6	35.4	0.6	0.548	-31.5 $\rightarrow$ -10.5	.

B)	Pseudo-R2	LR χ^2	P > χ^2	Mean absolute SMD (%bias/SMD)	Median absolute SMD	B	R	%Var
Sample								
Unmatched	0.096	31.83	0	55.9	55.9	81.4 ^a	0.89	0
Matched	0.003	0.45	0.8	6.6	6.6	11.7	1.04	0

^a if B > 25%, R outside [0.5; 2]

Supplementary Table S3. A) Balance diagnostics and B) Rubin’s B and R diagnostics for the male cohort, pre- and post-matching results are shown. SMD= standardized mean difference.

A)	Before matching				After matching				SMD (%bias)	Variance ratio (Treated/Control)
Variable	PEth ≥0.05 (Treated) n = 47	Control n = 113	t	P value (P> t)	PEth ≥0.05 (Treated) n = 43	Control n = 55	t	P value (P> t)	Before → After	After
Age, mean	76.3	82.3	−4.3	<0.001	77.3	77.3	0.04	0.966	−72.4 → 0.9	0.98
% Frail	23.4	47.8	−2.92	0.004	25.6	26.4	−0.08	0.936	−52.3 → −1.7	

B) Sample	Pseudo-R2	LR chi²	P > chi²	Mean absolute SMD (%bias/SMD)	Median absolute SMD	B	R	%Var
Unmatched	0.11	21.27	0	62.3	62.3	81.9 ^a	1.36	0
Matched	0	0.01	0.99	1.3	1.3	2.3	0.97	0

^a if B>25%, R outside [0.5; 2]