Appendix S1.

Unmeasured confounder analysis was performed to assess whether covariates that were not measured, such as smoking or body mass index, would have had the potential to materially affect the results had they been available. Using the framework presented by Lin et al. (29), the association between a hypothetical unmeasured confounder and the outcome of interest necessary to: (*i*) result in a non-significant association between exposure and outcome; and (*ii*) result in no association (hazard ratio; HR=1) between exposure and outcome under different assumptions of prevalence of the risk factor in the exposed and unexposed groups.

Size of confounding effect necessary to nullify the association between mild psoriasis and specific causes of death and all-cause mortality

Prevalence in mild psoriasis	Prevalence in referents	Required HR unity	Required HR Ns
Cardiovascular disease			
20%	10%	1.8	1.0*
30%	10%	1.0*	1.0*
40%	10%	1.0*	1.0*
Chronic lower respiratory disease			
20%	10%	3.6	1.0*
30%	10%	1.8	1.0*
40%	10%	1.2	1.0*
Kidney disease			
20%	10%	12.0	3.6
30%	10%	6.0	1.8
40%	10%	4.0	1.2
Severe infection			
20%	10%	4.1	1.1
30%	10%	2.1	1.0*
40%	10%	1.4	1.0*
Liver disease			
20%	10%	10.0	3.4
30%	10%	5.0	1.7
40%	10%	3.3	1.1
All-cause mortality			
20%	10%	1.5	1.0*
30%	10%	1.0*	1.0*
40%	10%	1.0*	1.0*

*Below 1.0 using the approximation presented by Lin et al. (29).

Size of confounding effect necessary to nullify the association between severe psoriasis and specific causes of death and all-cause mortality

Prevalence in psoriasis	Prevalence in general population	Required HR unity	Required HR ns
Cardiovascular disease			
20%	10%	5.2	2.1
30%	10%	2.6	1.0*
40%	10%	1.7	1.0*
Cancer			
20%	10%	3.2	1.0*
30%	10%	1.6	1.0*
40%	10%	1.1	1.0*
Liver disease			
20%	10%	32.6	8.7
30%	10%	16.3	4.3
40%	10%	10.9	2.9
Other causes			
20%	10%	12.5	5.9
30%	10%	6.2	2.9
40%	10%	4.2	2.0
Missing cause of death			
20%	10%	24.2	2.4
30%	10%	12.1	1.2
40%	10%	8.1	1.0*
All-cause mortality			
20%	10%	5.6	3.6
30%	10%	2.8	1.8
40%	10%	1.9	1.2

*Below 1.0 using the approximation presented by Lin et al. (29).