

**Supplementary Table 1.** Variable definition by ICD-10 codes in this study.

Covariates	ICD-10 Codes
Any malignancy	C00, C01, C02, C03, C04, C05, C06, C07, C08, C09, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, C24, C25, C26, C30, C31, C32, C33, C34, C37, C38, C39, C40, C41, C43, C45, C46, C47, C48, C49, C50, C51, C52, C53, C54, C55, C56, C57, C58, C60, C61, C62, C63, C64, C65, C66, C67, C68, C69, C70, C71, C72, C73, C74, C75, C76, C77, C78, C79, C80, C81, C82, C83, C84, C85, C88, C90, C91, C92, C93, C94, C95, C96, C97, C900, C902
Liver disease / cirrhosis	B18, I850, I859, I864, I982, K700, K701, K702, K703, K704, K709, K711, K713, K714, K715, K717, K72, K73, K74, K760, K762, K763, K764, K765, K766, K767, K768, K769, Z944
Diabetes mellitus	E100, E101, E102, E103, E104, E105, E106, E107, E108, E109, E110, E111, E112, E113, E114, E115, E116, E117, E118, E119, E120, E121, E122, E123, E124, E125, E126, E127, E128, E129, E130, E131, E132, E133, E134, E135, E136, E137, E138, E139, E140, E141, E142, E143, E144, E145, E146, E147, E148, E149
Renal disease / failure	I120, I131, N18, N19, N032, N033, N034, N035, N036, N037, N052, N053, N054, N055, N056, N057, N18, N19, N250, Z490, Z491, Z492, Z940, Z992
Rheumatic disease	L940, L941, L943, M05, M06, M08, M120, M123, M30, M310, M311, M312, M313, M315, M32, M33, M34, M35, M45, M461, M468, M469, M360
Hypertension	I10, I11, I12, I13, I15
Deficiency anemia/Blood loss anemia	D500, D508, D509, D51, D52, D53
Alcohol abuse	F10, E52, G621, I426, K292, K700, K703, K709, T51, Z502, Z714, Z721
Peptic ulcer disease	K25, K26, K27, K28
Dementia	F00, F01, F02, F03, F051, G30, G311
Hemiplegia / paraplegia	G041, G114, G801, G802, G81, G82, G830, G831, G832, G833, G834, G839
Depression	F204, F313, F314, F315, F32, F33, F341, F412, F432
Fatigue	R53
Gait Abnormality / difficulty walking	R260, R261, R262, R268
Hyperlipidemia	E780, E781, E782, E783, E784, E785

Sleep Apnea	G473
COPD	J41, J42, J43, J44

\*Any malignancy including lymphoma and leukemia, and malignant neoplasm of skin.

COPD: chronic obstructive pulmonary disease, ICD-10: International Statistical Classification of Diseases and Related Health Problems, Tenth Revision.

**Supplementary Table 2.** Association between statin use, all-cause mortality, after adjustment by the inverse probability of treatment-weighted (IPTW) method.

Variable	Category	Number of cases after adjustment	Number of statin group	Cox regression analysis in adjusted population				RR	RD	RD 95% CI	NNT	NNT 95% CI		
				HR	95% CI	p-value								
Overall population	-	34,219	2,753	0.40	0.33	0.48	<.0001	0.31	0.05	0.04	0.06	21.20	18.10	24.70
Age	65 to <75 years	21,479	2,062	0.30	0.20	0.44	<.0001	0.22	0.02	0.02	0.03	44.64	39.18	54.57
	75 to <85 years	10,284	613	0.42	0.31	0.57	<.0001	0.37	0.07	0.04	0.09	14.78	11.75	22.39
	≥85 years	3,011	75	0.59	0.37	0.93	0.02	0.55	0.13	-0.004	0.28	7.63	3.63	-244.3
Sex	Men	17,643	1,027	0.35	0.26	0.48	<.0001	0.25	0.06	0.05	0.07	15.68	13.45	19.21
	Women	17,939	1,804	0.43	0.33	0.55	<.0001	0.33	0.04	0.03	0.04	27.50	23.30	38.87
Current smoker	Yes	3,763	226	0.43	0.33	0.97	0.03	0.51	0.04	0.002	0.08	22.29	11.69	433.8
	No	30,474	2,535	0.38	0.31	0.47	<.0001	0.29	0.05	0.04	0.05	20.95	18.34	24.42
BMI	<18.5	2,847	133	0.23	0.10	0.55	0.0008	0.27	0.08	0.04	0.11	12.02	8.97	25.33
	18.5 to <25.0	21,879	1,871	0.43	0.34	0.54	<.0001	0.30	0.05	0.04	0.05	21.13	18.61	26.01
	25.0 to <30.0	8,163	720	0.37	0.24	0.56	<.0001	0.23	0.05	0.04	0.06	21.20	18.15	27.87
	≥30.0	798	71	0.64	0.22	1.83	0.41	0.77	0.01	-0.04	0.07	73.34	13.55	-22.85
LDL cholesterol	<120 mg/dl	27,956	436	0.57	0.37	0.86	0.008	0.20	0.05	0.04	0.07	20.34	14.62	23.46
	120 to <140 mg/dl	20,129	891	0.64	0.46	0.90	0.009	0.46	0.02	-0.02	0.05	43.70	20.90	-49.61
	140 to ≤160 mg/dl	8,781	1,132	0.47	0.34	0.66	<.0001	0.53	0.02	0.01	0.03	45.42	31.91	75.48
	>160 mg/dl	7,223	2,134	0.51	0.39	0.67	<.0001	0.36	0.03	0.02	0.04	34.19	25.29	51.32
Diabetes	Yes	2,223	239	0.31	0.16	0.58	0.0002	0.25	0.08	0.05	0.10	12.78	9.66	20.96
	No	31,225	2,516	0.41	0.34	0.50	<.0001	0.32	0.05	0.04	0.05	22.14	18.85	26.45
Rheumatic disease	Yes	1,350	118	0.40	0.17	0.97	0.04	0.11	0.07	0.04	0.08	14.75	12.11	24.07

	No	32,059	2,617	0.40	0.33	0.49	<.0001	0.32	0.05	0.04	0.06	21.11	18.00	24.98
Dementia	Yes	861	60	0.35	0.19	0.67	0.0015	0.42	0.18	0.05	0.26	5.69	3.83	18.81
	No	32,672	2,654	0.39	0.32	0.48	<.0001	0.30	0.04	0.04	0.05	22.52	19.58	26.56

CI: confidence interval, HR: hazard ratio, NNT: number needed to treat, RD: risk difference, RR: risk ratio.