

Suppl 2. Subgroup Analysis Between Four Groups Participants and Lung Cancer Mortality

Group	Events/total (%)	Model 1 HR (95% CI) ^a	P	Model 2 HR (95% CI) ^b	P
Age (years)					
≤ 59					
NENN group	22/3,981 (0.6)	Ref		Ref	
E group	35/2,243 (1.6)	2.745 (1.610 - 4.680)	< 0.001	1.936 (1.111 - 3.373)	0.020
N group	30/1,904 (1.6)	2.719 (1.573 - 4.733)	< 0.001	2.288 (1.300 - 4.028)	0.004
E + N group	19/792 (2.4)	4.072 (2.200 - 7.535)	< 0.001	2.777 (1.453 - 5.309)	0.002
60 - 64					
NENN group	30/2,809 (1.1)	Ref		Ref	
E group	32/1,819 (1.8)	1.567 (0.952 - 2.580)	0.077	1.405 (0.815 - 2.420)	0.221
N group	26/1,488 (1.7)	1.509 (0.891 - 2.554)	0.126	1.669 (0.946 - 2.946)	0.077
E + N group	33/700 (4.7)	3.970 (2.412 - 6.533)	< 0.001	3.251 (1.872 - 5.645)	< 0.001
65 - 69					
NENN group	18/1,545 (1.2)	Ref		Ref	
E group	28/1,149 (2.4)	2.082 (1.152 - 3.764)	0.015	1.625 (0.871 - 3.031)	0.127
N group	39/902 (4.3)	3.628 (2.075 - 6.345)	< 0.001	3.207 (1.787 - 5.755)	< 0.001
E + N group	29/534 (5.4)	4.595 (2.549 - 8.283)	< 0.001	3.631 (1.944 - 6.782)	< 0.001
70 - 74					
NENN group	15/705 (2.1)	Ref		Ref	
E group	14/608 (2.3)	1.097 (0.530 - 2.273)	0.803	1.122 (0.524 - 2.402)	0.767
N group	25/443 (5.6)	2.617 (1.379 - 4.965)	0.003	2.777 (1.394 - 5.535)	0.004
E + N group	29/327 (8.9)	4.293 (2.301 - 8.010)	< 0.001	4.036 (2.040 - 7.982)	< 0.001
Sex					
Women					
NENN group	19/3,764 (0.5)	Ref		Ref	
E group	38/2,269 (1.7)	3.163 (1.823 - 5.489)	< 0.001	2.776 (1.544 - 4.993)	0.001
N group	51/2,079 (2.5)	4.524 (2.669 - 7.667)	< 0.001	4.350 (2.486 - 7.614)	< 0.001
E + N group	36/884 (4.1)	6.893 (3.992 - 12.214)	< 0.001	6.529 (3.603 - 11.830)	< 0.001
Men					
NENN group	66/5,276 (1.3)	Ref		Ref	
E group	71/3,550 (2.0)	1.462 (1.045 - 2.045)	0.027	1.215 (0.851 - 1.736)	0.284
N group	69/2,658 (2.6)	1.911 (1.363 - 2.680)	< 0.001	1.866 (1.305 - 2.668)	< 0.001
E + N group	74/1,469 (5.0)	3.461 (2.477 - 4.837)	< 0.001	2.585 (1.799 - 3.713)	< 0.001
Smoking status					
Former smoker					
NENN group	37/5,020 (0.7)	Ref		Ref	
E group	34/2,643 (1.3)	1.562 (0.979 - 2.492)	0.061	1.396 (0.854 - 2.281)	0.183
N group	41/2,572 (1.6)	1.977 (1.267 - 3.087)	0.003	1.896 (1.185 - 3.034)	0.008
E + N group	43/1,011 (4.3)	4.623 (2.962 - 7.216)	< 0.001	4.190 (2.623 - 6.691)	< 0.001
Current smoker					
NENN group	48/4,020 (1.2)	Ref		Ref	
E group	75/3,176 (2.4)	1.834 (1.276 - 2.636)	0.001	1.662 (1.127 - 2.450)	0.010
N group	79/2,165 (3.6)	2.836 (1.980 - 4.062)	< 0.001	2.846 (1.940 - 4.174)	< 0.001
E + N group	67/1,342 (5.0)	3.611 (2.487 - 5.243)	< 0.001	2.996 (1.997 - 4.495)	< 0.001
Smoking, pack-years					
30 - 59					
NENN group	44/6,276 (0.7)	Ref		Ref	
E group	48/3,476 (1.4)	1.817 (1.206 - 2.736)	0.004	1.550 (0.998 - 2.408)	0.051
N group	70/3,222 (2.2)	2.830 (1.939 - 4.129)	< 0.001	2.713 (1.813 - 4.061)	< 0.001
E + N group	54/1,378 (3.9)	4.758 (3.187 - 7.104)	< 0.001	3.968 (2.568 - 6.132)	< 0.001
60 - 89					
NENN group	26/2,034 (1.3)	Ref		Ref	
E group	34/1,668 (2.0)	1.504 (0.902 - 2.508)	0.117	1.470 (0.858 - 2.519)	0.161
N group	29/1,102 (2.6)	1.945 (1.144 - 3.306)	0.014	1.946 (1.107 - 3.421)	0.021
E + N group	36/690 (5.2)	3.611 (2.172 - 6.004)	< 0.001	3.252 (1.882 - 5.620)	< 0.001
60 - 89					
NENN group	15/730 (2.1)	Ref		Ref	
E group	27/675 (4.0)	1.895 (1.008 - 3.564)	0.047	1.626 (0.839 - 3.150)	0.150
N group	21/413 (5.1)	2.353 (1.212 - 4.568)	0.011	2.370 (1.193 - 4.710)	0.014
E + N group	20/285 (7.0)	3.121 (1.592 - 6.120)	0.001	2.690 (1.330 - 5.443)	0.006
Family history of lung cancer					
No					
NENN group	72/7,312 (1.0)	Ref		Ref	
E group	75/4,623 (1.6)	1.547 (1.119 - 2.139)	0.008	1.364 (0.968 - 1.924)	0.076
N group	91/3,817 (2.4)	2.259 (1.658 - 3.079)	< 0.001	2.150 (1.545 - 2.992)	< 0.001
E + N group	87/1,855 (4.7)	4.158 (3.035 - 5.695)	< 0.001	3.416 (2.430 - 4.800)	< 0.001
Yes					
NENN group	13/1,728 (0.8)	Ref		Ref	
E group	34/1,196 (2.8)	3.315 (1.747 - 6.291)	< 0.001	2.466 (1.253 - 4.852)	0.009
N group	29/920 (3.2)	3.717 (1.930 - 7.160)	< 0.001	3.765 (1.909 - 7.426)	< 0.001
E + N group	23/498 (4.6)	4.899 (2.468 - 9.723)	< 0.001	3.544 (1.722 - 7.295)	0.001

Model 1a: adjusted for age. Model 2b: adjusted for age, gender, race/ethnicity, education level, marital status, smoking status, smoking pack-year, BMI and family history of lung cancer. NENN group: non-emphysema and non-nodules; E group: emphysema without nodules; N group: nodules without emphysema; E + N group: nodules with emphysema.