

**Supplementary Table 3.** Hazard ratios and 95% confidence intervals for death from pneumonia according to the exposure duration to low-household income, subgroup analysis according to insulin use

Subgroup	Duration of exposures to low-household income, yr	No. of events	Follow-up duration, person-yr	IR, /1,000 person-yr (95% CI)	Hazard ratio (95% confidence interval)				
					Crude model	Model 1	Model 2	Model 3	Model 4
Insulin non-users	0 (n=2,229,237)	9,565	15,480,345.15	0.618 (0.605–0.629)	1 (Ref)	1 (Ref)	1 (Ref)	1 (Ref)	1 (Ref)
	1–4 (n=38,494)	343	244,420.24	1.403 (1.261–1.559)	2.413 (2.166–2.687)	1.758 (1.578–1.959)	1.686 (1.513–1.879)	1.703 (1.528–1.898)	1.687 (1.514–1.880)
	5 (n=16,748)	95	93,620.90	1.015 (0.830–1.241)	1.996 (1.630–2.444)	5.321 (4.341–6.523)	4.872 (3.974–5.973)	4.955 (4.042–6.075)	4.859 (3.963–5.958)
	<i>P</i> for trend				<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Insulin users	0 (n=207,268)	2,108	1,363,974.92	1.545 (1.478–1.609)	1 (Ref)	1 (Ref)	1 (Ref)	1 (Ref)	1 (Ref)
	1–4 (n=7,660)	94	44,575.45	2.109 (1.721–2.579)	1.482 (1.205–1.823)	1.751 (1.424–2.154)	1.654 (1.344–2.035)	1.654 (1.344–2.036)	1.629 (1.323–2.005)
	5 (n=4,174)	40	21,794.54	1.835 (1.348–2.505)	1.436 (1.049–1.965)	3.384 (2.466–4.644)	3.146 (2.292–4.319)	3.175 (2.312–4.359)	3.069 (2.234–4.215)
	<i>P</i> for trend				<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
<i>P</i> for interaction					<0.0001	0.8506	0.8321	0.8079	0.7968

Model 1: adjusted for age and sex; Model 2: adjusted for age, sex, smoking history, alcohol consumption, regular exercise, and presence of chronic kidney disease (CKD); Model 3: adjusted for age, sex, smoking history, alcohol consumption, regular exercise, and presence of CKD, fasting plasma glucose, and diabetes duration ( $\geq 5$  years vs.  $< 5$  years); Model 4: adjusted for age, sex, smoking history, alcohol consumption, regular exercise, presence of CKD, fasting plasma glucose, diabetes duration ( $\geq 5$  years vs.  $< 5$  years), chronic lower respiratory disease, and lung diseases due to external agents.

IR, incidence rate; CI, confidence interval.