

Association between Air Pollution and Emergency Room Visits for Atrial Fibrillation

Table S1. Bipollutant models of the association between AF emergency hospital admissions and air pollution levels. Reported statistics are the % increase in risk per 10 unit increase of pollutant (95% CI).

	Immediate (Lag 0–1)	Retarded (Lag 2–5)	Extended (Lag 0–5)
PM ₁₀ with NO ₂	1.23 (0.31, 2.16)*	-0.38 (-1.41, 0.67)	0.27 (-0.94, 1.5)
PM _{2.5} with NO ₂	2.04 (0.26, 3.90)*	-0.30 (-2.46, 1.14)	0.69 (-1.89, 3.34)
NO ₂ with PM ₁₀	0.50 (-0.54, 1.56)	0.71 (-0.54, 1.97)	0.92 (-0.55, 2.41)
NO ₂ with PM ₂₅	1.25 (-0.18, 2.71)	0.52 (-1.22, 2.29)	1.24 (-0.80, 3.33)

* *p*-value < 0.05.

Table S2. Pre-existing medical conditions in the consecutive case series coming from a single hospital from which those data were available (*n* = 4482; only years 2006–2010). Median age was 72 years (min = 45; max = 100); women represented 51.8% of total patients.

Medical condition	Frequency (<i>n</i> = 4482)
Diabetes	11.9%
Cardiovascular disease	75.4%
Chronic respiratory disease	8.8%
Oncological, liver, renal or neurodegenerative disease	22.5%

Lag-response curve for a 10-unit increase in PM₁₀

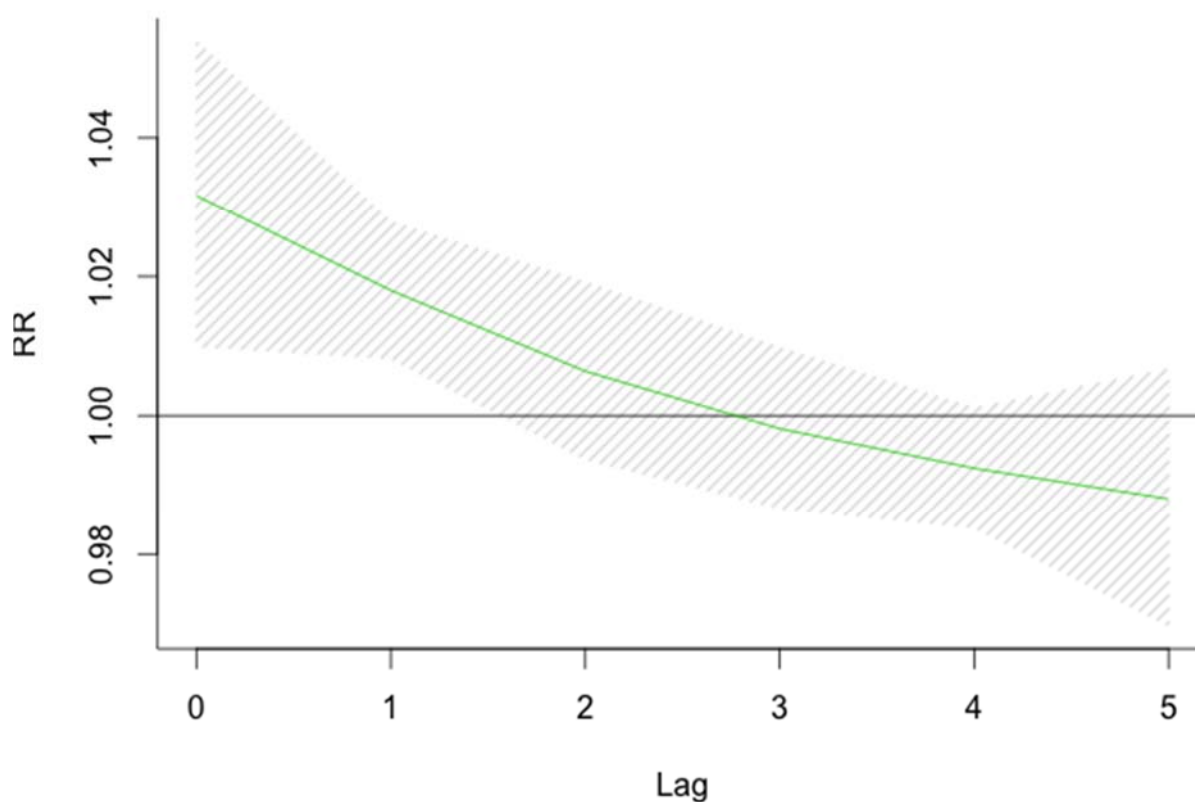


Figure S1. Relative risks of emergency room admission for atrial fibrillation associated with PM₁₀ of 44.5 $\mu\text{g}/\text{m}^3$ compared to a centered concentration of PM₁₀ = 34.5 $\mu\text{g}/\text{m}^3$ (mean of the whole study period) on lag 0 to 5 in Rome during 2001–2014.

Lag-response curve for a 10-unit increase in PM_{2.5}

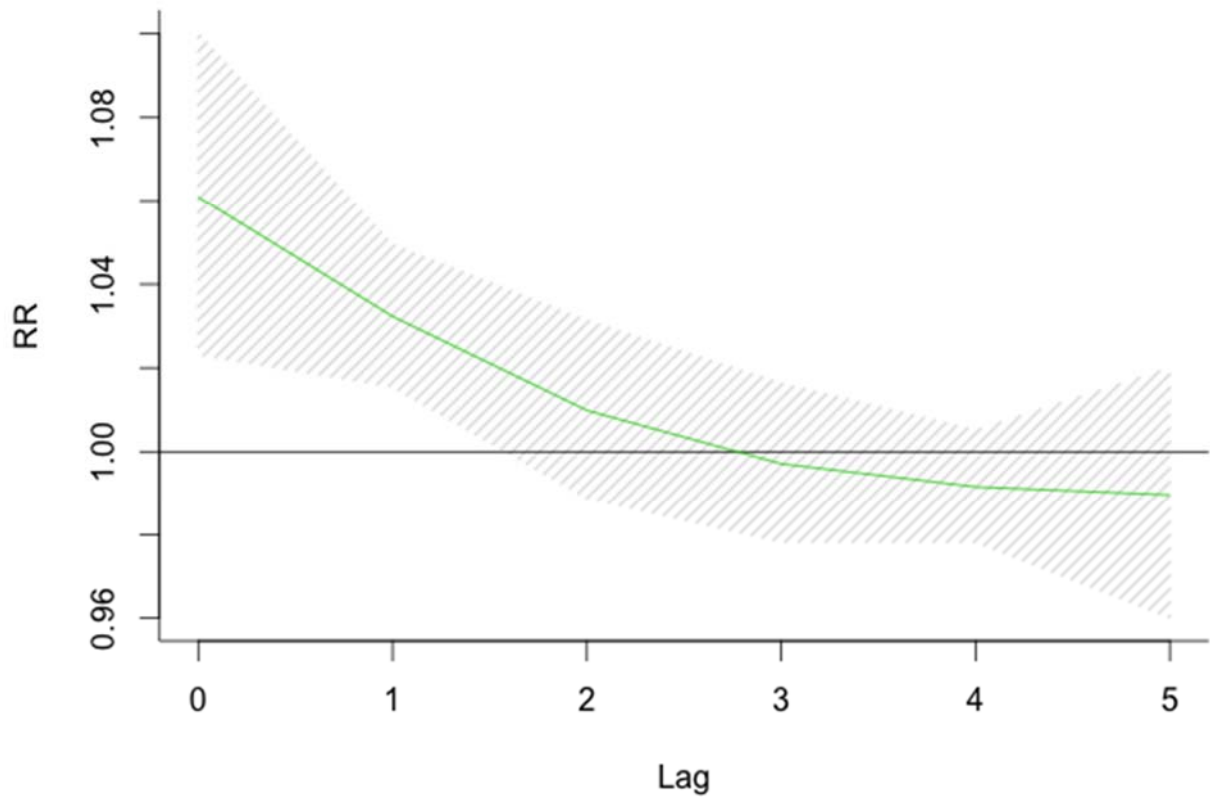


Figure S2. Relative risks of emergency room admission for atrial fibrillation associated with PM_{2.5} of 28.7 $\mu\text{g}/\text{m}^3$ compared to a centered concentration of PM_{2.5} = 18.7 $\mu\text{g}/\text{m}^3$ (mean of the whole study period) on lag 0 to 5 in Rome during 2001–2014.

Lag-response curve for a 10-unit increase in NO₂

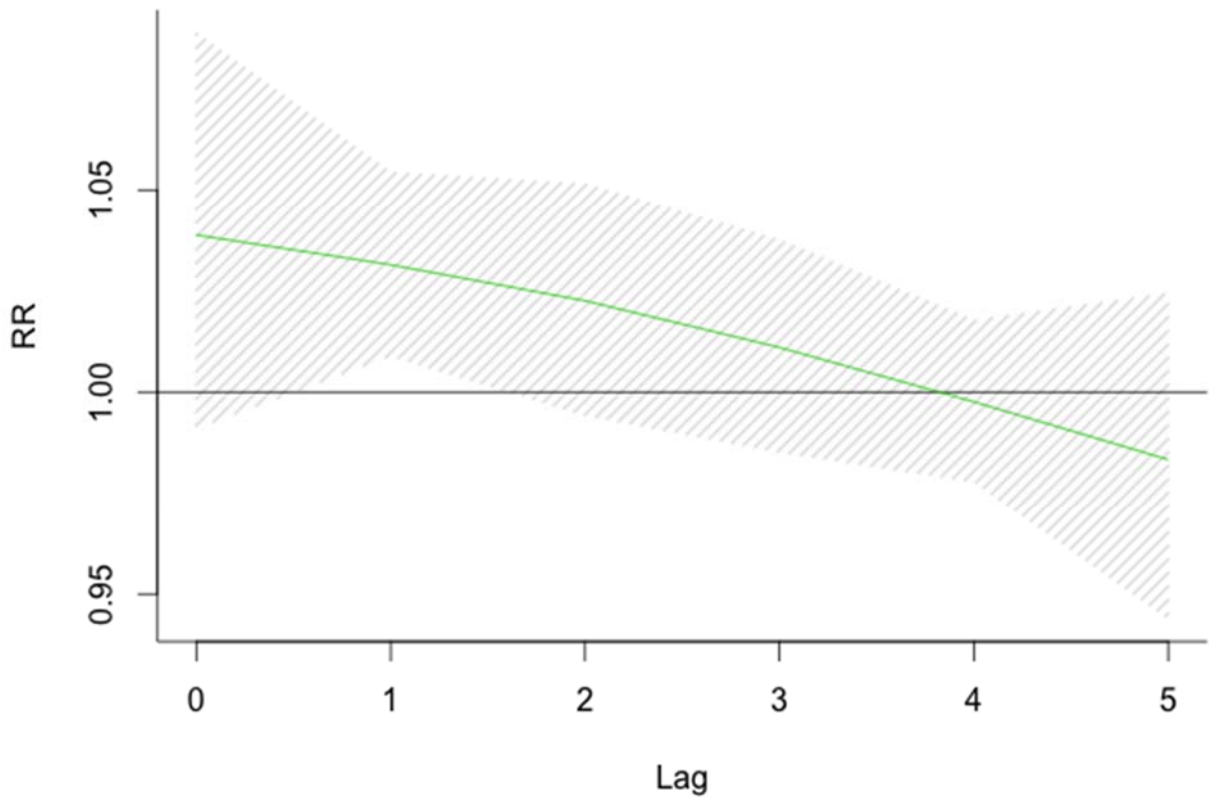


Figure S3. Relative risks of emergency room admission for atrial fibrillation associated with NO₂ of 68.3 $\mu\text{g}/\text{m}^3$ compared to a centered concentration of NO₂ = 58.3 $\mu\text{g}/\text{m}^3$ (mean of the whole study period) on lag 0 to 5 in Rome during 2001–2014.