

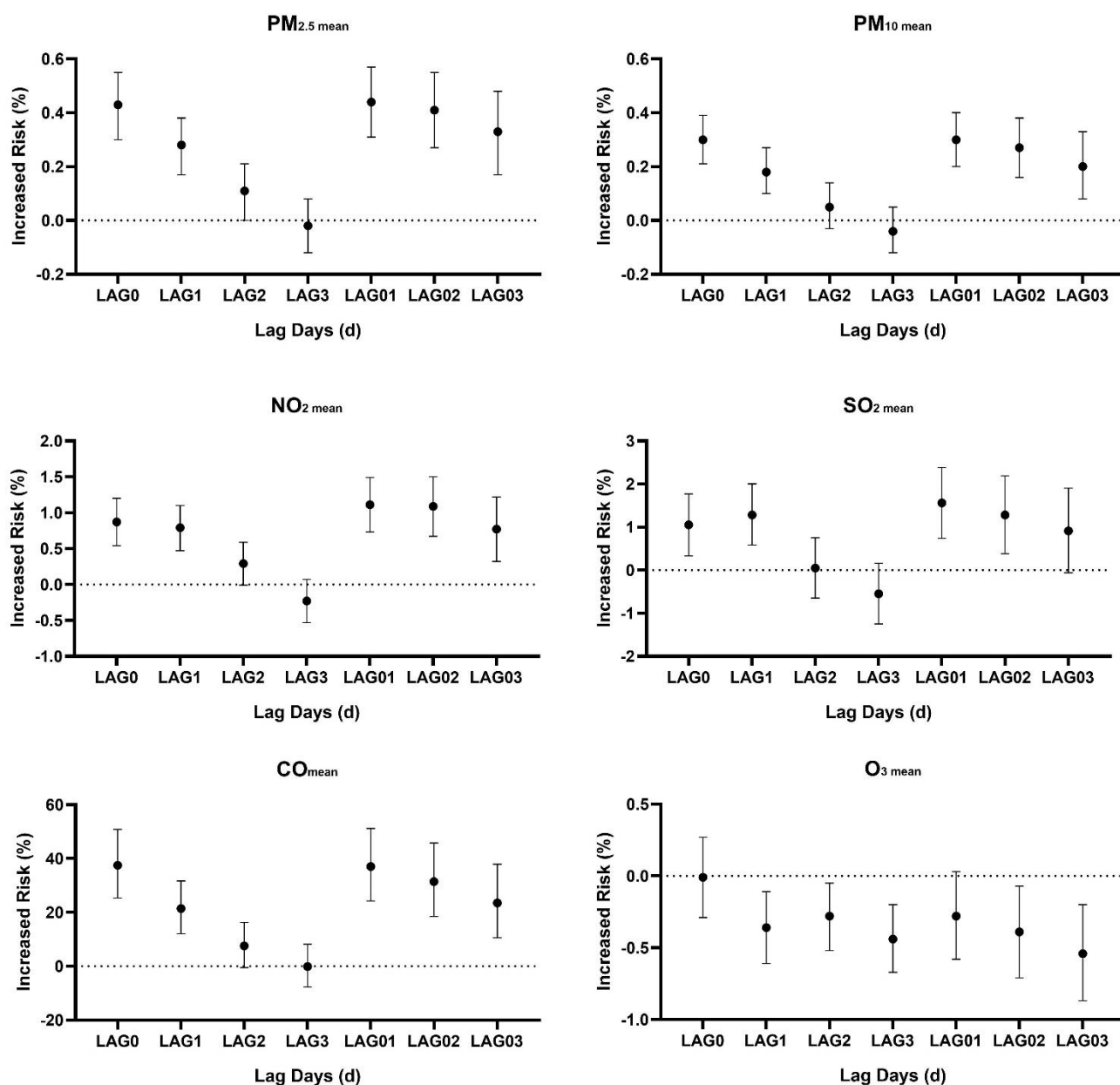
Supplementary Materials

# Hourly Valley Concentration of Air Pollutants Associated with Increased Acute Myocardial Infarction Hospital Admissions in Beijing, China

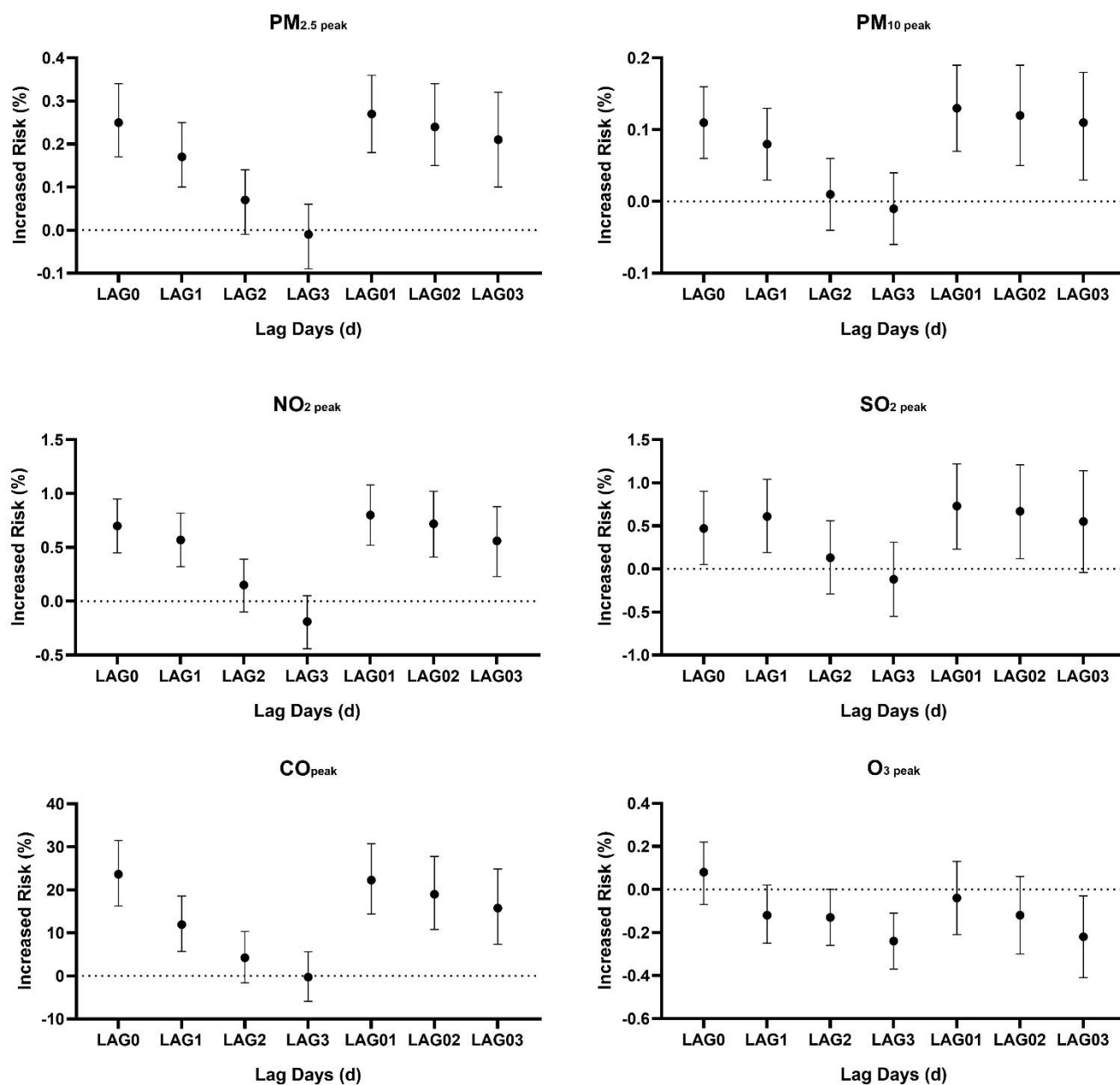
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**Table S1.** The excess risk (%) and 95% confidence interval in AMI hospital admissions for per 10 units increase in hourly peak, mean and valley concentration of six kinds of air pollutants in different lag days among the total population in Beijing, China.

Variable	LAG0	LAG1	LAG2	LAG3	LAG01	LAG02	LAG03
PM <sub>2.5</sub> valley	0.5 (0.35–0.66)	0.36 (0.22–0.5)	0.13 (0–0.26)	0 (–0.13–0.13)	0.63 (0.46–0.81)	0.6 (0.4–0.79)	0.53 (0.32–0.74)
PM <sub>2.5</sub> mean	0.43 (0.3–0.55)	0.28 (0.17–0.38)	0.11 (0–0.21)	–0.02 (–0.12–0.08)	0.44 (0.31–0.57)	0.41 (0.27–0.55)	0.33 (0.17–0.48)
PM <sub>2.5</sub> peak	0.25 (0.17–0.34)	0.17 (0.1–0.25)	0.07 (–0.01–0.14)	–0.01 (–0.09–0.06)	0.27 (0.18–0.36)	0.24 (0.15–0.34)	0.21 (0.1–0.32)
PM <sub>10</sub> valley	0.44 (0.32–0.56)	0.28 (0.16–0.4)	0.09 (–0.02–0.21)	–0.06 (–0.17–0.06)	0.51 (0.37–0.65)	0.48 (0.33–0.64)	0.41 (0.24–0.59)
PM <sub>10</sub> mean	0.3 (0.21–0.39)	0.18 (0.1–0.27)	0.05 (–0.03–0.14)	–0.04 (–0.12–0.05)	0.3 (0.2–0.4)	0.27 (0.16–0.38)	0.2 (0.08–0.33)
PM <sub>10</sub> peak	0.11 (0.06–0.16)	0.08 (0.03–0.13)	0.01 (–0.04–0.06)	–0.01 (–0.06–0.04)	0.13 (0.07–0.19)	0.12 (0.05–0.19)	0.11 (0.03–0.18)
NO <sub>2</sub> valley	0.84 (0.47–1.22)	0.89 (0.53–1.24)	0.33 (0–0.66)	–0.09 (–0.42–0.24)	1.36 (0.9–1.83)	1.37 (0.87–1.89)	1.16 (0.61–1.71)
NO <sub>2</sub> mean	0.87 (0.54–1.2)	0.79 (0.47–1.1)	0.29 (–0.01–0.59)	–0.23 (–0.53–0.07)	1.11 (0.73–1.49)	1.09 (0.67–1.5)	0.77 (0.32–1.22)
NO <sub>2</sub> peak	0.7 (0.45–0.95)	0.57 (0.32–0.82)	0.15 (–0.1–0.39)	–0.19 (–0.44–0.05)	0.8 (0.52–1.08)	0.72 (0.41–1.02)	0.56 (0.23–0.88)
SO <sub>2</sub> valley	1.86 (0.73–3.01)	2.51 (1.39–3.63)	–0.23 (–1.32–0.87)	–1 (–2.1–0.11)	3.14 (1.79–4.51)	2.55 (1.02–4.11)	1.78 (0.1–3.49)
SO <sub>2</sub> mean	1.05 (0.33–1.77)	1.28 (0.58–2)	0.05 (–0.65–0.75)	–0.55 (–1.25–0.16)	1.56 (0.74–2.38)	1.28 (0.38–2.19)	0.91 (–0.06–1.9)
SO <sub>2</sub> peak	0.47 (0.05–0.9)	0.61 (0.19–1.04)	0.13 (–0.29–0.56)	–0.12 (–0.55–0.31)	0.73 (0.23–1.22)	0.67 (0.12–1.21)	0.55 (–0.04–1.14)
CO valley	44.6 (28.99–62.1)	33.86 (20.77–48.37)	10.87 (0.55–22.25)	3.64 (–6.08–14.37)	60.72 (41.12–83.05)	54.41 (34.31–77.53)	47.83 (27.45–71.45)
CO mean	37.5 (25.37–50.8)	21.46 (12.04–31.68)	7.57 (–0.5–16.29)	–0.07 (–7.67–8.16)	37.05 (24.25–51.16)	31.42 (18.49–45.77)	23.49 (10.59–37.9)
CO peak	23.64 (16.28–31.46)	11.95 (5.7–18.57)	4.22 (–1.59–10.37)	–0.29 (–5.9–5.65)	22.27 (14.38–30.71)	18.98 (10.8–27.76)	15.76 (7.35–24.84)
O <sub>3</sub> valley	–0.34 (–0.74–0.06)	–0.47 (–0.86–0.09)	–0.33 (–0.72–0.05)	–0.14 (–0.53–0.24)	–0.62 (–1.1–0.14)	–0.74 (–1.28–0.2)	–0.72 (–1.3–0.13)
O <sub>3</sub> mean	–0.01 (–0.29–0.27)	–0.36 (–0.61–0.11)	–0.28 (–0.52–0.05)	–0.44 (–0.67–0.2)	–0.28 (–0.58–0.03)	–0.39 (–0.71–0.07)	–0.54 (–0.87–0.2)
O <sub>3</sub> peak	0.08 (–0.07–0.22)	–0.12 (–0.25–0.02)	–0.13 (–0.26–0)	–0.24 (–0.37–0.11)	–0.04 (–0.21–0.13)	–0.12 (–0.3–0.06)	–0.22 (–0.41–0.03)



**Figure S1.** The excess risk (%) and 95% confidence interval in AMI hospital admissions for per 10 units increase in hourly mean concentration of six kinds of air pollutants in different lag days among the total population in Beijing, China.



**Figure S2.** The excess risk (%) and 95% confidence interval in AMI hospital admissions for per 10 units increase in hourly peak concentration of six kinds of air pollutants in different lag days among the total population in Beijing, China.

**Table S2.** The excess risk (%) and 95% confidence interval in AMI hospital admissions for per 10 units increase in hourly peak, mean and valley concentration of six kinds of air pollutants among the total population in Beijing, China ( used alternative degrees of freedom).

Variable	Excess Risk (%)	95%CI low	95%CI upp
PM <sub>2.5</sub> valley	0.48	0.33	0.63
PM <sub>2.5</sub> mean	0.40	0.28	0.53
PM <sub>2.5</sub> peak	0.23	0.15	0.32
PM <sub>10</sub> valley	0.43	0.31	0.55
PM <sub>10</sub> mean	0.29	0.20	0.38
PM <sub>10</sub> peak	0.11	0.06	0.16
NO <sub>2</sub> valley	0.78	0.40	1.17
NO <sub>2</sub> mean	0.82	0.47	1.18
NO <sub>2</sub> peak	0.66	0.39	0.92
SO <sub>2</sub> valley	1.51	0.33	2.70
SO <sub>2</sub> mean	0.78	0.02	1.54
SO <sub>2</sub> peak	0.28	−0.16	0.73
CO valley	40.33	25.09	57.44
CO mean	32.49	20.58	45.58
CO peak	20.27	12.88	28.13
O <sub>3</sub> valley	−0.28	−0.69	0.14
O <sub>3</sub> mean	0.02	−0.26	0.30
O <sub>3</sub> peak	0.09	−0.06	0.24