

Supplementary Information

Ambient air pollution, weather changes, and outpatient visits for allergic conjunctivitis: A retrospective registry study

Jiaxu Hong, Taoling Zhong, Huili Li, Jianming Xu, Xiaofang Ye, Zhe Mu, Yi Lu, Alireza Mashaghi, Ying Zhou, Mengxi Tan, Qiyuan Li, Xinghuai Sun, Zuguo Liu, Jianjiang Xu

Supplementary File 1: Distribution of weekly outpatient visits for allergic conjunctivitis

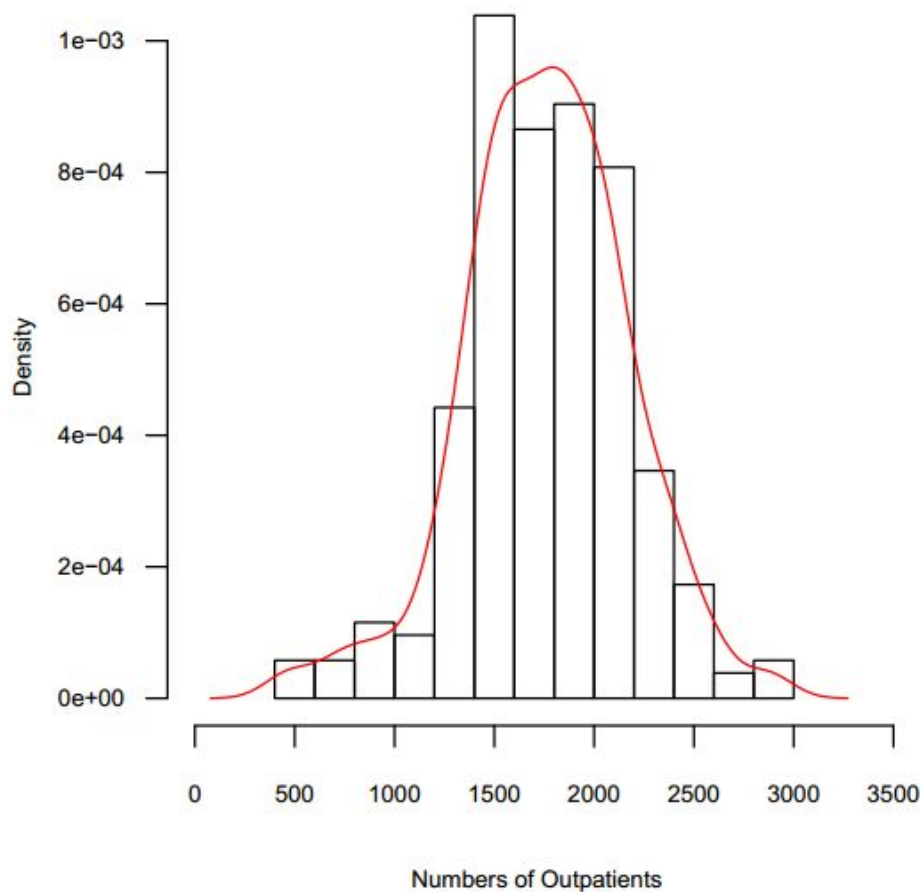


Figure Legend: The Anderson–Darling normality test indicated that the distribution is close to normal distribution ($P = 0.0939$).

**Supplementary File 2 Correlation between the Number of Outpatients, with the
Interaction between each Pollutant and the Weather Condition by the Stepwise**

Regression Method

Variables	Estimate (95% CI)	<i>P</i> value
SO₂	12.942 (-80.66, 106.543)	0.7856
SO₂: Wind Velocity	-0.461 (-35.698, 34.776)	0.9795
NO₂	267.814 (75.457, 460.172)	0.0065
NO₂: Humidity	-2.999 (-5.765, -0.234)	0.0336
PM₁₀	-2.555 (-14.654, 9.545)	0.6779
O₃	24.411 (-24.092, 72.914)	0.3226
O₃: Temperature	-0.431 (-2.339, 1.477)	0.6569

Supplementary File 3 The *P*-value of Ljung-Box Test for the ARMA Model to Fit the Residual of the Univariate Linear Model when Latency is from 1 to 5 Weeks

Variables	lag=1	lag=2	lag=3	lag=4	lag=5
SO₂	0.4501	0.5845	0.9562	0.9901	0.9708
NO₂	0.0074	0.0245	0.6414	0.9442	0.8835
PM₁₀	0.0008	0.0094	0.5096	0.8696	0.8338
O₃	0.0051	0.0082	0.4706	0.7899	0.4054
Temperature	0.0026	0.0046	0.3423	0.7650	0.4852
Humidity	0.0001	0.0019	0.4564	0.9421	0.8453
Wind Velocity	0.0001	0.0018	0.4593	0.9402	0.8446

Supplementary File 4 Principal component analysis for the cutoff age

Variable	<20		20-50		≥50	
	Estimate	<i>P</i> value	Estimate	<i>P</i> value	Estimate	<i>P</i> value
SO ₂	0.2369	0.2912	0.2347	0.4198	-2.8406	0.0451
NO ₂	0.3130	0.1236	0.5869	0.0273	2.6528	0.0506
PM ₁₀	0.1223	0.0537	0.0500	0.5480	-0.0163	0.9700
O ₃	0.7192	0.0000	0.4973	0.0005	-0.0817	0.9106
PM _{2.5}	0.0019	0.9884	0.0859	0.5977	-0.2974	0.7104
temp.av	3.5536	0.0000	3.7688	0.0001	10.6424	0.0072
temp.hi	3.1007	0.0000	3.2072	0.0001	9.0609	0.0115
temp.lo	2.7642	0.0008	3.4234	0.0006	11.0969	0.0055
pres.av	-1.1897	0.0576	-0.6774	0.3932	-4.0442	0.2545
prec	0.0002	0.7300	-0.0001	0.8655	-0.0030	0.4653
humi.av	-1.0184	0.0005	-0.9148	0.0170	-1.1010	0.5858
velo.av	-1.3714	0.7217	6.8841	0.1786	73.3291	0.0060