

**Table S1.** Increase of daily number of psoriasis cases associated with per 1000 ppb increase of NO<sub>2</sub> concentrations and weather conditions with single-and multiple-pollutant models

Environmental factors	aRR <sup>a</sup> Lag0	aRRLag1	aRRLag2
<i>Single model</i>			
Adjusted for O <sub>3</sub> .8h	1.007(1.005, 1.008) ***	1.003(1.002,1.005) ***	1.003(1.002,1.005) ***
Adjusted for SO <sub>2</sub>	1.007(1.006, 1.009) ***	1.003(1.002,1.005) ***	1.003(1.002,1.005) ***
Adjusted for PM <sub>2.5</sub>	1.009(1.007, 1.010) ***	1.005(1.003,1.006) ***	1.005(1.003,1.006) ***
<i>Multiple model</i>			
Adjusted for O <sub>3</sub> .8h+PM <sub>2.5</sub>	1.009(1.007, 1.010) ***	1.005(1.003,1.006) ***	1.005(1.003,1.006) ***
Adjusted for SO <sub>2</sub> +PM <sub>2.5</sub>	1.009(1.007, 1.011) ***	1.005(1.003,1.006) ***	1.005(1.003,1.006) ***
Adjusted for SO <sub>2</sub> +O <sub>3</sub> .8h	1.007(1.006, 1.009) ***	1.004(1.002,1.005) ***	1.004(1.002,1.005) ***
Adjusted for SO <sub>2</sub> +O <sub>3</sub> .8h+PM <sub>2.5</sub>	1.009(1.007, 1.011) ***	1.005(1.003,1.006) ***	1.005(1.003,1.006) ***

<sup>a</sup>aRR, adjusted relative risk, \*\*\*p <0.001

**Table S2. The numbers and proportions of patients with psoriasis in Guangzhou during 2014-2020 (N=62305)**

<b>Date</b>	<b>Patient Numbers</b>	<b>Proportion(%)</b>
<b>Year</b>		
2014	5225	8.39
2015	6346	10.19
2016	7278	11.68
2017	9115	14.63
2018	10068	16.16
2019	12075	19.38
2020	12198	19.58
<b>Month</b>		
January	5360	8.60
Feburary	3730	5.99
March	5246	8.42
April	5224	8.38
May	5214	8.37
June	4874	7.82
July	5080	8.15
August	5025	8.07
September	5141	8.25
October	5461	8.76
November	5718	9.18
December	6232	10.00