

**Acute Exacerbation of Idiopathic Pulmonary Fibrosis Associated with Air Pollution
Exposure – Supplementary Material**

Supplementary Table 1: Sensitivity Analyses over Three Exposure Periods

Exposure Period (days preceding diagnosis)	Mean O₃ (n=55) HR (95%CI)	Mean NO₂ (n=87) HR (95%CI)
1-14	0.82 (0.39-1.73)	0.83 (0.50-1.37)
15-28	2.79 (1.67-4.67)	0.96 (0.47-1.97)
29-56	0.78 (0.45-1.36)	1.73 (0.98-3.06)

Abbreviations: O₃=ozone, NO₂=nitrogen dioxide, HR=hazard ratio. HRs adjusted for forced vital capacity, smoking status and the effect of other exposure periods in this analysis.

Supplementary Table 2: Sensitivity Analyses for Exceedances with Alternative Standards

Pollutant	US EPA	Air Korea	WHO
O ₃ , HR (95%CI)	1.51 (1.17-1.94)	1.35 (1.04-1.77)	1.24 (0.99-1.54)
NO ₂ , HR (95%CI)	1.21 (1.12-1.31)	1.21 (1.12-1.31)	--
PM ₁₀ , HR (95%CI)	1.06 (0.83-1.36)	1.15 (0.91-1.45)	1.16 (0.83-1.63)
SO ₂ , HR (95%CI)	--	--	n/a
CO, HR (95%CI)	--	--	n/a

Abbreviations: O₃=ozone, NO₂=nitrogen dioxide, PM₁₀=particulate matter less than 10 microns in aerodynamic diameter, SO₂=sulfur dioxide, CO=carbon monoxide, HR=hazard ratio, US EPA=United States environmental protection agency, WHO=World health organization, n/a=not applicable. HRs adjusted for forced vital capacity and smoking status. There were no exceedances above specified standards where no values listed. 'N/a' where published standards could not be applied.

Supplementary Figure 1: Distance from Residential Address to Monitoring Site

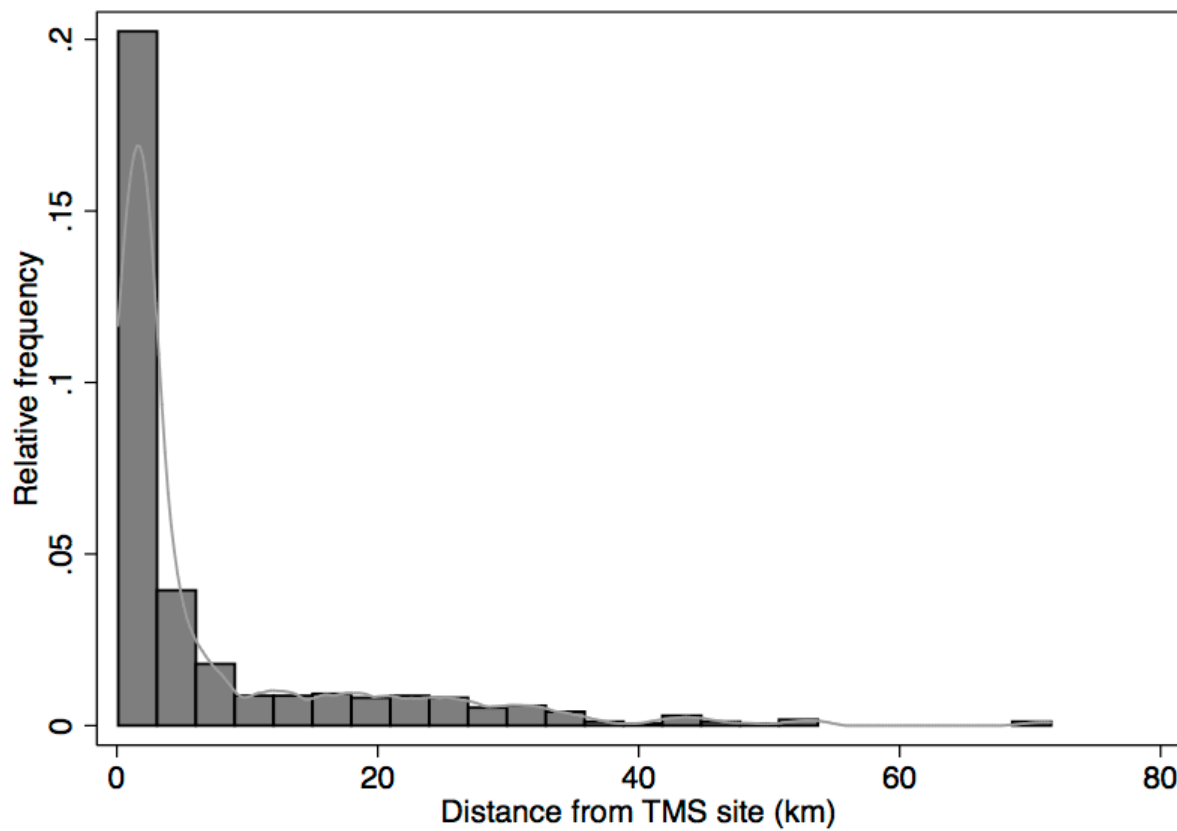


Figure Legend: Histogram showing distance (kilometers) from each patient's residential address to their assigned air pollution monitoring site