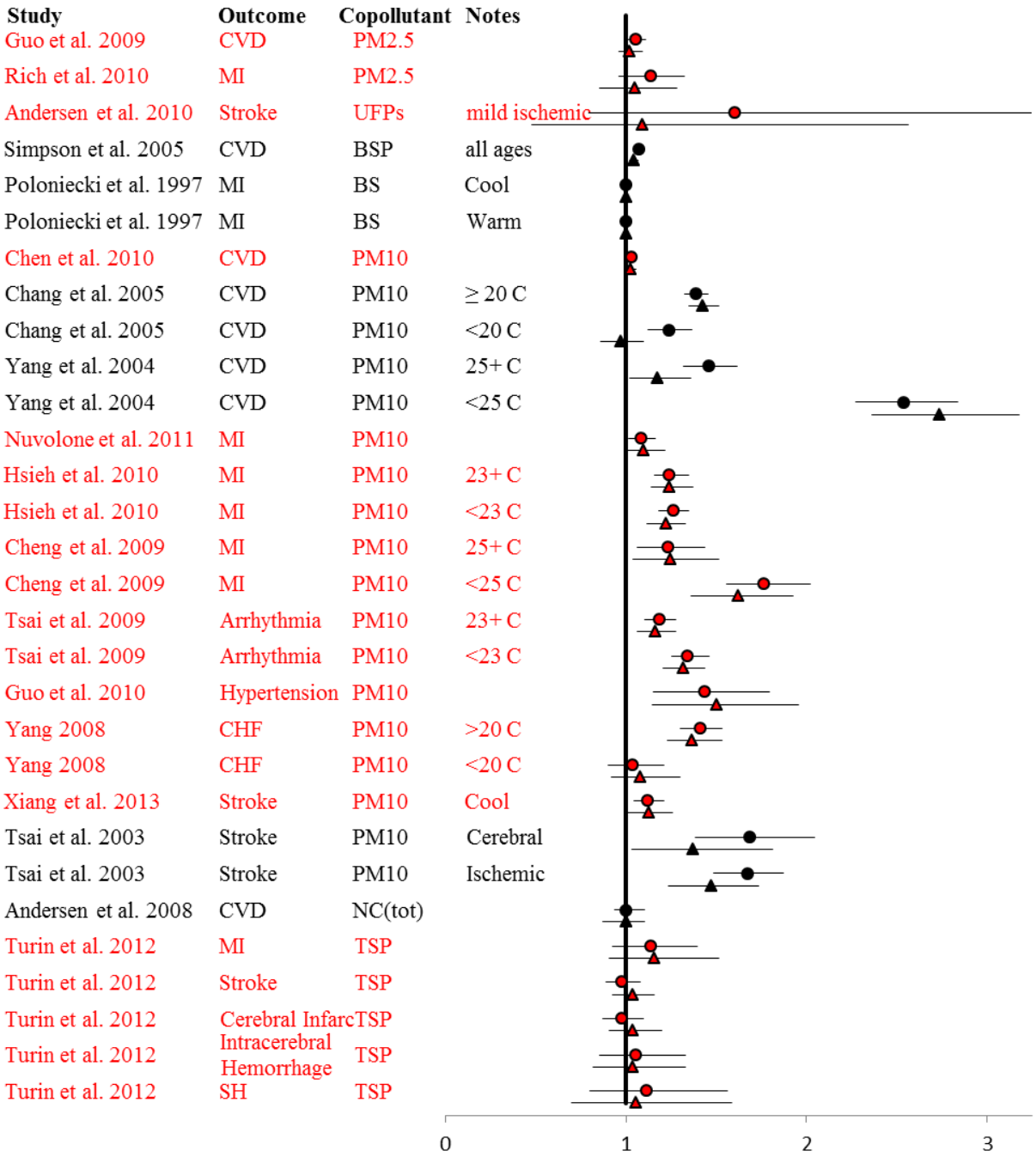

Note: Studies in red are recent studies. Studies in black were included in the 2008 ISA for Oxides of Nitrogen. Relative risks were standardized to a 20 ppb or 30-ppb increase in NO_2 concentration for 24-h and 1-h averaging times, respectively. Relative risks from Andersen et al. (2010) were standardized to a 40 ppb or 60-ppb increase in NO_X concentration for 24-h and 1-h averaging times, respectively. Model estimates are presented as pairs with the top estimate (circles) for the single pollutant model and the bottom estimate (triangles) for the copollutants model. Horizontal lines indicate 95% confidence intervals around the central estimate. Associated data presented below. BSP: black smoke particles; BS: black smoke; NC(tot): total number count.

Supplemental Figure S5-2 Results of single-pollutant and copollutant models of short-term exposure to NO_2 or NO_X with and without PM and hospital admissions for cardiovascular disease.

Corresponding risk estimates of ambient NO_2 or NO_X for hospital admissions for cardiovascular disease in studies conducting copollutant models with PM for presented in Supplemental Figure S5-2.

Study	Location	Notes	Cause	Single Pollutant Relative Risk[a] (95% CI)	Copollutant Relative Risk[a] (95% CI)
Guo et al. (2009)	Beijing, China		CVD	1.05 (1.00, 1.11)	+$PM_{2.5}$: 1.02 (0.96, 1.09)
Rich et al. (2010)	New Jersey, U.S.		MI	1.14 (0.96, 1.32)	+$PM_{2.5}$: 1.05 (0.85, 1.28)
Andersen et al. (2010)[b]	Copenhagen, Denmark		Mild Ischemic Stroke	1.61 (0.79, 3.30)[b]	+UFP: 1.09 (0.48, 2.56)[b]
Simpson et al. (2005)	4 Australian Cities		CVD	1.07 (1.05, 1.09)	+BSP: 1.04 (1.02, 1.07)
Poloniecki et al. (1997)	London, U.K.	Cool	MI	1.00 (1.00, 1.00)	+BS: 1.00 (1.00, 1.00)
Poloniecki et al. (1997)	London, U.K.	Warm	MI	1.00 (1.00, 1.00)	+BS: 1.00 (1.00, 1.00)
Chen et al. (2010)	Shanghai, China		CVD	1.03 (1.00, 1.06)	+PM_{10}: 1.03 (1.00, 1.05)
Chang et al. (2005)	Taipei, Taiwan	≥ 20 °C	CVD	1.39 (1.32, 1.45)	+PM_{10}: 1.43 (1.35, 1.52)
Chang et al. (2005)	Taipei, Taiwan	< 20 °C	CVD	1.24 (1.12, 1.37)	+PM_{10}: 0.97 (0.86, 1.10)
Yang et al. (2004)	Kaohsiung, Taiwan	≥ 25 °C	CVD	1.46 (1.32, 1.62)	+PM_{10}: 1.18 (1.02, 1.36)
Yang et al. (2004)	Kaohsiung, Taiwan	< 25 °C	CVD	2.54 (2.27, 2.84)	+PM_{10}: 2.74 (2.36, 3.17)
Nuvolone et al. (2011)	Tuscany, Italy		MI	1.09 (1.02, 1.16)	+PM_{10}: 1.10 (1.00, 1.21)
Hsieh et al. (2010)	Taipei, Taiwan	≥ 23 °C	MI	1.24 (1.16, 1.35)	+PM_{10}: 1.24 (1.14, 1.37)
Hsieh et al. (2010)	Taipei, Taiwan	< 23 °C	MI	1.26 (1.18, 1.35)	+PM_{10}: 1.22 (1.12, 1.33)
Cheng et al. (2009)	Kaohsiung, Taiwan	≥ 25 °C	MI	1.23 (1.06, 1.44)	+PM_{10}: 1.25 (1.04, 1.51)
Cheng et al. (2009)	Kaohsiung, Taiwan	< 25 °C	MI	1.76 (1.55, 2.02)	+PM_{10}: 1.62 (1.36, 1.93)
Tsai et al. (2009)	Taipei, Taiwan	≥ 23 °C	Arrhythmia	1.19 (1.10, 1.27)	+PM_{10}: 1.16 (1.06, 1.27)
Tsai et al. (2009)	Taipei, Taiwan	< 23 °C	Arrhythmia	1.34 (1.25, 1.46)	+PM_{10}: 1.32 (1.21, 1.44)
Guo et al. (2010)	Beijing, China		Hypertension	1.44 (1.15, 1.79)	+PM_{10}: 1.50 (1.15, 1.95)
Yang (2008)	Taipei, Taiwan	≥ 20 °C	CHF	1.41 (1.30, 1.53)	+PM_{10}: 1.37 (1.23, 1.53)
Yang (2008)	Taipei, Taiwan	< 20 °C	CHF	1.04 (0.90, 1.21)	+PM_{10}: 1.08 (0.92, 1.30)
Xiang et al. (2013)	Wuhan, China	Cool	Stroke	1.12 (1.04, 1.21)	+PM_{10}: 1.13 (1.00, 1.26)
Tsai et al. (2003)	Kaohsiung, Taiwan		Cerebral Stroke	1.68 (1.38, 2.04)	+PM_{10}: 1.37 (1.04, 1.81)
Tsai et al. (2003)	Kaohsiung, Taiwan		Ischemic Stroke	1.67 (1.48, 1.87)	+PM_{10}:1.47 (1.24, 1.73)
Andersen et al. (2008)	Copenhagen, Denmark		CVD	1.00 (0.93, 1.10)	+NC(tot): 1.00 (0.87, 1.10)
Turin et al. (2012)	Shiga, Japan		MI	1.14 (0.92, 1.40)	+TSP: 1.16 (0.91, 1.51)
Turin et al. (2012)	Shiga, Japan		Stroke	0.98 (0.89, 1.08)	+TSP: 1.04 (0.92, 1.16)
Turin et al. (2012)	Shiga, Japan		Cerebral Infarction	0.98 (0.87, 1.10)	+TSP:1.04 (0.91, 1.20)
Turin et al. (2012)	Shiga, Japan		Intracerebral Hemorrhage	1.06 (0.85, 1.33)	+TSP: 1.04 (0.82, 1.33)
Turin et al. (2012)	Shiga, Japan		Hemorrhage	1.12 (0.80, 1.56)	+TSP: 1.06 (0.70, 1.58)

Note: Studies correspond to studies presented in Supplemental Figure S5-2.
[a]Effect estimates are standardized to a 20 ppb or 30-ppb increase in NO_2 or 40 ppb or 60-ppb increase in NO_X concentration for 24- h and 1-h averaging times, respectively.
[b]Effect estimates from Andersen et al. (2010) were standardized to a 40 ppb or 60-ppb increase in NO_X concentration for 24-h and 1-h averaging times, respectively.
BSP: black smoke particles; BS: black smoke; NC(tot): total number count.