We thank Drs. Shukunami, Nishijima, and Kotsuji for their comments (1) on our article (2) and agree that making exclusions can lead to selection bias, a potentially serious threat to the validity of our inferences. However, the specific exclusions that they note have little impact on our preterm birth risk estimates and would not change our study’s principal finding that traffic-related air pollution exposure disproportionately affects lower socioeconomic status neighborhoods in the winter (2).

First, we address their concern on exclusions of extreme values of birth weight. “Extremely low birth weight” has been defined as a birth weight of less than 1,000 g (3). In our case-control sample drawn from Los Angeles County, California, 1994–1996 births, infants born weighing less than 500 g comprised 0.4 percent of the overall sample and 1 percent of the preterm births. Excluding very heavy babies weighing greater than 5,000 g also has virtually no impact on our study, since these babies were only 0.1 percent of the overall case-control sample. Perhaps including this detailed information on the inconsequential proportion of excluded extreme values of birth weight in our article would have allayed their concerns earlier.

With regard to the exclusion of cesarean sections, we explained in our article that cesarean section births may be scheduled or might occur on an emergency basis for specific medical reasons (e.g., preeclampsia, diabetes, problems with baby). Scheduled cesarean sections are unlikely to be related to exposures that occur prior to birth, such as air pollution, while emergency cesarean sections very well may be. Unfortunately, it is difficult to distinguish these two types of cesarean sections in our data. However, given that cesarean sections comprise approximately 9 percent of preterm births prior to their exclusion, as part of our research we did estimate our models with the inclusion of singleton cesarean section deliveries. Our traffic-related air pollution (distance-weighted traffic density) results remained robust (table 1). In line with the important conceptual

| TABLE 1. Adjusted odds ratios* for preterm birth by distance-weighted traffic density, stratified by neighborhood socioeconomic status and season, Los Angeles County, California, 1994–1996 |
|---------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                                | Low SES          | Middle SES       | High SES         | Low SES          | Middle SES       | High SES         | Low SES          | Middle SES       | High SES         |
|                                | Summer           | Winter           | Summer           | Winter           | Summer           | Winter           | Summer           | Winter           | Summer           |
| DWTD (≥80th vs. ≤20th percentile) | Odds ratio | 95% confidence interval | Odds ratio | 95% confidence interval | Odds ratio | 95% confidence interval | Odds ratio | 95% confidence interval | Odds ratio | 95% confidence interval |
| No cesarean sections           | 0.93             | 0.76, 1.13       | 1.30             | 1.07, 1.58       | 1.19             | 0.98, 1.43       | 0.93             | 0.80, 1.09       | 1.00             | 0.85, 1.17       |
| With singleton cesarean sections | 0.93             | 0.76, 1.13       | 1.30             | 1.07, 1.58       | 1.19             | 0.98, 1.43       | 0.93             | 0.80, 1.09       | 1.00             | 0.85, 1.17       |

* Adjusted for infant’s sex, race/ethnicity, maternal age, marital education, health insurance, prenatal care, previous low birth weight or preterm infant, parity, interval since previous livebirth, year of birth, carbon monoxide, nitrogen dioxide, particulate matter with a diameter of <10 μm, and nitrogen trioxide.
considerations enumerated here and in the article, we main-
tained the cesarean section exclusions for publication.
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