Author's response to reviews

Title: Prenatal Mercury Exposure, Autism, and Developmental Delay, Using Pharmacokinetic Combination of Newborn Blood Concentrations and Questionnaire Data: A Case Control Study

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Author's response to reviews: see over
Dear Dr. Grandjean,

We agree with the reviewer that adding the average mercury concentration in the U.S. fish diet estimated by Groth adds additional context and a valuable comparison to our estimated concentration. While the mercury concentration estimate in the Groth paper is higher than our estimate (86 ppb vs. 42 ppb, respectively), as the reviewer pointed out, the distribution of fish species consumed by the pregnant mothers in our study would not necessarily be expected be the same as that of the overall U.S. population (especially given that pregnant women are advised to consume species lower in mercury). Accordingly, we added the following sentence to the top of page 21:

Our estimated MeHg concentration is also lower than the average concentration in the U.S. fish diet estimated by Groth (86 ppb)[36]; however, there is reason to suspect the distribution of the fish species consumed by mothers in our study differ from that of the overall U.S. population.

Groth also presents the average mercury concentrations for fish species that are very low in mercury (18 ppb) and species with below average mercury levels (56 ppb), which are in the range of our estimated mercury concentration. Interestingly, Groth also points out that fish species with very low and below average mercury levels are popular seafood items and account for a large share of the U.S. market (about 68%).

We hope with this additional edit that all of the reviewer’s concerns are sufficiently addressed and look forward to your response.

Sincerely,

Stephen McKean