Supplementary Online Content

Grønborg TK, Schendel DE, Parner ET. Recurrence of autism spectrum disorders in full-siblings and half-siblings and trends over time: a population-based cohort study. *JAMA Pediatr*. Published online August 19, 2013. doi:10.1001/jamapediatrics.2013.2259.

eAppendix. Relative Recurrence Risks for Male and Female Offspring

This supplementary material has been provided by the authors to give readers additional information about their work.

eAppendix. Relative Recurrence Risks for Male and Female Offspring

In the maternal sibling subcohort, we estimated crude relative recurrence risks for ASDs for siblings in the 4 combinations of sexes of the first-born and second-born children (male-male, male-female, female-male, and female-female). There were no statistically significant differences in relative recurrence risk for ASDs among the 4 combinations of sibling sex (first-born/second-born: male/male: HR=6.2 (5.0-7.8), male/female: HR=8.4 (5.9-12.0), female/male: HR=5.7 (3.4-9.5), and female/female: HR=8.9 (4.2-18.9), *P*=.39). Previous investigations have found a higher recurrence risk if the affected child was female compared with male, suggesting a multifactorial threshold model of transmission, where the risk is elevated for relatives of the affected individual in which the disorder is less common.[1,2] Our relative recurrence risk measures do not support this model. However, the power to detect differential recurrence risks in male and female offspring is small in our study due to the few diagnosed girls, which also is evident in the wide CIs.

eReferences

1. Ritvo ER, Jorde LB, Mason-Brothers A, et al. The UCLA-University of Utah epidemiologic survey of autism: recurrence risk estimates and genetic counseling. *Am J Psychiatry*. 1989;146(8):1032-1034.

2. Sumi S, Taniai H, Miyachi T, Tanemura M. Sibling risk of pervasive developmental disorder estiimated by means of an epidemiologic survey in Nagoya, Japan. *J Hum Genet*. 2006;51(6):518-522.