**TABLE S1**

Sociodemographic and perinatal characteristics among autism spectrum disorder cases and population controls for pregnancies with ultrasound data from the caregiver interview, including pregnancies with multiple foetuses (n = 1611)

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Autism cases**  **(n = 663)** |  | **Population controls**  **(n = 948)** |
| Characteristica | **% of pregnancies** |  | **% of pregnancies** |
| Maternal age at interview (years) |  |  |  |
| <35 | 72.1 |  | 70.8 |
| ≥35 | 27.9 |  | 29.2 |
| Maternal education at interview |  |  |  |
| Some high school or high school grad | 15.7 |  | 10.0 |
| Some college/college grad | 62.9 |  | 59.9 |
| Postgraduate | 21.4 |  | 30.1 |
| Maternal race/ethnicity |  |  |  |
| Non-Hispanic White | 56.6 |  | 70.8 |
| Non-Hispanic Black | 19.8 |  | 12.4 |
| Hispanic | 11.9 |  | 8.5 |
| Other | 11.8 |  | 8.2 |
| Maternal smoking during pregnancy |  |  |  |
| No | 87.0 |  | 91.5 |
| Yes | 13.0 |  | 8.5 |
| Child sex |  |  |  |
| Male | 82.1 |  | 53.7 |
| Female | 17.9 |  | 46.3 |
| Gestational age at birth (weeks) |  |  |  |
| <32 | 4.4 |  | 1.4 |
| 32-36 | 20.2 |  | 15.2 |
| ≥37 | 74.8 |  | 82.8 |
| Missing | 0.6 |  | 0.6 |
| Child plurality |  |  |  |
| Singleton | 92.6 |  | 96.0 |
| Twin | 6.9 |  | 3.3 |
| Triplet | 0.5 |  | 0.4 |
| Higher order multiple | 0.0 |  | 0.1 |
| Missing | 0.0 |  | 0.2 |

a Maternal age, education, and race/ethnicity; and child sex are reported based on multiply imputed data; for each variable, <1% of participants were missing data for these variables from the original data set.

**TABLE S2**

Frequency of indications for prenatal ultrasound among participants with ultrasound data from the caregiver interview and data on maternal or pregnancy conditions that were potential ultrasound indications, including pregnancies with multiple foetuses (n = 1280)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Autism cases**  **(n = 518)** | | **Population controls**  **(n = 762)** | |
| **Conditiona** | **Number (%)** | | **Number (%)** | |
| Pregnancy conditions potentially requiring ultrasound monitoring | | | | |
| Abnormality on prior ultrasound | 104 | 20.1 | 112 | 14.7 |
| Birth defect | 4 | 0.8 | 2 | 0.3 |
| Breech presentation | 49 | 9.5 | 47 | 6.2 |
| Intrauterine growth restriction | 12 | 2.3 | 13 | 1.7 |
| Multiple fetuses | 42 | 8.1 | 29 | 3.8 |
| Infertility diagnosis | 94 | 18.1 | 118 | 15.5 |
| Prenatal valproate exposure | 0 | 0.0 | 1 | 0.1 |
| Maternal medical conditions potentially requiring ultrasound monitoring | | | | |
| Pre-pregnancy BMI ≥30 | 96 | 18.5 | 95 | 12.5 |
| Diabetes | 49 | 9.5 | 63 | 8.3 |
| Hypertension | 96 | 18.5 | 82 | 10.8 |
| Cystic fibrosis | 1 | 0.2 | 1 | 0.1 |
| Hashimoto thyroiditis | 8 | 1.5 | 11 | 1.4 |
| Graves disease | 2 | 0.4 | 6 | 0.8 |
| Neurofibromatosis | 0 | 0.0 | 1 | 0.1 |
| Sickle cell disease | 4 | 0.8 | 8 | 1.0 |
| Sjogren disease | 3 | 0.6 | 2 | 0.3 |
| Systemic lupus erythematosus | 0 | 0.0 | 3 | 0.4 |

BMI, body mass index

a Numbers are based on original unimputed data; Addison disease, myasthenia gravis, Sydenham chorea, and von Willebrand disease were included in the list of ultrasound indications also associated with risk for autism spectrum disorder, but no participants were identified with these conditions.