

ERRATA LIST

This errata lists corrections for the doctoral thesis of Charlotte Willfors titled "Identification of Biobehavioral Markers of Neurodevelopmental Disorders in Twins", Karolinska Institutet, 2017, ISBN 978-91-7676-395-7.

The corrections are related to the results for Study 4, which in the result section are incorrectly reported from a previous version of the manuscript. Please see below the correct and final results for Study 4.

Section/Page/Line	Corrected text
Abstract // 18-20	ASD cases demonstrate higher lead levels during a period of 10 to 20 weeks after birth, lower manganese levels 10 weeks prenatally to five to 20 weeks postnatally...
4.4 Study 4 / 44 / 2-22	<p>By fitting DLMS, different developmental periods when elemental levels varied within the discordant pairs were identified. The greatest difference of lead levels was observed 15 weeks postnatally, when ASD cases had 1.5 times higher lead than their non-ASD co-twins after adjusting for the average difference in control twins. ASD cases showed manganese deficiency during two periods; 10 weeks before birth and five to 20 weeks postnatally. As most the ASD twins reached 2.5-fold lower manganese levels, compared to their co-twin, at 15 weeks postnatally. Differences of a similar magnitude were also observed seven weeks prenatally. The ASD cases also had reduced zinc levels, being 28% lower than their co-twins at eight weeks prenatally.</p> <p>Analyses of clinical ASD severity (ADOS-2 comparison score) and autistic traits (SRS-2 total scores) showed lead and manganese to be significantly associated with dimensional ASD. Manganese was inversely associated with autistic traits as defined by SRS-2 (strongest association at 15 weeks, $r=-0.25$, 95% CI -0.40 to -0.10) and ASD severity on ADOS-2 (strongest association at 12 weeks, $r=-0.20$, 95% CI -0.35 to -0.05). Lead levels was positively associated with dimensional ASD 10 weeks before birth and up to approximately week 30 postnatally (maximum r with ADOS-2=0.40, 95% CI 0.20 to 0.60, at five weeks prenatally). Zinc and other metals analysed under exploratory analysis were not significantly associated with SRS-2 and ADOS-2.</p>