

Table. Maximum Observed ASM Blood Levels (%ABL) and Dose (%DDD) during 3rd Trimester Across Age 2 BSID-III Scale Scores in Children of WWE on ASM

Exposure	Age 2 BSID-III Scale Scores	N	Unadjusted Analysis		Adjusted Analysis	
			Parameter Estimate (95% CI)	P-value ^c	Parameter Estimate (95% CI)	P-value ^d
Max Observed %ABL^a						
	Language	258	-9.8 (-15.9, -3.8)	0.001	-4.4 (-10.8, 2.1)	0.185
	Motor	256	-7.5 (-11.7, -3.2)	0.001	-5.5 (-10.6, -0.4)	0.035
	Cognitive	261	-6.4 (-11.0, -1.8)	0.006	-3.5 (-8.6, 1.6)	0.178
	Social-Emotional	261	-5.1 (-10.8, 0.6)	0.078	-1.4 (-8.0, 5.2)	0.677
	General Adaptive	259	-8.0 (-13.3, -2.7)	0.003	-5.9 (-12.3, 0.5)	0.069
Max %DDD^b						
	Language	270	-1.9 (-3.2, -0.7)	0.003	-0.5 (-1.9, 0.9)	0.448
	Motor	267	-1.1 (-2.0, -0.2)	0.020	-0.3 (-1.4, 0.8)	0.593
	Cognitive	274	-1.8 (-2.8, -0.8)	<.001	-1.1 (-2.2, 0.1)	0.066
	Social-Emotional	272	-1.4 (-2.6, -0.2)	0.020	-0.7 (-2.2, 0.7)	0.341
	General Adaptive	270	-2.1 (-3.2, -1.0)	<.001	-1.6 (-3.0, -0.2)	0.022

^a % Therapeutic Range (%ABL) calculated as percent upper limit for therapeutic range (from St, Louis, and K. Erik.(2009)). %ABL for polytherapy subjects calculated by summing the %ABL for each ASM. Maximum observed value recorded during third trimester (includes day of delivery).

^b Max %DDD = Maximum % Defined Daily Dose during third trimester. For mothers on polytherapy, %DDD equals the sum across the %DDD for all ASMs.

^c P-values from linear regression model

^d P-values from ANCOVA model adjusted for mother's IQ, ASM group, mother's education level, child ethnicity, depression during pregnancy, gestational age at birth, and gestational age at mother's enrollment.