

## Supplementary materials

**Table S1.** Comparisons of number and length of hospital admissions between patients with and without clinical scores compatible with a diagnosis of ASD.

Treatments	ASD Measures											
	ADOS-2 Total Scores			AQ Total Scores			ADOS-2 Diagnostic Scores for ASD			AQ Diagnostic Scores for ASD		
	F	p-value	Adjusted R2	F	p-value	Adjusted R2	F	p-value	Adjusted R2	F	p-value	Adjusted R2
N. of hospitalizations	0.799	0.405	-0.033	0.745	0.455	-0.042	0.992	0.279	-0.001	0.752	0.477	-0.045
Duration of hospitalizations	0.282	0.652	-0.128	0.332	0.560	-0.118	0.281	0.656	-0.128	0.233	0.781	-0.138
N. of PEU admissions	0.842	0.299	-0.026	0.465	0.750	-0.092	1.025	0.216	0.004	0.513	0.643	-0.083

Abbreviations: AQ = Autism Questionnaire; ADOS-2 = Autism Diagnostic Observation Schedule-2; ASD = Autism Spectrum Disorder; PEU = Pediatric Emergency Unit. Note: results controlled for baseline EDI-3 Global Psychological Maladjustment (GMPC) and age.

**Table S2.** ASD total scores and treatment intensity.

	ASD Measures					
	ADOS-2 Total			AQ Total		
	OR	C.I.	p-Value	OR	C.I.	p-Value
Risperidone	0.963	-0.317–0.241	0.791	0.801	-0.508–0.064	0.128
Aripiprazole	1.239	-0.048–0.477	0.109	1.084	-0.077–0.238	0.315
Olanzapine	0.920	-0.513–0.347	0.706	0.795	-0.550–0.091	0.795
Sertraline	0.920	-0.315–0.149	0.482	0.927	-0.254–0.101	0.401
Fluvoxamine	0.836	-0.239–0.194	0.836	0.998	-0.147–0.142	0.976
Fluoxetine	1.020	-0.271–0.310	0.894	1.425	-0.040–0.748	0.078

Abbreviations: AQ = Autism Questionnaire; ADOS-2 = Autism Diagnostic Observation Schedule-2; ASD = Autism Spectrum Disorder. Note: results controlled for baseline EDI-3 Global Psychological Maladjustment (GMPC) and age.