

Table S1. Participant Characteristics			
Variable	Typically Developing	ASD without Regression	ASD with Regression
Number of Subjects	37	28	29
Age, mean (SD), years months	8 y 2 m (4 y 4 m)	8y 4m (3y 9m)	8y 0m (3y 6m)
Females, N (%)	17 (46%)	14 (50%)	4 (14%)
Regression, N (%)			
Single Regression			19 (65%)
Age at 1 st Regression			22m (7m)
Loss of Language Skills			23 (79%)
Loss of Social Skills			24 (83%)
Loss of Gross Motor Skills			8 (28%)
Loss of Fine Motor Skills			7 (24%)
Associated Fever			6 (21%)
Associated Illness			10 (34%)
Associated Seizure			3 (10%)
Associated Other			10 (35%)
Associated Any Trigger			18 (62%)
Neurodevelopmental and Behavior Score Mean (St Dev)			
Language Ability (Scaled Score)	102 (12)	74 (26)	63 (24)
Vineland Adaptive Behavior Scale (Scaled Score)			
• Communication Subscale	107 (14)	69 (18)	63 (20)
• Daily Living Skills Subscale	105 (10)	67 (15)	64 (15)
• Social Subscale	112 (11)	68 (15)	62 (14)
• Motor Subscale	108 (13)	78 (18)	75 (14)
• Adaptive Behavioral Composite	108 (11)	66 (14)	62 (15)
Social Responsiveness Scale (T-Score)			
• Awareness	51 (11)	73 (12)	75 (14)
• Cognitive	49 (10)	82 (11)	78 (10)
• Communication	47 (8)	80 (13)	81 (11)
• Motivation	49 (10)	72 (13)	78 (13)
• Mannerisms	47 (11)	80 (18)	80 (12)
• Total	47 (10)	83 (12)	83 (11)
Aberrant Behavior Checklist (Raw Score)			
• Irritability	3 (4)	17 (10)	13 (9)
• Lethargy / Social Withdrawal	1 (2)	14 (9)	13 (8)
• Stereotyped Movements	0 (1)	8 (6)	6 (5)
• Hyperactivity	4 (7)	24 (12)	20 (11)
• Inappropriate Speech	0 (1)	4 (3)	3 (3)
Comorbid Conditions (Parent Report), N (%)*			
Neurologic	3/26 (12%)	19/27 (70%)	17/26 (65%)
Allergic	7/26 (27%)	15/27 (56%)	13/26 (50%)
Psychiatric	2/26 (8%)	20/27 (74%)	13/26 (50%)
Gastrointestinal	6/26 (23%)	15/27 (56%)	11/26 (42%)
Immune	1/26 (4%)	7/27 (26%)	7/26 (27%)
Growth	3/26 (12%)	10/27 (37%)	8/26 (31%)
Endocrine	0/26 (0%)	1/27 (4%)	3/26 (12%)
Cardiovascular	0/26 (0%)	2/27 (7%)	2/26 (8%)
Comorbid Conditions (Medical Records), N (%)*			
Food Allergies/Intolerances	5/36 (14%)	19/25 (76%)	19/26 (73%)
Epilepsy	0/37 (0%)	6/28 (21%)	13/29 (45%)
Chronic Constipation	4/34 (12%)	13/23 (57%)	11/28 (39%)
Fatigue/Exercise Intolerance	2/37 (5%)	6/28 (21%)	11/29 (38%)
Recurrent Infections (AAAAI Criteria)	4/36 (11%)	4/20 (20%)	8/28 (29%)
Gross Motor Delay	1/37 (3%)	13/28 (46%)	16/29 (55%)
Hypogammaglobinemia	0/6 (0%)	2/21 (10%)	1/25 (4%)
Failure to Thrive	0/37 (0%)	2/28 (7%)	5/29 (17%)
Genetic Syndrome	0/37 (0%)	2/28 (7%)	0/29 (0%)
Treatments, N (%)			
Gastrointestinal Medications	6 (16%)	12 (43%)	13 (45%)
Melatonin	0 (0%)	9 (32%)	7 (24%)
Allergy/Asthma Medications	3 (8%)	8 (29%)	18 (40%)
Mineral Supplements	0 (0%)	6 (21%)	5 (17%)
Antiepileptic Medications	0 (0%)	3 (11%)	8 (28%)
Antimicrobial Medications	0 (0%)	3 (11%)	3 (11%)
Other Psychotropic Medications	0 (0%)	3 (11%)	4 (14%)

Immunomodulatory Medications	1 (3%)	2 (7%)	6 (21%)
Stimulant	0 (0%)	8 (29%)	4 (14%)
Alpha-adrenergic agonists	0 (0%)	3 (11%)	6 (21%)
Selective Serotonin Reuptake Inhibitors	0 (0%)	3 (11%)	2 (7%)
Hormone Supplementation	0 (0%)	1 (4%)	1 (3%)
Thyroid Supplementation	0 (0%)	1 (4%)	1 (3%)
Beta Blocker	0 (0%)	2 (7%)	2 (7%)
Dietary Formula	0 (0%)	1 (4%)	1 (3%)

*Some families did not answer every survey question and some information could not be abstracted from medical chart so not every patient is represented in these percentages.