



Massachusetts General Hospital
Founding Member, Mass General Brigham

XII. Bipolar Disorder in Youth with Autism

GAGAN JOSHI, MD

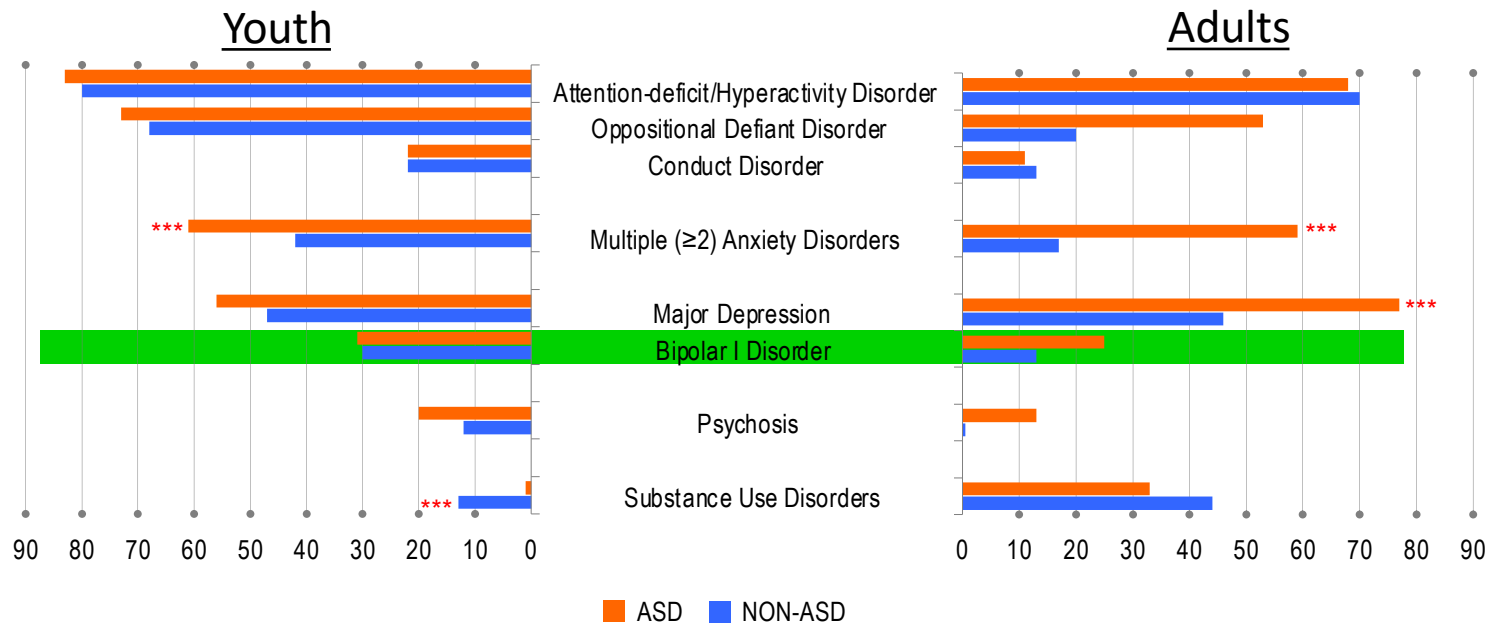
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HARVARD MEDICAL SCHOOL
TEACHING HOSPITAL

Psychopathology Associated with ASD in Psychiatrically Referred Populations

Lifetime Psychiatric Comorbidity



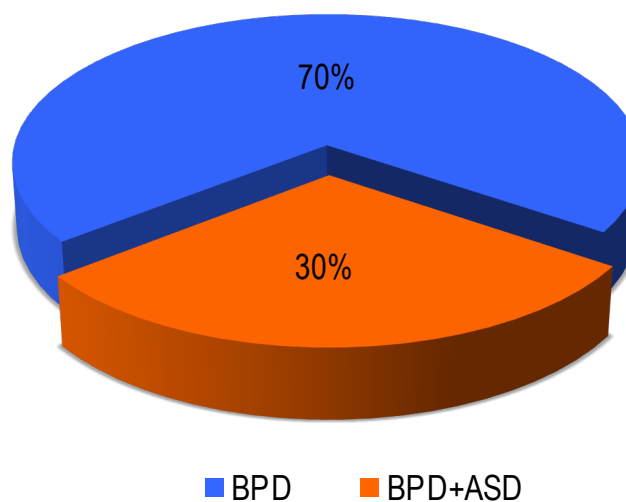
Statistical Significance: ***p≤0.001

Joshi et al., 2010, 2013



Prevalence of ASD in Research Population of Youth with BPD

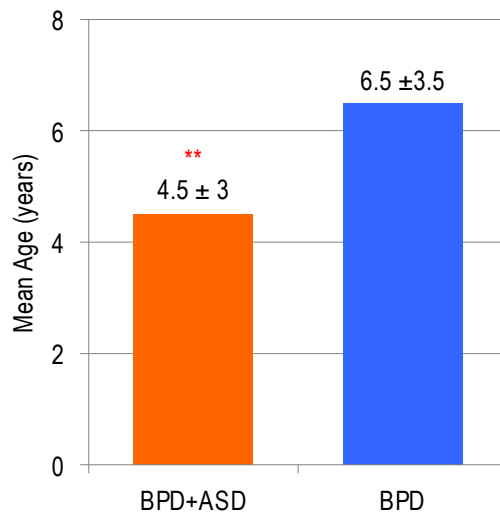
Total N: 155
Age (yrs): 10.5 ±3.2 (6-17)
Male: 79%
IQ: 103 ±14 (73 – 146)



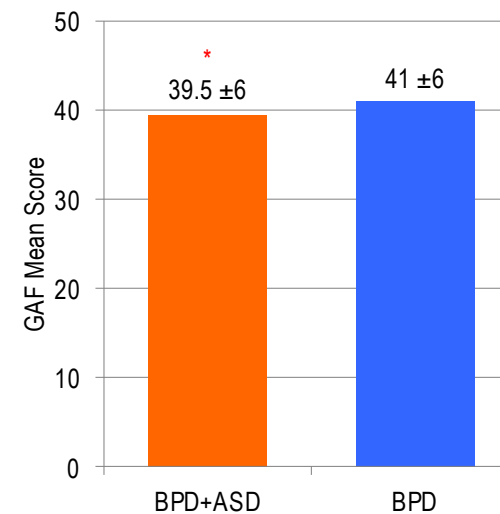
One-third of youth with Bipolar Disorder suffered from Autism

ASD Comorbidity in Youth with BPD

Age at Onset of BPD



Level of Functioning (GAF)

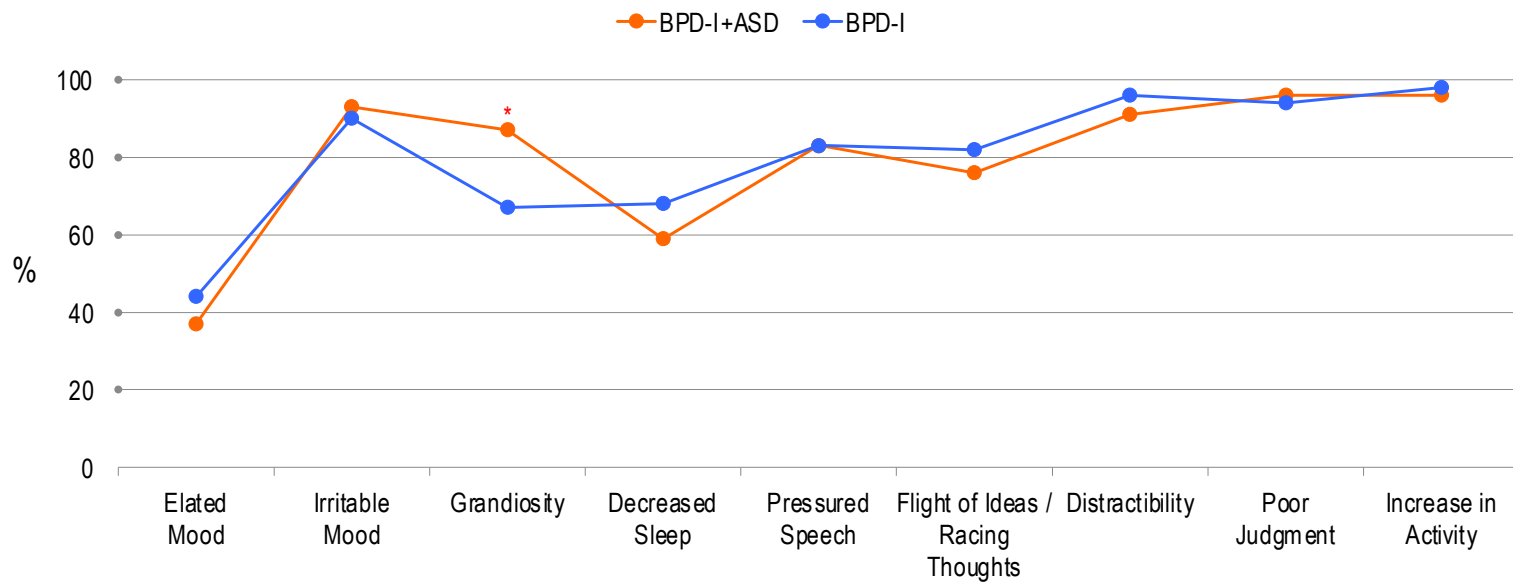


Statistical Significance: *p≤0.05, **p≤0.01

In the presence of Autism, the onset of Bipolar Disorder in youth was earlier and with poorer level of global functioning



Presentation of Mania in Youth with ASD



Statistical Significance: *p<0.05

Typical presentation of Mania in youth with Autism

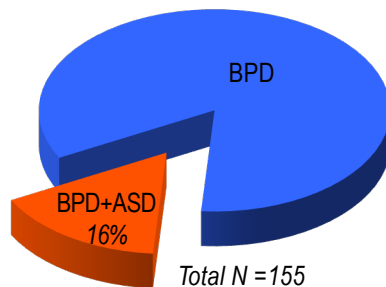


Response to Second Generation Antipsychotics in Youth with Comorbid Bipolar Disorder and Autism Spectrum Disorder

Gagan Joshi,^{1,2} Joseph Biederman,^{1,2} Janet Wozniak,^{1,2} Robert Doyle,^{1,2} Paul Hammerness,^{1,2} Maribel Galdo,¹ Nora Sullivan,¹ Courtney Williams,¹ Kristin Brethel,¹ K. Yvonne Woodworth¹ & Eric Mick^{1,2}

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SUMMARY

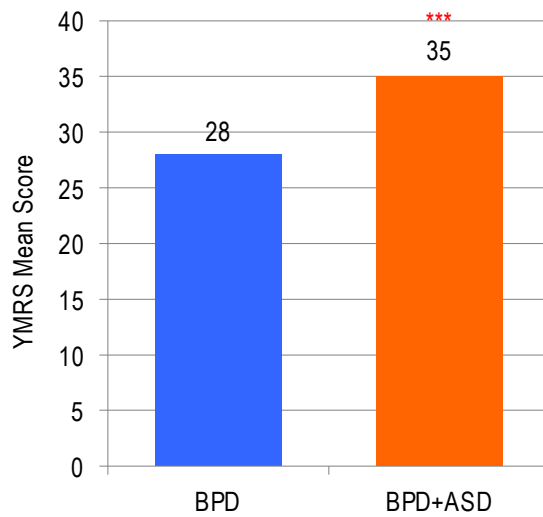
Objective: To assess the impact of comorbid autism spectrum disorders (ASD) on the response to second-generation antipsychotics (SGA) in pediatric bipolar disorder (BPD).

Methods: Secondary analysis of identically designed 8-week open-label trials of SGA monotherapy (risperidone, olanzapine, quetiapine, ziprasidone, or aripiprazole) in youth with BPD.

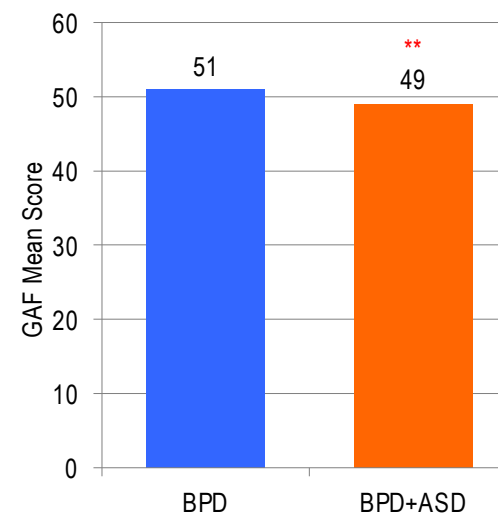
Results: Of the 151 BPD subjects 15% ($n = 23$) met criteria for comorbid ASD. There were no differences in the rate of antimanic response (YMRS change $\geq 30\%$ or CGI-Improvement ≤ 2 : 65% vs. 69%; $P = 0.7$) in the presence of comorbid ASD. **Conclusion:** No difference observed in the rate of antimanic response or tolerability to SGA monotherapy in the presence of ASD comorbidity.

SGN Monotherapy Response of ASD Youth with and without BPD

Severity of Mania



Level of Functioning (GAF)



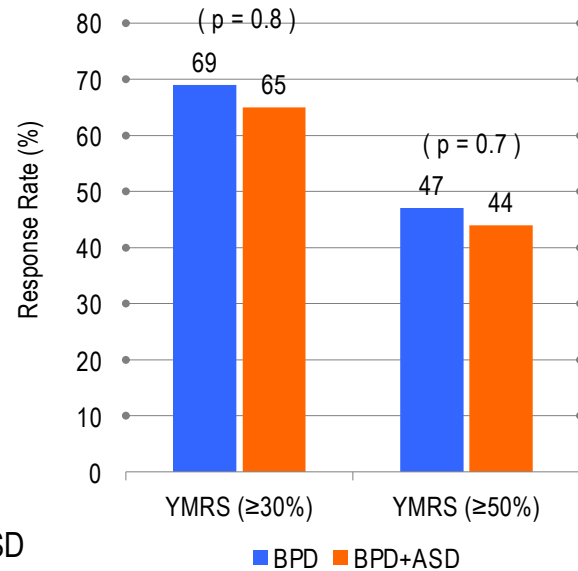
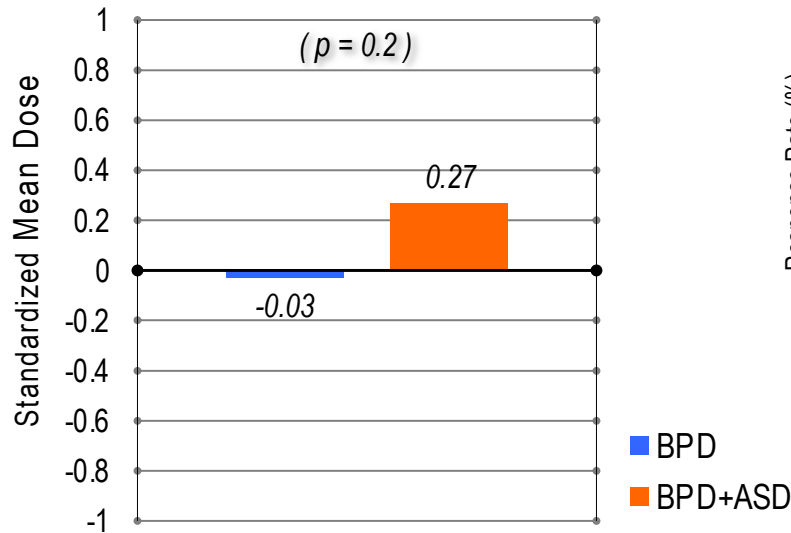
Statistical Significance: ** $p \leq 0.01$, *** $p \leq 0.001$

Greater severity of Mania with worse global functioning in the presence of Autism in youth with Bipolar Disorder



SGN Monotherapy Response of ASD Youth with and without BPD

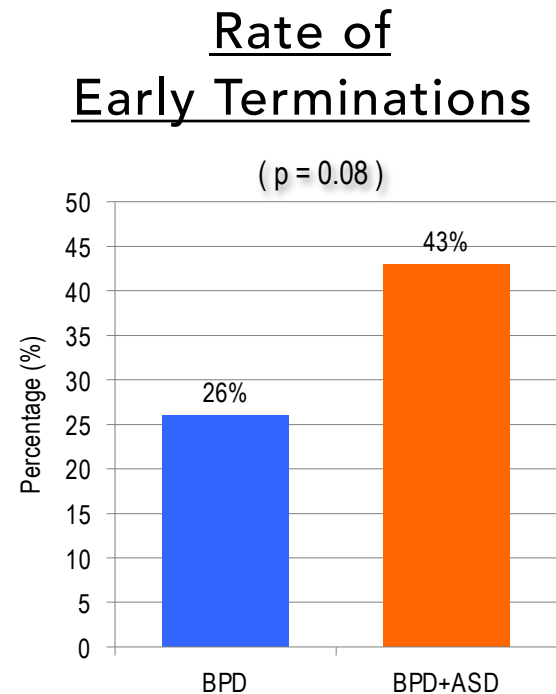
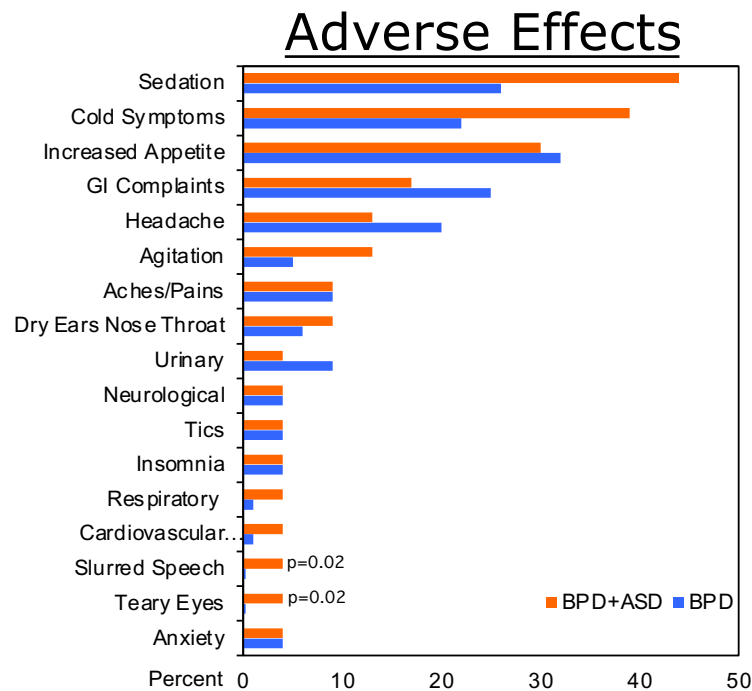
Standardized Mean Dose of SGA @ Endpoint Rate of Anti-manic Response



The required dose of SGA and the anti-manic response did not differ in the presence of Autism in youth with Bipolar Disorder



SGN Monotherapy Response of ASD Youth with and without BPD



The tolerability to treatment was equally good in the presence of Autism in youth with Bipolar Disorder



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