The Role of Medications in the Treatment of Autism Spectrum Disorder and Related Neurodevelopmental Disorders

Pilar Trelles, MD
Assistant Professor of Psychiatry
Child and Adolescent Psychiatry

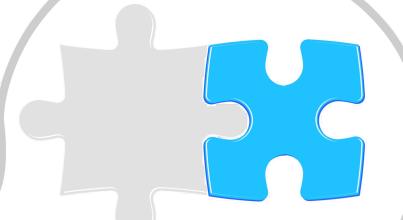




Seaver Autism Center for Research and Treatment

Autism Spectrum Disorder: A Behaviorally Defined Conditions

Deficits in social communication



Repetitive and restrictive behaviors

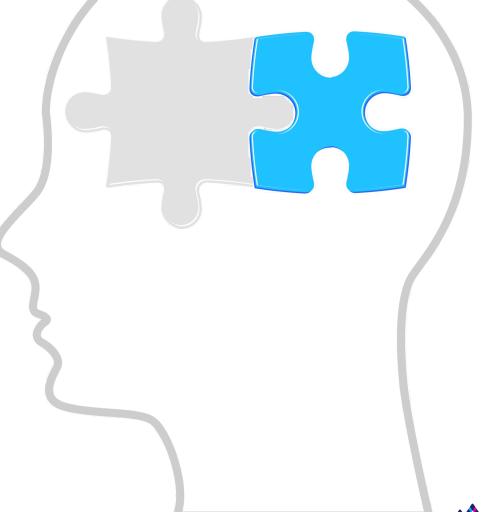
AUTISM SPECTRUM DISORDER





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Associated Symptoms can Cause Significant Impairment

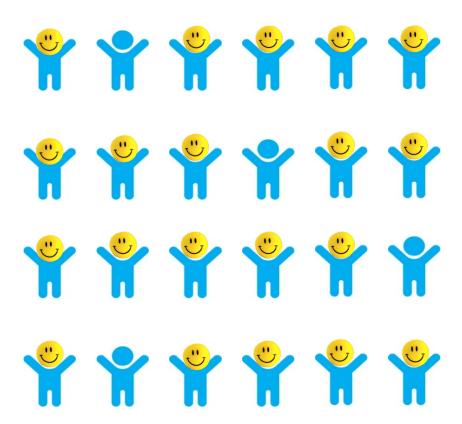






Clinical Trials

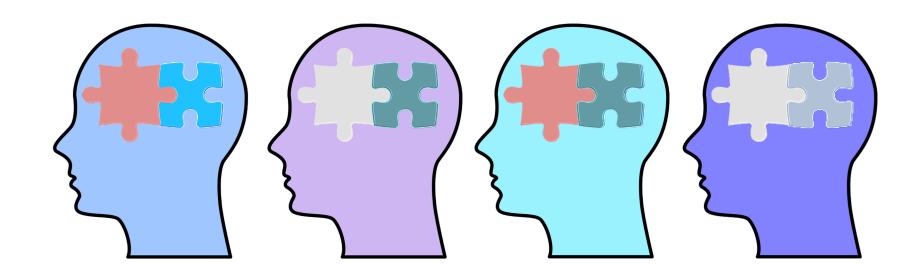








Autism is a Heterogenous Disorder







Clinical Trials in Autism







Clinical Trials in Autism





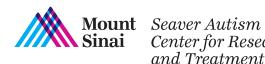




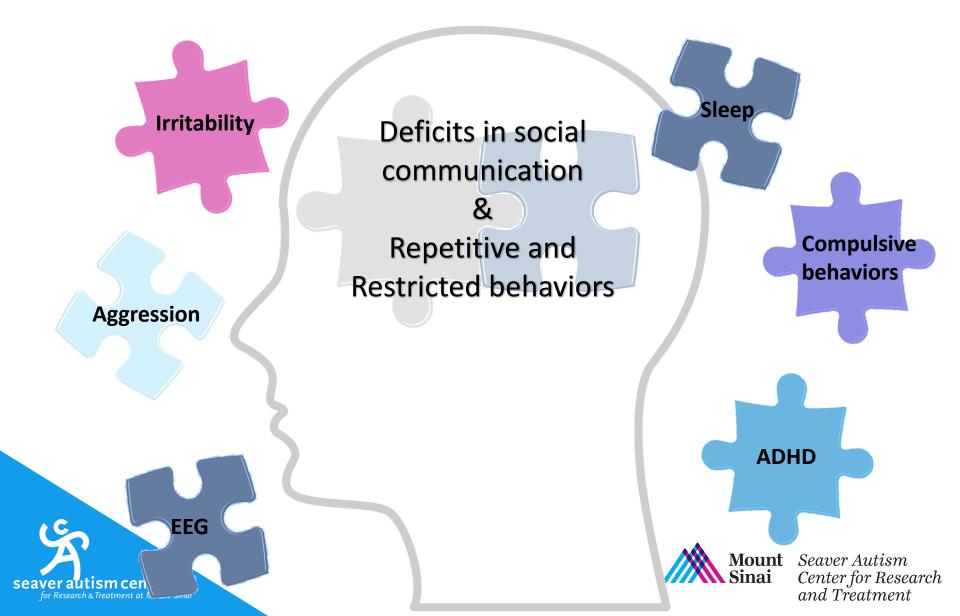
Why is this important?

- Individuals with ASD and other neurodevelopmental disorder that are behaviorally defined are different from each other
- We have more options than just the two "FDA" approved medications
- Monitor closely: consider efficacy and tolerability
- We are working to identify individuals with NDD that are biologically similar → narrow treatment options and improve outcomes.





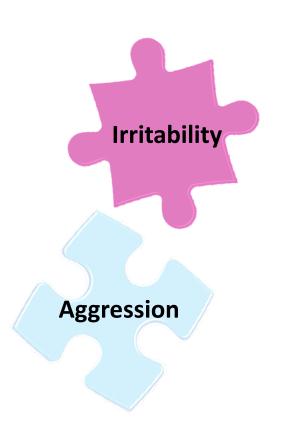
Symptom Domain Approach



Atypical Antipsychotics

- Risperidone*
- Aripiprazole *
- Quetiapine
- Ziprasidone
- Haloperidol
- Olanzapine
- Clozapine

* FDA approval







Medications for ADHD

- Methylphenidate
- Atomoxetine
- Clonidine
- Guanfacine







Antiepileptic Drugs



- Depakote
- Lamictal
- Topiramate



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Antidepressants

Medication	Open Label	Placebo Controlled
fluoxetine	++++	++
fluvoxamine	+	++
sertraline	+++	
citalopram	+	
escitalopram	+	
venlafaxine	++	
clomipramine		+
buspirone	++	

Repetitive Behaviors Depression Anxiety



Points to Take Home

- The foundation of treatment for ASD lies on psychosocial treatments, while pharmacological interventions target associated features
- Although risperdal and aripiprazole are the only medications with an FDA indication in the treatment of ASD, their side effect profile limits its use
- Pharmacological approaches in ASD use a dimensional and symptom specific approach
- Major setback in the development of new treatments lies in the heterogeneity of ASD and availability of objective outcome measures





Resources- Psychiatry Clinics for Neurodiverse Individuals in NYC

- Developmental Disabilities Center, Mount Sinai West https://www.mountsinai.org/care/neurology/services/pediatric-neurology/developmental-disabilities-center
 212-523-6230
- Premier Healthcare, Member of YAI network https://www.yai.org/services/psychiatry

 212-273-6272

Adapt Community Network (Adults ages 18+)
 https://www.adaptcommunitynetwork.org/service-options/healthcare/877-827-2666



Important COVID-19 Services Counseling – Medical – NYC services

- NYC Well 24/7 confidential helpline and psychotherapy referral nycwell.cityof newyork.us – English, Spanish & other languages -1800-NYC-WELL/ 888-692-9355
- Thrive NYC thrivenyc.cityofnewyork.us mental health support via phone or online.
- UFT Free Mental Health Hotline general mental health support for NYC public school students and their families – 212-709-3222
- American Red Cross Virtual Family Assistance Center Crisis counselors are available to provide emotional support and guidance when someone has lost a loved one. 585-957-8187 – www.redcross.org
- Free COVID 19 Medical Infoline for NYC residents: if you have symptoms or questions about COVID 19 call: 1-844-692-4692 – 9am-9pm
- NYC COVID-19 Resources Directory obtain resources for accessing food(1-866-888-8777), rental assistance, domestic violence (1-800-621-HOPE), etc. –go to: www1.nyc.gov

