“Good morning Chair Lipps, Vice Chair Holmes, Ranking Member Russo, and members of the Ohio House Health Committee.

Thank you for allowing me to testify today. My name is Dr. Solomon Zaraa. I am a board-certified psychiatrist in adult psychiatry and also in child and adolescent psychiatry. I have conducted psychiatric clinical research since 2012, including Autism research, through Case Western Reserve University School of Medicine and University Hospitals of Cleveland. I have treated people with Autism Spectrum Disorder (ASD) of all ages and in a variety of settings from emergency departments, inpatient psychiatric units, research departments, outpatient clinics, and community mental health centers. I am also one of the “first wave” of approved Ohio medical marijuana physicians. My medical marijuana practice at Compassionate Cleveland in Beachwood, Ohio includes patients with ASD. These patients also have a qualifying diagnosis that allows them to enroll in Ohio’s Medical Marijuana Control Program. I have direct clinical experience in managing the risks and benefits of medical marijuana in children, adolescents, and adults with ASD. Based on my clinical experience, I strongly support House Bill 60.

There are severe long-term consequences to poorly managed symptoms of Autism. Research reports that *at least* 1 out of 3 children with ASD suffer from significant self-injurious behaviors.[14] One meta-analysis reviewing long-term ASD outcomes reports that 48% of children and adolescents with ASD become adults that have poor or very poor independent and social functioning. These adults with ASD required significant assistance in activities of daily living. Early interventions and treatments that improved symptoms in children also improved long-term outcomes.[15,18] In summary, the longer children suffer with symptoms of ASD, the higher the likelihood that they will continue to suffer those symptoms into adulthood.

Currently there are only 2 FDA-approved treatments for aggression in Autism Spectrum Disorder: risperidone for patients age 5-16 and aripiprazole for patients age 6-17.[1,12,16] There are no FDA-approved treatments for symptoms of ASD in adults. This has lead to attempts by clinicians to prescribe a wide variety of non-FDA approved medications for the treatment of ASD in all ages, despite limited research into effectiveness or safety.[8] It is not uncommon for clinicians to prescribe multiple medications simultaneously in attempts to reduce the impairing symptoms of ASD, despite little or no research about the risks or benefits this strategy.[17,19]

The current FDA-approved treatments for aggression in ASD are in the 2nd generation anti-psychotic family and have significant risks. Some patients with ASD cannot tolerate their side effects or experience limited benefit. These medications are not a good fit for all patients. Children and adolescents utilizing FDA-approved treatments for aggression in ASD have higher rates of metabolic syndrome including obesity, diabetes and glucose intolerance, elevated liver enzymes, elevated cholesterol and lipids, and unexpected death.[10,11,13] Up to 70% of children and adolescents treated with risperidone or aripiprazole experience significant weight gain.[6] Children and adolescents with ASD experience nearly double the risk of obesity compared to neurotypical youth.[20]

The FDA reports that compared to FDA-approved treatments for ASD, cannabis’s psychoactive compound THC has similar pharmacokinetic properties and has a dose-dependant response with respect to risks and benefits.[1,9,12] In my practice, helping medical marijuana patients (including those with ASD) find the proper dose was extremely similar to helping patients find the proper dose of conventional prescription medications. A newly published double-blinded randomized placebo-controlled trial of a 20:1 ratio of CBD to THC found that while benefits were mixed at this specific concentration of CBD and THC, there were NO serious adverse events in 150 study participants ages 5-21 who have ASD.[3] Other studies of various methodologies report varying degrees of success in ASD treatment and all reported favorable safety profiles.[2,4,5] From a clinical perspective, it is reassuring to see a randomized-control trial, the “gold-standard” of medical research, demonstrate safety of THC in youth with ASD.

The American Academy of Pediatrics (AAP) recognizes that cannabis may be an option for “children with life-limiting or severely debilitating conditions and for whom current therapies are inadequate.”[7] Given the difficulty in managing the symptoms of ASD, the limitations and risks of the 2 FDA-approved treatments for ASD, the long-term risks of poorly managed ASD symptoms, and the current research on the safety of

cannabis as treatment for ASD, it is my medical opinion that people with Autism Spectrum Disorders should have cannabis available as a treatment choice.

I ask you to please consider my testimony and vote YES on this important legislation. Thank you again for the opportunity to testify.

I welcome any questions the committee has.

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