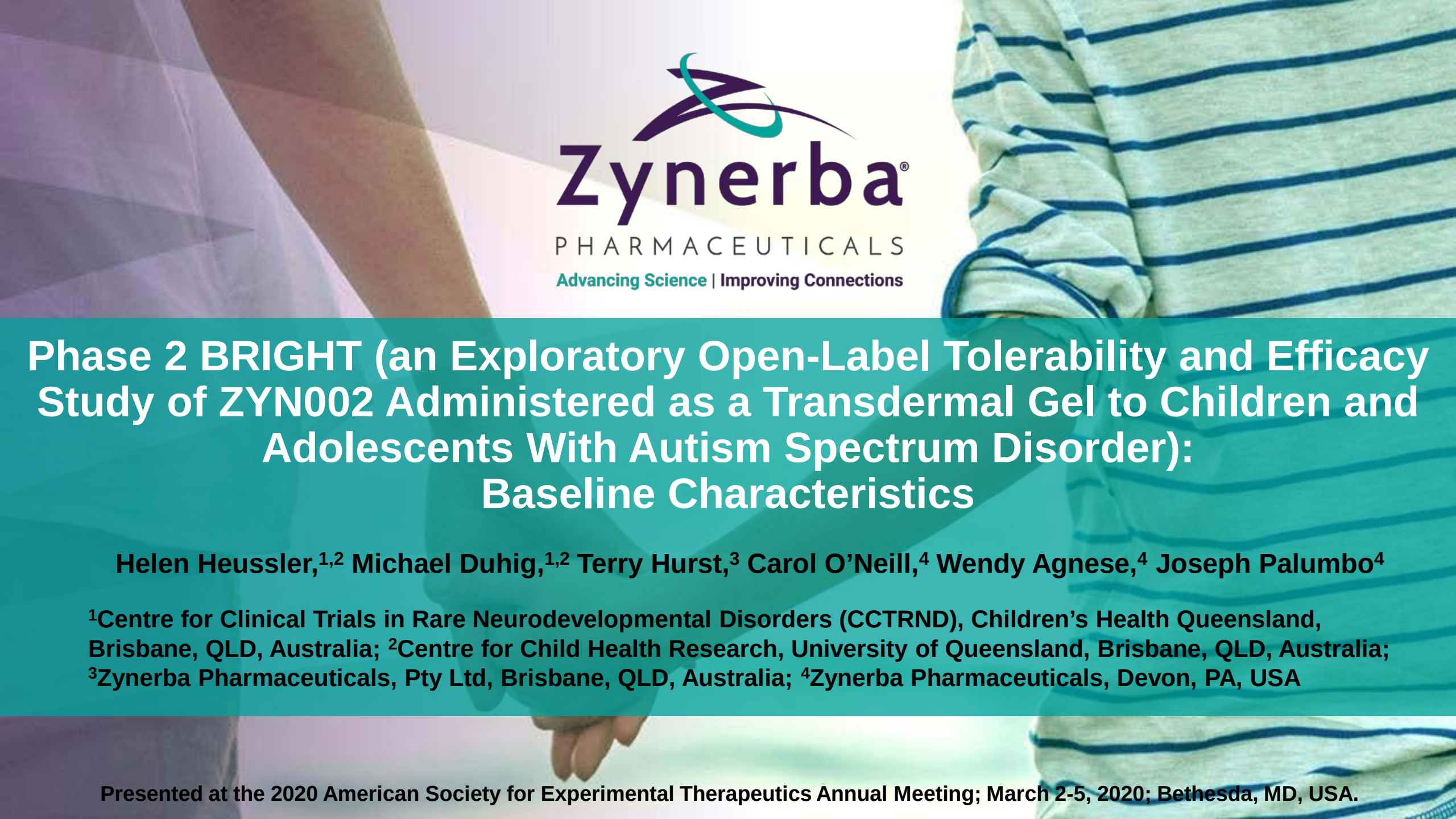

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Phase 2 BRIGHT (an Exploratory Open-Label Tolerability and Efficacy Study of ZYN002 Administered as a Transdermal Gel to Children and Adolescents With Autism Spectrum Disorder): Baseline Characteristics

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Disclaimer

- This presentation is for educational purposes only.
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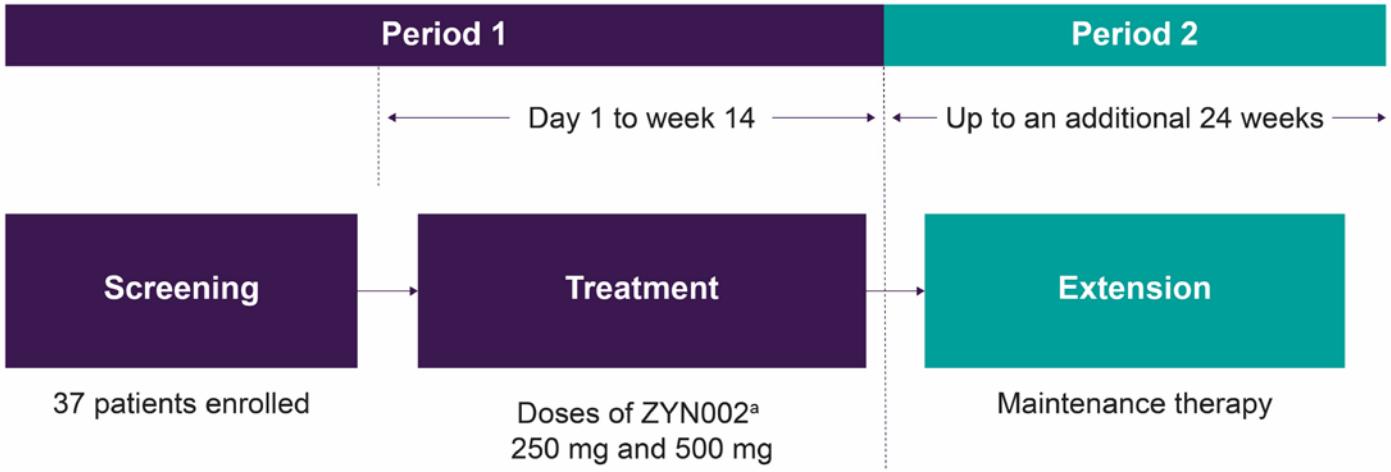
BRIGHT Study Design & Treatment

- **ZYN002 is a pharmaceutically manufactured transdermal CBD gel currently in clinical development for the treatment of behavioral symptoms in ASD**
- **BRIGHT is phase 2, open-label, single-center study being conducted in Australia**



Key Inclusion Criteria

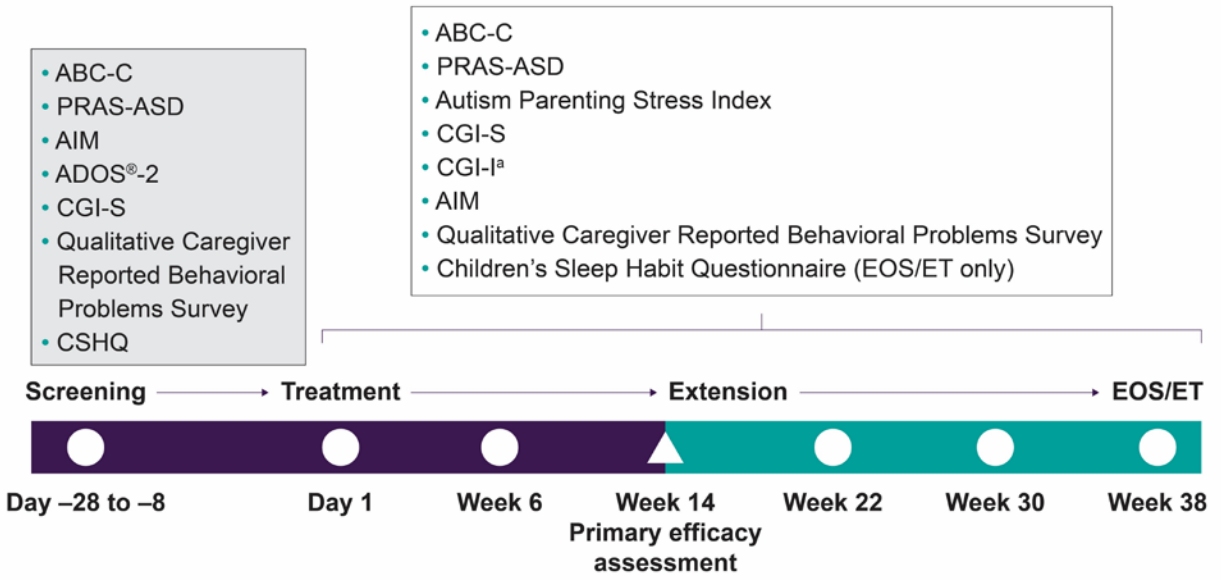
- Male or female patients aged 4 through 17 years
- Confirmed diagnosis of ASD (*DSM*-5)
- CGI-S score ≥4
- ABC-C Irritability Subscale score ≥18

Primary Objective	• To evaluate the safety and tolerability of transdermal ZYN002 in the treatment of symptoms of ASD in patients aged 4 through 17 years
Secondary/ Exploratory Objectives	• To evaluate the efficacy of ZYN002 in the treatment of symptoms of ASD • To evaluate CBD and THC plasma level exposure • To identify plasma levels of CBD metabolite(s)

[a]Total daily dose, administered twice daily. Dose is dependent on body weight. The investigator may increase dosage at week 6 in patients with <25% improvement from baseline in ABC-C Irritability Subscale score.
ABC-C, Abberant Behavior Checklist–Community; ASD, autism spectrum disorder; CGI-S, Clinical Global Impression–Severity; *DSM*-5, *Diagnostic and Statistical Manual of Mental Disorders*, 5th edition; THC, tetrahydrocannabinol.

Screening and Efficacy Assessments

Schedule of Screening and Efficacy Assessments



[a]Not completed on day 1.
ABC-C, Aberrant Behavior Checklist–Community; ADOS®-2, Autism Diagnostic Observation Schedule®, 2nd edition; AIM, Autism Impact Measure; ASD, autism spectrum disorder; CGI-I, Clinical Global Impression–Improvement; CGI-S, Clinical Global Impression–Severity; CSHQ, Children's Sleep Habit Questionnaire; EOS, end of study; ET, end of treatment; PRAS-ASD, Parent Rated Anxiety Scale–Autism Spectrum Disorder.

Key Measures of Baseline Disease Severity

ABC-C[1]

- 58-item caregiver-rated scale measuring behavior across 5 subscales:
  - Irritability/agitation, lethargy/social withdrawal, stereotypic behavior, hyperactivity/noncompliance, inappropriate speech
- Higher scores indicate greater severity of aberrant behavior

ADOS®-2[2-4]

- Clinical diagnostic tool assessing social communication and core behaviors of ASD
- Total scores are diagnostic; standardized comparison scores can be used to measure severity
- Comparison scores range from 0-10:
  - <5 = mild ASD; 5-7 = moderate ASD; 8-10 = severe ASD

PRAS-ASD[5,6]

- 25-item parent-rated scale assessing anxiety in ASD
- Maximum score is 75, with scores >52 indicating possible clinical anxiety

1. Hustyi KM et al. *Res Dev Disabil*. 2014;35(11):2691-2701. 2. Maddox BB et al. *J Autism Dev Disord*. 2017;47(9):2703-2709. 3. Gotham K et al. *J Autism Dev Disord*. 2009;39(5):693-705. 4. Lord C et al. *Autism Diagnostic Observation Schedule*, 2nd ed (ADOS-2) [Manual: Modules 1-4]. Torrance, CA; Western Psychological Science; 2012. 5. Scahill L et al. *J Am Acad Child Adolesc Psychiatry*. 2019;58(9):887-896. 6. Spectrum News. https://www.spectrumnews.org/news/toolbox/new-scale-measures-anxiety-children-autism. Accessed February 25, 2020.

Baseline Characteristics of BRIGHT Patients

- BRIGHT enrolled 37 male (91.9%) and female (8.1%) patients
- The mean age of patients enrolled in BRIGHT is 9.2 years (range 3-16)
- Most patients are white (75.7%; Aboriginal: 5.4%, Asian: 8.1%; Other: 10.8%)

Most patients had moderate or severe ASD at baseline as measured by ADOS®-2 and *DSM*-5, and 24.3% of patients had possible clinical anxiety

Baseline Disease Characteristics of Enrolled Patients

Disease Characteristic	BRIGHT patients (N = 37)[a]
ABC-C Irritability Subscale score	
Mean (range)	30.0 (18-43)
PRAS-ASD score	
Mean (range)	40.9 (21-68)
>52, n (%)	9 (24.3)
DSM-5 severity level[b]	
Level 1 (mild), n (%)	3 (8.1)
Level 2 (moderate), n (%)	15 (40.5)
Level 3 (severe), n (%)	19 (51.4)
ADOS®-2 total score	
Mean (range)	17.5 (7-25)
ADOS®-2 comparison score	
Mean (range)	7.5 (4-10)
<5, n (%)	2 (5.6)
5-7, n (%)	19 (52.8)
8-10, n (%)	15 (41.7)

[b]N=37 for all characteristics except ADOS®-2 total and comparison scores, for which data is missing from one patient (n=36).
[b]DSM-5 severity levels are based on degree of social communication impairment and behavioral flexibility. The levels indicate patients "requiring support" (level 1), "requiring substantial support" (level 2), and "requiring very substantial support" (level 3).
ABC-C, Aberrant Behavior Checklist–Community; ADOS®-2, Autism Diagnostic Observation Schedule®, 2nd edition; AIM, Autism Impact Measure; PRAS-ASD, Parent Rated Anxiety Scale–Autism Spectrum Disorder.

Conclusions

- BRIGHT is an ongoing, exploratory, phase 2, open-label study to evaluate the safety, tolerability, and efficacy of ZYN002 in children and adolescents with ASD, a patient population with high unmet needs
- BRIGHT enrolled a broad and inclusive patient population and was enriched for disease severity to avoid floor effects on outcome measures
- Baseline characteristics indicate a patient population with predominantly moderate-to-severe ASD, with a high burden of anxiety
- Topline results from BRIGHT will be available in 2Q2020

ASD, autism spectrum disorder.