



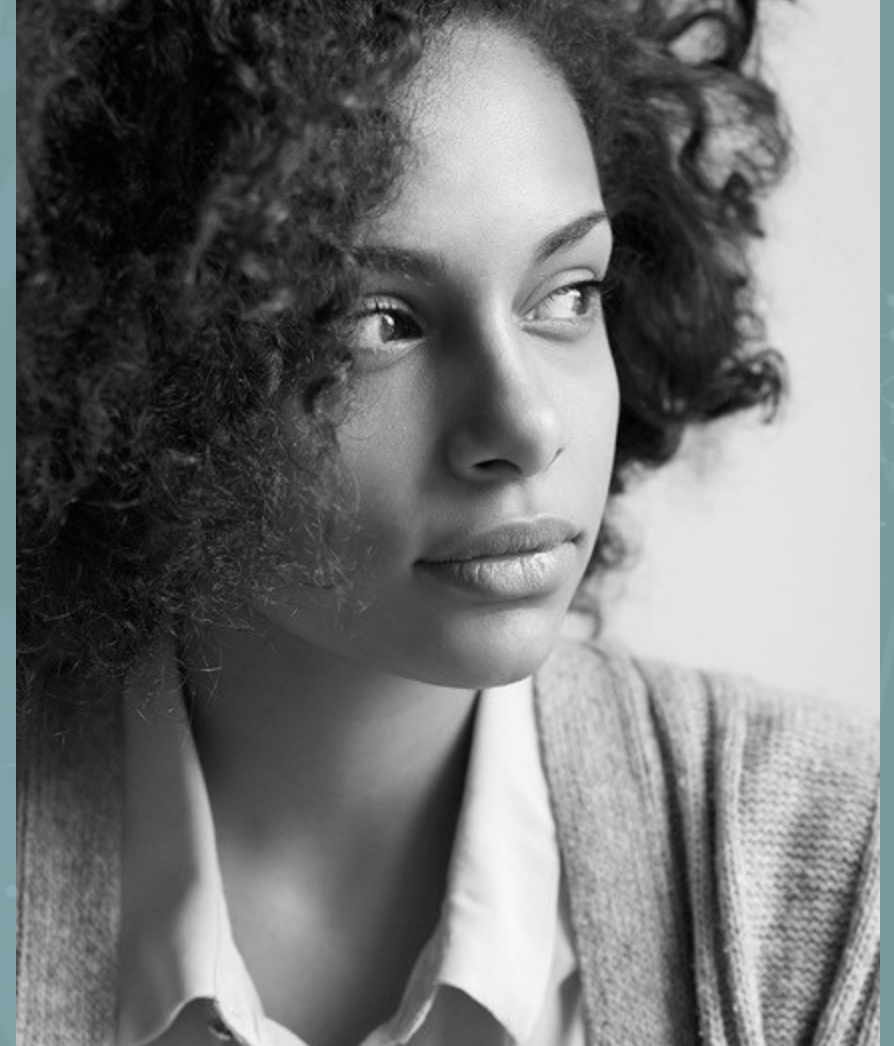
NLS Pharmaceuticals
Connecting Brains



**Quilience (Mazindol ER) a New Approach to treat
Type I & Type II Narcolepsy
POLARIS Clinical Development Program**

Why study mazindol ER in narcolepsy – Key Highlights

- ❖ Unmet medical need in narcolepsy
- ❖ **Novel mechanism of action** targeting both Orexin (OX2R) and monoaminergic systems: norepinephrine, dopamine, serotonin
- ❖ **Once daily dose**
- ❖ **Long history of positive safety** data and well tolerated
- ❖ **Clinical evidence** that the drug addresses **both sleepiness and cataplexy (NT1 and NT2)**
- ❖ **Proven low potential for abuse, misuse, or diversion**
- ❖ **Possibility to be use as monotherapy** for narcoleptic patients (with and without cataplexy)

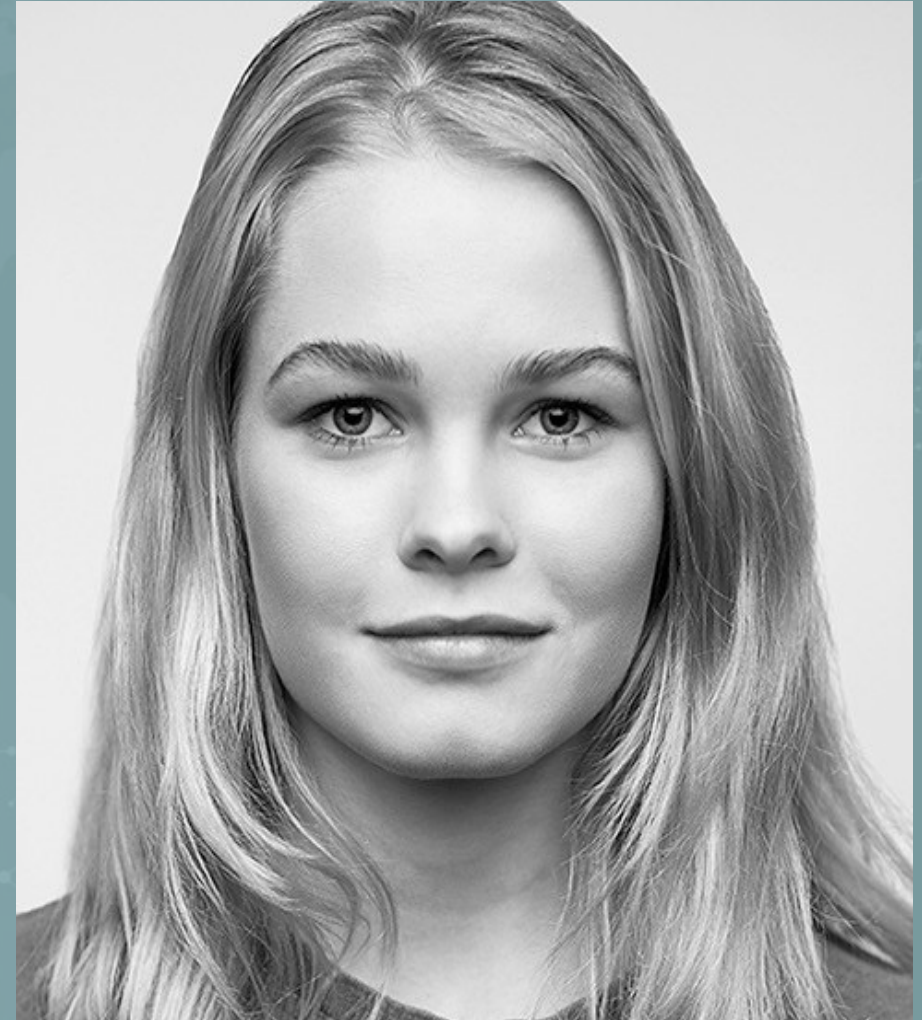


**Polaris program currently represents
two U.S. clinical trials both approved by FDA/ WIRB**

- ❖ **NLS-1021 Phase IIa** A four-week double-blind, placebo controlled, randomized, US multi-center study of Mazindol ER 3 mg once daily vs. placebo (1:1)
- ❖ **NLS-1022 Open Label Extension**, An Open Label Extension Study available for individuals following completion of the four-week NLS 1021 study.
This OLE study offers participants the opportunity to take oral Mazindol ER once daily in the morning for up to six months.

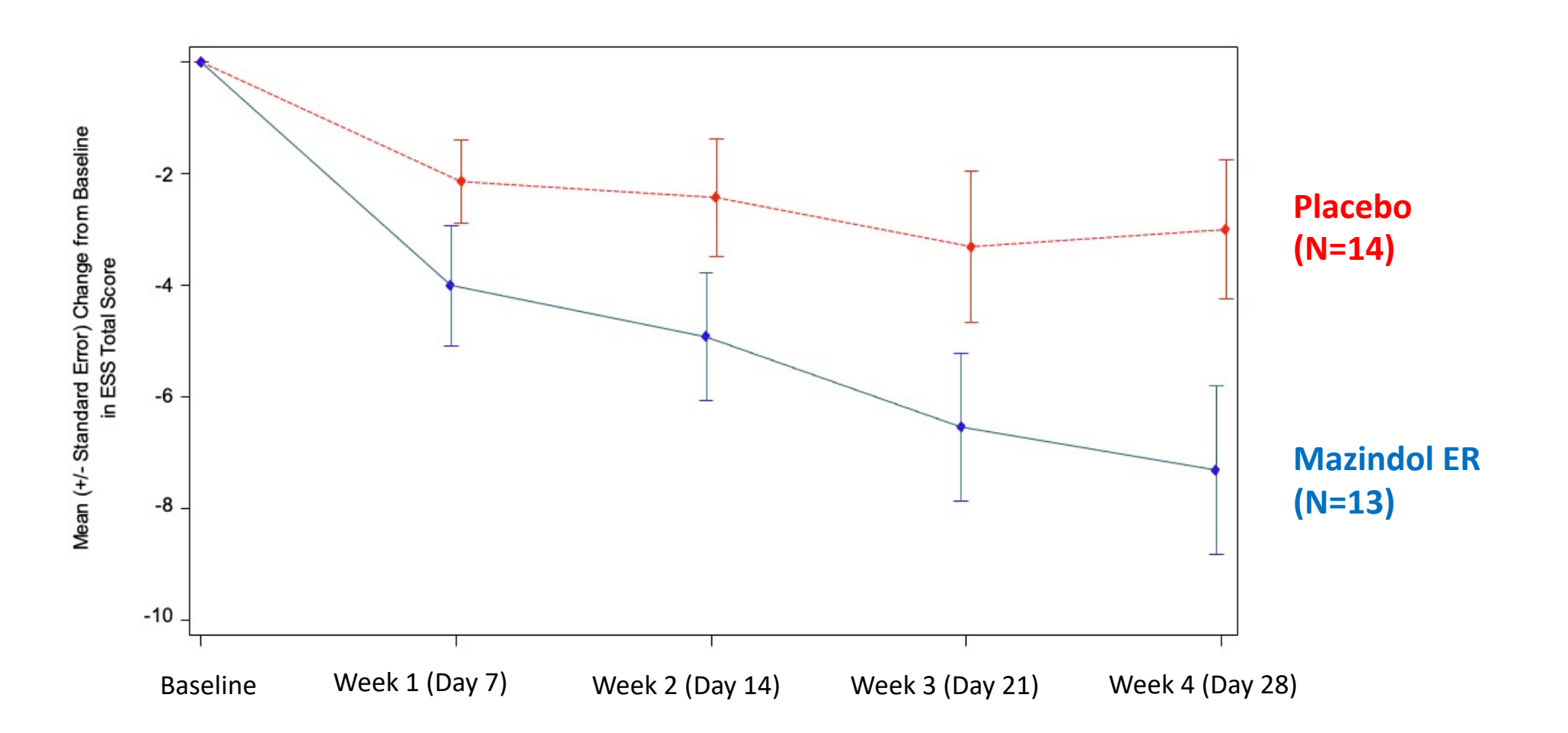
Summary of Interim Top-Line Efficacy Results

- ❖ Clinically meaningful improvement in ESS score at 4 weeks:
 - ❖ -7.3 ESS score reduction vs. baseline in the active group
 - ❖ -4.3 ESS score difference vs placebo.
- ❖ Rapid onset of action and clinical effect (within 1 week)
- ❖ Sustained EDS improvement all along the treatment period
- ❖ Placebo effect seen up to 2nd week, stabilized from week 3
- ❖ Statistical power affirmed; Phase 2a trial to continue as initially designed



Primary Endpoint: Change from Baseline to Last Visit on Epworth Sleepiness Scale (ESS) (ITT Population)

Mean (+/- Standard Error) Change from Baseline in Epworth Sleepiness Scale (ESS) Total Score by Visit



Summary of Interim Top-Line Safety Results

- ❖ **No** patient discontinued treatment to due to adverse reactions
- ❖ **All AEs resolved spontaneously**, no intervention was required
- ❖ **No** serious adverse events or unexpected AEs
- ❖ **Well-tolerated** with the most commonly known adverse reactions occurring at low frequencies
- ❖ **Possible dose increases** given solid safety profile

