Relmada THERAPEUTICS

Fourth Quarter and Full-Year 2022 Earnings Call

March 23, 2023

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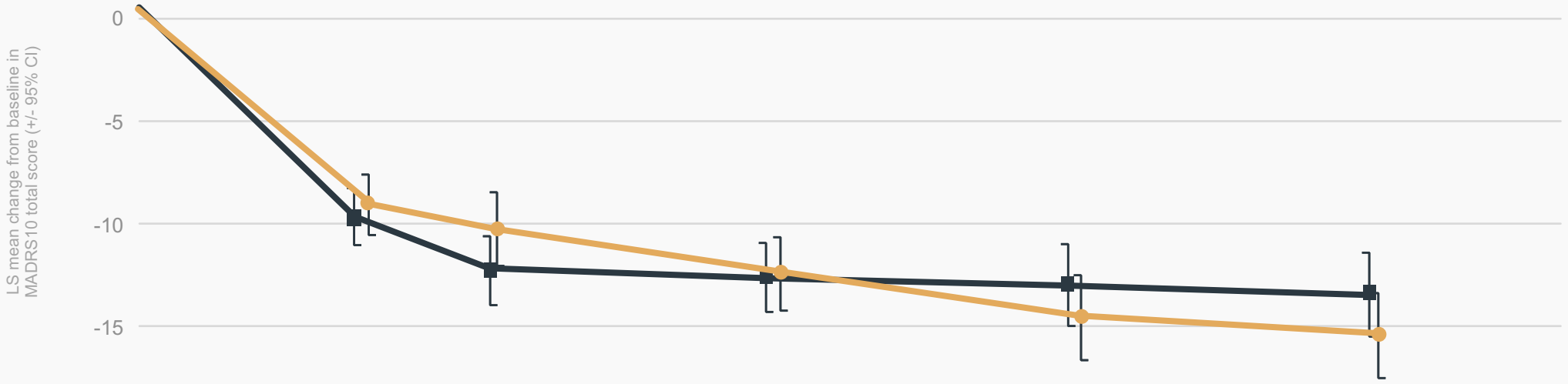
Reliance I primary efficacy endpoint: REL-1017 showed a clinically meaningful -2.3 MADRS point difference vs. placebo at Day 28 in the full analysis set



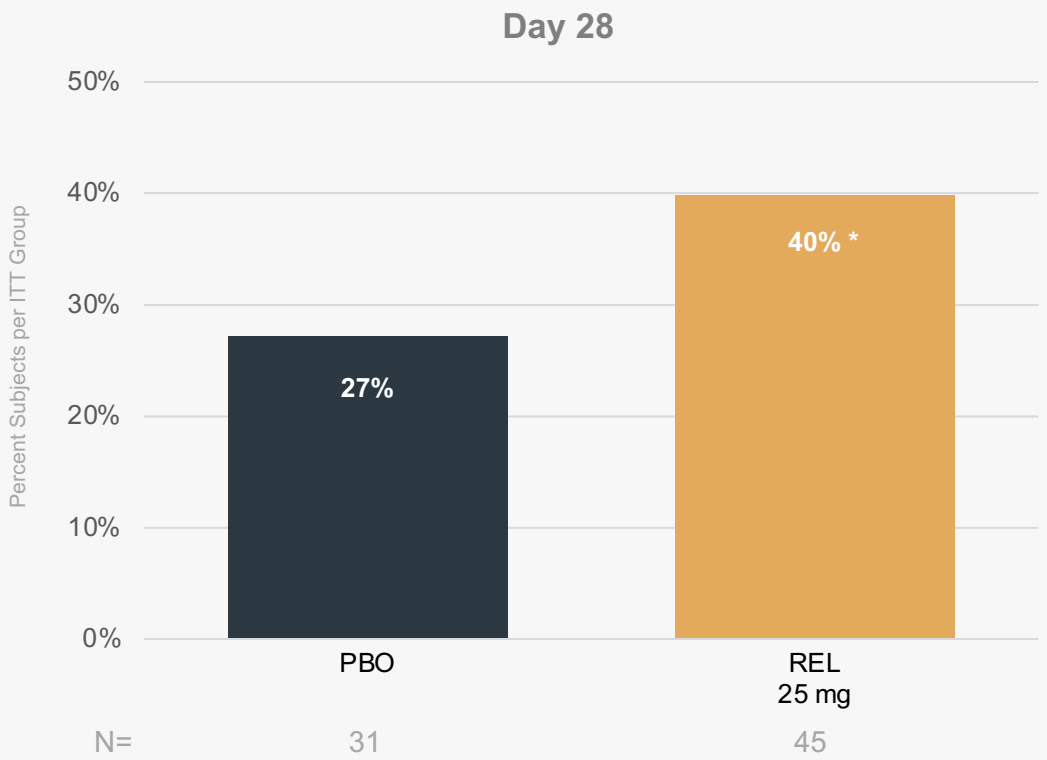
ΔMADRS (N=227) Placebo N=114, 25 mg N=113, 43 sites	Day 4	Day 7	Day 14	Day 21	Day 28 End of Treatment
Placebo Mean (SD)	-9.3 (7.3)	-11.8 (9.9)	-12.2 (10.9)	-13.0 (11.2)	**-12.9** (10.4)
25 mg Mean (SD)	-8.3 (8.9)	-10.2 (9.5)	-12.4 (9.4)	-14.4 (10.4)	**-15.1** (11.3)
Placebo LSMean (SE), MMRM	-8.5 (0.8)	-11.9 (0.9)	-12.4 (1.0)	-13.0 (1.0)	-13.4 (1.1)
25 mg LSMean (SE), MMRM	-8.3 (0.8)	-10.2 (0.9)	-12.6 (1.0)	-14.2 (1.0)	-15.1 (1.1)
REL-1017 vs Placebo LSMean Diff (SE); p-value, MMRM	0.2 (1.2); 0.85	1.7 (1.3); 0.20	-0.2 (1.4); 0.88	-1.2 (1.5); 0.42	-1.7 (1.5); 0.26

-2.3 diff.
REL-1017
vs. placebo
p=0.15
ES=-0.21

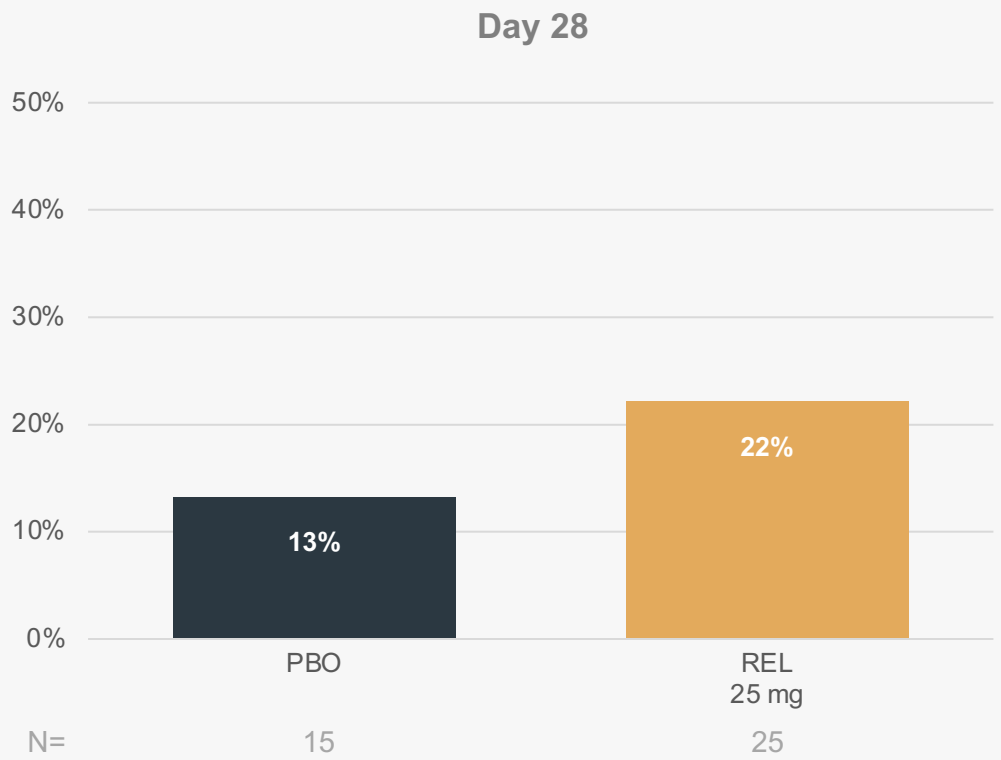
Day 28: last efficacy assessment
Total N=227; * p= <0.05
MADRS=Montgomery-Asberg Depression Rating Scale; Source: Relmada Data on File

Reliance I achieved a statistically significant response rate of 40% (p=0.044), and achieved remission rate of 22% (p=0.076) at Day 28 in the full analysis set

Percentage of subjects achieving response
(≥ 50% MADRS improvement from baseline)

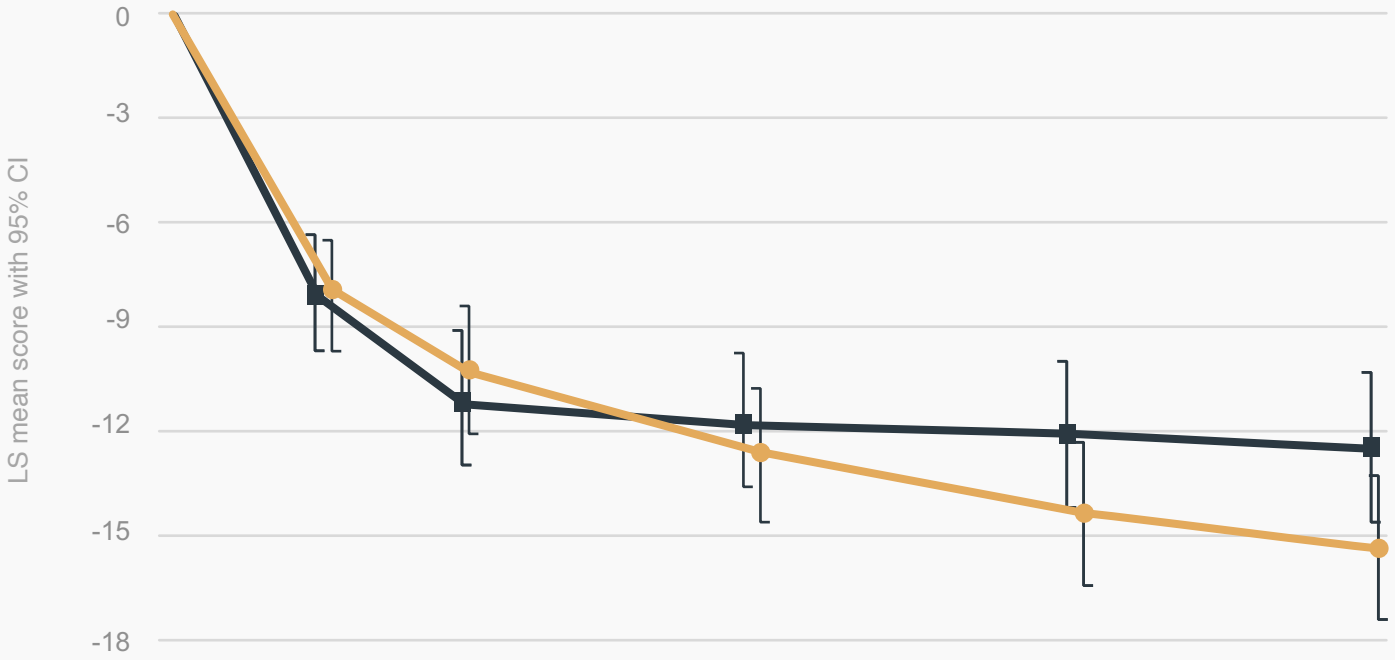


Percentage of subjects achieving remission
(MADRS ≤10)



Day 28: last efficacy assessment
Total N=227; * p= <0.05
MADRS=Montgomery-Asberg Depression Rating Scale; Source: Relmada Data on File

Reliance I: REL-1017 showed a clinically meaningful -3.1 MADRS point difference vs. placebo at Day 28 in the Reliance I per protocol set*



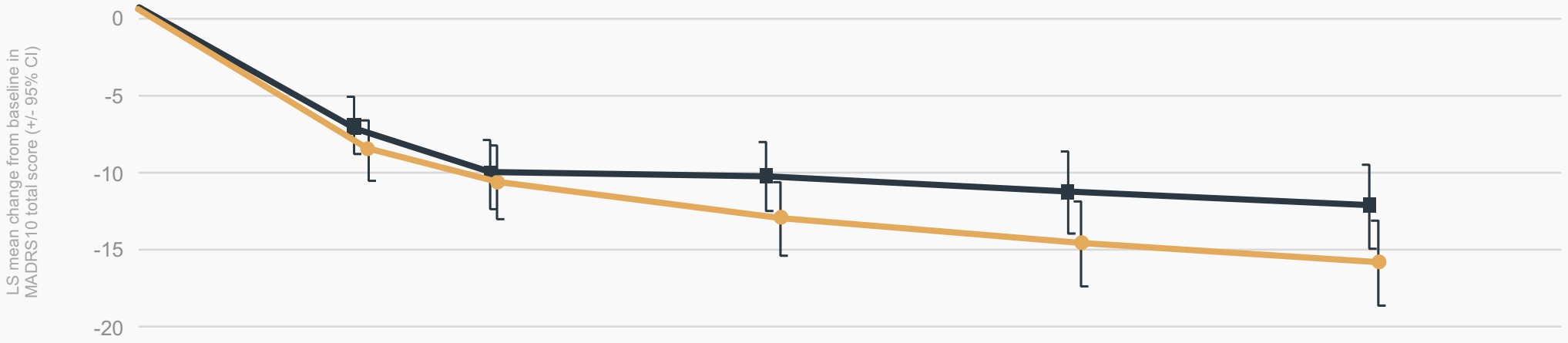
ΔMADRS (N=198) Placebo N=97, 25 mg N=101	Day 4	Day 7	Day 14	Day 21	Day 28 End of Treatment
Placebo Mean (SD)	-9.0 (7.4)	-11.2 (9.7)	-11.8 (10.2)	-12.5 (10.8)	**-12.5** (9.9)
25 mg Mean (SD)	-8.3 (8.7)	-10.4 (9.5)	-12.6 (9.5)	-15.0 (10.5)	**-15.6** (11.2)
Placebo LSMean (SE), MMRM	-8.2 (0.9)	-11.2 (1.0)	-11.9 (1.0)	-12.3 (1.1)	-12.7 (1.1)
25 mg LSMean (SE), MMRM	-8.3 (0.8)	-10.4 (1.0)	-12.9 (1.0)	-14.6 (1.1)	-15.6 (1.1)
REL-1017 vs Placebo LSMean Diff (SE); p-value, MMRM	-0.8 (1.2); 0.95	0.8 (1.4); 0.56	-1.0 (1.4); 0.50	-2.3 (1.5); 0.12	-2.94 (1.5); 0.057

-3.1 diff.
REL-1017
vs. placebo
p= 0.051
ES=-0.29

*Per-Protocol Set: Valid completer, ie, participants who complete the 28-day treatment and do not have any major protocol deviations impacting the efficacy assessments. This set will be analyzed according to the treatment actually received.
Day 28: End of treatment and primary efficacy endpoint
MADRS=Montgomery-Asberg Depression Rating Scale; Source: Relmada Data on File

Reliance I: REL-1017 vs placebo with post-hoc removal of two sites with paradoxical results

Modified analysis of 41 of 43 centers and 185 of 227 subjects*



ΔMADRS (N=185) **Placebo N=88, 25 mg N=97, 41 sites**	**Day 4**	**Day 7**	**Day 14**	**Day 21**	**Day 28** **End of Treatment**
Placebo Mean (SD)	-8.5 (7.0)	-11.0 (9.6)	-11.0 (10.8)	-11.8 (10.5)	**-12.6** (9.8)
25 mg Mean (SD)	-8.8 (9.1)	-10.7 (9.6)	-13.4 (9.1)	-15.3 (10.1)	**-16.7** (11.1)
Placebo LSMean (SE), MMRM	-7.8 (1.0)	-10.9 (1.1)	-11.0 (1.1)	-11.9 (1.2)	-12.8 (1.2)
25 mg LSMean (SE), MMRM	-9.0 (0.9)	-10.8 (1.0)	-13.6 (1.0)	-15.2 (1.0)	-16.6 (1.1)
REL-1017 vs Placebo LSMean Diff (SE); p-value, MMRM	-1.2 (1.3); 0.35	0.1 (1.4); 0.95	-2.6 (1.5); 0.08	-3.3 (1.6); **0.04**	-3.8 (1.6); **0.02**

-4.1 diff.
REL-1017
vs. placebo
p= 0.019
ES=-0.38

*These same two centers produced non-plausible results in Reliance III
Day 28: last efficacy assessment
Total N=227; * p= <0.05
MADRS=Montgomery-Asberg Depression Rating Scale; Source: Relmada Data on File

Patient sources: verifiable vs. unverifiable

Verifiable sources

- Past patients at site*
- Current patient*
- Site database**
- HCP referral

**For past/current patients at site, they are not necessary patients who were treated by the site. For sites that are Research-only (no psychiatric practice), these patients have worked with the sites for Research purposes, but not for ongoing care*

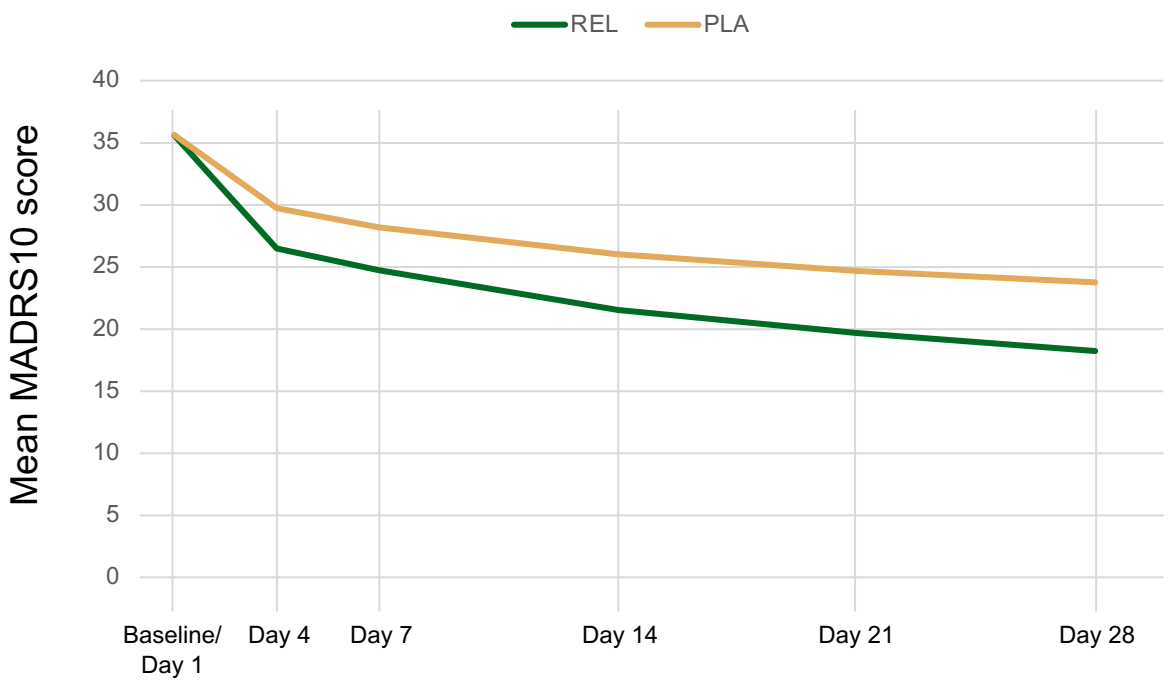
***Patients from site database are patients that sites have contacted in the past*

Unverifiable sources

- Radio/TV AD
- Banner/Pop AD
- Social media
- Internet search
- Friend
- Recruitment company
- Referral from other patients

Reliance I: MADRS10 results for patients from verifiable sources vs unverifiable sources

Patients from verifiable sources

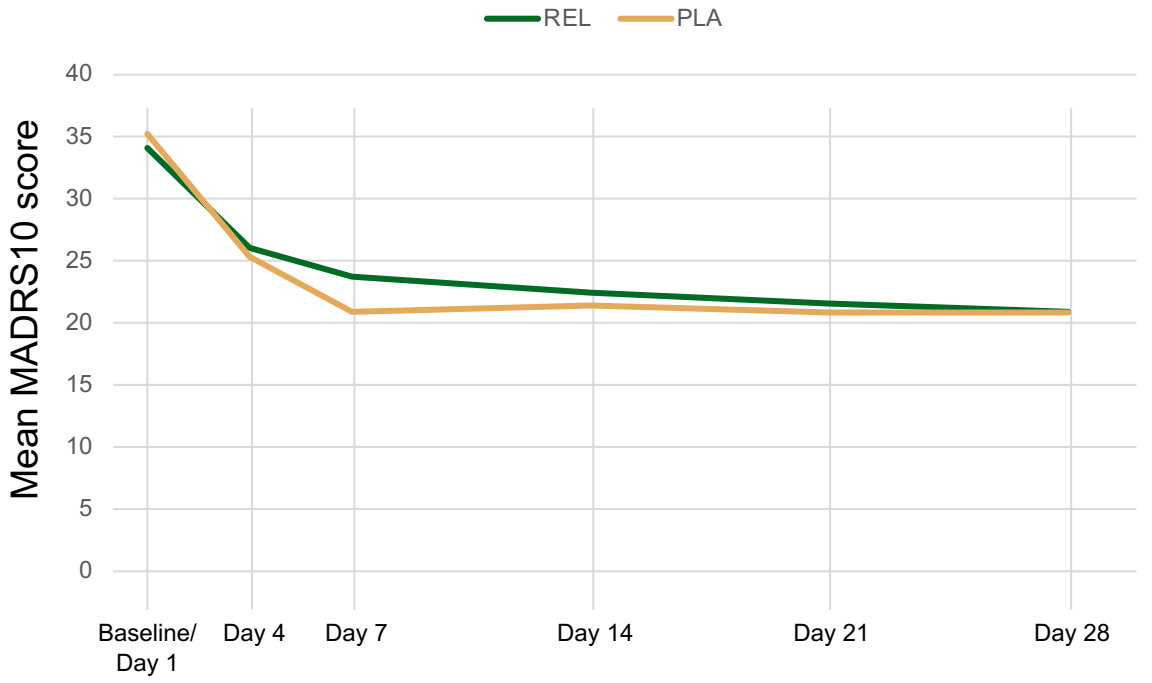


REL	52	50	50	50	49	49
PLA	40	39	39	39	37	37

Average change from baseline on Day 28	REL-1017	-17.22	p = 0.01614
	PLACEBO	-11.76	

-5.5 diff. REL-1017 vs. placebo

Patients from unverifiable sources



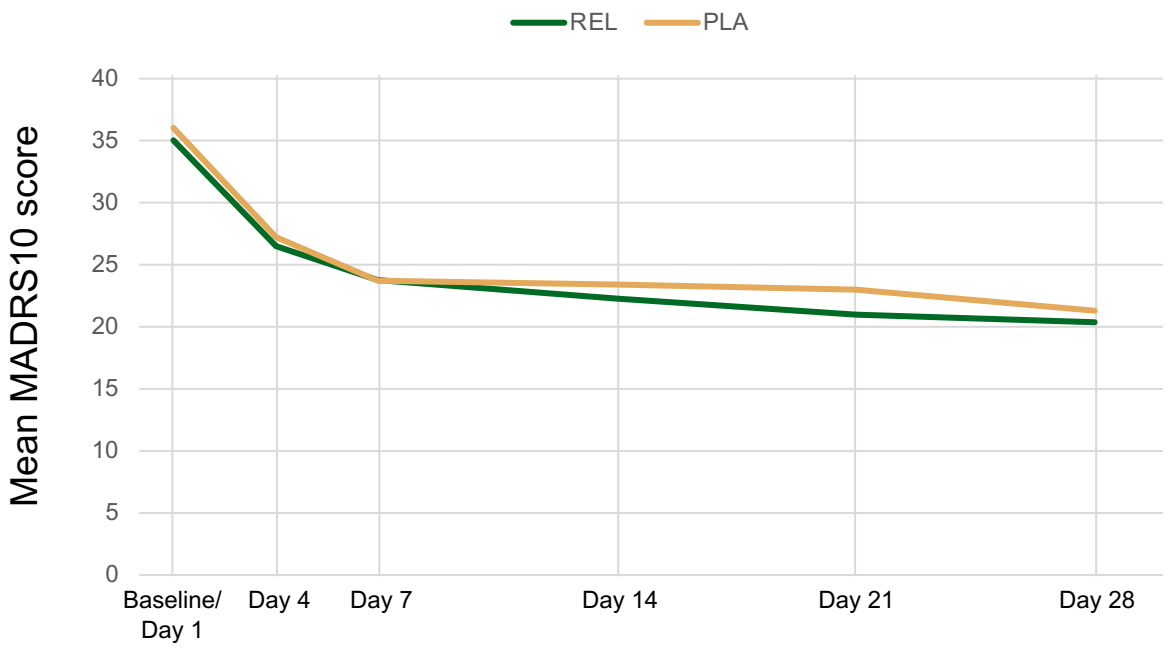
REL	61	61	60	60	59	60
PLA	74	70	70	66	65	70

Average change from baseline on Day 28	REL-1017	-13.22	p = 0.58911
	PLACEBO	-14.31	

p values is calculated using Student's Two-sample equal variance t-Test, with a two-tailed distribution
*Enrollment date is the date of Baseline/Day 1 visit

Potential impact of the COVID-19 pandemic on Reliance I: MADRS10 results for patients enrolled* before vs. after April 1st, 2022

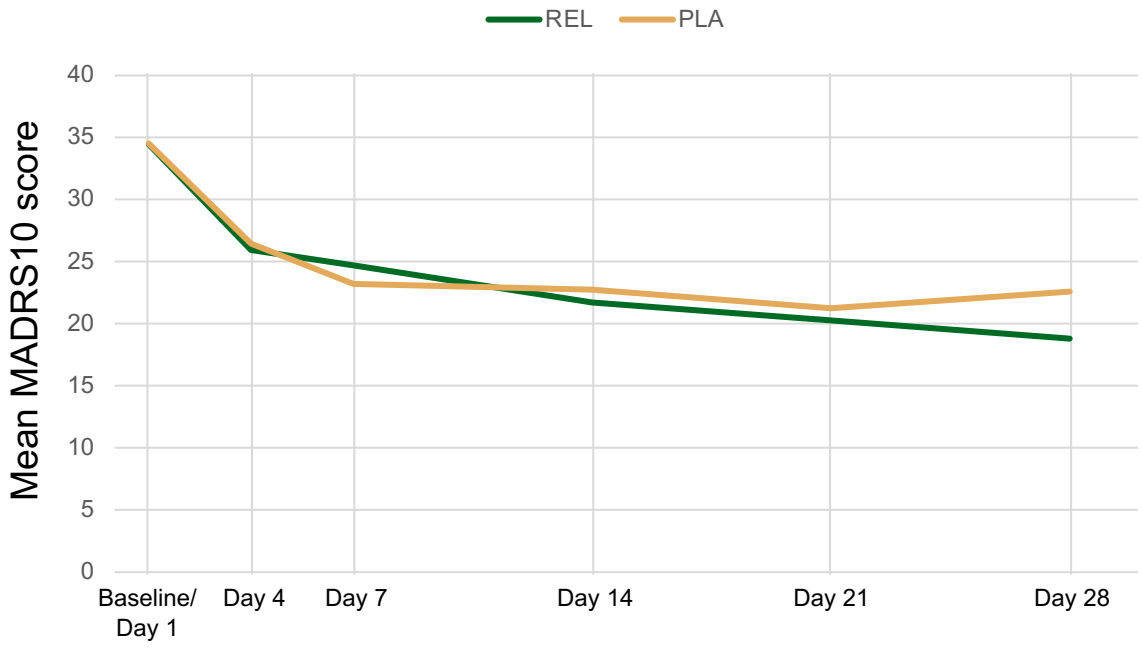
Patients enrolled before April 1st, 2022



REL	65	63	62	62	62	62
PLA	64	63	62	60	59	61

Average change from baseline on Day 28	REL-1017	-14.52	p = 0.89048
	PLACEBO	-14.79	

Patients enrolled after April 1st, 2022



REL	48	48	48	48	46	47
PLA	50	46	47	45	43	46

Average change from baseline on Day 28	REL-1017	-15.68	p = 0.08898
	PLACEBO	-11.63	

-4.1 diff.
REL-1017
vs. placebo

p values is calculated using Student's Two-sample equal variance t-Test, with a two-tailed distribution
*Enrollment date is the date of Baseline/Day 1 visit

Key learnings from internal and external stakeholders

- Study site visits were too long and entailed too many assessments
- High enrolling sites with high placebo rates were over-represented in the final dataset
- Study screening eligibility adjudication needed improvement
- COVID-19 impacted our trial due to the large number of patients experiencing situational depression related to isolation and other pandemic related issues

Changes to improve subject quality and better manage placebo response

- Requirement of medical records to verify depression diagnoses and ADT history to ensure enrollment of patients with true clinical depression
- Increased clinical trial oversight and management to improve screening eligibility adjudication
- Careful site selection based on the wealth of data gathered from recent experience
- Limiting the number of patients enrolled per site to ensure there is not a disproportionate effect on study outcomes
- Protocol simplification to reduce the duration of site visits and assessments, enhance recruitment, and manage placebo response

Q&A

Thank you!