GAME-Pilot: Investigating the clinical impact of a game-based digital therapeutic for social anxiety disorder

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Clinical Trial of Arcade Therapeutics's Flagship Therapeutic Mobile Game ABM-01 Shows Robust Reductions in Adult Social Anxiety

BACKGROUND

ABM-01 is a game-based form of a cognitive intervention called attention bias modification (ABM) in which attentional biases towards negative or threatening information are reduced through gamified interactions with facial expressions.

GAME-Pilot (NCT05240794) tested whether ABM-01, relative to sham control, would result in symptom reduction among socially anxious adults on the following measures:

○ Primary endpoint - Social anxiety disorder symptoms (LSAS)

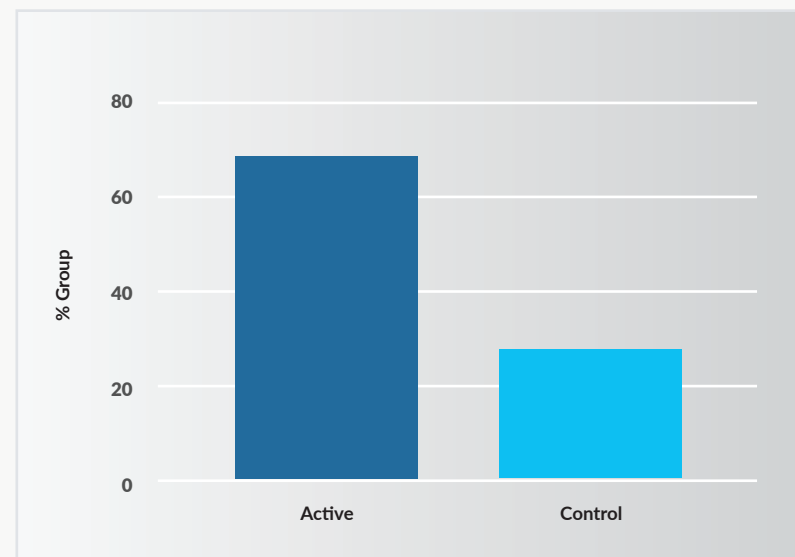○ Exploratory endpoint - Major depressive disorder symptoms (BDI-II)

RESULTS

Primary Endpoint: LSAS

Active vs. sham control arm resulted in greater reductions in social anxiety symptoms
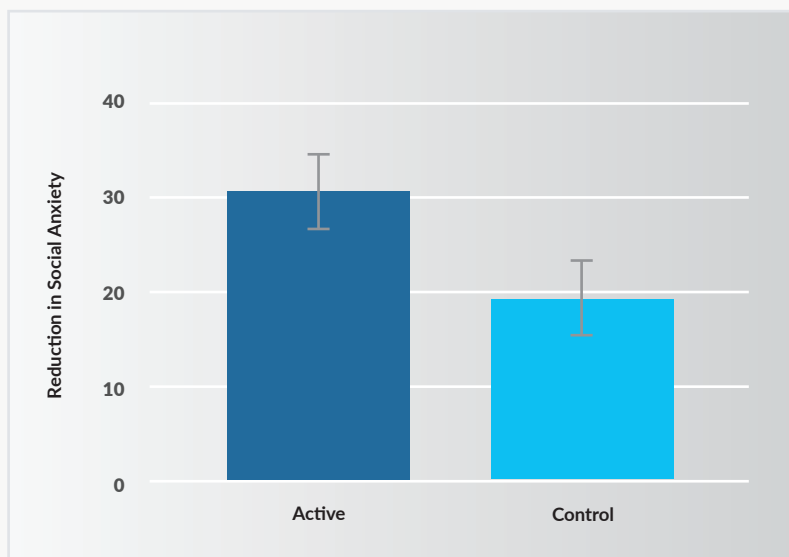
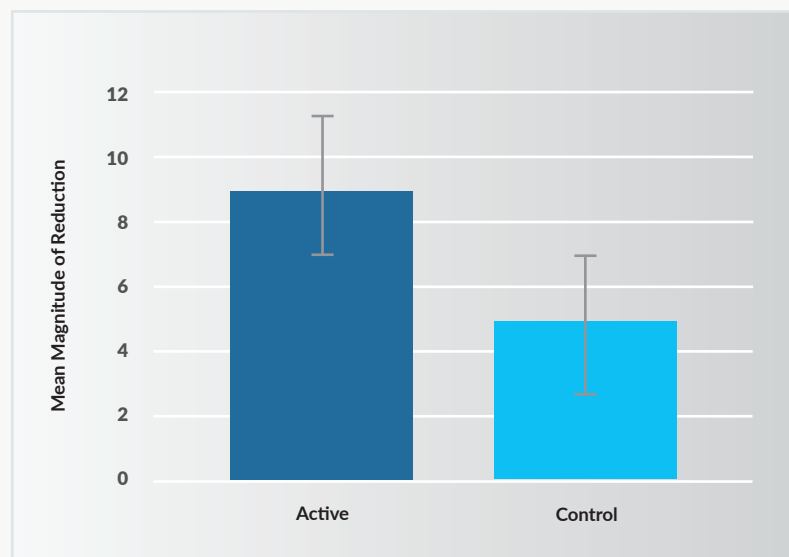$F_{(1,88)} = 5.05$, $p = .027$, $d = .4738$

Clinically Meaningful Benefit: Reductions in Severity Level

$X^2_{(1, 90)} = 5.51$, $p = .019$

Exploratory Endpoint: BDI II

Active vs. sham control arm resulted in greater reductions in depression symptoms

$F_{(1,88)} = 4.116$, $p = .045$

Symptom Reduction (Pre-Post Δ)

	ABM-01	Control
LSAS Mean	30.86	19.25
LSAS SE	3.44	3.85
BDI II Mean	9.12	4.75
BDI II SE	1.61	2.15

METHODS

Participants. 104 adult patients (aged 23 - 64) with elevated symptoms of social anxiety disorder and receiving usual care.

Measures. Leibowitz Social Anxiety Scale[1]; Beck Depression Inventory II[2]

Design. Double-blind, randomized, and sham-controlled. The sham version of ABM-01 had a randomized MoA consistent with the standard in ABM research literature.[3]

Figure 1: GAME-Pilot Study Design

SCREENING — **RECRUITMENT PHASE** — DAY 0 — **TREATMENT PHASE** — DAY 28

Randomized in line w/ national distribution by: age, sex, race/ethnicity, and income level

~**12** minute sessions
4 days per week
4 week course

23-64yo w/ SAD Both arms receiving usual care (N=104)

Baseline: LSAS, BDI and Other Assessments

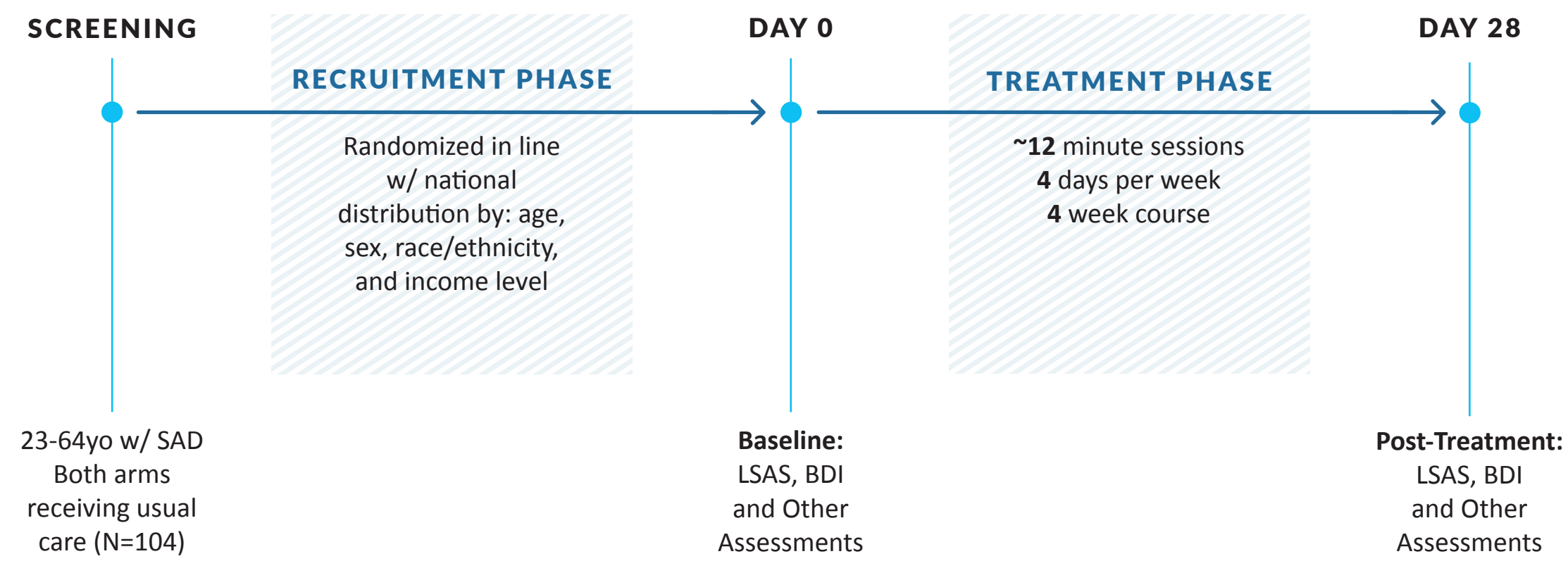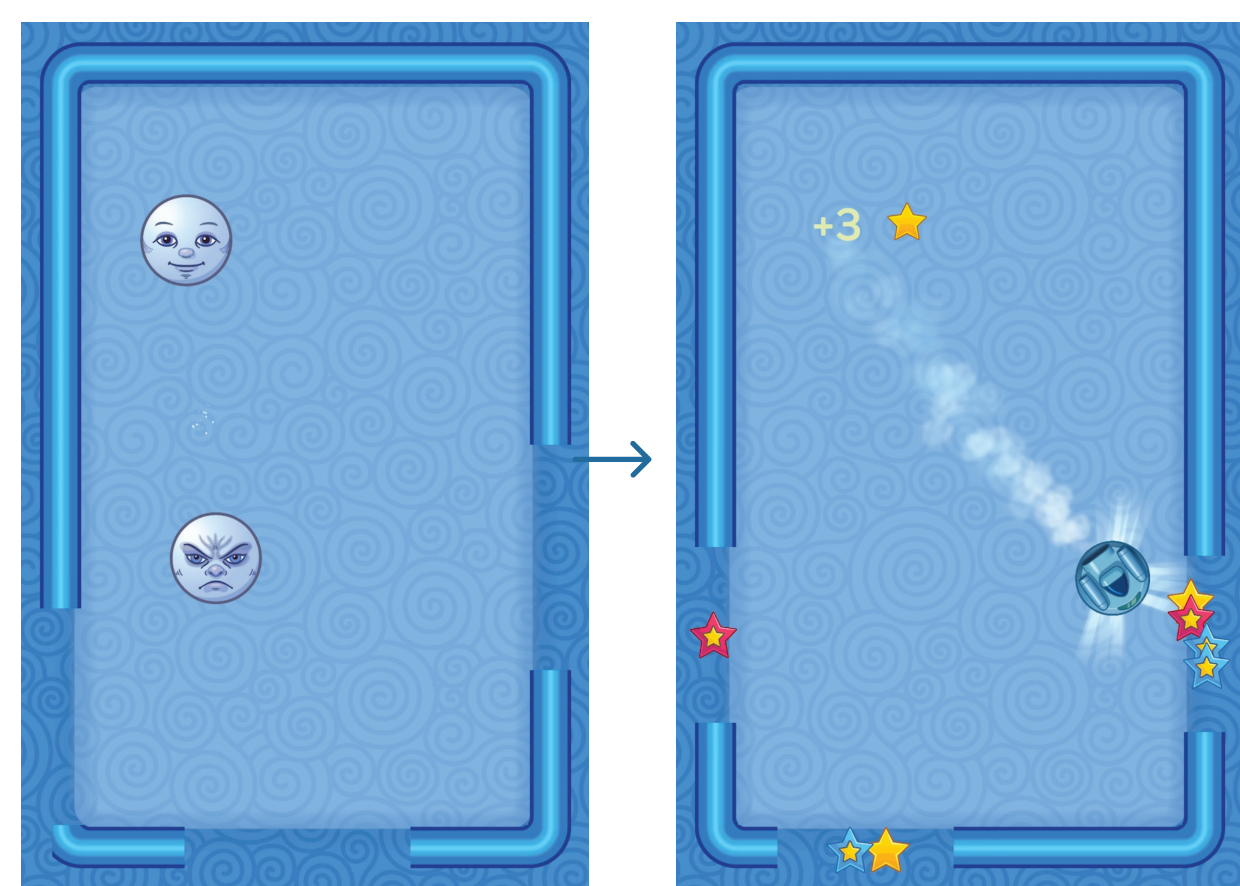Post-Treatment: LSAS, BDI and Other Assessments

Figure 2: ABM-01 Gameplay Screenshots

SAFETY

No adverse events were reported.

CONCLUSIONS

Pilot validation of ABM-01 as an effective game-based treatment for Social Anxiety Disorder. Further investigation in the form of a pivotal trial is planned to launch later this year.

REFERENCES
[1]Liebowitz M. R. (1987). Social phobia. Modern problems of pharmacopsychiatry, 22, 141–173.
[2]Beck, A. T., Steer, R. A., & Brown, G. (1996). Beck Depression Inventory–II (BDI-II) [Database record]. APA PsycTests.
[3]Mogoașe, C., David, D. and Koster, E.H.W. (2014), Clinical Efficacy of Attentional Bias Modification Procedures: An Updated Meta-Analysis.
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