

# Applying placebo-induced expectancies to emotion regulation

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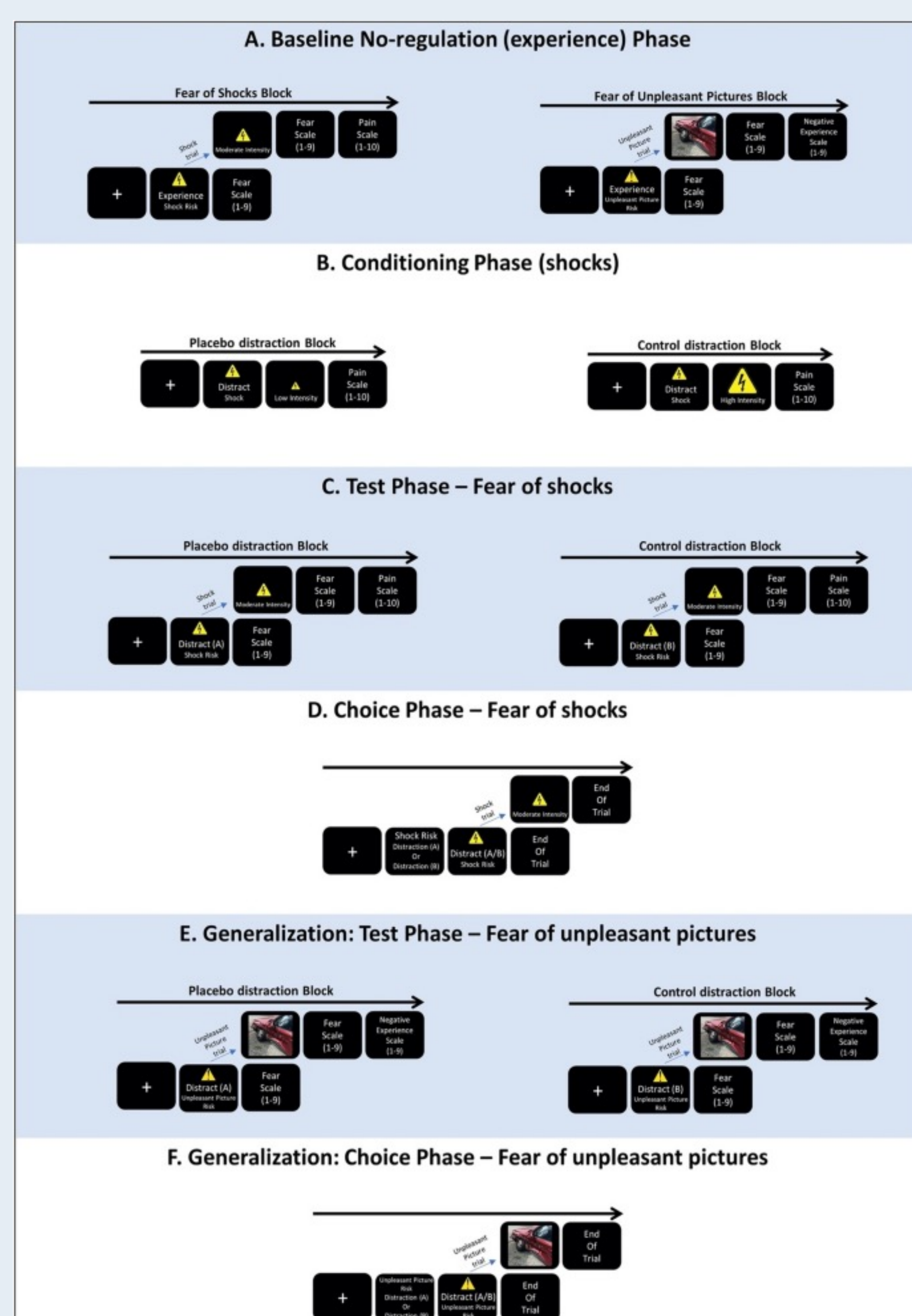
## Introduction

- The placebo effect demonstrates how positive expectancies shape the effectiveness of various treatments.
- Across existing studies, placebos are treatment interventions (creams, pills, etc.) that are presented to individuals as, and are learned to be, beneficial for them. Thus, the use of the placebo treatment, rather than an internal action of individuals, is the trigger for individuals' improvement in conditions.
- The goal of the current study was to test whether placebo-induced expectancies can be harnessed to improve individuals' *internal* attempts to improve their conditions.
- We focused on improving distraction, a commonly used cognitive emotion regulation strategy that involves attentional disengagement from emotional information.

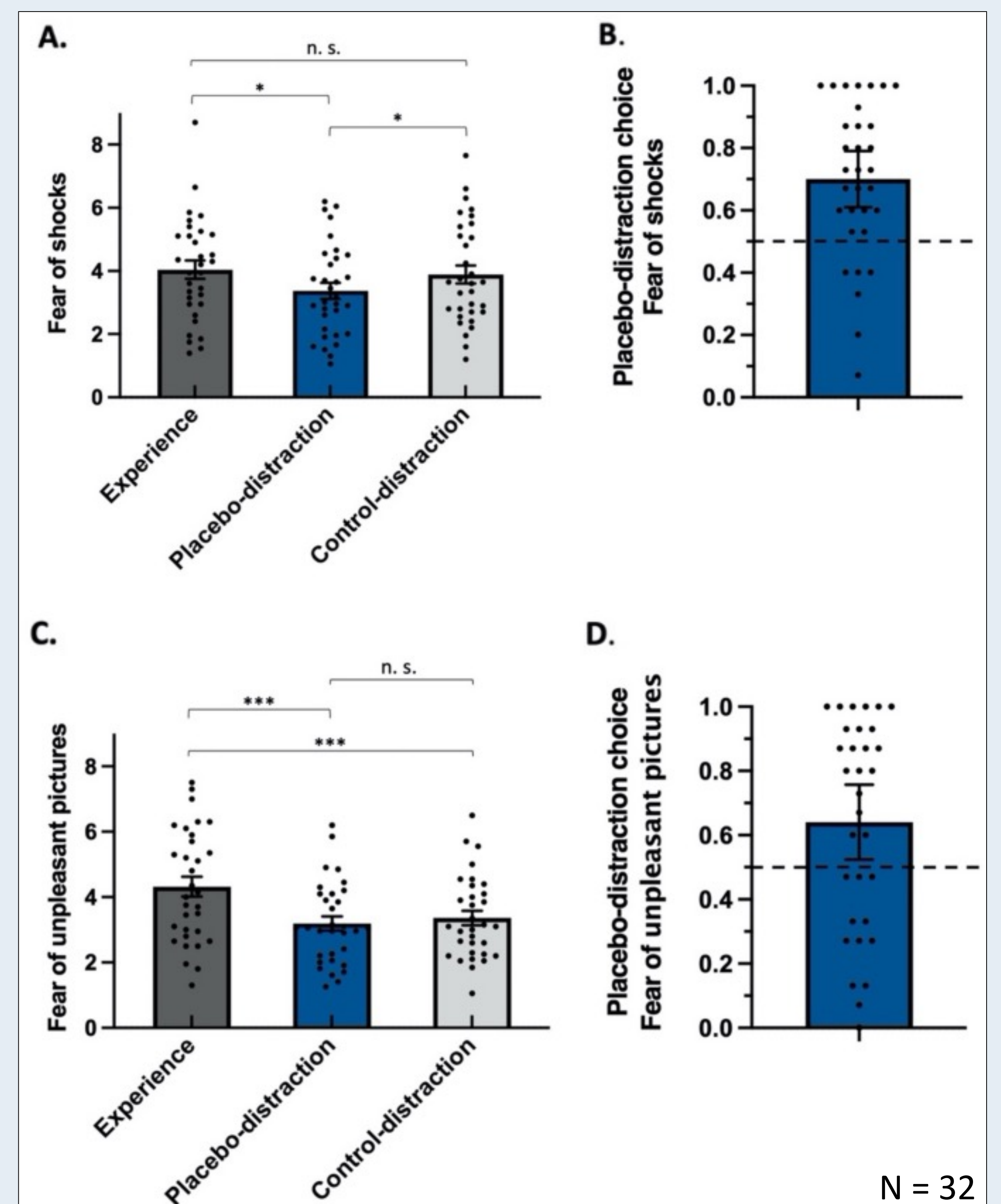
## Methods

- The final sample consisted of thirty-two healthy participants (mean age 24.31 years, 10 men).
- We used a typical conditioning paradigm with verbal suggestion and conditioning manipulations.
- Participants implemented a placebo-distraction and a control-distraction to regulate fear of pain, as well as fear of unpleasant pictures (generalization).

## Experimental Paradigm



## Results



- The placebo-distraction resulted in reduced self-reported fear of pain, relative to the control-distraction.
- Participants showed increased preferences for the placebo-distraction over the control-distraction.
- In a different context of fear of unpleasant pictures, the placebo-distraction was as effective as the control-distraction.
- However, it was substantially preferred over the control-distraction.

## Summary & Conclusions

- Robust placebo-induced expectancies can be harnessed to increase emotion regulation effectiveness and choice.
- The investigation of placebo effects can be expanded to include individuals' *internal* attempts to influence their conditions.

\*This poster is based on Shafir, R., Israel, M. & Colloca, L. Harnessing the placebo effect to enhance emotion regulation effectiveness and choice. *Sci Rep* (2023).

\*RS is supported by the Rothschild Fellowship. LC is supported by the National Center for Complementary and Integrative Health (NCCIH, R01AT01033 and R01AT011347).

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