

## Reply to: *N*-Acetylcysteine in Treatment of Substance Use Disorders

### To the Editor:

Gorelick (1) is absolutely correct in using caution to extrapolate from basic to clinical efficacy. In fact, we do not believe that *N*-acetylcysteine (NAC) is curing addiction, but rather we believe that NAC is reducing the thought intrusions that occur during craving that can increase vulnerability to relapse (2). In this endophenotype of addiction, the findings with NAC nicely translate from the animal model to the clinic (i.e., NAC reduces cue reactivity in the animal model and in human clinical research) (3,4). It was an unfortunate oversight of ours to exclude the more recent adult clinical trial data for cannabis use from our discussion. This multisite clinical trial failed to demonstrate the clinical efficacy of NAC for increasing drug-negative urines, but the study authors acknowledge that certain limitations, including low medication adherence and an unexpectedly high proportion of missing data points, somewhat limit the interpretation of a negative result (5). Therefore, replication trials are still needed both for cannabis and across the board, given that the systematic review and meta-analysis mentioned comprised only seven studies (6). We agree with Gorelick that caution is warranted in extrapolating the rodent findings to the clinic until more data are collected, but we hope that our new preclinical model is at least helpful in that regard.

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### Article Information

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