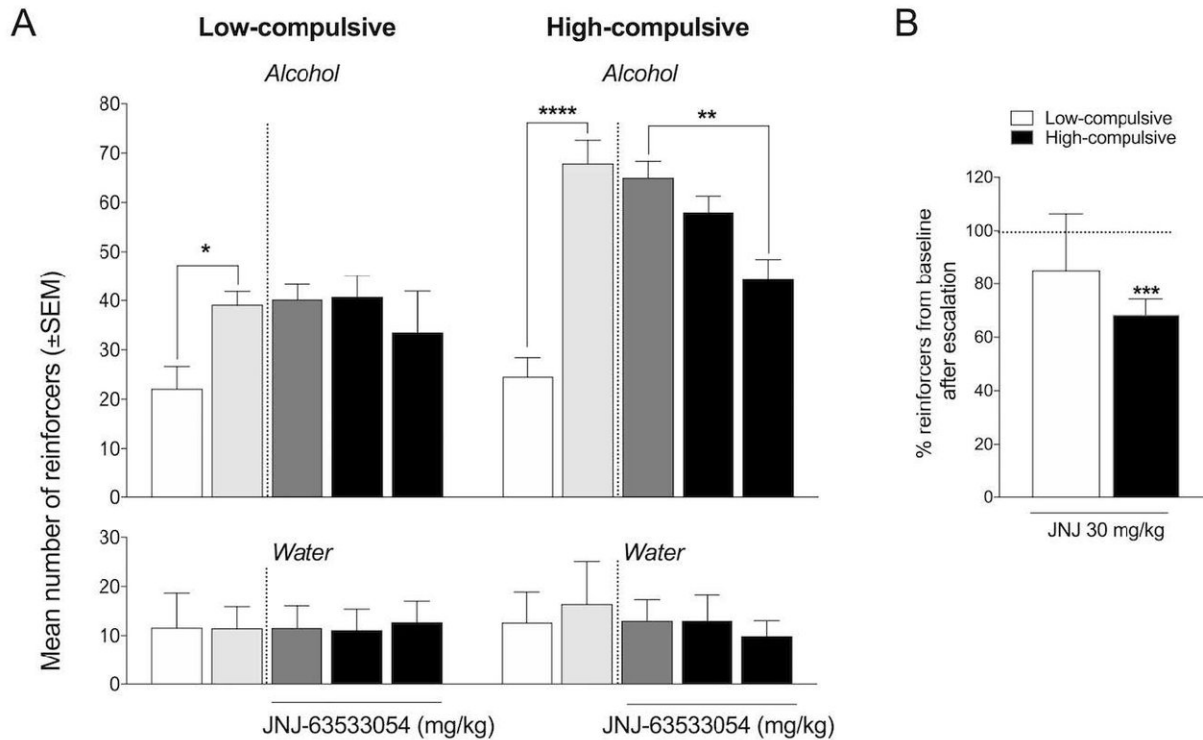


New target for treating alcoholism

June 25 2018



Activation of a receptor with no known function in the brain reduces excessive alcohol use and the pain of withdrawal, according to preclinical research in male rats. The study, published in *eNeuro*, suggests a new approach towards the treatment of alcohol use disorder. Credit: Kononoff et al., *eNeuro* (2018)

Activation of a receptor with no known function in the brain reduces excessive alcohol use and the pain of withdrawal, according to preclinical research in male rats. The study, published in *eNeuro*,

suggests a new approach towards the treatment of alcohol use disorder.

More than a third of approved pharmaceutical drugs target G protein-coupled receptors (GPCRs). One receptor belonging to this family, GPR139, is highly expressed in the habenula—a brain region with a critical role in addiction.

Olivier George and colleagues used a rat model of alcohol dependence and a substance that activates GPR139 to establish a previously unknown role for the receptor in addiction-like behavior. The researchers found that activation of GPR139 reduced [alcohol intake](#) and restored pain sensitivity thresholds only in alcohol-dependent mice that showed compulsive-like alcohol consumption akin to problematic drinking in humans.

This study is the first to establish an effect of GPR139 manipulation on behavior and encourages investigation of the receptor as a potential drug target in the development of medications for [alcohol dependence](#).

More information: Systemic and intra-habenular activation of the orphan G protein-coupled receptor GPR139 decreases compulsive-like alcohol drinking and hyperalgesia in alcohol-dependent rats, *eNeuro*, [DOI: 10.1523/ENEURO.0153-18.2018](https://doi.org/10.1523/ENEURO.0153-18.2018)

Provided by Society for Neuroscience

Citation: New target for treating alcoholism (2018, June 25) retrieved 13 February 2024 from <https://medicalxpress.com/news/2018-06-alcoholism.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is

provided for information purposes only.