Two independent clinical trials compared the effectiveness of extended-release naltrexone (XR-NTX/VIVITROL®) versus buprenorphine-naloxone (BUP-NX)*

Comparative effectiveness of extended-release naltrexone versus buprenorphine-naloxone for opioid relapse prevention X:BOT: A multicentre, open-label, randomised controlled trial

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The Lancet, November 14, 2017

Study Overview and Objectives

This study compared the effectiveness of treatment for six months (24 weeks) with extended-release naltrexone (VIVITROL) to buprenorphine-naloxone for opioid dependent patients initiating treatment in short-term residential units (detoxification) and continuing care as outpatients. This was an open-label study conducted in eight community-based treatment programs across the U.S. affiliated with the NIDA Clinical Trials Network.

The study included 570 randomized participants of which 474 patients were successfully started on medication. Patients were randomized to receive VIVITROL once-monthly injectable or buprenorphine-naloxone via take-home, daily sublingual dosing. The study was funded by the National Institute on Drug Abuse (NIDA) Clinical Trials Network.

Results

- XR-NTX was as effective as BUP-NX treatment in maintaining patients relapse-free once patients began study medication.
- In those patients who began study medication, several secondary measures were similar for XR-NTX and BUP-NX groups, including number of abstinent days, number of negative urine tests, and reduction in cravings. Self-reported opioid craving was initially less with extended-release naltrexone than with buprenorphine-naloxone, and then converged by week 24.
- Other than mild-to-moderate injection site reactions when utilizing extended-release naltrexone, adverse events including overdose were similar in the two treatment groups.
- This study reinforces the importance of the availability of two effective, yet very distinct, medication options.

Expert Commentary

"The US X:BOT trial, funded by the National Institute on Drug Abuse and reported by Joshua D Lee and colleagues in The Lancet, and a trial done in Norway, suggest that BUP-NX and XR-NTX are similarly effective at increasing treatment retention and preventing relapse. Results of the US trial do not support the widespread belief that patients with more severe opioid use disorder require agonist therapy."

Nora D. Volkow, MD

Director, National Institute on Drug Abuse, National Institutes of Health *The Lancet, "Medications for opioid use disorder: bridging the gap in care" (Comment) November 14, 2017*

"Both medications worked quite similarly and, therefore, both should be discussed as treatment options. The problem is not enough people are getting into treatment anyway, and when they do go into treatment, they don't get any of these treatment options. Enough of the circular firing squad among the addiction treatment providers, and the war amongst all these different medications."

Joshua Lee, MD

Associate Professor, NYU School of Medicine STAT, "Long-awaited study finds month shot Vivitrol as effective as daily pill for opioid addiction," November 14, 2017

Effectiveness of Injectable Extended-Release Naltrexone vs. Daily Buprenorphine-Naloxone for Opioid Dependence: A Randomized Clinical Noninferiority Trial

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Journal of the American Medical Association (JAMA) Psychiatry. October 18, 2017

Study Overview and Objectives

This study sought to determine whether treatment with extended-release naltrexone is as effective as daily buprenorphine hydrochloride with naloxone hydrochloride in maintaining abstinence from heroin and other illicit substances in newly detoxified individuals. It was an open-label study conducted over twelve weeks, assessed 159 patients with opioid dependence who received outpatient care at five urban addiction clinics in Norway. Patients were randomized to receive extended-release naltrexone (VIVITROL) once-monthly or daily oral flexible dose buprenorphine-naloxone following detoxification.

Results

- Extended-release naltrexone was as effective as buprenorphine-naloxone as measured by all primary endpoints
 including retention in treatment and maintaining short-term abstinence from heroin and other illicit opioids in opioiddependent individuals following detoxification.
- XR-NTX patients reported significantly less heroin craving, which was a secondary endpoint, than BUP-NX patients.
- Overall more patients reported adverse events in the extended-release naltrexone group versus those in the buprenorphine-naloxone group. Ten patients discontinued treatment in the study: six in the buprenorphine-naloxone group and four in the extended-release naltrexone group. There were no deaths, including overdose deaths, reported for the 143 participants who took at least one-dose of either study medication.

Expert Commentary

"This study is the first-ever direct comparison of extended-release naltrexone and buprenorphine-naloxone in a randomized-controlled clinical setting. These data showed that treatment with extended-release naltrexone was as effective as buprenorphine-naloxone, the current standard of treatment, in maintaining short-term abstinence from heroin and other illicit opioids."

Lars Tanum, MD, DMSci

Associate Professor, Norwegian Centre for Addiction Research, University of Oslo, Norway
Head of Research Unit, Dept. of R&D in Mental Health Services, Akershus University Hospital, Norway
Alkermes Press Release, "New Study Comparing Effectiveness of Extended-Release Nattrexone to BuprenorphineNaloxone for Opioid Dependence Published in JAMA Psychiatry," October 18, 2017

"Given its effectiveness and appeal to patients, extended-release naltrexone clearly deserves a place alongside methadone and buprenorphine in opioid addiction treatment. As recommended both by the U.S. Surgeon General and the White House Commission on the Opioid Crisis, expanding access to all three of these medications should be central to the health-care system's response to the opioid epidemic."

Keith Humphreys, PhD

Professor, Psychiatry and Behavioral Sciences, Stanford University
Washington Post, "In clinical trials, medications show promise for treating heroin addiction,"
November 8, 2017

^{*}Alkermes provided no financial support to either study. Study drug was provided for the Norway study. No support of any kind provided to the NIDA X:BOT Trial.