

## **Ninety-six week retention in treatment with extended-release subcutaneous buprenorphine depot injections among people with opioid dependence: Extended follow-up after a single-arm trial**

Michael Farrell<sup>1</sup>, Jeyran Shahbazi<sup>1</sup>, Mark Chambers<sup>1</sup>, Marianne Byrne<sup>1,2</sup>, Jaleh Gholami<sup>1</sup>, Emma Zahra<sup>1</sup>, Jason Grebely<sup>2</sup>, Nicholas Lintzeris<sup>3,4</sup>, Briony Larance<sup>1,5</sup>, Robert Ali<sup>1,6</sup>, Suzanne Nielsen<sup>1,7</sup>, Adrian Dunlop<sup>8,9</sup>, Gregory J. Dore<sup>2</sup>, Michael McDonough<sup>10</sup>, Mark Montebello<sup>1,3,11</sup>, Rob Weiss<sup>12</sup>, Craig Rodgers<sup>13</sup>, Jon Cook<sup>14</sup> & Louisa Degenhardt<sup>1</sup>, on behalf of the CoLAB study team

<sup>1</sup>National Drug and Alcohol Research Centre, UNSW Sydney, Sydney, Australia, <sup>2</sup>Kirby Institute, UNSW Sydney, Sydney, Australia, <sup>3</sup>Discipline of Addiction Medicine, The University of Sydney, Sydney, Australia, <sup>4</sup>Drug and Alcohol Services, South East Sydney Local Health District, Sydney, Australia, <sup>5</sup>School of Psychology, University of Wollongong, Wollongong, Australia, <sup>6</sup>Faculty of Health and Medical Sciences, University of Adelaide, Adelaide, Australia, <sup>7</sup>Monash Addiction Research Centre, Eastern Health Clinical School, Monash University Peninsula Campus, Melbourne, Australia, <sup>8</sup>Drug and Alcohol Clinical Services, Hunter New England Local Health District, Newcastle, Australia, <sup>9</sup>Hunter Medical Research Institute, University of Newcastle, Newcastle, Australia, <sup>10</sup>Drug and Alcohol Services South Australia, Adelaide, Australia, <sup>11</sup>Drug and Alcohol Services, North Sydney Local Health District, Sydney, Australia, <sup>12</sup>Frankston Healthcare, Melbourne, Australia, <sup>13</sup>Alcohol and Drug Service, St Vincent's Hospital, Sydney, Australia, <sup>14</sup>Drug and Alcohol Clinical Advisory Service, Western Health, Melbourne, Australia

Presenter's email: michael.farrell@unsw.edu.au

**Introduction and Aims:** The most recent formulation of buprenorphine treatment is extended-release depot injections (BUP-XR) that are administered subcutaneously by health care professionals. This study aimed to observe treatment outcomes of BUP-XR delivered in standard practice during a 96-week follow-up period in a community setting.

**Methods:** The study is an extension of the CoLAB study, a prospective single-arm, multicentre, open label trial, (N = 100, seven sites in Australia) among people with opioid dependence who received monthly injections of BUP-XR. Participants were followed up for 96 weeks, comprising the 48 weeks of the CoLAB study followed by 48-week extension phase.

**Results:** Of 100 participants at baseline, 47 were retained on BUP-XR at 96 weeks. Median time retained on monthly depot was 89.5 weeks. Overdose in the 12 months prior to the study (adjusted hazard ratio [AHR] 2.62, 95% confidence interval [CI] 1.36-5.04) and heroin use in

the first 12 weeks of the study (AHR 3.45, 95% CI 1.58-7.55) were associated with higher rates of dropout after 12 weeks. Greater time in opioid agonist treatment prior to the current study (AHR 0.94 per year 95% CI 0.89-0.99 per year) was associated with lower rates of dropout. Prevalence of past four-weeks opioid use was estimated at 4% at 96 weeks of treatment (prevalence 0.04, 95% CI 0.00-0.11). Quality of life and medication treatment satisfaction improved over time for those retained in treatment.

**Discussions and Conclusions:** This is the first study to describe 96-week retention in treatment with BUP-XR in community settings. Retention rates were encouraging, and patient reported outcomes suggest improvements in client wellbeing.

**Disclosure of Interest Statement:** This study was supported by an Externally Sponsored Collaborative Research grant from Indivior PLC. Indivior contributed to the study design and analysis plan; Indivior had no role in collection, analysis and interpretation of data; in the writing of the manuscript; or in the decision to submit the manuscript for publication. The National Drug and Alcohol Research Centre and the Kirby Institute are funded by the Australian Government Department of Health and Ageing. The views expressed in this publication do not necessarily represent the position of the Australian Government. J Grebely is supported by a National Health and Medical Research Council Investigator Grant (1176131). LD is supported by a National Health and Medical Research Council Senior Principal Research Fellowship (1135991) and a US National Institute of Health National Institute on Drug Abuse grant (R01DA1104470).

This study was supported by an Externally Sponsored Collaborative Research grant from Indivior PLC (MF, BL, LD, NL, AD, RA, SN, GD, JG). In the past three years, MF and LD have received funding from Indivior, Seqirus for studies of new opioid medications in Australia. J Grebely reports grants and personal fees from Abbvie, bioLytical, Camurus, Cepheid, Hologic, Indivior, and Gilead Sciences. NL has received reimbursement for participation in Advisory Boards for Mundipharma, Indivior and Chiesi Pharmaceuticals; he received funding from Camurus for a company-sponsored trial of BUP-XR. RA has received untied educational grants from Reckitt Benckiser and an untied educational grant from Mundipharma. AJD reports grants from Braeburn/Camurus AB, to conduct clinical studies with buprenorphine products and travel support to Hunter New England Local Health District, which employs AJD. He has served as an honorary on advisory boards for Mundipharma and Seqiris. GJD has received research grant funding from Gilead and Abbvie. MM has served as an honorary on advisory boards for Pfizer and AbbVieMC. JS and MB have no conflicts to declare. SN has received untied research funding from Seqirus to conduct research on prescription opioid related harms.