

An overview of Australian clinical research trials of depot (long-acting) buprenorphine

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Aim: Three ground-breaking clinical trials have recently been completed in Australia examining the new depot buprenorphine products for the treatment of opioid dependence. The symposium provides an opportunity to present the findings of these studies to Australian audiences, and to examine their relevance to clinical practice.

PRESENTATION 1: Overview and findings of the DEBUT Study: An open label randomised controlled trial of Buvidal versus sublingual (SL) buprenorphine

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Introduction: Previous research demonstrated the safety and efficacy (treatment retention, opioid use) of depot buprenorphine (BPN) products in treating opioid dependence, however studies had not previously compared depot to sublingual (SL) BPN on patient-rated outcomes such as treatment effectiveness or satisfaction.

Design and Methods: A 24-week open-label randomised trial comparing depot BPN (Buvidal®) versus SL BPN treatment for opioid dependence. Primary endpoint was the Treatment Satisfaction Questionnaire for Medication (TSQM), with secondary outcomes of quality of life, health status, substance use, adverse events and treatment retention. The study was conducted in 6 services across Australia.

Results: 119 participants (all in SL BPN treatment at enrolment, 70 [59%] men; mean age 44.4 years) received either depot BPN (n=60) or SL BPN (n=59). The mean [SE] TSQM global satisfaction score was significantly higher for the depot group at week 24 (82.5 [2.3] vs 74.3 [2.3]; P = .01). Significantly improved outcomes were observed in the depot group regarding treatment convenience and effectiveness, treatment burden, quality of life and physical health ratings. Self-reported opioid, other substance use, mental health ratings and treatment retention were similar across groups. The mean daily SL BPN dose was 15.6 (7.8) mg. 29 participants (48%) received at least 1 Buvidal Weekly dose (median 24mg), and the median Monthly dose was 96mg.

Conclusions: The study is the first to directly compare patient-reported outcome measures between depot and SL BPN treatment. Whilst there were no differences in 'traditional' outcomes (heroin use, retention), we identified greater levels of global treatment satisfaction, effectiveness and enhanced quality of life ratings with depot treatment.

Implications for Translational Research. Highlights the importance of patient reported outcome measures in evaluating medications that have comparable safety and efficacy, to better inform decision-making by consumers and clinicians. The study informed subsequent clinical guidelines, training programs and consumer literature.

PRESENTATION 2: Overview and findings of the CoLAB study: an open-label implementation study of Sublocade treatment in specialist and primary care settings in Australia.

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Introduction and Aims: The Community Long-Acting Buprenorphine (CoLAB) study aimed to evaluate patient outcomes among people with OUD receiving 48 weeks of BUP-XR treatment and examined the implementation of BUP-XR in diverse community healthcare settings in Australia.

Design and Methods: Participants were recruited from a network of GP and specialist drug treatment services (n=100). Following a minimum 7 days on 8–32 mg of sublingual buprenorphine (\pm naloxone), participants received monthly subcutaneous Sublocade® injections at intervals of 28 days ($-2/+14$ days) and completed monthly research interviews. The primary endpoint was participant retention in treatment at 48 weeks after treatment initiation.

Key Findings: Participants comprised of 28 females and 72 males with a mean age of 45. All participants had a long-established history of OAT with heroin (57%) and prescription opioid (33%) being the predominant primary opioid of concern. The proportion of participants retained in treatment at 24 and 48 weeks following initiation of BUP-XR was 82% and 76%, respectively. Most participants (83%) reported that overall, they were extremely or very satisfied with the treatment at the end of study, primarily with the convenience, time, and planning requirements of BUP-XR.

Discussion and Conclusions: The CoLAB study was a real world implementation study of BUP-Treatment was successfully introduced into a broad range of clinical and community settings. The majority transferred successfully from oral to depot with minor AEs and there was high retention and treatment satisfaction over the first 48 weeks of treatment.

PRESENTATION 3: Overview and findings of the UNLOCT trial – implementing depot buprenorphine in NSW correctional facilities.

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Introduction and Aims: Opioid agonist treatment is effective but resource intensive to administer safely in custodial settings, leading to significant under-treatment of opioid dependence in these settings worldwide. This study assessed the safety of depot buprenorphine in custodial settings.

Design and Methods: We conducted an open-label, non-randomised trial in seven correctional centres in New South Wales. Sixty-seven men and women, aged ≥ 18 years of various security classifications with a diagnosis of moderate to severe DSM-5 opioid use disorder currently serving a custodial sentence of ≥ 6 months were recruited between November 2018 and July 2019. Patients not in opioid agonist treatment at recruitment commenced depot buprenorphine (CAM2038 weekly for 4 weeks then monthly); patients already stable on daily oral methadone treatment were recruited to the comparison arm.

Results: Retention in depot buprenorphine treatment was 92%. Ninety-four percent of patients reported at least one adverse event, typically mild and transient. No diversion was identified. The prevalence of self-reported non-prescribed opioid use among depot buprenorphine patients decreased significantly between baseline (97%) and week 16 (12%, OR=0.0035, 95% CI 0.0007-0.018, $p < 0.0001$). Depot buprenorphine patients had higher TSQM convenience scores (65% vs, 54%, $p = 0.0403$) and lower treatment burden (TBQ) scores (8.15 [SD 10.73] vs. 20.13 [SD 19.55], $p < 0.001$) compared to methadone patients.

Discussion and Conclusions: This world-first study of depot buprenorphine in custodial settings showed treatment retention and outcomes comparable to those observed in community settings and for other opioid agonist treatment used in custodial settings, without increased risk of diversion.

Implications for Practice or Policy: Successful introduction of depot buprenorphine is likely to increase capacity for opioid treatment in custody and increase the availability of other clinical services.

Implications for Translational Research: As an effective, well-tolerated treatment in Australian community settings, demonstrating that depot buprenorphine is safe and acceptable in custodial settings will assist with its introduction in other high-risk and high-volume settings.

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Disclosure of Interest Statement:

The DEBUT Study was funded and sponsored by Camurus Pty Ltd. NL has been paid for serving on Advisory Boards for Mundipharma, Indivior and Chiesi Pharmaceuticals. PH, AS, SP and FT are employees of Camurus Pty Ltd.