# Improved recovery outcomes with injectable prolonged-release buprenorphine in an opioid agonist therapy clinic in Glasgow

**L Middleton, J Kelly, S Dargan, T Ritchie  Glasgow Alcohol and Drug Recovery Service**

## Background

Prior to Scottish Medicines Committee approval and wider use of Buvidal®, a newly licenced injectable prolonged release buprenorphine (iPRB) product, community care and treatment (CAT) teams in Glasgow were keen to gain experience via a pilot. Two CATs in south west Glasgow with a combined opioid agonist therapy (OAT) caseload in the region of 500 (20% prescribed sublingual buprenorphine (SLBUP)) are similar in composition to other CAT teams across Glasgow. They were identified as appropriate sites to establish the pilot and evaluate iPRB usage. Pilot commenced April 2019.


**Primary objectives**

- Acceptability of transfer
- Patient and practitioner experience
- Self reported and screened drug use
- Structured daily activity engagement

## Process

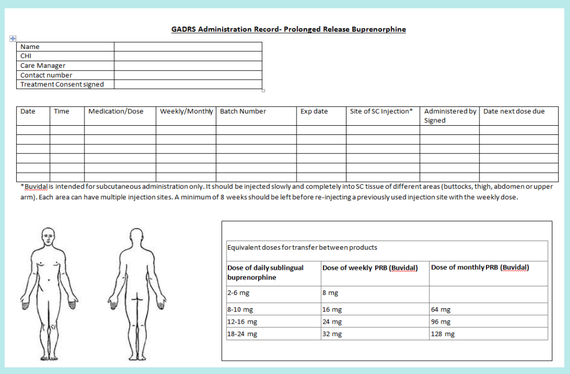
### Participants

As the aim was to gain clinical experience, individuals prescribed SLBUP who regularly attended appointments, with no recent problematic drug use or non-fatal overdose, no significant health problems and no other instalment dispensed medications were sought.

Following multidisciplinary review, 20 patients were identified as suitable to transfer to iPRB: 18 male (90%), mean age 43.5 (±7) years, average SLBUP dose 16.9mg (range 4mg – 24mg).

### Intervention

Patients were transferred to iPRB via pilot protocol and monitored for 12 weeks. Initially given two weekly equivalent dose injections to ensure tolerability and optimum dosing before transfer to monthly iPRB on week 3 for maintenance.



**GADRS Administration Record- Prolonged Release Buprenorphine**

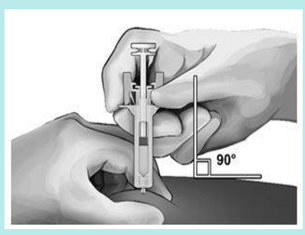
| | |
|---|---|
| Name | |
| CHI | |
| Care Manager | |
| Contact number | |
| Treatment Consent signed | |

| Date | Time | Medication/Dose | Weekly/Monthly | Batch Number | Exp date | Site of SC Injection* | Administered by Signed | Date next dose due |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

*Buvidal is intended for subcutaneous administration only. It should be injected slowly and completely into SC tissue of different areas (buttocks, thigh, abdomen or upper arm). Each area can have multiple injection sites. A minimum of 8 weeks should be left before re-injecting a previously used injection site with the weekly dose.

Equivalent doses for transfer between products

| Dose of daily sublingual buprenorphine | Dose of weekly PRB (Buvidal) | Dose of monthly PRB (Buvidal) |
|---|---|---|
| 2-6 mg | 8 mg | |
| 8-10 mg | 16 mg | 64 mg |
| 12-16 mg | 24 mg | 96 mg |
| 18-24 mg | 32 mg | 128 mg |




Pinch skin and insert at 90° angle

Depress and hold for 10 seconds

## Results

### Acceptability of transfer

- Of the 20 patients offered transfer to iPRB, 6 declined: 4 stating fear of needles, 1 with no desire to change from SLBUP and 1 who developed an acute physical health issue
- No significant differences were identified between those who accepted or declined
- After transfer, 1 patient requested return to SLBUP citing preference to daily medication/routine
- Transfer doses were in line with guidance issued in product SPC
- Patients noted that the injection was mildly painful
- None felt discomfort was reason enough to transfer back to SLBUP

### Prescriber experience

- 70 injections were administered during pilot period
- Needle bore slightly larger than expected
- Harder to inject lean patients. It helps to allow patient to pull skin away from muscle during injection
- Holding needle in-situ for 10 seconds before withdrawing helped minimise injection site reactions
- One patient was 1 week late attending for next monthly dose and showed minimal objective withdrawals
- Rewarding experience due to positive reactions from patients

*scan to view iPRB pilot protocol document*

*Contact: Catriona.Ritchie@ggc.scot.nhs.uk*

## Results

### Drug use on top

Near patient urine drug screening was completed at weeks 1 and 11 (for opiates, cocaine, benzodiazepine and amphetamine)

| | Pre iPRB Week 1 | iPRB Week 11 | P-value |
|---|---|---|---|
| Drug screen positive | 9/13 (69%) | 6/13 (46%) | P=0.23 |

The reduction in positive drug screens was not of statistical significance however the reduction in quantity and frequency of drugs being used, in particular a reduction in street benzodiazepine use, was felt to be clinically significant.

### Structured daily activity engagement

Activities measured included

- Employment
- Recovery community
- Occupational therapy
- Jobs and business training


| | Pre iPRB Week 1 | iPRB Week 11 | P-value |
|---|---|---|---|
| Structured daily activity | 4/13 (31%) | 12/13 (92%) | P=0.0016 |

Results at week 11 show a significant increase in engagement with structured activity, with 92% patients engaged p=0.0016. Patients cited not being tied to daily pharmacy attendance as the biggest motivating factor in encouraging other activities "It was the longest month of my life, I really need something to do" .

## Patient experience

- Patients overwhelmingly report the positive impact of avoiding opportunistic drug use via daily pharmacy contact with drug using associates
- Ability to travel abroad without fear of being stopped at customs. Patients have travelled to Goa and Turkey during pilot, in addition to other locations in the UK


## Conclusion

- The marked success of the iPRB pilot, both for patients and clinicians, has ensured planning for service-wide implementation in Glasgow
- All pilot patients have been maintained on iPRB with positive outcomes continuing
- Further work is required to identify other patients who will benefit from iPRB

### Next Steps

- Develop pilot protocol into guidance via governance processes
- Secure Home Office licences and controlled drug storage in all community bases
- Clarify interfaces with acute sector and prisons
- Staff training and communication strategy

**References**

Buvidal® Summary of Product Characteristics
https://www.medicines.org.uk/emc/product/9706/smpc

**Disclosures**

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