Clinical Practice Procedures: Drug administration/
Syringe infusion pump – Perfusor® Space

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Date: April, 2016
Purpose: To ensure a consistent procedural approach for Syringe infusion pump – Perfusor® Space.
Scope: Applies to all QAS clinical staff.
Author: Clinical Quality & Patient Safety Unit, QAS
Review date: April, 2018
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The B. Braun Perfusor® Space is a lightweight and portable syringe infusion pump used for the accurate and safe administration of intravenous infusions.

Due to the built-in error reduction software, customised medication library and intuitive navigation menu the Perfusor® Space is widely used in hospital and aero-medical retrieval environments.

**Arrow up and down:** Scroll through menus, change setting of numbers from 0–9, answer Yes/No questions.

**Arrow left and right:** Select data from a scale and switch between digits when numbers are entered. Open a function while pump is running or stopped with the left arrow key.

**Yellow LED:** Pre-alarm, reminder alarm

**Green/Red LED:** Infusion occurring /device alarm, operating alarm

**Blue LED:** Currently connected to SpaceControl

- Press to initiate bolus
- Press to turn pump on/off
- Drive head with claws to hold the syringe plunger plate
- Syringe holder
- Open certain functions and press to confirm values/settings/alarms.
- Press to link the pump to SpaceControl and to assign a barcode after scanning
- QUEENSLAND AMBULANCE SERVICE
**Indications**
- The administration of infusions via the IV route

**Contraindications**
- Evidence of misplaced or dislodged access

**Complications**
- Pain or discomfort on medication administration
- Air embolism
- Infection
- Extravasation and possible tissue necrosis

**Procedure – Syringe infusion pump – Perfusor® Space**

**Commencing a simple mL/hr infusion**

1. Prepare compatible syringe and extension tubing with required medication.
2. Press to switch the unit on – an automatic self-test will commence. At completion of the self-test the drive head will be extended in preparation for syringe placement.
3. Open front cover.
4. Open syringe holder by gently pulling and turning to the right.
Procedure – Syringe infusion pump – Perfusor® Space

5. Insert an appropriately labelled syringe with the syringe wings positioned in the slot to the right of the housing - ensure that the syringe graduated markings are facing outwards.

6. Gently close the syringe holder and front cover.

7. Confirm the syringe type by pressing \( \blacktriangleright \). Once confirmed, the drive head will advance and grip the syringe’s pressure plate.

8. When asked ‘Use drug library?’ – select ‘No’ by pressing \( \blacktriangleright \).

9. Enter required information in the Start Up Menu with \( \blacktriangleup \) and \( \blacktriangledown \), until ‘rate’ is displayed in the main menu.

10. Press \( \blacktriangleleft \) and set desired rate using \( \blacktriangleup \) and \( \blacktriangledown \).

11. Confirm the rate by pressing \( \blacktriangleright \).

12. Connect extension tubing to patient’s patent intravenous access.

13. Press \( \blacktriangleright \) to commence infusion – running arrows on the display and a green LED above the display will indicate the pump is infusing.

14. The infusion may be ceased at any time by pressing \( \blacktriangleleft \).

Commencing an infusion using the pre-programmed drug library

1. Prepare compatible syringe and extension tubing with required medication.

2. Press \( \blacktriangleleft \) to switch the unit on – an automatic self-test will commence. At completion of the self-test the drive head will be extended in preparation for syringe placement.

3. Open front cover.

4. Open syringe holder by gently pulling and turning to the right.

5. Insert an appropriately labelled syringe with the syringe wings positioned in the slot to the right of the housing - ensure that the syringe graduated markings are facing outwards.

6. Gently close the syringe holder and front cover.

7. Confirm the syringe type by pressing \( \blacktriangleright \). Once confirmed, the drive head will advance and grip the syringe’s pressure plate.

\( \blacktriangleright \) Time: 0:11[h:min] \( \blacktriangledown \) ml/h
8. When asked “Use drug library?”
   – select ‘Yes’ by pressing 🔄.
9. Navigate through the alphabetical drug list by pressing 🔄.
10. Select the appropriate drug by pressing 🔄.
11. If required, confirm the displayed drug information with 🔄.
12. Press 🔄 to commence infusion – running arrows on the display and a green LED above the display will indicate the pump is infusing.
13. The infusion may be ceased at any time by pressing 🔄.

**Syringe change and new therapy start.**

1. Press 🔄 to cease the infusion – the green LED will disappear.
2. Disconnect the extension tubing from the patient’s intravenous access.
3. Quickly open and close the syringe holder.
4. Confirm syringe change by pressing 🔄. Drive head will be extended in preparation for syringe removal.
5. Open front cover.
6. Open syringe holder by gently pulling and turning right.
7. Remove old syringe and insert new syringe.

**End of infusion**

1. Press 🔄 to cease the infusion – the green LED will disappear.
2. Disconnect the extension tubing from the patient’s intravenous access.
3. Open front cover.
4. Open syringe holder by gently pulling and turning right.
5. Remove the syringe, move the syringe holder into an upright position and close the front door.
6. Press for 🔄 3 seconds to switch the pump off – the driver will move into the park position.

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**Administering a bolus (on an infusion pump)**

**Manual Bolus:**

1. Press 🔄.
2. Press and hold 🔄 to deliver a manual bolus.
**Additional information**

- Battery capacity is displayed on the screen during all pump administrations.
- During use, the device is to be securely fixed and positioned. Positioning changes and severe shock may lead to minor changes in delivery accuracy.
- Only pressure resistant extension tubing (min. 2 bar/1500 mmHg) is to be used.
- The B Braun Perfusor® Space is compatible with the following commonly supplied syringes:

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- To avoid incorrect dosing, always disconnect the pump from the patient when changing the syringe.
- Never leave the pump unattended during syringe a change.
- If the syringe is unable to be removed (claws in a locked position) the syringe can be freed by pressing the Emergency Release Button with a pointed pen.