



COVID-19 Considerations Using the Alaris™ PCA Module for continuous infusions

Due to the COVID-19 crisis strain on resources and supplies, customers are considering all equipment and mode of use to fulfill infusion needs. If your organization is considering using the Alaris™ PCA Module for continuous infusions, the following information will help you to make an informed decision.

BD has Pharmacy Consultants and Clinical Consultants who can answer questions related to medication set up, and practice considerations. For assistance please contact the Alaris Medication Safety Program via email: GMB-AlarisMedSafety@bd.com mailbox to request assistance.

General Consideration

- By design, only one Alaris™ PCA Module can be used on each BD Alaris™ PC Unit.
- The smallest syringe size allowed is 20 mL syringe; max is 60 mL syringe.
- If removing the Dose Request Cord because the infusion will be continuous and not needed, ensure you know where the cord is stored so it is not lost.

Guardrails™ Editor

Set-up example:

The screenshot shows the 'PCA Drug Setup Group - ADULT' window. The 'Drug Name' is set to 'diltiazem'. Under 'Concentrations', the '50 mg / 50 mL (1 mg / mL)' option is selected. The 'Dosing Units' are 'mg' and the 'Dosing Range' is '0.001 to 9,999'. The 'Max Accumulated Dose Range' is configured with 'Soft Min/1h: 1', 'Soft Max/1h: (Optional)', 'Hard Max/1h: 21', and 'Initial Value: (Optional)'. The 'Continuous Dose' radio button is selected, with 'PCA Dose' and 'PCA + Continuous Dose' unselected. The 'Lockout Interval' is '1 - 99 min'. The 'Continuous Dose' settings are: 'Soft Min/h: 1', 'Soft Max/h: 15', 'Hard Max/h: 21', and 'Initial Value: (Optional)'. The 'Supports PCA Pause Protocol' checkbox is unselected. The 'Bolus Dose' checkbox is unselected. The 'Loading Dose' checkbox is unselected. The 'Concentration Limits' checkbox is unselected. The 'Clinical Advisory' section has 'Name: [None]'. At the bottom, there are 'OK', 'Cancel', and 'Apply' buttons.



- The 35% rule applies to all PCA setups, so the continuous rate cannot exceed 35% of the syringe capacity.
- The concentration units need to be the same as the dose units (mcg or mg). "Unit" will not work (i.e. insulin, heparin).
- Infusions can be set up to run mL/hour only
- Medications on the Master Drug list that are already setup as intermittent medications can NOT be entered into the PCA library.
- Select "Continuous Dose" option.
 - Do not use the Bolus Dose or Loading Dose unless you are OK with the configured Bolus Dose Rate for all infusions (150 mL/h is the default rate but can be edited in the PCA Configurations).
- Weight based infusions are not allowed by design.
- Do not select PCA Pause Protocol unless you want to attach an Alaris™ EtCO2 Module.
- Clinical Advisories can be added as needed.
- Use hard minimum concentration limits if you must have a custom concentration.

Configurations

Review of all configurations for the module is important. Configurations are set up per profile and any drug run on the module in that patient profile is subject to the configuration limitation regardless of whether it is a PCA drug or continuous infusion. Consider including these settings in training or procedure materials:

- **Bolus Delivery Rate:** The bolus delivery rate is set for the profile, and not the individual drug. If using the bolus feature for any other medication, it will only run at the rate identified for the profile.
- **Max Dose Limit:** If enabled will allow the clinician to enter Yes (if one is ordered) or No.
- **Module Location Enforcement:** If enabled, the PCA module will only be able to be used on the right side of the PC Unit (secure location) – if Disabled, the PCA can be removed without a key.
- **Near End of Infusion:** Configuration, if enabled, will cause the module to alarm at the set percentage of the syringe capacity remaining in the syringe.
 - The Near End of Infusion configuration can be changed however it would affect all PCA modules and all infusions, PCA medications or continuous infusions.

Near End of Infusion

Alert Time (%): 5 - 25

NEOI Snooze (Shared Syringe and PCA Setting)

Snooze Time (minutes): 5 10 15



- *Pressure Limit:* Consider occlusion pressures that may be present due to use of other medications or extra-long extension sets.
- *Security Access Level:* Consider switching Security Level 1 (Key only) to Level 3 (Key +Code). Initial programming always requires a key.
- *Priming:* Should remain enabled to allow for quicker start-up of continuous infusions running at slower rates.
- *Security Code:* Consider changing to Level 3 (key + code) so that programming can be changed without a key. Note: this is for all medications in the profile- PCA drugs and continuous drugs.
- *Security Code:* Consider how code will be communicated securely.
- *PCA Pause Protocol:* If the PCA Pause Protocol is enabled for the profile, consider disabling the Monitoring Module Attach Enforcement settings.

Clinical Guidelines

- If using extension sets, Clinical Considerations for use of extra-long extension sets applies.
- Dose Request Cord may not reach your patient, therefore PCA may only be used in CONTINUOUS mode to provide a basal rate.
- Use the PRIME SET WITH SYRINGE channel option to speed up the engagement of the device's mechanical components and decrease the syringe's internal friction.