



Elastomeric Infusor Checklist for Identifying Causes of Rate Errors

Was the deviation from rate within the expected tolerance range?

Infusors flow within plus or minus 10% of the labelled flow rate. For example, it is generally considered acceptable for 46- or 48-hour Infusors to run out within plus or minus 5 hours of the intended infusion time.

If an Infusor runs out too quickly, determine if the patient was given an overdose. A *fluorouracil Infusor overdose* is defined as the administration of fluorouracil via Infusor at greater than or equal to 2 times the intended rate, with completed delivery of greater than 50% of the intended total fluorouracil dose. In the event of an overdose, follow procedures as outlined in BCCA Management Guideline – Management of Fluorouracil infusion overdose at the BCCA, Interim Guidance.

If an Infusor runs out faster than the expected tolerance range, but not fast enough to be considered an overdose, the patient is still at risk for adverse effects. The ordering physician should be consulted to make a clinical decision about whether any action is required.

Was the wrong Infusor selected?

Compare the Infusor code on the BCCA pre-printed order to the one on the Infusor (SV2, LV2, LV5 or LV1.5).

- SV** Small volume (maximum capacity of 130 mL)
- LV** Large volume (maximum capacity of 300 mL)
- 1.5** 1.5 ml/hr fixed flow rate
- 2** 2 ml/hr fixed flow rate
- 5** 5 ml/hr fixed flow rate

If the Pre-printed orders list more than one Infusor, ensure that the correct Infusor was selected for the dose.

Pre-printed orders for protocols containing 46- and 48-hour fluorouracil infusions use different sized Infusor with different rates depending on the dose:

46-Hour Infusion

Dose Banding:

- LV5 for all doses

No Dose Banding:

- SV2 for doses less than or equal to 4400 mg
- LV5 for doses greater than 4400 mg

48-Hour Infusion:

- SV2 for doses less than or equal to 4600 mg
- LV5 for doses greater than 4600 mg

Was the Infusor filled with the correct volume?

Infusors should be filled to levels that fall within the minimum and maximum volumes, which are listed on the infusor. An underfilled infusor will infuse faster than the intended rate.



<input type="checkbox"/>	<p>Was normal saline used instead of D5W?</p> <p>Normal saline would make the Infusor infuse approximately 10% faster than with the intended D5W due to viscosity changes.</p>
<input type="checkbox"/>	<p>Were there any leaks that may have contributed to an Infusor running out early?</p> <p>If leaks were present, this would explain why the Infusor ran out early.</p>
<input type="checkbox"/>	<p>Was the access system (i.e. catheter) used to connect the Infusor 22 gauge or larger?</p> <p>Anything smaller than 22 gauge may decrease the flow rate.</p>
<input type="checkbox"/>	<p>Was Infusor positioned correctly on the patient? Including at night?</p> <p>Elastomeric Infusor should be stored close to the same height as the luer lock connector. During the day, Infusors are generally kept in a fanny packs carried around the waist. At night, Infusors are kept at bed height. Under the pillow is often recommended. If Infusors are placed on the floor below the bed the flow rate will be decreased. If they are placed on a dresser that is higher than the bed the flow rate will be increased.</p>
<input type="checkbox"/>	<p>Was the flow restrictor taped securely to the skin to maintain the correct temperature?</p> <p>If the flow restrictor is not taped securely to the skin, the temperature may drop leading to a decreased flow rate.</p>
<input type="checkbox"/>	<p>Were any sources of obstruction present that could slow or stop flow?</p> <p><u>Examples Include:</u></p> <ul style="list-style-type: none">▪ Infection (redness, firmness or swelling at the IV site)▪ Kinks or clamps in the tubing▪ Air in tubing
<input type="checkbox"/>	<p>Was the Infusor stored at room temperature?</p> <p>Baxter Infusors will infuse faster in the heat or slower in the cold due to viscosity changes.</p>

References

1. Baxter elastomeric pumps patient guide. Mississauga, ON: Baxter Corporation; 2010.
2. Baxter elastomeric Pumps Clinician guide. Mississauga, ON: Baxter Corporation; 2010.
3. Adam Jones, Personal communication. Baxter Corporation, Sr. Marketing Manager Elastomerics.27 March 2017.