

DOPAMINE (Dopamine hydrochloride and 5% Dextrose injection USP)

The two sources of dopamine in Canada are Hospira Healthcare Corporation and Baxter Canada. **Hospira** has noted long term manufacturing delays with an unknown estimated resupply date.

Indications and Clinical Uses in Canada:

- Correction of hemodynamic imbalances present in the shock syndrome due to myocardial infarction, trauma, endotoxic septicemia, open heart surgery, renal failure, and chronic cardiac decompensation as in congestive failure.
- Poor Perfusion of Vital Organs
- Low Cardiac Output
- Hypotension

Treatment Alternatives:

- Dopamine hydrochloride and 5% dextrose injection USP
 - Available from Baxter Canada (1-888-719-9955) during Hospira shortage

Non-Equivalent Treatment Alternative:

- Norepinephrine bitartrate injection USP
 - Trial published in 2010 in the New England Journal of Medicine (SOAP II Trial) compared dopamine to norepinephrine for treating patients with shock found no difference in the rate of death between either drug; however, dopamine was associated with significantly more cardiac arrhythmia than norepinephrine, and therefore may be a more attractive first-line option, especially in patients with pre-existing cardiac conditions, despite both drugs being considered first-line therapies.

Prepared by Jaris Swidrovich, BSP, PharmD candidate
Nov. 14, 2012

References:

1. Product Monograph. Dopamine hydrochloride and 5% dextrose injection USP. Hospira Healthcare Corporation Canada. 2004.
2. Baxter Canada. Online Catalogue. Accessed November 14, 2012 from: http://www.baxter.ca/en/healthcare_professionals/product_catalogues.html
3. De Backer D, Biston P, Devriendt J, et al (SOAP II investigators). Comparison of dopamine and norepinephrine in the treatment of shock. N Engl J Med. 2010;362:779-89.