

Nitroglycerin

【INTG2】 Millisrol® 5mg/10mL/Amp

ATC Code : C01DA52

中文名： 敏立舒注射液 «Nippon Kayak»

適應症： 手術中或其前後高血壓情況之血壓控制、急性心肌梗塞 導致之鬱血性心衰竭、有機硝酸鹽類或阻斷劑未產生反應之狹心症、外科手術時用以控制低血壓。

成分： Each mL contains:

Nitroglycerin 0.5 mg D-Mannitol 50.7 mg

藥理分類： **Antianginal Agent.**

用法用量： **Note:** Hemodynamic and antianginal tolerance often develop within 24 to 48 hours of continuous nitrate administration. Nitrate-free interval (10 to 12 hours/day) is recommended to avoid tolerance development; gradually decrease dose in patients receiving nitroglycerin for prolonged period to avoid withdrawal reaction.

Administration:

1. Administer Millisrol® as an undiluted solution OR as a solution in **isotonic NaCl solution, 5% glucose solution or lactated Ringer's solution**, containing 0.005-0.05% nitroglycerin (50-500 mcg of nitroglycerin per mL) by IV drip.
2. Use administration sets intended for nitroglycerin. Avoid in-line IV filters that adsorb nitroglycerin. Administer via infusion pump.

Indications and dosage regimens:

Maintenance of low blood pressure during surgery:

1-5 mcg/kg/min

Emergency treatment for abnormal hypertension during surgery:

0.5-5 mcg/kg/min

Acute heart failure (including the acute exacerbation stage of chronic heart failure):

Initially 0.05-0.1 mcg/kg/min, and increase the drip rate to 0.1-0.2 mcg/kg/min every 5-15 minutes until the desired left ventricular repletion pressure is obtained. Utilize the highest possible drip rate to ensure accurate delivery of drug.

Angina:

Initially 0.1-0.2 mcg/kg/min, and increase the drip rate to 0.1-0.2 mcg/kg/min each about 5 minutes to maintain 1-2 mcg/kg/min drip rate. If the administration does not effect enough, combine the IV injection of 20-40 mcg of it each an hour. Further dose of IV injection should take 1-3 minutes as slowly as possible.

不良反應： 偶有眩暈、虛弱、心悸、姿勢性低血壓等。

交互作用：

- **Phosphodiesterase 5** (*Avanafil, Mirodenafil, Sildenafil, Tadalafil, Udenafil, Vardenafil*) Inhibitors: ↑ the vasodilatory effect of Nitroglycerin.
- **Ergot Derivatives** (*Dihydroergotamine, Ergonovine, Ergotamine, Methylexgonovine, Methysergide*): ↓ the vasodilatory effect of Nitroglycerin. Nitroglycerin may increase the serum concentration of Ergot Derivatives (Vasoconstrictive CYP3A4 Substrates).

注意事項： 1. 聚氯乙稀(PVC, Polyvinyl chloride) 製造之輸液容器及輸液 Set 會吸著 nitroglycerin；PVC 輸液 Set 之長度越長及點滴速度越慢，則 nitroglycerin 被吸著率越大，故應特別注意。
2. 建議適用玻璃製、聚乙稀(PE, Polyethylene)製或聚丙稀(PP, Polypropylene)製輸液容器，建議使用 nitroglycerin 專用 IV SET。

3. Millisrol® 稀釋時，不應使用 pH10 以上之鹼性溶液或含還原物質（如 ascorbic acid）之溶液，以避免 nitroglycerin 含量降低。

4. Phosphodiesterase5 (PDE5) inhibitors :如 sildenafil, tadalafil, vardenafil, avanafil，不可併用。

懷 孕 期： 1. NTG 會通過胎盤。效益高於可能危險性時方可投予。

2. Intravenous nitroglycerin is recommended in pregnant females when preeclampsia is associated with pulmonary edema (ESC [Regitz-Zagrosek 2018]).

授 乳 期： 尚未確定 nitroglycerin 是否會分泌於乳汁中。若使用本品，須停止哺乳。