

Digoxin

【IDIG】Lanoxin® 0.5mg/2mL/Amp

ATC Code : C01AA05

中文名：隆我心注射劑 «GSK»

適應症：心臟衰竭、心房撲動、心房纖維顫動、陣發性心室性心搏過速。

【ODIG】Lanoxin® 0.25mg/Tab

ATC Code : C01AA05

中文名：隆我心錠 «GSK»

適應症：心臟衰弱症。

藥理分類：Cardiac Glycoside; Antiarrhythmic Agent, Miscellaneous.

用法用量：**Administration:**

- Tablet, orally; administer consistently with relationship to meals; avoid concurrent administration (ie, administer digoxin 1 hour before or 2 hours after) with meals high in fiber or pectin and with drugs that decrease oral absorption of digoxin.
- IV: May be administered undiluted or diluted. Inject slowly over ≥ 5 minutes.

Loading doses:

- administered in divided doses, with approximately 50% of the total loading dose given as the first dose;
- additional fractions (generally 25%) of the loading dose are administered at 4- to 8-hour intervals IV or 6- to 8-hour intervals ORALLY with careful assessment of clinical response before each additional doses.

Rapid Digitalization:

Usual digitalizing and maintenance dosages (normal renal function, based on lean body weight)

Age	Digitalizing Dose (mcg/kg)		Maintenance Dosage (mcg/kg/day)
	Oral	IV	
Premature neonates	20-30	15-25	20-30% of ORAL/ IV loading dose
Full-Term neonates	25-35	20-30	25-35% of ORAL/ IV loading dose
1-24 mths	35-60	30-50	
2-5 yrs	30-40	25-35	
5-10 yrs	20-35	15-30	
> 10 yrs	10-15	8-12	
Adults	10-15	8-12	100-375 mcg daily

Slow Digitalization:

Steady-state serum concentrations will be achieved in approximately 5 half-lives of the drug for the individual patient; depending on the patient's renal function, this may take 1-3 weeks.

—Adults:

An appropriate daily maintenance dosage is administered.

—Children < 10 yrs:

Administer 25-35% of the total calculated dose for rapid digitalization daily.

Indications and dosage regimens:

Atrial fibrillation or atrial flutter, rate control (alternative agent):

Total digitalizing dose (TDD):

Initial:

IV: 0.25 to 0.5 mg over several minutes, with repeat doses of 0.25 mg every 6 hours to a maximum of 1.5 mg over 24 hours.

or

IV: A total of 8 to 12 mcg/kg (use lean body weight) (not to exceed 0.75 to 1.5 mg) administered by giving 50% of TDD over 5 minutes and the remaining 50% as 2 doses of 25% of TDD at 4- to 8-hour intervals after the initial dose.

Maintenance dose: Oral: 0.125 to 0.25 mg once daily.

Heart failure with reduced ejection fraction (HFrEF):

Maintenance dose (loading dose not recommended):

- Oral: 0.125 to 0.25 mg once daily.
- If patient is >70 years of age, has impaired renal function, or has a low lean body mass, low doses (eg, 0.125 mg daily or every other day) should be used initially.

Supraventricular tachycardia (eg, atrioventricular nodal reentrant tachycardia), rate control:

Total digitalizing dose:

Initial:

Oral:

- 0.5 mg loading dose
- with additional 0.125 to 0.25 mg doses administered at 6- to 8-hour intervals until evidence of adequate effect (maximum total dose over 24 hours: 8 to 12 mcg/kg [use lean body weight], not to exceed 0.75 to 1.5 mg).

IV:

- 0.25 to 0.5 mg bolus;
- may repeat 0.25 mg administered at 6- to 8-hour intervals until evidence of adequate effect (maximum total dose over 24 hours: 8 to 12 mcg/kg [use lean body weight], not to exceed 0.75 to 1.5 mg).

Maintenance dose: Oral: 0.125 to 0.25 mg once daily.

Dosage adjustment in Kidney Impairment: Adult

Atrial fibrillation/flutter, supraventricular tachycardia:

IV, Oral:

Loading dose: Note: Use with caution and only when rapid ventricular rate control is necessary.

CrCl >15 mL/minute: No dosage adjustment necessary.

CrCl ≤15 mL/minute: Administer 50% of usual dose

Maintenance dose:

CrCl ≥60 mL/minute: No dosage adjustment necessary.

CrCl 45 to <60 mL/minute: 0.0625 to 0.125 mg once daily.

CrCl 30 to <45 mL/minute: 0.0625 mg once daily.

CrCl <30 mL/minute: 0.0625 mg every 48 hours or consider alternative agent.

Heart failure:

Digoxin Dosing Suggestions When Used for Heart Failure ^{a,b}		
Ideal body weight (kg)	CrCl (mL/minute)	Digoxin dose
45 to 50	>60	0.125 mg once daily
	15 to 60	0.0625 mg once daily ^c
>50 to 60	>110	0.25 mg once daily
	>45 to 110	0.125 mg once daily
	15 to 45	0.0625 mg once daily ^c
>60 to 70	>110	0.25 mg once daily
	>35 to 110	0.125 mg once daily
	15 to 35	0.0625 mg once daily ^c
>70 to 80	>80 to 110	0.25 mg once daily
	>20 to 80	0.125 mg once daily
	15 to 20	0.0625 mg once daily ^c
>80	>70	0.25 mg once daily
	15 to 70	0.125 mg once daily

^a Derived from a contemporary digoxin dosing nomogram using CrCl and ideal body weight or height for determining the initial maintenance dose in patients with heart failure to achieve a target digoxin concentration of 0.7 ng/mL (Bauman 2006, DiDomenico 2014).

^b No loading dose necessary.

^c May administer as 0.125 mg every other day.

不良反應：脈搏不規則、腹瀉、食慾不振、噁心、嘔吐、頭痛、視力模糊或黃視（出現毒性前的先兆之一）等。

交互作用：

- ITRACONAZOLE, RABEPRAZOLE, AZITHROMYCIN, ERYTHROMYCIN, CLARITHROMYCIN, SIMVASTATIN, TETRACYCLINE, TELMISARTAN, THIAZIDE DIURETICS, PAXLOVID®: ↑ digoxin levels and digoxin toxicity (nausea, vomiting, arrhythmias).
- DRONEDARONE: ↑ digoxin levels and ↑ conduction effects of dronedarone.
- AMIODARONE: digoxin toxicity (nausea, vomiting, cardiac arrhythmias) and potentiated effects of amiodarone.
- RIFAMPIN, ST JOHN'S WORT, PHENYTOIN; SUCRALFATE; METOCLOPRAMIDE: ↓ digoxin efficacy.
- VERAPAMIL, DILTIAZEM: ↑ digoxin levels and risk of digitalis toxicity; ↑ risk of complete heart block.
- CALCIUM: serious risk of arrhythmia and cardiovascular collapse.
- POTASSIUM phosphate: ↑ risk of severe and potentially fatal hyperkalemia.

注意事項：1. 本劑禁用於 Wolff-Parkinson-White syndrome、心室性心跳過快、毛地黃中毒引起之心律不整及嚴重心肌炎患者。
2. 本劑之有效劑量與毒性劑量間之範圍狹窄，應密切監測患者之血中濃度與毒性反應。有效治療濃度範圍 0.8-2.0 ng/mL。

懷 孕 期：孕婦不禁用 digoxin，但孕婦所需劑量較難預測。有些人懷孕時需要增加 digoxin 的劑量。如同其他藥物，孕婦使用 digoxin 應先衡量治療對孕婦之益處是否大於對胎兒可能造成的風險。

授乳期： 1. digoxin 會分泌於乳汁中，但量極少，使用期間不必停止哺乳(仿單)。
2. Digoxin is present in breast milk. The amount of digoxin available to the infant via breast milk is not likely to be clinically significant.
3. The World Health Organization considers digoxin to be compatible with breastfeeding (WHO 2002).

相容輸注液： D5W、Dextrose 5% in NaCl 0.45% with KCl 20mEq、NS、1/2NS、Lactated Ringer's。