UNIVERSITY HOSPITALS OF DERBY & BURTON NHS FOUNDATION TRUST DRUG MONOGRAPH FOR USE ON ADULT INTENSIVE CARE UNITS Digoxin

Indication	Supra-ventricular arrhythmias (especially AF)			
Dose	Loading doses range from 250-500micrograms followed by 250-500micrograms SIX hours after the first infusion.			
	Maintenance doses range from 62.5 micrograms – 250micrograms DAILY.			
Preparation	Digoxin vials contain 500microgram/2ml			
	 Draw up the required amount of digoxin using a filter needle Add the digoxin to a 100ml sodium chloride 0.9% or 			
	glucose 5% bag			
Administration	Infuse over 30 minutes via a peripheral or central line			
Shelf-life	24 hours at room temperature			
Common Compatibility Issues	Digoxin is considered compatible with insulin, linezolid and midazolam at concentrations usually used on ICU. Check ICU compatibility chart for more information.			
Additional information	Digoxin is primarily excreted via the kidneys so the maintenance dose needs to be reduced in patients with renal impairment. Low potassium levels pre-dispose the patient to digoxin toxicity therefore potassium supplements should be given for patients with potassium <4mmol/L. Digoxin can take 7-14 days to reach steady-state concentrations therefore levels taken before this can be misleading. Digoxin levels should be taken at least 6 hours after the dose is given. Range = 0.8-2 micrograms/L. Many drugs can alter digoxin levels. Drugs e.g. amiodarone and verapamil may increase digoxin levels and phenytoin may reduce digoxin levels.			
	DRUGS ADDED TO THIS INFUSION PATIENT WARD			
Sample Label	A. Patient (A. Number)			ICH
	DRUG Digoxin in 100ml sodium chloride 0.9%	AMOUNTmg (mg/ml)	ADD BY	CHECKED BY
	DATE ADDED TIME ADDED	EXP. DATE EXP. TIME		BATCH No.
	DISCONTINUE IF CLOUDINESS OR PRECIPITATE DEVELOPS			
				_
	I .			

Documentation Controls

Development of Guideline:	Pharmacist – Critical Care & Theatres		
Consultation with:	Pharmacy Department		
Approved By:	ICU Sister's Meeting: June 2023		
	ICU Risk & Quality Meeting: August 2023		
	Surgical Division		
Review Date:	March 2026		
Key contact:	Pharmacist – Critical Care & Theatres		

References

BMA & Pharmaceutical Press. British National Formulary June 2018.

https://www.medicinescomplete.com/#/content/bnf/_154218357?hspl=Digoxin Accessed September 2018.

Summary of Product Characteristics. http://www.emc.medicines.org.uk. Accessed September 2018.

Trissel, L.A. Handbook on Injectable Medicines 18th Edition.

https://www.medicinescomplete.com/#/content/hid/a582063?hspl=Digoxin Accessed September 2018.

Brayfield A (ed), Martindale: The Complete Drug Reference. [online] London: Pharmaceutical Press < https://www.medicinescomplete.com/#/content/martindale/5801-a (accessed September 2018).

UKCPA. Minimum Infusion Volumes for Fluid Restricted Critically III Patients. 4th Edition (December 2012).

*** End of Monograph ***