UHDB NHS FOUNDATION TRUST DRUG MONOGRAPH FOR USE ON CARDIAC CATHETER SUITE

Cangrelor

Indication	In combination with aspirin for the reduction of thrombotic cardiovascular events in patients with coronary artery disease undergoing percutaneous coronary intervention (PCI) who have not received an oral P2Y ₁₂ inhibitor (e.g. clopidogrel, prasugrel, ticagrelor) prior to the PCI procedure and in whom oral therapy with a P2Y ₁₂ inhibitor is not suitable					
Dose	The treatment should be started <u>before</u> percutaneous coronary intervention. Initially a bolus of 30micrograms/kg is to be given, followed by an intravenous infusion of 4micrograms/kg/minute. The infusion should be continued for at least 2 hours or for the duration of the procedure, whichever is longer. The <u>maximum</u> duration of the infusion is 4 hours					
Preparation	Cangrelor 50mg vials					
Administration	 Reconstitute 50mg vial with 5mL water for injection. Swirl gently until powder is dissolved, avoiding vigorous mixing. Allow any foam to settle. This will produce a 10mg per mL solution. Draw up 5mL (50mg) from the reconstituted vial and add to a 250mL bag of sodium chloride 0.9% or glucose 5% to produce a 200micrograms per mL solution The bolus dose should administered rapidly (<1 minute) from the diluted infusion. The bolus should be completely administered prior to the start of the PCI. The infusion should be started straight after the bolus is given. Patients weighing over ≥100kg will need a minimum of two bags. 					
Shelf-life	12 hours at room temperature					
Common Compatibility Issues	Do not mix with any other medicines or infusion solutions					
Additional information	Patients should be transitioned to oral P2Y ₁₂ therapy for chronic treatment. For transition, a loading dose of (clopidogrel, ticagrelor, prasugrel) should be administered immediately following discontinuation of cangrelor infusion. Alternatively, a loading dose of ticagrelor or prasugrel (not clopidogrel) may be administered up to 30 minutes before the end of the infusion.					
	DRUGS ADDED TO THIS INFUSION					
Sample Label	PATIENT A. Patient (A. Number) DRUG Cangrelor In 250ml NaCl 0.9% / Gluocse 5% DATE ADDED	AMOUNT 50mg EXP. DATE	AD D BY	WARD Cath Lab CHECKED BY BATCH No.		
	TIME ADDED EXP. TIME DISCONTINUE IF CLOUDINESS OR PRECIPITATE DEVELOPS					

	Loading dose 30micrograms/Kg		Maintenance Infusion: 4microgram/kg/minute (0.24mg/kg/hr)		
Weight of patient (Kg)	Loading dose in mg	Loading dose in mL	Dose per hour	Infusion rate: mL per hour	
40	1.2mg	6mL	9.6mg/hr	48ml/hour	
50	1.5mg	7.5mL	12mg/hr	60ml/hour	
60	1.8mg	9mL	14.4mg/hour	72ml/hour	
70	2.1mg	10.5mL	16.8mg/hour	84ml/hour	
80	2.4mg	12mL	19.2mg/hour	96ml/hour	
90	2.7mg	13.5mL	21.6mg/hour	108ml/hour	
100	3.0mg	15mL	24mg/hour	120ml/hour	
110	3.3mg	16.5mL	26.4mg/hour	130ml/hour	
120	3.6mg	18mL	28.8mg/hour	144ml/hour	
130	3.9mg	19.5mL	31.2mg/hour	156ml/hour	
140	4.2mg	21mL	33.6mg/hour	168ml/hour	
150	4.5mg	22.5mL	36mg/hour	180ml/hour	

References

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- ASHP Injectable Drugs Information. Accessed by November 2023
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