

Information for Clinical Choice

Blood and Fluid Warming

Support Document

Introduction

Information for Clinical Choice (ICC) has been developed to assist Clinicians in the decision-making process when assessing the suitability of a product by providing a clear illustration and description of the features of a range of similar products supplied through NHS Supply Chain.

The criteria provided, in the form of a Product Matrix and Support Document, is the result of a product review conducted by the clinical team in the Category Management Service Provider with support from clinical stakeholders from across the NHS as part of our assurance process.

The aim, alongside delivering savings back into NHS frontline services, is to ensure that clinical choice remains at the forefront of any product switching decision.

Patient Temperature Management: Blood and Fluid Warming Standard Flow

Blood and Fluid Warming can help maintain normothermia and will contribute to a positive patient outcome by providing consistent normothermic blood and fluid at all flow rates. It has been shown maintaining normothermia results in benefits to the patient. In the NICE guidelines it states," All intravenous fluids given should be warmed to 37°C. Blood and Fluid warmers are routinely used to reduce the risk of hypothermia. When blood is transfused, it reduces cardiac complications associated with the infusion of cold blood products.

This ICC is one of a number that will enable clinicians to make an informed decision when choosing blood /fluid with standard flow systems.

There are differences in standard flow warming machines with their dedicated consumables. Standard flow is measured from Keep Vein Open (KVO) to the maximum flow that the machine can deliver the warmed fluid/blood. The key considerations are as follows, as they are similar but there are differences. The standard flow is KVO–100 or 150ml/min depending on the system used. Some of the consumables have extensions and a few have bubble traps.



Supplier	3M UNITED KINGDOM PLC	3M UNITED KINGDOM PLC	3M UNITED KINGDOM PLC	3M UNITED KINGDOM PLC	Central Medical Supplies Ltd (CMS)	Central Medical Supplies Ltd (CMS)	Central Medical Supplies Ltd (CMS)	Central Medical Supplies Ltd (CMS)	Central Medical Supplies Ltd (CMS)
Brand	Ranger	Ranger	Ranger	Ranger	Fluido	Fluido	Fluido	Biegler	Biegler
MPC	24507	24200	24250	24450	TSC-FLU650000	TSC-FLU672000	TSC-FLU672100	BIEG160	BIEG101B
NPC	FFF897	FSB653	FSB656	FSB934	FSB1877	FSB1878	VCB932	FSB1123	FSB1124
Description	Blood and fluid warming Standard flow control unit	Blood and fluid warming Standard flow disposable set for Ranger blood and fluid warmer	Blood and fluid warming Standard flow disposable set with extension for Ranger blood and fluid warmer	Blood and fluid warming Paediatric disposable set warm fluid aspiration port	Blood and fluid warming Fluido compact system - warming & control module	Blood and fluid warming Fluido compact standard set	Patient Temperature Management Compact Standard Set with drip	Blood and fluid warming 685 Blood & fluid warmer	Blood and fluid warming 3.5m extension set
Picture					fuidor			T	
Flow rate	150ml/min	150ml/min	150ml/min	100ml/min	100ml/min	100ml/min	100ml/min	100ml/min	100ml/min
Route	Blue Diamond	Stocked	Stocked	Stocked	eDirect	eDirect	eDirect	eDirect	Stocked
UOI	1	1	1	Box 10	1	Box of 30	Box of 60	1	Box of 100
Latex Free	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country of manufacture	USA	Mexico	Mexico	Mexico	Netherlands	Netherlands	Netherlands	Austria	Belgium



	Central Medical									
Supplier	Supplies Ltd (CMS)	Eden Medical	Eden Medical	Fenton	Fenton	GBUK Ltd	GBUK Ltd	AQUILANT LTD BD BAS CRITICAL	AQUILANT LTD BD BAS CRITICAL	AQUILANT LTD BD BAS CRITICAL
Brand	Biegler	Astotherm	Astotherm	MEQU	MEQU	AutoMer	AutoMer	enFlow	enFlow	enFlow
MPC	BIEG115	AP220	IFT30460	64920	64922	E2MZ00001	KM2K00001	980121EU	980105VS	980200EU
NPC	FSB1241	FFF381	FFF380	VCB85129	VCB85126	VCB85196	VCB85236	VCB85106	VCB85108	VCB85107
Description	Blood and fluid warming 4.6m extension set with bubble trap and 3 way tap	Blood and fluid warming Blood and fluid warmer	Blood and fluid warming Blood and fluid warming infusion extension set for use with Astotherm IFT220 / AP220 bloodwarmer	Complete System MWS001for emergency transfusions. Includes Power Pack Charger x5 Warmers	Disposable Warming Unit for fluid/blood Single Use MWS201	IV Fluid and Blood Warmer	Patient Temperature Management II Disposable set	ENFLOW CONTROLLER UNIT	ENFLOW WARMER UNIT	ENFLOW DISP CARTRIDGE- 30/CASE
Picture						Autorex			Ø	
Flow rate	100ml/min	100ml/min	100ml/min	150ml/min	150ml/min	150ml/min	150ml/min	200ml/min	200ml/min	200ml/mim
Route	eDirect	eDirect	eDirect	eDirect	eDirect	eDirect	eDirect	eDirect	eDirect	eDirect
UOI	Box of 100	1	50	1	5	1	20	1	1	30
Latex Free	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country of manufacture	Belgium	Germany	Germany	Denmark	Denmark	Korea	Korea	USA	USA	USA





References:

If you have any questions, would like further information, or have feedback to share, please contact:

Raymond Pukacz – Clinical Engagement and Implementation Manager, Patient Temperature Management raymond.pukacz@supplychain.nhs.uk

Keith Johnson – Category Manager, Patient Temperature Management keith.johnson@supplychain.nhs.uk

