

Information for Clinical Choice Matrix and Support Document

Intravenous (IV) Cannula and Associated Products Safety Integrated IV Cannula System.

Information for Clinical Choice (ICC) has been developed to assist Clinicians in the decision-making process when assessing the suitability of a product. It gives customers the assurance that they can switch to alternative products without the concern that quality will be compromised.

The criteria provided, in the form of a Product Matrix and Support Document, is the result of an independent product review, conducted by the Clinical Collaboration Team (CCT), 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 as this serves to provide the best output for patients.

Safety intravenous (IV) cannula system

A Safety Peripheral Intravenous Cannula or Catheter (SPIVC) is a vascular access medical device which is directly threaded into a vessel after venepuncture with a needle, known as a stylet ("catheter over the needle" configuration).^{1,4}

SPIVC is intended for the purpose of administering intravenous (IV) therapy such as IV fluids or medications, directly into a blood vessel or obtain a blood sample at the time of insertion.^{1,2,4}

Intended for short-term therapy lasting less than a week. Bolus injections or short infusions ⁴

Safety integrated cannula with wings

Safety integrated cannula with wings known as closed IV catheter systems, is a type of SPIVC with preassembled or integrated components into the catheter such as bilateral wings, as a stabilisation platform, and an extension set with a needle-free access which could have single or double port(s).

Safety integrated cannula have been shown to:

- Reduce phlebitis
- Reduce infiltration
- Reduce costs by increasing functional dwell time – Value based procurement
- Reduce blood exposure during insertion compared to an open system²
- The wings reduce dislodgement by 84% and complies with the Infusion Therapy Standards of Practice and CDC guidelines for catheter stabilisation²

Safety mechanism features

- **Active Mechanism** - The Practitioner must push a button to activate safety feature.
- **Passive Mechanism** - The Stylet has a blunting or shielding feature which is automatically activated on removal from the cannula.

Blood control and non-blood control



Blood Control mechanism mimics venous valves encouraging unidirectional flow of blood, preventing pooling of blood thereby avoiding leakage out from the cannula at insertion.

Fenestrated and non-fenestrated (Small openings or holes near the tip of the catheter)

- Allows fluid to exit the catheter in addition to that which normally exits through the main opening at the tip of the catheter.
- Fenestrated IV catheter is useful in terms of higher vascular attenuation and lower injection pressure for coronary computed tomography angiography.
- It has potential merit in patients with fragile and small veins.

Needle-free connectors Aurum compatibility

Ensure interoperability and safe connectivity with Aurum glass syringes, without breakage or product performance failure to deliver on-the-spot administration of drugs where high visibility and simple drug identification is crucial.

Power injection

Allows reliability in the delivery of rapid flow rates, such as contrast media via a high-powered automated injector to improve diagnostic accuracy.

Radiopaque

Refers to the dense property that absorbs and resists passage of X-rays thus influencing the radiological image obtained.

Subcutaneous catheter

Allows indwelling subcutaneous insertion for delivery of medicines subcutaneously and decreases trauma, distress and discomfort for the patients with challenging IV Access.





Material

- **PUR** – Polyurethane for softer and more comfortable indwelling performance
- **FEP** - Fluoro Ethylene Propylene

Safety Integrated Single Port Cannula with Wings 20g x 25mm

Supply Chain Coordination Limited (SCCL) is the Management Function of the NHS Supply Chain
Registered in England No: 10881715. VAT No: 290 8858 54 Registered Office: Skipton House, 80 London Road, London, United Kingdom, SE1 6LH






Supplier	Becton Dickinson UK Ltd	Becton Dickinson UK Ltd	Smiths Medical International Ltd	Smiths Medical International Ltd
Brand	BD Nexiva	BD Nexiva Diffusics	DeltaVen	DeltaVen
MPC	383516	383693	3835222	3835422
NPC	FSP4776	FSP2640	FSP4210	FSP4221
Description	Safety Integrated Cannula with Wings Pink 20G x 25mm	Safety Integrated Cannula with Wings Pink 20G x 25mm	Safety Integrated Cannula with Wings Pink 20G x 25mm	Safety Integrated Cannula with Wings Pink 20G x 25mm
Picture				
Route	eDirect	Stocked	Blue Diamond	Blue Diamond
UOI	80	20	100	80
Safety mechanism	Passive	Passive	Passive	Passive
Cannula and catheter length ranges	Range from 18G x 32mm to 24G x 19mm	Range from 18G x 32mm to 24G x 19mm	Range from 16G x 32mm to 26G x 19mm	Range from 16G x 32mm to 26G x 19mm
Gravity flow rate	61 mL/min	68 mL/min	47 mL/min	47 mL/min
Power injectable	✓	✓	✓	✓
Power injectable (psi)	300 psi	325 psi	330 psi	330 psi
Power injectable flow rate	4 mL/sec	10 mL/sec	8 mL/sec	8 mL/sec
Radiopaque catheter (PUR/FEP)	Yes PUR	Yes PUR	Yes PUR	Yes PUR
DEHP-free catheter	✓	✓	✓	✓
Latex-free	✓	✓	✓	✓
Transparent flashback chamber	✓	✓	✓	✓
Spare needle free connector	✓	✗	✗	✗
Needle free connector Aurum syringe-compatible	Yes with luer adapter	Yes with luer adapter	✗	✓
Integrated extension length	114.3 mm	123.2 mm	110 mm	110 mm
Blood control	✓	✓	✓	✓
Subcutaneous use	✗	✗	✓	✓
Fenestrated or non-fenestrated cannula	Non-fenestrated	Fenestrated	Non-fenestrated	Non-fenestrated




Safety Integrated Dual Ported Cannula with Wings 20g x 25mm (Part 1)

Supply Chain Coordination Limited (SCCL) is the Management Function of the NHS Supply Chain

Registered in England No: 10881715. VAT No: 290 8858 54 Registered Office: Skipton House, 80 London Road, London, United Kingdom, SE1 6LH



Supplier	Becton Dickinson UK Ltd	Becton Dickinson UK Ltd	Smiths Medical International Ltd
Brand	BD Saf-T-Intima	BD Nexiva	DeltaVen
MPC	383339	383536	3831022
NPC	FSP329	FSP2237	FSP4232
Description	Safety Integrated Cannula with Wings Pink 20G x 25mm with Y Connector	Safety Integrated Cannula with Wings Pink 20G x 25mm with Y Connector	Safety Integrated Cannula with Wings Pink 20G x 25mm with Y Connector
Picture			
Route	Stocked	Stocked	Blue Diamond
UOI	25	1	100
Safety mechanism	Passive	Passive	Passive
Cannula and catheter length ranges	Range from 18G x 32mm to 24G x 19mm	Range from 18G x 32mm to 24G x 19mm	Range from 16G x 32mm to 26G x 19mm
Gravity flow rate	55 mL/min	61 mL/min	47 mL/min
Power injectable	✗	✓	✓
Power injectable (psi)	N/A	300 psi	330 psi
Power injectable flow rate	N/A	4 mL/sec	8 mL/sec
Radiopaque catheter (PUR/FEP)	Yes PUR	Yes PUR	Yes PUR
DEHP-free catheter	✓	✓	✓
Latex-free	✓	✓	✓
Transparent flashback chamber	✓	✓	✓
Spare needle free connector	✓	✓	✗
Needle free connector Aurem compatible	Yes with luer adapter	✓	✗
Integrated extension length	82.5 mm	114.3 mm	110 mm
Blood control	✓	✓	✓
Subcutaneous use	✓	✗	✓
Fenestrated or non-fenestrated cannula	Non-fenestrated	Non-fenestrated	Non-fenestrated

Supplier	Smiths Medical International Ltd	GBUK Healthcare Ltd	GBUK Healthcare Ltd
Brand	DeltaVen	Integrated	Nouvo Safety Set
MPC	3831522	SICW2032-GSC	SICW2032DNF
NPC	FSP4243	FSP4955	FSP20044
Description	Safety Integrated Cannula with Wings Pink 20G x 25mm with Y Connector	Safety Integrated Cannula with Wings Pink 20G x 25mm with Y Connector	Safety Integrated Cannula with Wings Pink 20G x 25mm with Y Connector
Picture			
Route	Blue Diamond	Stocked	Blue Diamond
UOI	80	20	20
Safety mechanism	Passive	Passive	Passive
Cannula and catheter length ranges	Range from 16G x 32mm to 26G x 19mm	Range from 18G x 32mm to 24G x 19mm	Range from 18G x 32mm to 24G x 19mm
Gravity flow rate	47 mL/min	56 mL/min	56 mL/min
Power injectable	✓	✓	✓
Power injectable (psi)	330 psi	325-330 psi	325-330 psi
Power injectable flow rate	8 mL/sec	Not available	Not available
Radiopaque catheter (PUR/FEP)	Yes PUR	Yes PUR	Yes PUR
DEHP-free catheter	✓	✓	✓
Latex-free	✓	✓	✓
Transparent flashback chamber	✓	✓	✓
Spare needle free connector	✓	✓	✓
Needle free connector Aurem compatible	✗	✓	✗
Integrated extension length	110 mm	100 mm	100 mm
Blood control	✓	✓	✓
Subcutaneous use	✓	✓	✓
Fenestrated or non-fenestrated cannula	Non-fenestrated	Non-fenestrated	Non-fenestrated



Useful Resources:

1. Clinical Review: Safety peripheral intravenous cannula (2018) NHS Clinical Evaluation Team
https://wwwmedia.supplychain.nhs.uk/media/Clinical_Review_Safety_Peripheral_Intravenous_Cannula_Report_October_2018.pdf
2. Gorski LA, Hadaway L, Hagle ME, et al. Infusion therapy standards of practice. *Journal of Infusion Nursing*. 2021;44(suppl 1): S1-S224. doi:10.1097/NAN.0000000000000396
<https://gavceit.it/nuovo/sites/default/files/uploads/Infusion%20Therapy%20Standards%20of%20Practice%202021.pdf>
3. Health and Safety Executive (HSE) (2013) *Health and Safety (Sharp Instruments in Healthcare) Regulations: Guidance for Employers and Employees*. London: Health and Safety Executive.
4. Lister, S., Hofland, J. and Grafton H. (eds) (2020) *The Royal Marsden Manual of Clinical Nursing Procedures*, 10th ed. John Wiley and Sons, Chichester.

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

Maya Guerrero – maya.guerrero@supplychain.nhs.uk Ward Based Consumables - Clinical Specialist Lead; NIVAS member – Vascular Access Nurse

Dan Lewin – dan.lewin@supplychain.nhs.uk Ward Based Consumables - Clinical Specialist Lead

Charlotte Farrell – charlotte.farrell@supplychain.nhs.uk - Ward Based Consumables - Buyer

Karen Hudson – karen.hudson@supplychain.nhs.uk Ward Based Consumables - Clinical Program Manager

