



Value Life

MONITORING & CRITICAL ACCESS



Arterial access

PRODUCT GUIDE

The success of the Seldinger technique for arterial access

Arterial lines are routinely used in the critical care environment for haemodynamic monitoring as well as blood sampling for physiological monitoring in patients at risk of deterioration

Whilst widely recognised to be a safe device, knowledge of anatomy, procedural skills and awareness of safety issues are vital to reduce the risk of harm to both patient and operator. Some high profile episodes of harm in recent years⁽¹⁾ have increased awareness of the patient and operator safety and calls for a national safety standard.⁽²⁾

When it comes to the insertion of arterial lines into small vessels, the procedure can be technically challenging, particularly if the patient is hypotensive or peripherally vasoconstricted. Using the Seldinger technique adds the reliability of a confirmed arterial puncture prior to advancing the catheter into the vessel. In practice, studies have shown the Seldinger technique has demonstrated a significantly higher rate of success than the direct threading method.⁽³⁾

“My technique was the result of an idea...Vygon developed that idea with skill and innovation, resulting in an excellent product which I highly recommend.”

Sven-Ivar Seldinger

leadercath[®]

Provides arterial puncture

leadercath arterial offers the 'classic' Seldinger technique plus a host of benefits dedicated to patient safety and ease of use.

- Inserted using the classic Seldinger technique for a higher success rate
- Anti-kink collar maintaining patency
- Winged hub for secure fixation
- Red hub for easy identification
- Soft tipped guidewire for easy insertion.

Matching Michigan introduced technical interventions to reduce line bloodstream infections which involved maximal sterile precautions including full-barrier drapes.⁽⁴⁾

Arterial Packs can minimise arterial catheter-related bloodstream infections. Epic3 guidelines recommend the use of maximal sterile barrier precautions for the insertion of central venous access devices (Class C). Reduced rates of infection will deliver health gains for patients and benefits for health systems.⁽⁵⁾





leadercath arterial packs

All you need in one pack to meet current guidelines, clinical and patient needs

Our leadercath arterial packs contain everything required to safely and efficiently insert an arterial line. The pack comes complete with a safety hypodermic needle to reduce the risk of needlestick injuries and is available with a choice of dressing to suit local protocols and clinical needs. The packs promote consistency, standard practice and efficiency.

Our standard arterial pack includes:

- 1 x leadercath 20g 80mm type 115.090
- 1 x arterial peelable drape 50x100cm (fenestrated 5.5x7cm)
- 1 x outer wrap 75x50cm
- 1 x safety hypodermic needle 25G 5/8" orange
- 1 x 2.5ml LS syringe
- 1 x 5ml LS syringe
- 5 x swabs 10x10cm, 4 ply, non-woven.

To complete the pack choose your dressing:



Tegaderm

1 x Tegaderm dressing
10x12cm code 1626W
Code: 0115802
NHSSC code: FSQ1777



IV3000

1xIV3000 dressing
10x12cm code 4008
Code: 0115803
NHSSC code: FSU472

The benefits of our arterial packs



Cost saving

Substantial saving when purchasing a pack vs individual components



Clinical benefit

Endorses Aseptic Non Touch Technique (ANTT) to minimise infections



Patient benefit

Reduces rates of infection which will deliver health gains



Clinician benefit

Includes a heat-sealed drape and a safety hypodermic needle (designed to minimise the risk of accidental needlestick injuries)



Efficiency and simplicity

Standardising the clinical practice by purchasing all the components/equipment required to complete your procedures resulting in less wastage from the multiple packaging of individual components.



Includes a heat-sealed drape

- Provides a barrier against infection
- Placed around the patient's cannulation site with ultra-high absorbency
- Provides an optimum sterile field for arterial catheterisation
- Reduces displacement as it can be peeled.

arteriosel[®]

Gives you more time to place the catheter under less pressure

Incorporating our **leadercath** arterial catheter, **arteriosel** utilises the benefits of the Seldinger technique for arterial cannulation. In addition, the device delivers minimal blood loss and clear visualisation of vessel access.

Minimal blood loss means minimal exposure to blood for clinicians therefore reducing potential exposure to blood borne viruses.



Features of **arteriosel** include:

- 1 Funnelled hub**
Ensures smooth transition of the guidewire
- 2 Blood control valve**
Reduces blood loss and minimises risk of blood exposure to clinicians
- 3 Visualisation chamber**
Blood pulsating in a contained extension tube is confirmation you have positioned the catheter in the artery even in hypotensive patients. In addition the visualisation chamber is calibrated to let you see pulsating blood, for blood pressures from 30mmHg – 260mmHg.
- 4 Rotating chamber**
Allows you to reposition the needle bevel so the visualisation chamber does not affect line of sight.



Ordering codes

Vygon code	NHSSC code	Description	Length (cm)	Size (G)	Quantity (Box)
0115.09	FSQ049	leadercath arterial PE	8	20	20
0115.11	FSQ004	leadercath arterial PE	10	18	20
0115802	FSQ1777	Arterial pack with Tegaderm dressing	8	20	35
0115803	FSU472	Arterial pack with IV3000 dressing	8	20	40
V02770120	FSQ2334	Arterial pack with safety hypodermic needle (Tegaderm)	8	20	35
V02770121	FSQ2335	Arterial Pack with safety hypodermic needle (IV3000)	8	20	40
01150901	FSQ1324	arterio sel catheter	8	20	20

References

- 1 Leslie R A et al. Survey of Arterial Line Practice Anaesthesia 2013; 68: 1114-1119
- 2 Blackburn J, Walton B, Risks Associated With Arterial Lines; Time for a National Safety Standard? Journal of Anaesthesia Practice, November 2016
- 3 Beards, S C et al. A comparison of arterial lines and insertion techniques in critically ill patients
- 4 BMJ Qual Saf. 'Matching Michigan': a 2-year stepped interventional programme to minimise central venous catheter-blood stream infections in intensive care units in England. 2012
- 5 The Journal of Hospital Infection. IVAD13 Epic3. Jan 2014.

For further information, please contact: vygon@vygon.co.uk

The specifications shown in this leaflet are for information only and are not, under any circumstances, of a contractual nature.

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