

Flixene AV access graft

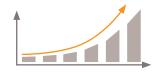
Premium performance for dialysis access



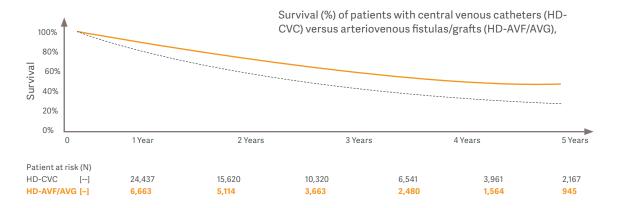
Dialysis burden

Facts and global trends

More than 2 million people around the world receive dialysis treatment or are awaiting a kidney transplant. The number of patients diagnosed with the disease continues to **increase at a rate of 5-7% per year.**^{1,2}



Central Venous Catheter (CVC) use is one of the growing problems globally which results in a **significantly higher morbidity and mortality rate** particularly due to the rate of infection.¹



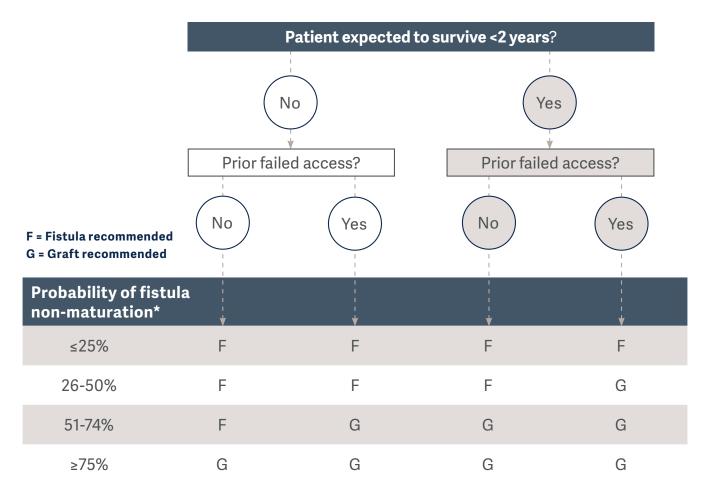
- Successful hemodialysis treatment is only possible with a well-functioning vascular access.

 The latest KDOQI and ESVS guideline recommend **grafts as a viable tier 2 option** and central venous catheters (CVCs) as a last alternative.^{1,2}
- Representing 25-30% in ESRD registries, **elderly patients may benefit from the use of AV Grafts** because of the high primary autogenous AVF failure rate. "Early stick
 grafts" may offer elderly patients the option to avoid CVCs with their inherent "high risk of infection".

2 FLIXENE VASCULAR GRAFTS

Vascular access

How to choose the right vascular access³⁻⁴



^{*} The percentages correspond to the estimated risk of fistula non-maturation. The author states that the algorithm requires clinical skills and evidence based tools to determine the likelihood of fistula non-maturation.

→ Risk factors for fistula non-maturation ¹⁵

- Age > 65
- Coronary Artery Disease (CAD)
- · Poor vessel distensibility
- Peripheral Vascular Disease (PVD)
- Diabetic
- Small vein diameter

Flixene AV access graft

Premium performance

Ongoing durability

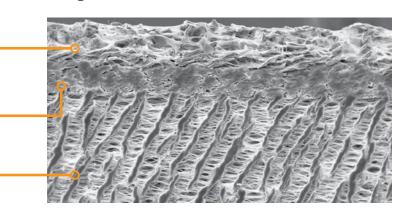
- · Reinforced cannulation zone for greater durability
- Unique 3-layer ePTFE construction specifically designed to handle the rigors of multiple needle cannulations related to dialysis care¹⁰
- Reliable performance for nursing staff and patients^{5,6}
- Average outer porosity of 60 μm to promote tissue ingrowth¹⁰

3 Layer ePTFE graft

Large pore (nominal 60µm) surface layer, more receptive to tissue ingrowth¹

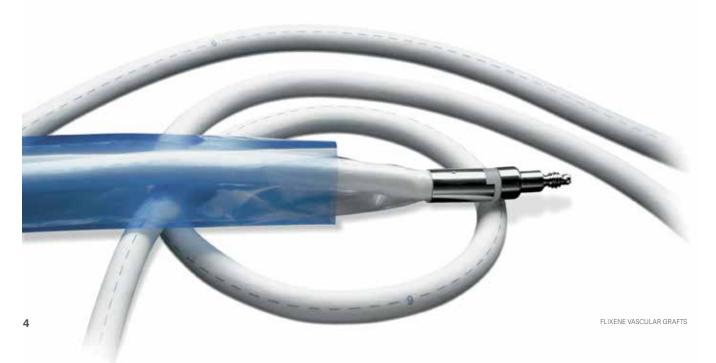
Middle layer, reinforcing wrap for increased support¹⁰

Small pore base layer, inner graft surface porosity of nominal 20µm¹



Early cannulation

- An alternative to CVC catheters^{3,9}
- Demonstrated as a safe and effective early cannulation option^{3,9}



Unique Graft Deployment System (GDS)⁵

- Improved primary patency at 180 days
- Designed to make tunneling easier than conventional practices
- Minimize soft tissue trauma
- · Reduce graft sweating



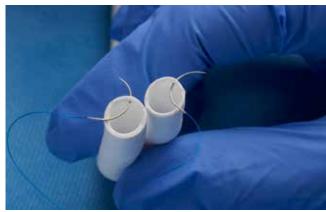
Flixene with GDS connects to tunneler rod

A choice of configurations

1. Graduated wall technology Reduced wall thickness on each end (length ≈8cm) for improved suturability and handling

2. Tapered

Designed to change flow dynamics

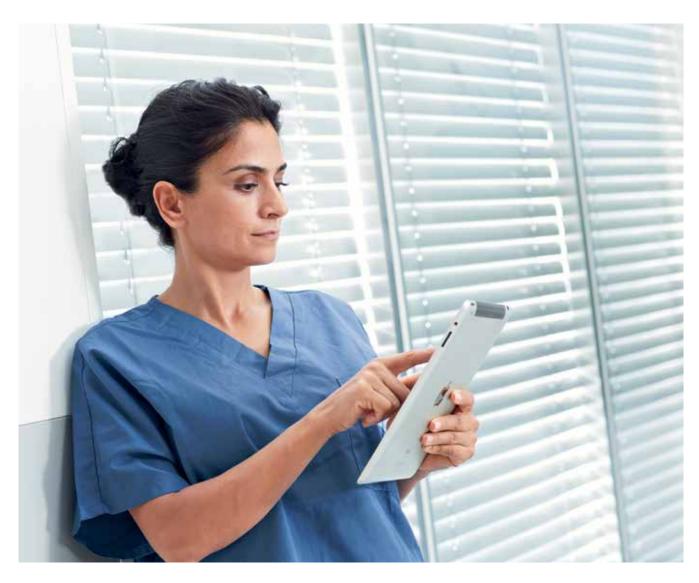


Wall thickness of standard wall vs. graduated wall

Flixene can make a difference

Clinical evidence

- Flixene is shown to be a viable option for early cannulation within 3 days, reducing the need and risks associated with CVCs for patients^{6,7,8}
- Flixene includes a slider GDS system with plastic sheath for easy tunneling, reduced soft tissue trauma and targeted placement.^{1,5}
- Flixene offers successful treatment option for challenging patient population^{6,8}
- Secondary patency at 12 months ranged from 63% to 92%⁹
- Implantation of the Flixene graft followed by accessing the graft may reduce the need for temporary or permanent catheters.9
- One year patency and complication rates are equivalent to those of conventional grafts which can be cannulated only after 2 weeks⁹



6 FLIXENE VASCULAR GRAFTS

Flixene

Product information

Straight

	Inflow options GW	Cannulation zone G	Outflow options W	
		Straight	_	
Diameter	Length	Wall Thickness	Slider GDS	Reference
6 mm	10 cm	SW	No	25053
6 mm	30 cm	GW	Yes	25125
6 mm	30 cm	SW	Yes	25142
6 mm	40 cm	GW	Yes	25061
6 mm	50 cm	SW	Yes	25052
6 mm	50 cm	GW	Yes	25058
7 mm	10 cm	SW	No	25054
7 mm	30 cm	GW	Yes	25126
7 mm	40 cm	GW	Yes	25062
7 mm	50 cm	SW	Yes	25056
7 mm	50 cm	GW	Yes	25059
7 mm	80 cm	GW	Yes	25120
8 mm	50 cm	SW	No	25057
8 mm	50 cm	GW	Yes	25060
8 mm	80 cm	GW	Yes	25121

Tapered

	Inflow options GWT	Cannulation zone GV	Outflow options	
		Taper		
Diameter	Length	Wall thickness	Slider GDS	Reference
4-6 mm	35 cm	GWT-GW	Yes	25128
4-6 mm	45 cm	GWT	Yes	25134
4-6 mm	45 cm	GWT-GW	Yes	25137
4-7 mm	30 cm	GWT-GW	Yes	25141
4-7 mm	35 cm	GWT-GW	Yes	25129
4-7 mm	45 cm	GWT	Yes	25135
4-7 mm	45 cm	GWT-GW	Yes	25138
5-8 mm	35 cm	GWT-GW	Yes	25130
5-8 mm	45 cm	GWT-GW	Yes	25139

References

- 1. Vascular Access: 2018 Clinical Practice Guidelines of the European Society for Vascular Surgery (ESVS) Eur J Vasc Endovasc Surg (2018) 55, 757-818
- 2. KDOQI Clinical practice guideline
- 3. Allon M, Lok CE. Dialysis Fistula or Graft: The Role for Randomized Clinical Trials. Clin J Am Soc Nephrol 5: 2348-2354, 2010.
- 4. Brown PW. Preoperative radiological assessment for vascular access. Eur J Vasc Endovasc Surg 31: 64-69, 2006
- 5. Schild AF, Baltodano NM, Alfieri K, Livingstone J, Raines JK. New Graft for Low Friction Tunneling in Vascular Access Surgery. J Vasc Access. 2004 Jan-Mar:5(1):19-24.
- 6. Schild AF, Schuman ES, Noicely K, et al. Early cannulation prosthetic graft (Flixene) for arteriovenous access. J Vasc Access. 2011 Jul-Sep;12(3):248-52.
- 7. Hinojosa CA, Soto-Solis S, Olivares-Cruz S, Laparra-Escareno H, Gomez-Arcive Z, Anaya-Ayala JE. Early cannulation graft Flixene™ for conventional and complex hemodialysis access creation. J Vasc Access. 2017 Mar 21;18(2):109-113. doi: 10.5301/jva.5000550. pub 2017 Feb 6.
- 8. Berard X, Ottaviani N, Brizzi V, et al. Use of the Flixene vascular access graft as an early cannulation solution. J Vasc Surg. 2015;62(1):128-134.
- 9. Ottaviani N, Deglise S, Brizzi V, et al. Early cannulation of the flixene™ ateriovenous graft. J Vasc Access. 2015
- Data on file



Product availability is subject to the regulatory or medical practices that govern individual markets. Certain products may not be licensed or available in certain countries or in stock. Please check with your local distributor for availability.

Advanta vascular grafts, Slider graft deployment system (GDS), and Flixene vascular grafts are manufactured by Atrium Medical Corporation / 40 Continental Blvd., Merrimack, NH 03054 / Tel. 603-880-1433 • Protected by the following international and U.S. patent(s): http://patents.maquet.com. • Getinge, GETINGE * , Maquet, Atrium, Flixene and Slider graft deployment system are trademarks or registered trademarks of Getinge AB, its subsidiaries or affiliates in the United States or other countries • Getinge and Atrium are registered with the U.S. Patent and Trademark Office. • Copyright 2019 Atrium Medical Corp. or its affiliates. • All rights not expressly granted are reserved. • Refer to Instructions for Use for current indications, warnings, contraindications, and precautions. • Printed in U.S.A. • 01/19

Getinge • 40 Continental Blvd. • Merrimack, NH 03054 • USA • (603) 880-1433