



# CERTIFICATE



This is to certify that the company

## MicroVention, Inc.

1311 Valencia Ave.  
Tustin, CA, 92780  
United States of America

with the organizational units/sites as listed in the annex

has implemented and maintains a **Quality Management System**.

### Scope:

Design, Development, Manufacturing and Distribution of Embolization Prostheses and Accessories, Intravascular Access Devices (Occlusion Balloon Catheters, Guiding and Aspiration Catheters, Microcatheters and Guidewires), Stents, Clot and Foreign Body Retrieval Devices, Liquid Embolic System, Embolic Protection System, Aneurysm Embolization Device, Microspheres, Aspiration Devices and Detachment Controller Units.

Through an audit, documented in a report, performed by DQS Medizinprodukte GmbH, it was verified that the management system fulfills the requirements of the following standard:

**DIN EN ISO 13485 : 2016 + AC : 2017-07**  
**EN ISO 13485 : 2016 + AC : 2016**  
**ISO 13485 : 2016**

Certificate registration no.	411133 MP2016
Certificate unique ID	170758666
Effective date	2019-11-17
Expiry date	2022-11-16
Frankfurt am Main	2019-11-17



## DQS Medizinprodukte GmbH

Sigrid Uhlemann  
Managing Director

Dr. Thomas Feldmann  
Head of Certification Body

August-Schanz-Straße 21, 60433 Frankfurt am Main,  
Tel. +49 (0) 69 95427-300, [medical.devices@dqs-med.de](mailto:medical.devices@dqs-med.de)



**Annex to certificate**  
**Certificate registration No.: 411133 MP2016**  
**Certificate unique ID: 170758666**  
**Effective date: 2019-11-17**



## **MicroVention, Inc.**

1311 Valencia Ave.  
Tustin, CA, 92780  
United States of America

### **Location**

### **Scope**

**MicroVention, Inc.**  
**Production Site**  
35 Enterprise  
Aliso Viejo, CA, 92656  
United States of America

Design, Development, Manufacturing and Distribution of Embolization Prostheses and Accessories, Intravascular Access Devices (Occlusion Balloon Catheters, Guiding and Aspiration Catheters, Microcatheters and Guidewires), Stents, Clot and Foreign Body Retrieval Devices, Liquid Embolic System, Embolic Protection System, Aneurysm Embolization Device, Microspheres, Aspiration Devices and Detachment Controller Units.

**MicroVention, Inc.**  
**Production Site**  
1311 Valencia Ave.  
Tustin, CA, 92780  
United States of America

Design, Development, Manufacturing and Distribution of Embolization Prostheses and Accessories, Intravascular Access Devices (Occlusion Balloon Catheters, Guiding and Aspiration Catheters, Microcatheters and Guidewires), Stents, Clot and Foreign Body Retrieval Devices, Liquid Embolic System, Embolic Protection System, Aneurysm Embolization Device, Microspheres, Aspiration Devices and Detachment Controller Units.

**MicroVention Costa Rica, S.R.L.**  
**Production Site**  
Zona Franca Coyol  
Alajuela  
Costa Rica

Manufacturing of Embolization Prostheses and Accessories, Intravascular Access Devices (Occlusion Balloon Catheter, Guiding and Aspiration Catheters, and Microcatheters), Stents, Clot and Foreign Body Retrieval Devices, Embolic Protection System, and Aspiration Devices.

# EC DECLARATION OF CONFORMITY

FD08-011 / W

We, MicroVention, Inc., located in Tustin, California, USA declare according to Directive 93/42/EEC Annex II (incl. section 4.) under our sole responsibility that the products to which this declaration relates are in conformity with Directive 93/42/EEC and fulfill the Essential Requirements as described in Directive 93/42/EEC Annex I.

Directives 93/42/EEC Council Directive Concerning Medical Devices

**Conformity Assessment Route**

EC Design Examination:

435827 MRA (Section 4)

Full Quality Assurance:

411133 MR2 (Excluding Section 4)

Product	Model Number(s)	Class-Rule	Effectivity date	GMDN code
Headway 17 Advanced Soft Microcatheter	MC172150S	III – Annex 9, rule 7	2018-12-19	10691
Headway 17 Advanced Microcatheter	MC172150STX, MC17215045X, MC17215090X, MC172150AX, MC172150BX, MC172150CX, MC172150DX, MC172150WX, MC172150JX, MC172150SX			
Headway 21 Microcatheter	MC212150S, MC212156S			
Headway 27 Microcatheter	MC272150S, MC272156S			
Headway Duo	MC162156S, MC162167S			
Wedge Microcatheter	MCWED21160	III – Annex 9, rule 8	2018-12-19	10691

**Manufacturer/**

**Production Site:**

MicroVention, Inc.  
1311 Valencia Avenue  
Tustin, CA 92780 USA

**Notified Body:**

DQS Medizinprodukte GmbH  
D-60433 Frankfurt am Main,  
Germany  
Notified Body Number: 0297

**EU Representative:**

MicroVention Europe  
30 bis, rue du Vieil Abreuvoir  
78100 Saint-Germain-en-Laye  
France

**Production Site:**

MicroVention Costa Rica  
Zona Franca Coyol  
Alajuela, Costa Rica

**Intended Use:**

The Headway Microcatheter (Headway 17 Advanced Soft, Headway 17 Advanced, 21 & 27) is intended for general intravascular use, including the peripheral, coronary and neuro vasculature for the infusion of diagnostic agents, such as contrast media, and therapeutic agents, such as occlusion coils.

The Headway Duo Microcatheter is intended for general intravascular use, including the peripheral and coronary vasculature for the infusion of diagnostic agents, such as contrast media, and therapeutic agents, such as embolization materials.

The Wedge Microcatheter is intended for general intravascular use, including the peripheral, coronary and neuro vasculature for the infusion of diagnostic agents, such as contrast media, and to assist in the delivery of interventional devices, such as the SOFIA 6F Catheter, in the neurovasculature.

We herewith declare that the above-mentioned products meet the provisions of the council directive 93/42/EEC for medical devices. All supporting documentation is retained under the premises of the manufacturer.



Salvatore Palomares  
Director, Regulatory Affairs  
MicroVention, Inc.

Expiry Date: 2022-12-19

Tustin, CA 92780, USA

Place of Issue



Date of Issue

**Unique braid/coil construction for the lowest profile of any 0.014"/0.012" guidewire compatible catheter**

## Headway® Duo Microcatheter

Microcatheter with Hydrophilic Coating

1 per box; includes shaping mandrel and introducer sheath

Product Name	Product Code	ID Body/Tip (inches)	Tip Shape	Usable Length (cm)	Flexible Distal Length (cm)	OD Prox./Dist. (French)	Dead Space	Tip Markers
Headway Duo, 156cm	MC162156S	0.0165 / 0.0165	STR	156	9	2.1 / 1.6	0.34 ml	2
Headway Duo, 167cm	MC162167S	0.0165 / 0.013	STR	167	9	2.1 / 1.3	0.35 ml	1

### Features

#### Hybrid Braid/Coil Design

Tight pitch coil provides lumen integrity and bending flexibility  
Proximal braid provides firmness and a torqueable catheter body  
Resists kinking and ovalization

#### Small OD, Large ID

**156cm Headway® Duo** microcatheter compatible with coils and ≤0.014" OD guidewires  
0.0165" body ID microcatheter with low profile distal tip  
**167cm Headway® Duo** microcatheter compatible with ≤0.014"/≤0.012" (proximal/distal OD) guidewires  
0.0165" body ID microcatheter with 0.013" ID distal tapered tip

#### Superior Trackability

True 1:1 push/pull while tracking through tortuous anatomy

#### Liquid Embolic Compatibility

Compatible with PHIL™ Liquid Embolic, Onyx™ Liquid Embolic, nBCA and DMSO  
High burst strength (700 psi)  
Long length allows distal lesion access

#### Soft Distal Tip

Smooth, atraumatic tracking  
Excellent tip "painting" ability



**MicroVention, Inc.**  
**Worldwide Headquarters**  
1311 Valencia Avenue  
Tustin, CA 92780, USA  
MicroVention UK Limited  
MicroVention Europe, S.A.R.L.  
MicroVention Deutschland GmbH  
**Web**

PH +1.714.247.8000

PH +44 (0) 191 258 6777  
PH +33 (1) 39 21 77 46  
PH +49 211 210 798-0  
**microvention.com**



# EC-CERTIFICATE

(Full quality assurance system)

This is to certify that the company

## MicroVention, Inc.

1311 Valencia Ave.  
Tustin, CA, 92780  
United States of America

has implemented and maintains a full quality assurance system which applies to the products at every stage from design to final controls.

Through an audit, documented in a report, performed by DQS Medizinprodukte GmbH, it was verified that the management system fulfills the requirements of

## Annex II excluding Section 4 of Council Directive 93/42/EEC concerning medical devices

with respect to the following medical devices:

Embolization Prostheses, Detachment Controller Units, Syringe Kits, Stents, Clot and Foreign Body Retrieval Devices, Intravascular Access Devices (Occlusion Balloon Catheters, Micro Catheters, Guidewires), Liquid Embolic System, EPS Embolic Protection System, Microspheres and Aneurysm Embolization Device as listed in Annex.

The manufacturer is subject to surveillance according to Annex II, Section 5. The CE marking with the Notified Body Identification Number (0297) may be affixed on the devices listed in the certificate. An EC Design Examination Certificate according to Annex II, Section 4 is required for class III devices covered by this certificate. The certificate is in the case of class I(s) devices (I(s) = class I products placed on the market in sterile conditions) limited to the aspects of manufacture concerned with securing and maintaining sterile conditions. The certificate is in the case of class I(m) devices (I(m) = class I devices with a measuring function) limited to the aspects of manufacture concerned with the conformity of the products with the metrological requirements.

Certificate registration no.	411133 MR2
Certificate unique ID	170711729
Effective date	2018-06-11
Expiry date	2022-11-02
Frankfurt am Main	2018-06-11

### DQS Medizinprodukte GmbH

Sigrid Uhlemann  
Managing Director

Dr. Thomas Feldmann  
Head of Certification Body

August-Schanz-Straße 21, 60433 Frankfurt am Main,  
Tel. +49 (0) 69 95427-300, [medical.devices@dqs-med.de](mailto:medical.devices@dqs-med.de)

DQS Medizinprodukte GmbH is a Notified Body according to Council Directive 93/42/EEC concerning medical devices with the Identification Number 0297.

Prepared for Romania



**Annex to certificate**  
**Certificate registration No.: 411133 MR2**  
**Certificate unique ID: 170711729**  
**Effective date: 2018-06-11**

## **MicroVention, Inc.**

1311 Valencia Ave.  
Tustin, CA, 92780  
United States of America

### **Production Sites:**

1.  
MicroVention, Inc.  
1311 Valencia Ave.  
Tustin, CA 92780  
United States of America
2.  
MicroVention, Inc.  
35 Enterprise,  
Aliso Viejo, CA 92656  
United States of America
3.  
MicroVention Costa Rica, S.R.L.  
Zona Franca Coyol  
Alajuela, Costa Rica



**Annex to certificate**  
**Certificate registration No.: 411133 MR2**  
**Certificate unique ID: 170711729**  
**Effective date: 2018-06-11**

**MicroVention, Inc.**

1311 Valencia Ave.  
 Tustin, CA, 92780  
 United States of America

Device Groups:	Device Family:	Devices:	Risk Class	Production Site
Embolization Prothese	V-Trak® Detachable Embolization Coils System	MicroPlex® Platinum Detachable Embolization Coils - Helical IStandard Helical-Reg. and Soft 10 & 18, - HyperSoft® 10 & 3D - Complex 10 & 18 - Compass 10 & 18, - COSMOS® 10 & 18 - VFC™	III	1,2,3
		HydroCoil® Platinum/Hydrogel Detachable Embolization Coils - HydroCoil® 10 & 14 & 18, - HydroSoft® 10 - HydroFill® - HydroFrame® 10 & 18 - HydroSoft 3D	III	1,2,3
	AZUR® Peripheral Coil System	AZUR® HydroCoil Detachable Embolization Coils 18 & 35 AZUR® HydroCoil Pushable Embolization Coils 18 & 35 AZUR® Framing Detachable Coils 18 & 35 AZUR® Injectable Coil System 18 & 35 AZUR Detachable 18 AZUR PURE Pushable Coil System 18 & 35 AZUR CX Detachable 18 & 35	IIb	1,2,3
Detachment Controller Units		V-Grip® Detachment Controller	IIa	1
		V-Grip® PLUS Detachment Controller	IIa	1
		WEB Detachment Controller	IIa	1
		AZUR® Detachment Controller	IIa	1



**Annex to certificate**  
**Certificate registration No.: 411133 MR2**  
**Certificate unique ID: 170711729**  
**Effective date: 2018-06-11**

**MicroVention, Inc.**

1311 Valencia Ave.  
 Tustin, CA, 92780  
 United States of America

Device Groups:	Device Family:	Devices:	Risk Class	Production Site	
Intravascular Access Devices		Traxcess® 14 Guidewire	III	1	
		Traxcess® 14 EX Guidewire			
		Traxcess® 14 SELECT Guidewire			
		Traxcess® 7 Mini Guidewire			
		Traxcess® 7 Mini XSoft Guidewire			
		Traxcess® Docking Wire			IIa
Catheters		Chaperon® Guiding Catheter System	III	1	
		Headway® 17 Advanced Soft Microcatheter			1,3
		Headway® 17 Advanced Microcatheter			1,3
		Headway® 21 Microcatheter			1,3
		Headway® 27 Microcatheter			1,3
		Headway Duo Microcatheter			1,3
		Scepter C™ Occlusion Balloon Catheter			1,3
		Scepter XC™ Occlusion Balloon Catheter			1,3
		SOFIA Distal Access Catheter			1,2,3
		SOFIA Select Catheter			1,2,3
		SOFIA PLUS Catheter			1,2,3
		SOFIA Flow PLUS Catheter			1,2,3
		SOFIA Guiding Catheter			1,2,3
		SOFIA Flow Catheter			1,2,3
		KANSHAS Drug Coated Balloon			1
		VIA 117 Microcatheter			1
		VIA 121 Microcatheter			
VIA 127 Microcatheter					
VIA 133 Microcatheter					
Wedge Microcatheter	1				





**Annex to certificate**  
**Certificate registration No.: 411133 MR2**  
**Certificate unique ID: 170711729**  
**Effective date: 2018-06-11**

**MicroVention, Inc.**

1311 Valencia Ave.  
 Tustin, CA, 92780  
 United States of America

Device Groups:	Device Family:	Devices:	Risk Class	Production Site
Stents		LVIS™ Intraluminal Support Device	III	1,2,3
		LVIS Jr.™ Intraluminal Support Device		
		FRED® Flow Re-Direction Endoluminal Device	III	1,3
		FRED Jr.® Flow Re-Direction Endoluminal Device		
		CASPER IRX Carotid Artery Stent System	III	1,3
		Roadsaver Carotid Artery Stent System		
		Peripheral vascular stent system		CASPER Peripheral Vascular Stent System
RENZAN Peripheral Vascular Stent System	IIb			1,3
Clot Retriever		ERIC™ Retrieval Device	III	1,2
Liquid Embolic System		PHIL™ Liquid Embolic System	III	1
Microspheres		HydroPearl Microspheres	IIb	1
		LifePearl Microspheres	III	1,2
Embolic Protection Device (EPS)		Empro Embolic Protection System	III	1,2,3
		Nanoparasol Embolic Protection System		
Aneurysm Embolization Device		WEB IAneurysm Embolization System	III	1



**Headway 156cm**  
Microcatheter

# Now with *Duo!* Technology

microcatheter

Hybrid braid/coil construction to improve stent delivery experience



**Headway 21** 156cm  
Microcatheter

**Headway 27** 156cm  
Microcatheter

- LVIS**  
Intraluminal Support Device
- ERIC**  
Endovascular Retriever with Identifiable Cages
- FRED Jr.**  
Flow Re-Direction Endoluminal Device
- Sofia**  
Distal Access Catheter  
Soft torquable catheter. Optimized For Intracranial Access
- FRED**  
Flow Re-Direction Endoluminal Device
- Sofia**  
Distal Access Catheter  
Soft torquable catheter. Optimized For Intracranial Access

**Stretch Resistant Shaft**

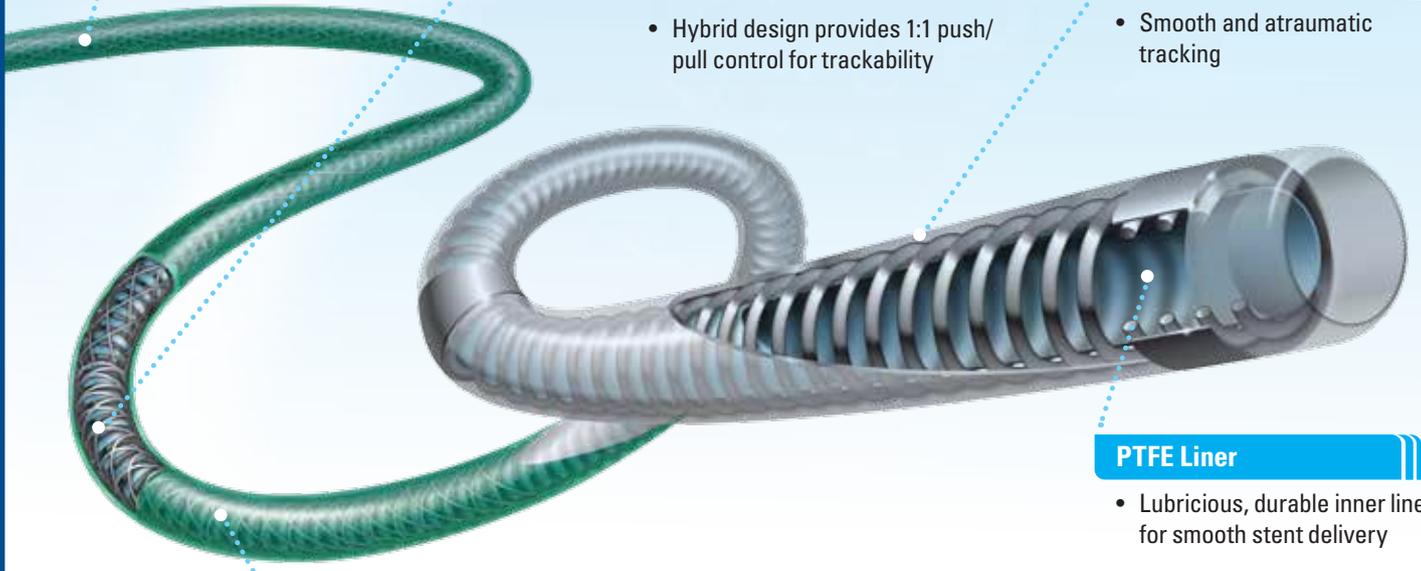
- For stability and prevention of catheter body twisting

**Hybrid Braid & Coil Design**

- Coil reinforcement provides lumen integrity, bending flexibility and excellent shape retention
- Proximal variable braid reinforcement provides support and torque control
- Hybrid design provides 1:1 push/pull control for trackability

**Soft Distal Shaft**

- Smooth and atraumatic tracking



**Lubricious Hydrophilic Coating**

- Reduced friction during navigation in tortuous anatomy and during lengthy procedures

**PTFE Liner**

- Lubricious, durable inner liner for smooth stent delivery

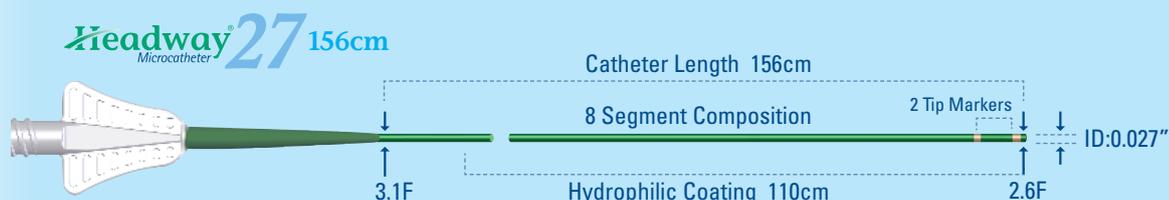
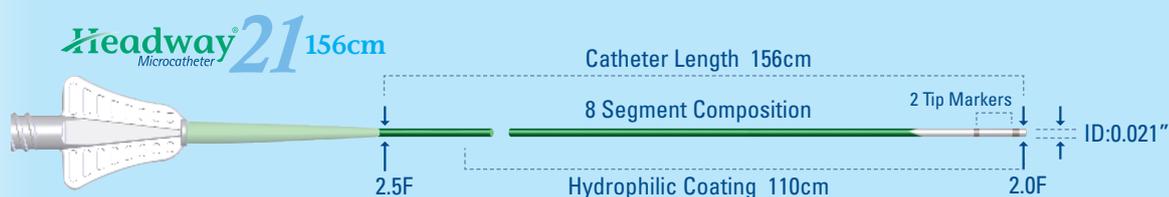
## SPECIFICATIONS

### Headway® 21 & 27 (156cm) Microcatheter

Microcatheter with Hydrophilic Coating

Packed 1 per box; includes shaping mandrel and introducer sheath

Product Name	Description	Product Code	ID (inches)	Tip Shape	Usable Length (cm)	OD Prox./Distal (French)	Tip Markers
Headway 21 156cm	Straight	MC212156S	0.021	STR	156	2.5 / 2.0	2
Headway 27 156cm	Straight	MC272156S	0.027	STR	156	3.1 / 2.6	2



#### Features

#### Benefits



Hybrid Braid/Coil Design

- Proximal column strength for stability and torqueability
- 156cm working length with distal flexible transitions
- Resistance to kinking and ovalization
- Resistance to stretching
- Resistance to twisting

- ✓ Facilitate access to the lesion
- ✓ Smooth device trackability
- ✓ Controlled device delivery

#### INDICATIONS FOR USE

The Headway Microcatheter is intended for general intravascular use, including the peripheral, coronary and neuro vasculature for the infusion of diagnostic agents, such as contrast media, and therapeutic agents, such as occlusion coils.

MICROVENTION, Headway, LVIS, FRED, Sofia and ERIC are registered trademarks of MicroVention, Inc.  
 • Scientific and clinical data related to this document are on file at MicroVention, Inc. Refer to Instructions for Use, contraindications and warnings for additional information. ©2016 MicroVention, Inc. MM457(i) 3/16



**MicroVention, Inc.**  
**Worldwide Headquarters**  
 1311 Valencia Avenue  
 Tustin, CA 92780 USA  
 MicroVention UK Limited  
 MicroVention Europe, S.A.R.L.  
 MicroVention Deutschland GmbH  
**Web**

PH +1.714.247.8000

PH +44 (0) 191 258 6777  
 PH +33 (1) 39 21 77 46  
 PH +49 211 210 798-0  
[microvention.com](http://microvention.com)



# Innovative Catheter Technology

**Unique braid/coil construction for the lowest profile of any 0.014"/0.012" guidewire compatible catheter**

## Headway® Duo Microcatheter

Microcatheter with Hydrophilic Coating

1 per box; includes shaping mandrel and introducer sheath

Product Name	Product Code	ID Body/Tip (inches)	Tip Shape	Usable Length (cm)	Flexible Distal Length (cm)	OD Prox./Dist. (French)	Dead Space	Tip Markers
Headway Duo, 156cm	MC162156S	0.0165 / 0.0165	STR	156	9	2.1 / 1.6	0.34 ml	2
Headway Duo, 167cm	MC162167S	0.0165 / 0.013	STR	167	9	2.1 / 1.3	0.35 ml	1

### Features

#### Hybrid Braid/Coil Design

Tight pitch coil provides lumen integrity and bending flexibility  
Proximal braid provides firmness and a torqueable catheter body  
Resists kinking and ovalization

#### Small OD, Large ID

**156cm Headway® Duo** microcatheter compatible with coils and  $\leq 0.014"$  OD guidewires  
0.0165" body ID microcatheter with low profile distal tip  
**167cm Headway® Duo** microcatheter compatible with  $\leq 0.014"/\leq 0.012"$  (proximal/distal OD) guidewires  
0.0165" body ID microcatheter with 0.013" ID distal tapered tip

#### Superior Trackability

True 1:1 push/pull while tracking through tortuous anatomy

#### Liquid Embolic Compatibility

Compatible with PHIL™ Liquid Embolic, Onyx™ Liquid Embolic, nBCA and DMSO  
High burst strength (700 psi)  
Long length allows distal lesion access

#### Soft Distal Tip

Smooth, atraumatic tracking  
Excellent tip "painting" ability



**MicroVention, Inc.**  
**Worldwide Headquarters**  
1311 Valencia Avenue  
Tustin, CA 92780, USA  
MicroVention UK Limited  
MicroVention Europe, S.A.R.L.  
MicroVention Deutschland GmbH  
**Web**

PH +1.714.247.8000

PH +44 (0) 191 258 6777  
PH +33 (1) 39 21 77 46  
PH +49 211 210 798-0  
**microvention.com**



MICROVENTION and Headway are registered trademarks of MicroVention, Inc. PHIL is a trademark of MicroVention, Inc. Onyx is a trademark of Covidien. • Scientific and clinical data related to this document are on file at MicroVention, Inc. Refer to Instructions for Use for additional information. ©2014 MicroVention, Inc. MM268(I) Rev.C 8/14

**Headway 156cm**  
Microcatheter

# Now with **Duo!** Technology

microcatheter

Hybrid braid/coil construction to improve stent delivery experience



**Headway 21** 156cm  
Microcatheter

**Headway 27** 156cm  
Microcatheter

- LVIS**  
Intraluminal Support Device
- ERIC**  
Endovascular Retriever with Identifiable Cages
- FRED Jr.**  
Flow Re-Direction Endoluminal Device
- Sofia**  
Distal Access Catheter  
Soft torquable catheter. Optimized for Intracranial Access
- FRED**  
Flow Re-Direction Endoluminal Device
- Sofia**  
Distal Access Catheter  
Soft torquable catheter. Optimized for Intracranial Access

**Stretch Resistant Shaft**

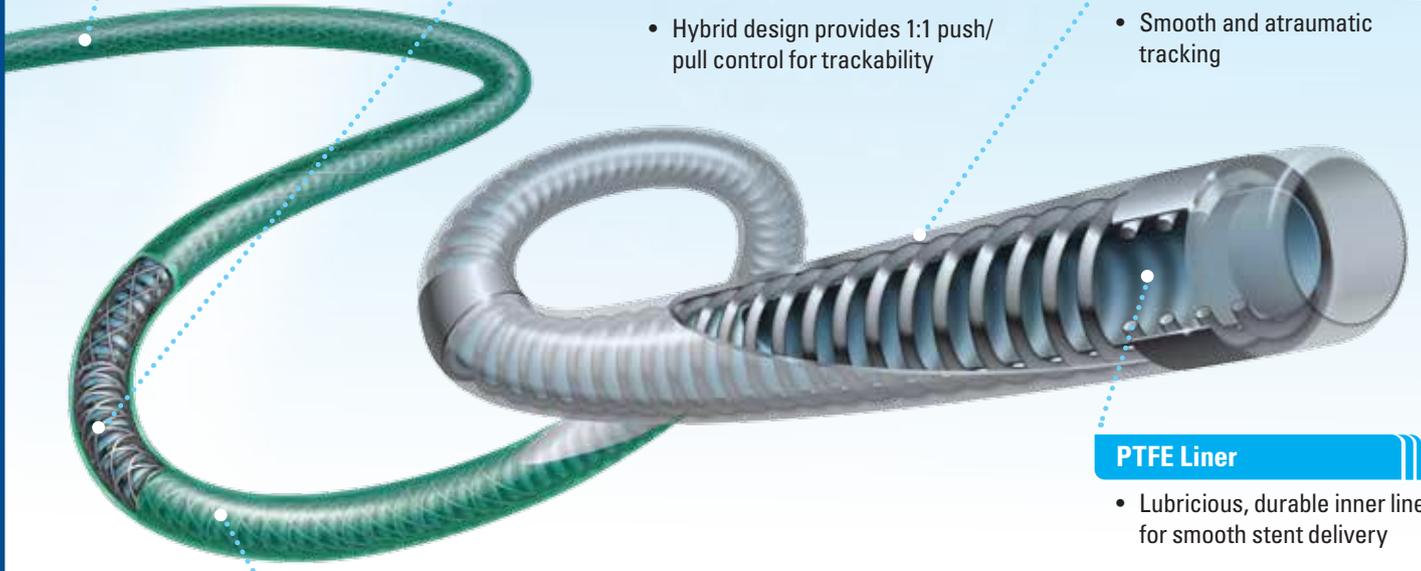
- For stability and prevention of catheter body twisting

**Hybrid Braid & Coil Design**

- Coil reinforcement provides lumen integrity, bending flexibility and excellent shape retention
- Proximal variable braid reinforcement provides support and torque control
- Hybrid design provides 1:1 push/pull control for trackability

**Soft Distal Shaft**

- Smooth and atraumatic tracking



**Lubricious Hydrophilic Coating**

- Reduced friction during navigation in tortuous anatomy and during lengthy procedures

**PTFE Liner**

- Lubricious, durable inner liner for smooth stent delivery

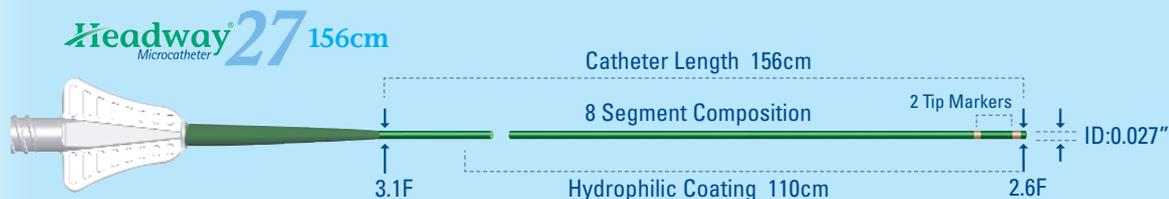
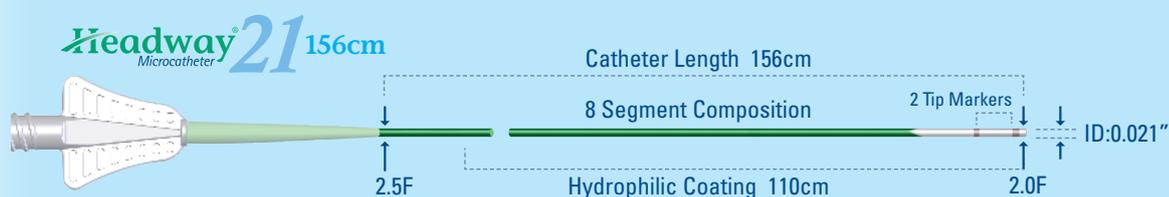
## SPECIFICATIONS

### Headway® 21 & 27 (156cm) Microcatheter

Microcatheter with Hydrophilic Coating

Packed 1 per box; includes shaping mandrel and introducer sheath

Product Name	Description	Product Code	ID (inches)	Tip Shape	Usable Length (cm)	OD Prox./Distal (French)	Tip Markers
Headway 21 156cm	Straight	MC212156S	0.021	STR	156	2.5 / 2.0	2
Headway 27 156cm	Straight	MC272156S	0.027	STR	156	3.1 / 2.6	2



### Features

### Benefits



Hybrid Braid/Coil Design

- Proximal column strength for stability and torqueability
- 156cm working length with distal flexible transitions
- Resistance to kinking and ovalization
- Resistance to stretching
- Resistance to twisting

- ✓ Facilitate access to the lesion
- ✓ Smooth device trackability
- ✓ Controlled device delivery

### INDICATIONS FOR USE

The Headway Microcatheter is intended for general intravascular use, including the peripheral, coronary and neuro vasculature for the infusion of diagnostic agents, such as contrast media, and therapeutic agents, such as occlusion coils.

MICROVENTION, Headway, LVIS, FRED, Sofia and ERIC are registered trademarks of MicroVention, Inc. Scientific and clinical data related to this document are on file at MicroVention, Inc. Refer to Instructions for Use, contraindications and warnings for additional information. ©2016 MicroVention, Inc. MM457(i) 3/16



**MicroVention, Inc.**  
**Worldwide Headquarters**  
 1311 Valencia Avenue  
 Tustin, CA 92780 USA  
 MicroVention UK Limited  
 MicroVention Europe, S.A.R.L.  
 MicroVention Deutschland GmbH  
**Web**

PH +1.714.247.8000

PH +44 (0) 191 258 6777  
 PH +33 (1) 39 21 77 46  
 PH +49 211 210 798-0  
[microvention.com](http://microvention.com)

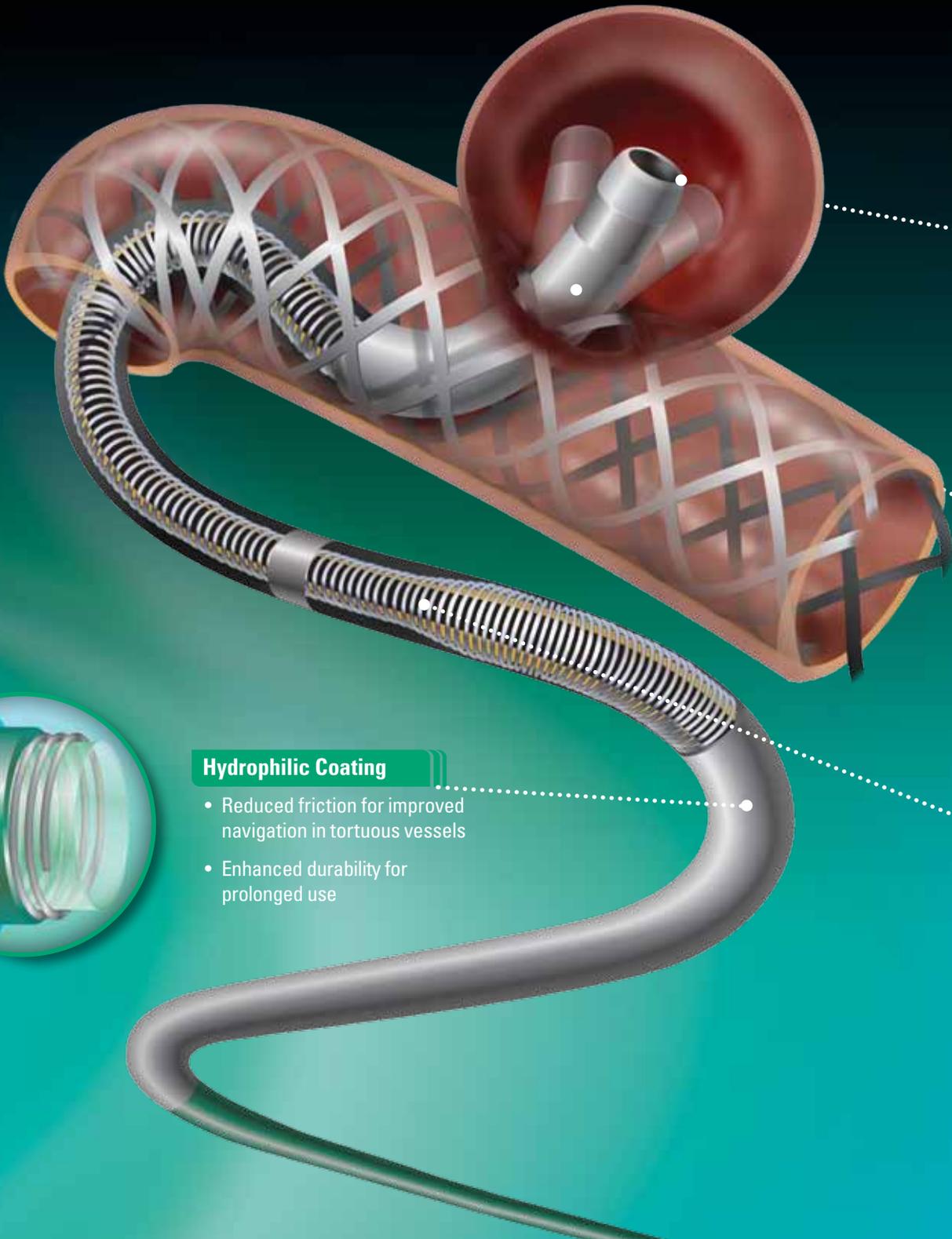
*Trackability / Shape Retention / Durability*

*Used with*





# HEADWAY® MICROCATHETER - N



### Hydrophilic Coating

- Reduced friction for improved navigation in tortuous vessels
- Enhanced durability for prolonged use

# EXT GENERATION CATHETER PERFORMANCE WITH IMPRO

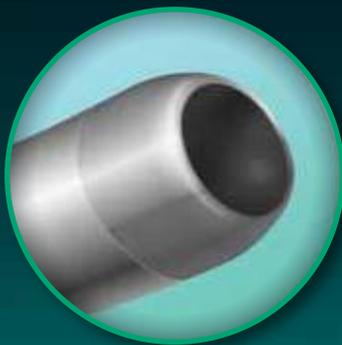
## Innovative Catheter Construction

**Headway 17** *The unique construction of the Headway 17 microcatheter combines 7 progressive segments with a tapered PTFE liner and an atraumatic soft tip for enhanced performance in challenging anatomies. Two levels of softness and superior tip shapability allow for an optimized configuration for every procedure.*

**Headway 21 and 27** *The multi-segmented design of the Headway 21 and 27 microcatheters provides superb trackability and resistance to elongation, while the combination of a tight-pitch coil reinforcement and PTFE inner liner allows for the delivery of stents in a smooth, controlled manner.*

### Rounded Tip

- Atraumatic soft tip facilitates smooth catheter advancement
- Rounded shape allows easier navigation through a deployed stent



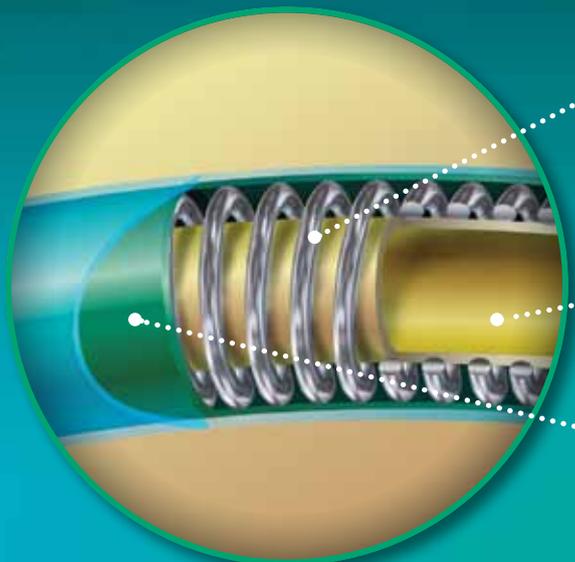
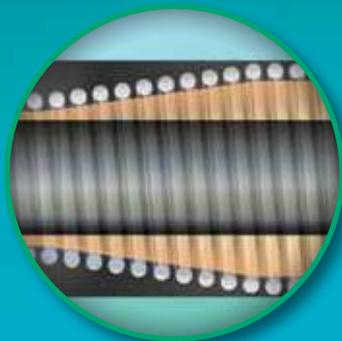
### Designed for Tip Shapability

- Easy to shape with steamer
- Advanced technology for better shape retention on distal tip



### Tapered PTFE Liner with Coil Reinforcement

- Tapered liner design allows true 1:1 push/pull control
- Tight-pitch coil reinforcement resists ovalization while maintaining maximum flexibility

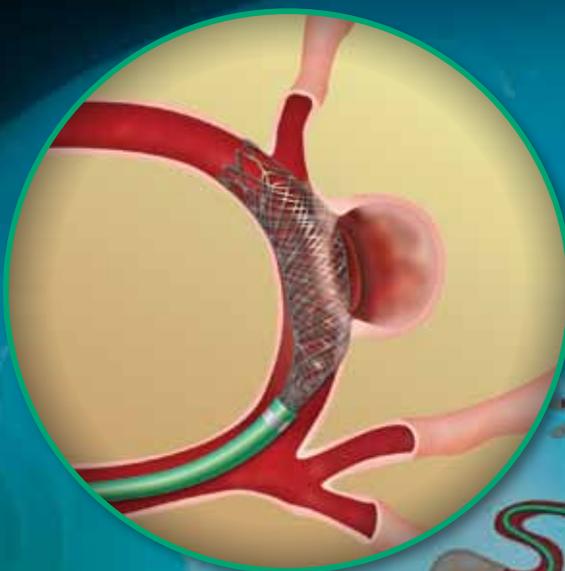


Headway<sup>®</sup> 21  
Microcatheter

Used with  **LVIS**  
Intraluminal Support Device

Headway<sup>®</sup> 27  
Microcatheter

Used with **FRED**  
Flow Redirection Embolism Device



### Coil Reinforced Catheter

- Tight pitch coil wind resists kinking and ovalization while maintaining maximum flexibility

### PTFE Liner

- Lubricious, yet durable inner liner for smooth stent delivery

### Robust Catheter Body

- Offers enhanced resistance to stretching and elongation while delivering stents or other less flexible devices



# Headway

Microcatheter

## A Complete Range of Sizes & Softness

Headway® microcatheters offer a wider selection of access solutions. With three sizes, two levels of support and three pre-shaped tip options available, there is a Headway microcatheter available for use in nearly any procedure. All Headway microcatheters are designed to optimize the performance of LVIS® and LVIS® Jr. Intraluminal Support Devices, FRED® System flow diverting stents, ERIC® Retrieval Devices, and embolic coils. Headway microcatheters are also PHIL™ Liquid Embolic System and DMSO compatible.

CHOOSE  
YOUR SIZE &  
LEVEL OF  
SOFTNESS

### SOFT SUPPORT ZONE

Soft support zone for greater sensitivity to coil delivery force

Headway<sup>17</sup> Advanced Soft  
Microcatheter

Headway<sup>17</sup> Advanced  
Microcatheter

Headway<sup>17</sup> Advanced  
Microcatheter - Pre-shaped tip

Pre-Shaped Tips



45°



90°



"J"

Headway<sup>21</sup>  
Microcatheter

Headway<sup>27</sup>\*  
Microcatheter

### ENHANCED SUPPORT ZONE

More support in the distal shaft to reduce catheter movement in challenging anatomy and ensure accurate device delivery.

\*Also available in 156cm hybrid braid/coil design version for improved flow diverter delivery experience.

# SPECIFICATIONS

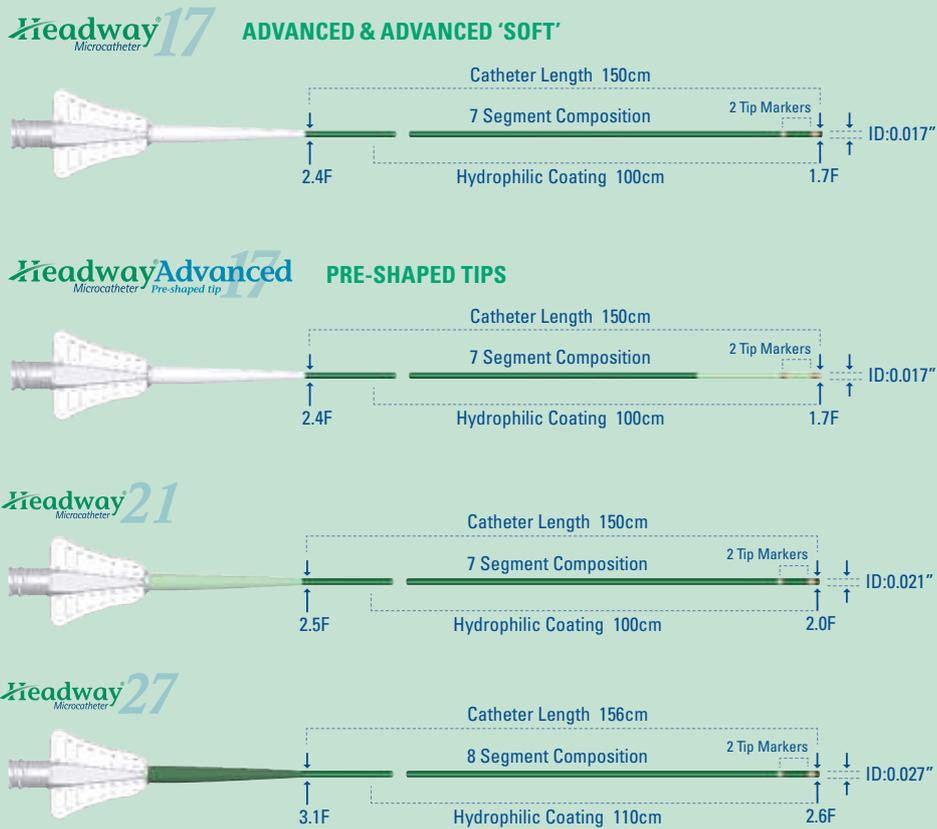
## Headway®

Microcatheter with Hydrophilic Coating

1 per box. Includes shaping mandrel and introducer sheath.

Product Name	Description	Product Code	ID (inches)	Tip Shape	Usable Length (cm)	OD Prox./Distal (French)	Tip Markers
Headway17 Advanced 'Soft'	Straight	MC172150S	0.017	STR	150	2.4 / 1.7	2
Headway17 Advanced	Straight	MC172150SX	0.017	STR	150	2.4 / 1.7	2
Headway17 Advanced	Pre-shaped tip 45	MC17215045X	0.017	45	150	2.4 / 1.7	2
Headway17 Advanced	Pre-shaped tip 90	MC17215090X	0.017	90	150	2.4 / 1.7	2
Headway17 Advanced	Pre-shaped tip J	MC172150JX	0.017	J	150	2.4 / 1.7	2
Headway21	Straight	MC212150S	0.021	STR	150	2.5 / 2.0	2
Headway27	Straight	MC272150S	0.027	STR	150	3.1 / 2.6	2
Headway27	Straight	MC272156S	0.027	STR	156	3.1 / 2.6	2

Dead space of Headway® 17 microcatheter is 0.41cc and 0.26cc with MicroVention hub adaptor.



Includes Shaping Mandrel and Introducer Sheath



[www.microvention.com](http://www.microvention.com)

**MicroVention, Inc.**  
 Worldwide Headquarters  
 1311 Valencia Avenue  
 Tustin, CA 92780 USA  
 PH +1.714.247.8000  
 PH 1.800.990.8368

**MicroVention UK Limited**  
 Suite 3, The Barracks Building  
 10 Cliffords Fort, North Shields  
 Tyne and Wear, NE30 1JE UK  
 PH +44 (0) 191 258 6777  
 F +44 (0) 191 258 5999

**MicroVention Europe**  
 30 bis, rue du Vieil Abrevoir  
 78100 Saint-Germain-en-Laye  
 France  
 PH +33 (1) 39 21 77 46  
 F +33 (1) 39 21 16 01

**MicroVention Deutschland GmbH**  
 Hildebrandstr. 4 F  
 D-40215, Düsseldorf  
 Germany  
 PH +49 211 210 798-0  
 F +49 211 210 798-29

MICROVENTION, Headway, LVIS, FRED and ERIC are registered trademarks of MicroVention, Inc. PHIL is a trademark of MicroVention, Inc.  
 • Scientific and clinical data related to this document are on file at MicroVention, Inc. Refer to Instructions for Use, contraindications and warnings for additional information. © 2014 MicroVention, Inc.MM304(I) Rev.B 11/14