1. The Amara Balloon Dilatation Catheter is designed for rapid deflation. To deflate completely, maintain endoscopic view of the proximal end of the balloon as a vacuum is applied using the inflation device.

**Precaution:** Do not pull back on the catheter until the balloon is deflated completely.

**Warning:** THE BALLOON MUST BE THOROUGHLY DEFLATED AND ALL FLUID REMOVED PRIOR TO WITHDRAWAL (approximately 10-30 seconds depending on the balloon size and inflation medium).

**Precaution:** For improved withdrawal, straighten the distal end of the endoscope as much as possible. Any excess bend in the working channel will increase the force needed to withdraw the catheter through the endoscope.

2. Slowly remove the catheter from the endoscope.

**Precaution:** If excessive resistance is felt, remove the endoscope and balloon catheter together as a complete unit to prevent damage to body tissue, the catheter or endoscope.

3. After use, this product may be a potential biohazard. Handle and dispose of in accordance with hospital, related to product contaminated by blood. For one time use only. Do not reuse. Do not re-sterilize. Read instructions prior to use.

**IX. DISCLAIMER OF WARRANTY AND LIMITATION OF REMEDY**

The manufacturer has exercised reasonable care in the manufacture of this device. Both manufacturer and distributor excludes all warranties, whether express or implied by operation of law or otherwise, including but not limited to, any implied warranties of merchantability or fitness, since handling and storage of this device as well as factors relating to the patient, the diagnosis, treatment, surgical procedures, and other matters beyond our control directly affect this device and the results obtained from its use. Both manufacturer and distributor shall not be liable for any incidental or consequential loss, damage, or expense, directly or indirectly arising from the use of this device. The manufacturer neither assumes, nor authorizes any other person to assume for it, any other or additional liability or responsibility in connection with this device.

**LABELING SYMBOLS DEFINITION**

- **REF:** Device reference
- **LOT:** Device Lot number/Serial Number
- **Expiry date, Use before date, Use by:**
- **STERILE EO:** Sterilized by Ethylene Oxide
- **Device Intended for Single Use only. Do not reuse:**
- **Caution, consult accompanying documents:**

**Manufactured by:**
NATEC Medical Ltd.
Maeva Centre Building,
Silicon Avenue,
Ebene Business Park,
Reduit 72201, Mauritius
www.natec-medical.com

**Distributed by:**
Envaste Ltd.
Maeva Centre Building,
Silicon Avenue,
Ebene Business Park,
Reduit 72201, Mauritius
www.envaste.com

**EC REP**
EMERGO EUROPE
Molenstraat 15
2513 HR, The Hague
The Netherlands

**0459**

**Neighboring Languages:**

- **Mauritian Creole:**
- **French:**

**Amara**

**BALLOON DILATION CATHETER**

**INSTRUCTIONS FOR USE**

**CAREFULLY READ ALL INSTRUCTIONS PRIOR TO USE. FAILURE TO OBSERVE ALL WARNINGS AND PRECAUTIONS MAY RESULT IN COMPLICATIONS**

**Guidewire lumen**

**Strain relief**

**Y-Connector**

**Shaft**

**Balloon**

**Compliance label**

**Temperature limitation**

**Non pyrogenic**

**Production date**

**Contents:** One (1) AMARA Balloon Dilation Catheter sterilized with ethylene oxide gas. Non-pyrogenic. These instructions apply to all balloon diameters and lengths.

**Product Information**

- Balloon compliance is measured at 37.5°C (In vitro Compliance).
- The balloon compliance table is available on the package as well as on the product label.
- The balloon diameter variation with respect to pressure and Rated Burst Pressure (RBP) are indicated on the label affixed on both inner packages, packaging box as well as on the product label.
- Do not exceed the RBP recommendation.

- Maximum Guide Wire Diameter: 0.035”in (0.89mm).

**Minimum Working Channel Alimentary Tract:**

- ≥ Ø2.8 or 3.2 mm* for Olympus Brand Endoscopes
- ≥ Ø3.2 mm for Pentax or Fujinon Brand Endoscopes

**Minimum Working Channel Biliary Tract:**

- ≥ Ø4.2 mm

After use, dispose product and packaging in accordance with hospital, administrative and/or local government policy related to product contaminated by blood. For one time use only. Do not reuse. Do not re-sterilize. Read instructions prior to use.

*≥3.2mm for 18/19/20mm balloon size.

**Packaging**

Medical device delivered in a peel-off pouch as inner packaging and a cardboard packaging box.

One (1) unit per box (one (1) catheter with a protection tubing coiled in an insert card).

Do not use if the package is opened or damaged.

Use before the expiry date clearly indicated on the label. Store in a dry place below 40°C. Keep away from light.
I. DEVICE DESCRIPTION

The AMARA Balloon Dilation Catheter is capable of 3 distinct and progressively larger sizes diameters via controlled radial expansion. The Amara is composed of a proximal dual-lumen shaft, a single lumen distal tubing, a balloon at the distal end and a distal soft tip. The proximal shaft has a Luer-lock Y-connector (hub) for balloon inflation at its proximal end. The hub consists of a guide wire lumen and an inflation lumen. Catheter is available in 180 or 240 cm lengths. Maximum guide wire diameter is 0.035" (0.89 mm).

The balloon is designed to reach specific diameters at specific pressures (see compliance table on the labels). Two radiopaque markers are placed under the balloon segment of the catheter to provide visual reference points fluoroscopically for balloon positioning within the stricture. The catheter includes a smooth, soft and tapered atraumatic tip to facilitate advancement of the catheter through the stricture.

The AMARA Balloon Catheter is available in balloon sizes 10/11/12 mm, 12/13/15 mm, 16/16.5/18 mm and 18/19/20 mm. Balloon diameter and length are printed on the "inflation leg" of the hub, and the lot number is printed on the flag between inflation and guide wire leg of hub. These details are also printed on the labels.

II. INDICATIONS

The AMARA Balloon Catheter is indicated for use in adult and adolescent populations to endoscopically dilate strictures of the alimentary tract. Also indicated in adults for endoscopic dilatation of the Sphincter of Oddi following sphincterotomy. (Dilatation Assisted Stone Extraction for endoscopic dilatation of the Sphincter of Oddi following strictures of the alimentary tract. Also indicated in adults and adolescent populations to endoscopically dilate strictures of the alimentary tract.)

III. CONTRAINDICATIONS

Those specific to the primary endoscopic procedure to be performed in gaining access to the dilation site. Those specific to dilation include, but are not limited to:

- Uncooperative patient
- Hemorrhagic lesions, ulcers or strictures
- Vascular, aneurysm
- Inability to advance balloon dilator through stricture area
- Gauging palpation
- Known or suspected perforation
- Severe inflammation
- Scarred adjacent to dilation site

IV. WARNINGS

- The device is designed and intended for single use only. DO NOT REPROCESS AND/OR REUSE. Reuse or reprocessing may create a risk of contamination of the device and/or cause patient infection or cross-infection, including, but not limited to the transmission of infectious disease(s) from one patient to another. Contamination of the device may lead to injury, illness or death of the patient. Reuse or reprocessing may compromise the structural integrity of the device and/or lead to device failure which, in turn, may result in patient injury, illness and death. The manufacturer will not be responsible for any direct, incidental or consequential damages resulting from resterilisation or reuse.
- Inspect the device, prior to procedure, to verify functionality and lack of damaged parts. Do not use the device if the outer or the inner package is damaged or opened.
- When the catheter is in the body, it should be manipulated while under sufficient and/or high quality fluoroscopy. Prior to withdrawing the catheter from the lesion, the balloon must be completely deflated under vacuum. If resistance is met during manipulation, determine the cause of the resistance before proceeding.
- Do not use air or any gaseous medium to inflate the balloon. Use only the recommended inflation medium.
- Do not expose the device to organic solvents, e.g. alcohol.
- Do not exceed the Rated Burst Pressure (RBP). The RBP is based on the results of the in vitro testing. At least 99.9% of the balloon (with 95% confidence) will not burst at or below their RBP. Use of a pressure monitoring device is recommended to prevent over pressurization. Inflation in excess of the rated burst pressure may cause the balloon to rupture.
- Only physicians thoroughly trained and educated in the performance of endoscopic balloon dilation should use this device. Physician should keep themselves informed and updated on recent publications about endoscopic balloon dilation techniques.
- To reduce the risk of digestive or GI tract damage, the inflated diameter of the balloon should approximate the diameter of the vessel just proximal and distal to the stenosis.
- Use prior to "use before" date.

V. PRECAUTIONS FOR USE

- Do not pre-inflate balloon.
- Prior to insertion of balloon dilator, negative pressure is mandatory to maintain balloon profile.
- Endoscope should remain as straight as possible when advancing or withdrawing balloon dilator.
- Entire balloon should be extended beyond tip of endoscope, and be completely visualized and positioned before inflation.
- During withdrawal of balloon dilator from endoscope, airless pressure is mandatory to maintain balloon deflation.
- Apply a water soluble lubricant to balloon to allow easier passage through accessory channel.

VI. POTENTIAL COMPLICATIONS

Complications that may result from this procedure include:

- Perforation
- Hemorrhage
- Aspiration
- Fever
- Sepsis/infection
- Allergic reaction to medication
- Hypotension
- Respiratory depression or arrest
- Cardiac arrhythmias or arrest

VII. SELECTION, PREPARATION OF DEVICE

A. Compatibility with Accessories

1. Open the package and remove Amara Catheter from the pouch.
2. Carefully center the catheter to the coiled configuration.
3. Insert carefully the guidewire size specified on the packaging label through the catheter lumen.

Note: Do not pre-inflate, pretest balloon or attempt to refold balloon into protective sleeve.

B. Introduction and Dilatation

Catheter insertion for Dilation of the Alimentary Tract

The Amara Balloon Dilation Catheter is designated to pass through the endoscope channel size specified on the package label. Removal of the rubber valve covering the working Channel may facilitate the insertion of larger balloon sizes (ie, 15 mm or larger).

1. Attach the balloon to a 60 ml (cc) inflation device with gauge to monitor balloon pressure.
2. To facilitate passage through the endoscope, apply negative pressure to the catheter before removing protective sleeve.
3. Remove the protective sleeve from the balloon.
4. Apply a lubricating agent to the balloon to facilitate passage through the endoscope accessory channel.
5. Maintain vacuum to the catheter during insertion through the scope.
6. Advance the catheter into the endoscope using short, 3-cm movements. Due to variations in endoscope construction, some resistance may be experienced immediately upon entering the endoscope and again 3-cm before exiting the distal end of the working channel.
7. Once the balloon has exited the distal end of the endoscope and is within the endoscopic view, the guidewire may be advanced beyond the distal end of the catheter. To use the guidewire as a catheter guide:
   - Advance guidewire into desired position beyond catheter tip (fluoroscopy is recommended).
   - Advance catheter over extended portion of the guidewire until balloon segment is in desired position. The Amara Catheter includes 2 radiopaque markers, located under the balloon to help proper placement across the stricture. Match the distal and proximal radiopaque markers of the balloon with the location of the stricture.
8. If desired, a standard 0.035" (0.89 mm) guidewire may be placed through the endoscope across the stricture area, and the catheter back loaded over the guidewire.

C. Balloon Inflation

Complications

1. Open the package and remove Amara Catheter from the pouch.
2. Carefully center the catheter to the coiled configuration.
3. Insert carefully the guidewire size specified on the packaging label through the catheter lumen.

Note: Do not pre-inflate, pretest balloon or attempt to refold balloon into protective sleeve.

VII. SELECTION, PREPARATION OF DEVICE

1. Open the package and remove Amara Catheter from the pouch.
2. Carefully center the catheter to the coiled configuration.
3. Insert carefully the guidewire size specified on the packaging label through the catheter lumen.

Note: Do not pre-inflate, pretest balloon or attempt to refold balloon into protective sleeve.

VIII. INTRODUCTION AND DILATATION

Catheter insertion for Dilation of the Alimentary Tract

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8. If desired, a standard 0.035" (0.89 mm) guidewire may be placed through the endoscope across the stricture area, and the catheter back loaded over the guidewire.

C. Balloon Inflation

Balloon must be filled with fluid. Depending on the technique, the balloon can be filled with either sterile water, sterile saline, or a contrast mixture (e.g. 70/30 saline and contrast medium).

Warning: NEVER USE AIR OR A GAS MEDIUM TO INFLATE THE BALLOON.

1. Each Amara Balloon Dilation Catheter is capable of the 3 distinct diameters listed on the package and hub labels. Inflate the balloon to the proper pressure within the balloon to the smallest balloon diameter and maintain until desired dilation is achieved. To achieve larger balloon diameters, increase pressure as indicated until the maximum inflation pressure listed on the catheter hub and package labels.

Warning: To prevent balloon burst, do not exceed the inflation pressure given for the largest diameter on the catheter's hub and package label. If the balloon does rupture, the significant level of pressure within the balloon occurs, deflate the balloon completely and carefully remove the balloon and endoscope together as a unit. Do not attempt to withdraw a ruptured balloon through the endoscope. Continue to dilate the stricture.

2. Monitor the pressure using an inflation device and pressure gauge system. As dilatation takes place, the pressure reading will determine the balloon pressure as necessary to meet the pressure given for the desired diameter (a slight drop in pressure is normal).