Minimal Access Aortic Surgery

Prof. Tristan D. Yan’s Instrument Set
**Obadia II Instruments Set**

**DC82161-30**
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**Yan Mini-Access Retractor - c: 108mm d: 96mm**

- This retractor has an innovative ultra-low-profile design
- It is ideal for both mini-sternotomy and mini-thoracotomy approaches
- Short rack and hinged arms allow the retractor to hug the chest wall unobtrusively
- Handle can be detached easily to avoid catching sutures
- Specifically designed retractor blades have three main advantages:
  - Textured surfaces firmly align with the edges of the sternum without slippage
  - Trapezoidal design reduces skin tension while allowing maximal opening
  - Unique latch system avoids blade rotation and allows interchangeable blades

<table>
<thead>
<tr>
<th>Blade Code</th>
<th>Width (mm)</th>
<th>Depth (mm)</th>
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<tbody>
<tr>
<td>DC82161-30</td>
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<td>DC82161-40</td>
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<td>DC82161-50</td>
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**DC82160-00 is provided with these three pairs of blades**
Obadia II Instruments Set

This retractor is designed to protect the mammary artery during mini-sternotomy. As the tip of the retractor is positioned in the para-sternal space, the Kocher portion retracts subcutaneous tissue laterally, while the tip would prevent direct contact between the sternal saw and the mammary artery.

Developed jointly with Prof. Tristan D. Yan, this set of instruments is specifically designed for Minimal Access Aortic Valve Surgery and Aortic Surgery, while being compatible with both mini-sternotomy and mini-thoracotomy approaches.

With a long-standing tradition, Delacroix-Chevalier craftsmanship delivers the finest quality surgical instruments with low-profile and ergonomic design, thus achieving the ultimate tactile control and surgical precision.

### MIS Scalpel Blade Handle - Adjustable Length: from 180mm to 250mm

<table>
<thead>
<tr>
<th>Blade Model</th>
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<tr>
<td>10</td>
<td>B130100</td>
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<td>11P</td>
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<td>18</td>
<td>B130180</td>
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<td>19</td>
<td>B130190</td>
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- Ideal for skin incision and annular decalcification
- Adjustable length with swivel lock enabling the scalpel to reach the left ventricular outflow tract
- Compatible with the following blade sizes

### Mammary Artery Protector - 230mm

- This retractor is designed to protect the mammary artery during mini-sternotomy.
- As the tip of the retractor is positioned in the para-sternal space, the Kocher portion retracts subcutaneous tissue laterally, while the tip would prevent direct contact between the sternal saw and the mammary artery.

### Hand-held Aortic Retractors - Adjustable Length: from 230mm to 300mm

- Malleable blades for retracting the ascending aorta externally
- Atraumatic low-profile design for retracting the aortic wall from the inside
- Textured surface for optimal gripping capability
- Adjustable length with swivel locking mechanism
- Two different sizes available:
  - Width: 20mm - Length: 230 to 300mm
  - Width: 30mm - Length: 230 to 300mm

### MIS Suction Handles - 260mm

- Double-curved design with flat suction tip to fit into narrow spaces
- Straight design with a beveled tip to effectively remove calcified debris from the aortic annulus

### Atraumatic Aortic Cross Clamp - 260mm

- Refined one-by-multiple ratchet for gradual and controlled clamping motion
- New flip lock system to fix the clamp in a desired position
- Atraumatic 3 x 2 DeBakey jaws to apply pressure evenly across the aorta and reduce crush injury
Prof. Tristan D. Yan's Instrument Set

DC13030-21S
DC13030-24S

Hybrid Aortic Forceps - 210mm and 240mm
- Hybrid design with fusion of DeBakey and Resano jaws
- Short segment of distal Resano jaws provide a secure grasp on calcified tissue
- Traumatic DeBakey jaws allow precise needle handling
- With the robust SuperGrip handle, the force applied by the fingers is transmitted directly to the distal jaws

DC80710-23
DC80711-23

Broad Aortic Valve Rongeurs - 230mm
- Straight and 45° upper-cut models ideal for mini-access approach
- Customized Rongeurs with broad “corn kernel” shaped jaws for efficient decalcification

DC21120-22

Aortic Leaflets Supercut Scissors - 220mm
- Streamlined curvature design to accommodate the scallop-shaped annulus
- Robust Supercut scissors with one blade having a razor sharp cutting edge and the other having a fine serrated edge to achieve a clean cut without pinching or slipping off tissue, ideal for heavily calcified tissue

DC80462-22

MIS Single Shaft Supercut Scissors - 220mm
- Low-profile single-shaft scissors for mini-access approach
- Streamlined curvature design to accommodate the scallop-shaped annulus
- Refined Supercut scissors with one blade having razor sharp cutting edge and the other having fine serrated edge to achieve clean cut without pinching or slipping off tissue

DC81301-01

MIS Suture Hook - Adjustable Length: from 200mm to 270mm
- Adjustable length with swivel lock for tightening a suture at various depths
- Groove marking every 5mm distally to be used as a ruler

DC50644-23S
DC50644-25S

Yan SuperGrip Needle Holders - 230mm and 250mm
- Robust spring action needle holders are essential for mini-access aortic surgery
- Tungsten jaws provide a secure grip on the needle even through a calcified annulus
- Ergonomic SuperGrip handle design reduces stress on the hand and wrist
- Round handles enable precise finger-tip rotational control over wrist control
- Suitable for both right handed and left handed surgeons
- Suitable for 5-0 to 2-0 needles
### MIS Single Shaft Needle Holders - 250mm
- Single shafted design for minimal access approaches, especially for the small annulus
- Tungsten jaws for a secure grip on the needle even through a calcified annulus
- Customized for both mini-sternotomy and mini-thoracotomy approaches
- Specifically reduced shaft length to optimize precision of needle movement
- Suitable for 5-0 to 2-0 needles

### SuperGrip Micro Forceps - 240mm
- 2.6mm DeBakey jaws for an atraumatic grasp of tissue and fine needle transfer
- Ergonomic round-handle design for smooth finger-tip rotational control

### Fine SuperGrip Micro Needle Holder - 230mm
- Refined Diamond Dust jaws for a secure and atraumatic grip on the needle
- Ergonomic round-handle design to facilitate precise finger-tip rotational control
- Suitable for 8-0 to 5-0 needles

### MIS Single Shaft Curved Scissors - 250mm
- Customized for both mini-sternotomy and mini-thoracotomy approaches
- Designed for aortic leaflet resection and coronary button mobilization
- Reduced spring action force for superior balance and tactile feedback

### Chest Tube Passer - 240mm and 355mm
- Strong grasping jaws
- To deliver chest drain tubes

### Finger-Extension Knot Pusher - 50mm
- Simple extension by one-phalanx length to reach the annulus or pulmonary vein
- Single-surgeon-operating design, without requiring an assistant’s help
- Low-profile distal portion to reach confined area when tying annular sutures
DC81912-01

Sterilization Trays for Prof. Yan’s Instrument Set - 540x250x70mm

- Ensures the safety of your instruments during transportation, cleaning and sterilization
- Recommended to maintain the high level performances of Prof. Yan’s instrument set
- Provided with lid and silicone brackets

DC81912-02

Sterilization Trays for Prof. Yan’s Instrument Set - 540x250x70mm

- Ensures the safety of your instruments during transportation, cleaning and sterilization
- Recommended to maintain the high level performances of Prof. Yan’s instrument set
- Provided with lid and silicone brackets

DC81912-03

Sterilization Trays for Prof. Yan’s Instrument Set - 540x250x70mm

- Ensures the safety of your instruments during transportation, cleaning and sterilization
- Recommended to maintain the high level performances of Prof. Yan’s instrument set
- Provided with lid and silicone brackets
Prof. Tristan D. Yan's Recommended Set

Surgical Approach and Aortic Valve Exposure

- DC82160-00: Yan Mini-Access Retractor
- DC81330-01: Scalpel Blade Handle - From 180 to 250mm
- DC33010-25: Mammary Artery Protector - 230mm
- DC33020-20: Narrow Hand-held Aortic Retractor - From 230 to 300mm
- DC80419-36: Chest Tube Passer - 355mm
- DC80710-23: Straight Aortic Valve Rongeur - 230mm
- DC80711-23: 45° Upper-cut Aortic Valve Rongeur - 230mm
- DC21120-22: Aortic Leaflets Supercut Scissors - 220mm
- DC80462-22: Single Shaft Supercut Scissors - 220mm
- DC81301-01: MIS Suture Hook - From 200 to 270mm
- DC33010-25: MIS Curved Scissors - 250mm
- DC33020-25: MIS Strongly Curved Scissors - 250mm
- DC50087-26: Atraumatic Aortic Cross Clamp - 260mm
- DC71337-33-C: MIS Curved Sucker - 260mm
- DC71337-33-S: MIS Straight Sucker - 260mm
- DC80711-23: 45° Upper-cut Aortic Valve Rongeur - 230mm
- DC50644-23S: Yan Heavy Style SuperGrip Needle Holder - 230mm
- DC50644-25S: Yan Heavy Style SuperGrip Needle Holder - 250mm
- DC80012-25: MIS Curved Needle Holder - 250mm
- DC80013-25: MIS Straight Needle Holder - 250mm
- DC80419-36: Chest Tube Passer - 355mm
- DC80420-24: Chest Tube Passer - 240mm
- DC71710-50: Finger-Extension Knot Pusher - 50mm

Aortic Valve and Aortic Replacement

- DC13030-21S: Strong Hybrid Forceps - 210mm
- DC13030-24S: Strong Hybrid Forceps - 240mm
- DC80710-23: Straight Aortic Valve Rongeur - 230mm
- DC80711-23: 45° Upper-cut Aortic Valve Rongeur - 230mm
- DC21120-22: Aortic Leaflets Supercut Scissors - 220mm
- DC80462-22: Single Shaft Supercut Scissors - 220mm
- DC81301-01: MIS Suture Hook - From 200 to 270mm
- DC13030-24S: Strong Hybrid Forceps - 240mm
- DC50644-23S: Yan Heavy Style SuperGrip Needle Holder - 230mm
- DC50644-25S: Yan Heavy Style SuperGrip Needle Holder - 250mm
- DC80012-25: MIS Curved Needle Holder - 250mm
- DC80013-25: MIS Straight Needle Holder - 250mm
- DC80419-36: Chest Tube Passer - 355mm
- DC80420-24: Chest Tube Passer - 240mm
- DC71710-50: Finger-Extension Knot Pusher - 50mm

Coronary Button Reimplantation

- DC12550-24S: SuperGrip Micro Forceps - 240mm
- DC50203-23S: Fine SuperGrip Micro Needle Holder - 230mm
- DC80111-25: MIS Curved Scissors - 250mm
- DC80112-25: MIS Strongly Curved Scissors - 250mm

Sterilization Trays

- DC81912-01: Sterilization Trays - 540x250x70mm
- DC81912-02: Sterilization Trays - 540x250x70mm
- DC81912-03: Sterilization Trays - 540x250x70mm