### Ultrasound-Guided Thoracentesis Simulator

#### MW4A
Ultrasound-Guided Thoracentesis Simulator - Strap-on set -

#### MW15
Ultrasound-Guided Pericardiocentesis Simulator

#### MW17
Ultrasound-Guided Thoracentesis/ Pericardiocentesis Simulator

---

**Set Includes**

<table>
<thead>
<tr>
<th>MW4</th>
<th>MW4A</th>
<th>MW15</th>
<th>MW17</th>
</tr>
</thead>
<tbody>
<tr>
<td>adult chest model</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>mid-axially line unit</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>mid-scapular line unit</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>pericardiocentesis unit</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>pillow for positioning</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>explanation model for thoracentesis</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>instruction manual</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Accessories**

<table>
<thead>
<tr>
<th>MW4</th>
<th>MW4A</th>
<th>MW15</th>
<th>MW17</th>
</tr>
</thead>
<tbody>
<tr>
<td>irrigator</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>funnel</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>syringes (50ml)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>joint hose</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>tube with three-way stopcock</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>plastic jar</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

---

**SKILLS**

**Thoracentesis**

- Patient positioning
- Recognition of anatomical landmarks by ultrasound
- Assessment of level and volume of pleural effusion
- Determination of insertion site
- Needle insertion and collection of fluid

**Pericardiocentesis**

- Patient positioning
- Visualization of pericardial fluid under ultrasound scanning
- Landmark palpation
- Needle insertion to the pericardial space
- Aspiration of pericardial effusion

---

**Product Supervision**

Takahiro Amano, M.D.
Vice President
Senior Vice-Dean, Postgraduate School
Professor and Director, Center of Postgraduate Medical Education
International University of Health and Welfare
Honorary Director, Sanno Medical Center
Thoracentesis

Simulate thoracentesis on both a torso and SP

Ultrasound-Guided Thoracentesis Simulator features two types of puncture units: mid-scapular line access and mid-axillary line access. Strap-on (wearable) puncture units facilitates hybrid training sessions with simulated patients.

**FEATURES**

1. Palpable ribs
2. Realistic needle-tip insertion and resistance
3. Strap-on units to practice patient positioning and communication
4. Two sites for access: right mid-scapular line and left mid-axillary line
5. Volume of pleural effusion can be controlled to set different levels of difficulty.
6. Body torso for independent training. (Only for MW4)

**DESCRIPTIONS**

- Excellent ultrasound image
- Palpable ribs
- Realistic needle-tip insertion and resistance
- Strap-on units to practice patient positioning and communication
- Two sites for access: right mid-scapular line and left mid-axillary line
- Volume of pleural effusion can be controlled to set different levels of difficulty
- Body torso for independent training. (Only for MW4)

**MATERIALS**

- Soft resin, hard resin
- Latex free

**REPLACEMENT PARTS**

- 11383-010 puncture pad
- 11383-020 mid-scapular line unit puncture pads
- 11383-030 replacement lung
- 11394-010 pad for MW15

**SPECIFICATIONS**

- Torso size: W38 x D25 x H48 cm/ 15 x 9.9 x 18.9 inch
- Pad size: W16 x D7 x H21 cm/ 6.3 x 2.76 x 8.3 inch
- Pad size: W16 x D14 x H21 cm/ 6.3 x 5.6 x 8.3 inch

Pericardiocentesis

Practice patient safety during pericardiocentesis with ultrasound guidance

This simulator allows trainees to insert the needle under ultrasound guidance, pierce the "pericardial sac” and aspirate pericardial fluid.

**FEATURES**

1. Durable and replaceable puncture pad
2. Practice both the subxiphoid approach and parasternal approach through palpable and ultrasonic landmarks.
3. Realistic needle tip sensation during puncture of the "pericardial sac”

**DESCRIPTIONS**

- Identification of "Larrey’s point" (left xiphisternal junction) for needle insertion.
- Inserting needle to the pericardial space with ultrasound guidance. Ventricles, ribs, pericardium, liver and main artery can be visualized.

**RECOMMENDED DEVICES**

- Thoracentesis: 22 G/ 23 G needle
- Pericardiocentesis: 18 G needle

**MATERIALS**

- Soft resin, hard resin
- Latex free

**REPLACEMENT PARTS**

- 11383-010 puncture pad
- 11383-020 mid-scapular line unit puncture pads
- 11383-030 replacement lung
- 11394-010 pad for MW15