Emergency Care & Trauma

Improving patient outcomes with team training of acute intervention procedures

SimMan® Vascular

SimMan Vascular is built on the trusted SimMan 3G platform with built-in Mentice VIST® endovascular technology to extend the immersive training course potential to the Endovascular Specialists, Cath Lab team, and Pre-Hospital care providers.

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SimMan® Vascular

VASCULAR ACCESS
- IV access (right arm)
- Intraosseous access (tibia)
- Automatic Drug Recognition System

MULTIPLE AIRWAY SKILLS/FEATURES
- Controllable open/closed airway; automatically or manually controlled
- Head tilt/Chin lift
- Jaw thrust w/articulated jaw
- Suctioning (Oral & Nasopharyngeal)
- Bag-mask ventilation
- Nasal cannulation
- Orotracheal/Nasotracheal intubation
- Combitube, LMA, and other airway placement
- Endotracheal tube intubation
- Retrograde intubation
- Fiberoptic intubation
- Transtracheal jet ventilation
- Needle/Surgical cricothyrotomy
- Variable lung compliance – 4 settings
- Variable airway resistance – 4 settings
- Right main stem intubation
- Stomach distention

AIRWAY COMPLICATIONS
- Detection of proper head position
- Can't intubate/Can ventilate
- Can't intubate/Can't ventilate
- Tongue edema
- Pharyngeal swelling
- Laryngospasm
- Decreased cervical range of motion
- Trismus

BREATHING FEATURES
- Simulated spontaneous breathing
- Bilateral and unilateral chest rise and fall
- CO2 exhalation
- Normal and abnormal breath sounds
  - 5 anterior auscultation sites
  - 6 posterior auscultation sites
- Oxygen saturation and waveform

BREATHING COMPLICATIONS
- Cyanosis
- Needle thoracentesis – bilateral
- Unilateral & bilateral chest movement
- Unilateral, bilateral & lobar breath sounds
- Chest tube insertion - bilateral

CARDIAC FEATURES
- Extensive ECG library
- Heart sounds – four anterior locations
- ECG rhythm monitoring (4 lead)
- 12 lead ECG display
- Defibrillation and cardioversion
- Pacing

CIRCULATION FEATURES
- BP measured manually by auscultation of Korotkoff sounds
- Carotid, brachial, radial, dorsalis pedis, popliteal and posterior tibialis pulses synchronized with ECG
- Pulse strength variable with BP
- Pulse palpation is detected & logged

ENDOVASCULAR PROCEDURES:
- Access points:
  - Left femoral artery/ vein
  - Right femoral artery
- AMI
- Stroke
- Trauma
- Interventional surgery
- REBOA- Aortic Balloon Occlusion
- Ballooning
- Stenting
- Embolization
- Aspiration
- Radiation safety

CPR
- Compliant with current Guidelines
- CPR compressions generate palpable pulses, blood pressure waveform, and ECG artifacts
- Realistic compression depth and resistance
- Detection of depth, release and frequency of compressions
- Real time feedback on quality of CPR

EYES
- Blinking - slow, normal, fast and winks
- Open, closed and partially open
- Pupillary accommodation:
  - synchrony/asynchrony
  - normal and sluggish speed of response

OTHER FEATURES
- Seizure/Fasciculation
- Bleeding
  - Simulation of bleeding at multiple sites
  - Arterial and venous
  - Vital signs automatically respond to blood loss & therapy
  - Works with various wound modules & moulage kits
- Urine output (variable)
- Foley catheterization
- Secretions
  - Eyes, Ears, Nose, Mouth
  - Blood, Mucous, CSF, etc.
- Diaphoresis
- Bowel Sounds – four quadrants
- Patient Voice
  - Pre-recorded and custom sounds
  - Instructor can simulate patient's voice wirelessly
- Instructor Communication
  - Multiple instructors communicate using integrated voice over IP
- Fully articulating pelvis
- Leg rotation in all natural directions

PHARMACOLOGY
- Automatic Drug Recognition System identifies drug & dose
- Extensive drug formulary
- Automatic or programmable physiological responses

SYSTEM FEATURES
- Wireless instructor computer with LLEAP software
- Control simulation from anywhere on your network
- Use Manual Mode to run "on-the-fly" for total control over all parameters
- Utilize Automatic Mode with pre-programmed scenario for a simple and standardized a simulation
  - Patient cases utilizing physiological and pharmacological models
  - Pre-programmed scenarios
  - Self-authored content
- Simulation controls; fast forward, pause, rewind, save/restore
- Profile editor
- Future prediction and patient outcome display
- Integrated video debriefing
- Time stamped activities, vital signs, and instructor comments are captured in the event log

PATIENT MONITOR
- Touch-screen simulated patient monitor provides concise clinical feedback for physiological parameters
- The monitor's color screen is configurable and provides multiple simulated parameters, each presenting multi-level alarms
- Simulated parameters include ECG (2 traces), Sp02, CO2, ABP, CVP, PAP, PCWP, NIBP, TOF, Cardiac output, temperature (core and peripheral), additional and programmable parameters e.g. ICP
- X-Ray Display
- 12 Lead ECG
- Custom image display
- Custom video display
- Oxygen saturation and waveform

ORDERING INFORMATION

222-02050   SimMan Vascular
Includes: SimMan 3G Simulator with Endovascular Functionality, Laptop, Keyboard, Mouse with USB, Screen, Clinical Device Kit, HD web camera, Headset/Microphone with USB, SpO2 probe with USB, LLEAP Software License, Mentice Software License.

222-88050   SimMan Vascular 3 year Tech Service
Includes: On-site Installation Service, 3 year annual Preventive Maintenance On-site, 2 year Extended Warranty. This is a required services for SimMan Vascular.

Visit Laerdal.com/SimManVascular for a complete list of specifications, parts, accessories and services

Laerdal® helping save lives

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