MG22277 | CLASSIC HUMAN HEART WITH THYMUS, 3 PARTS

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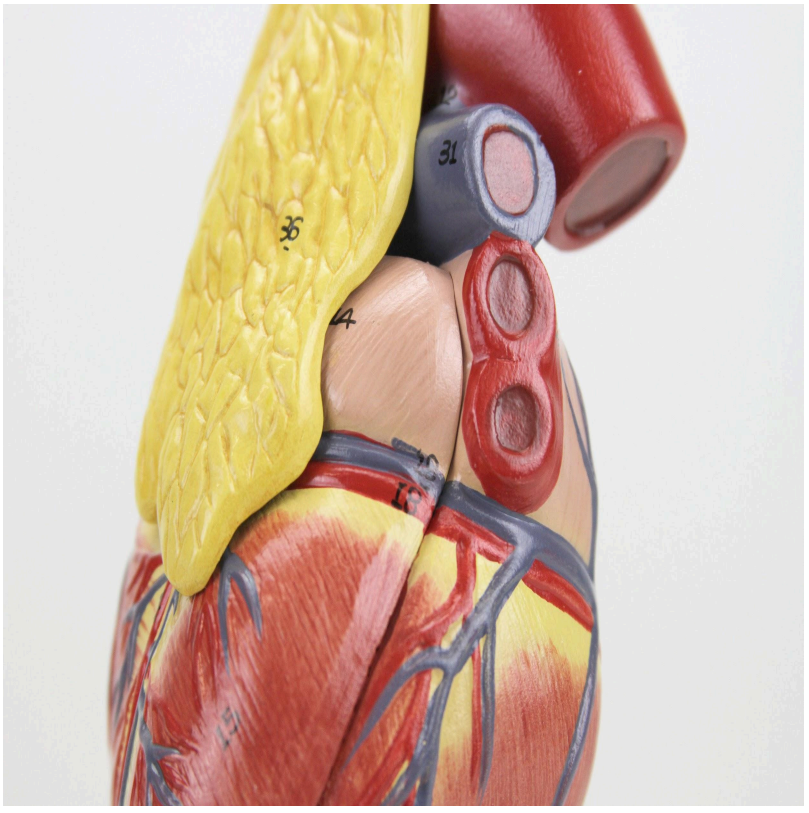

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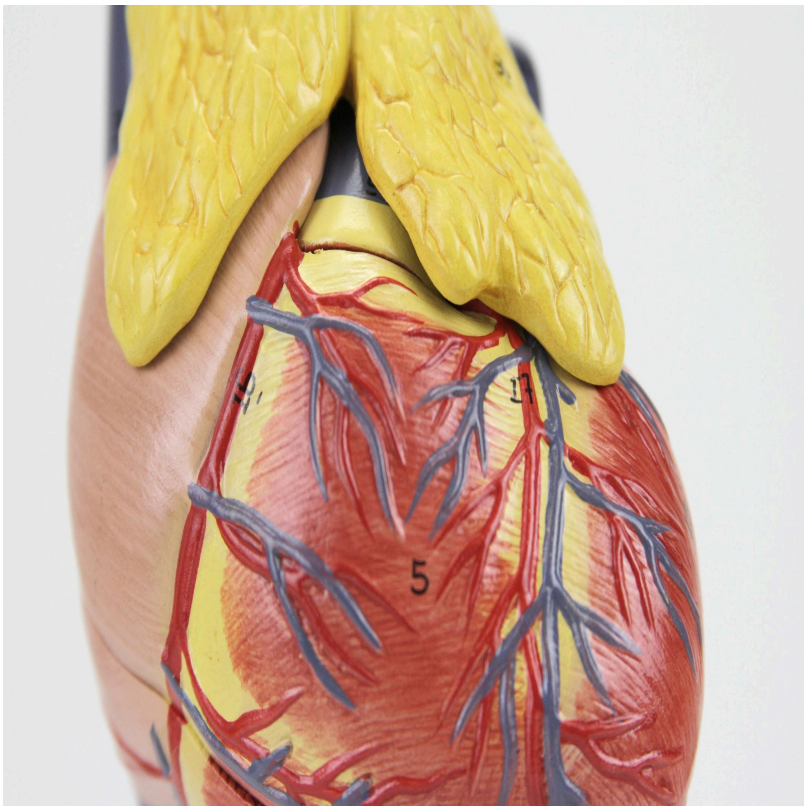

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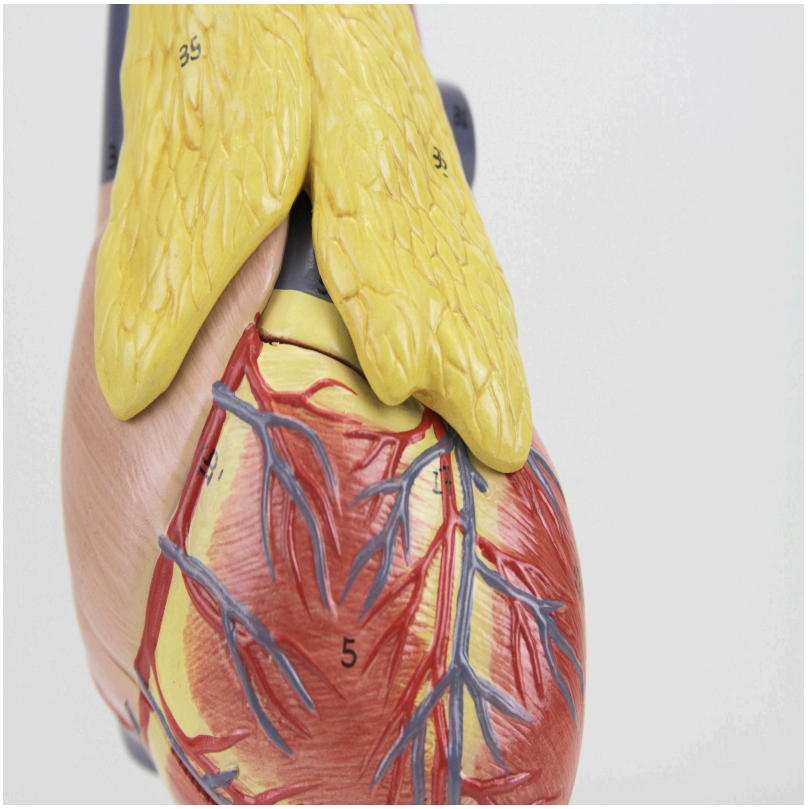

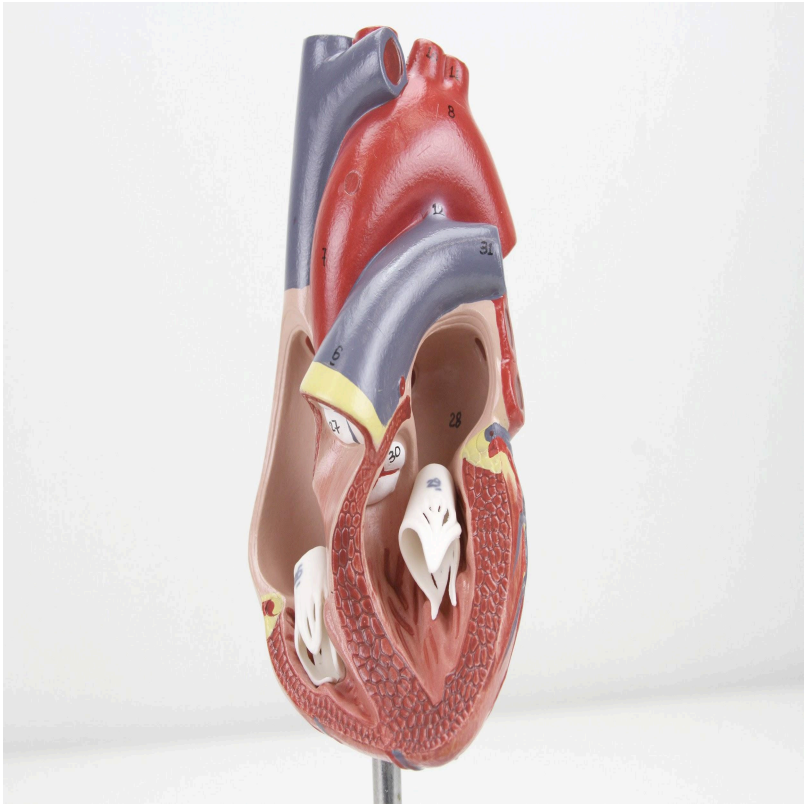

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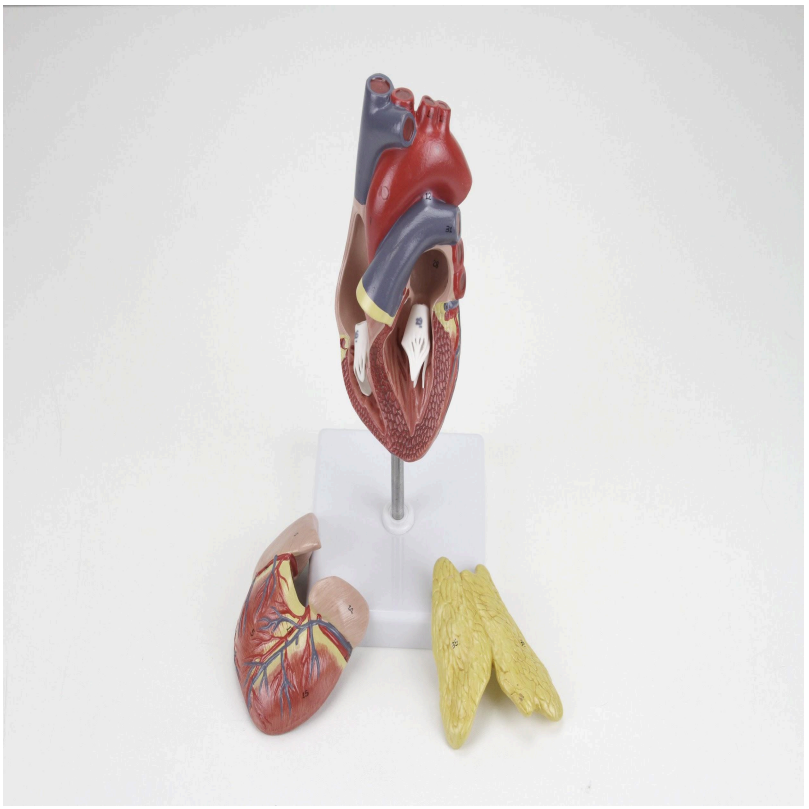

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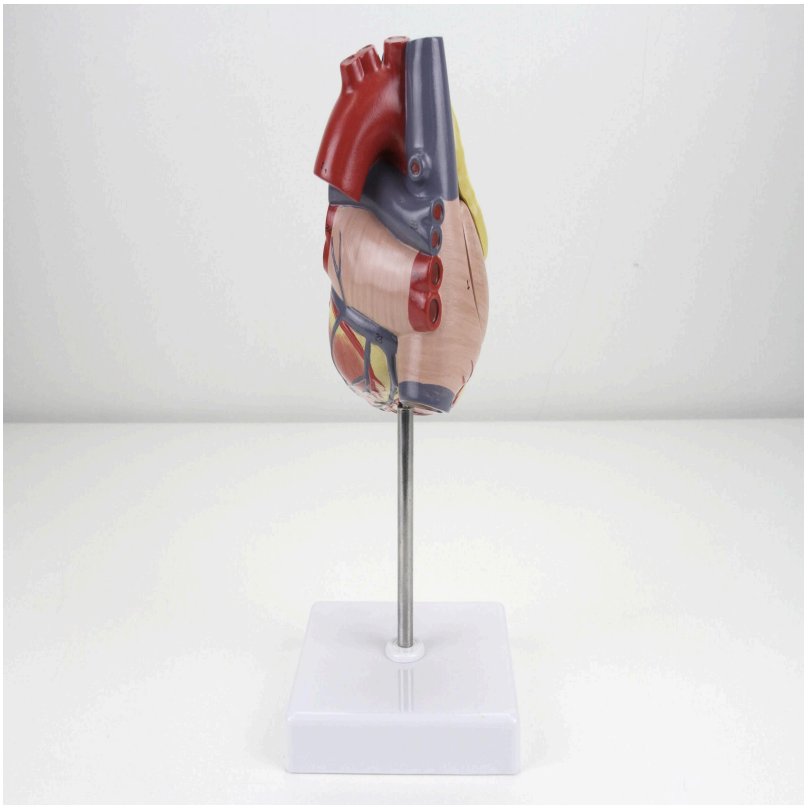

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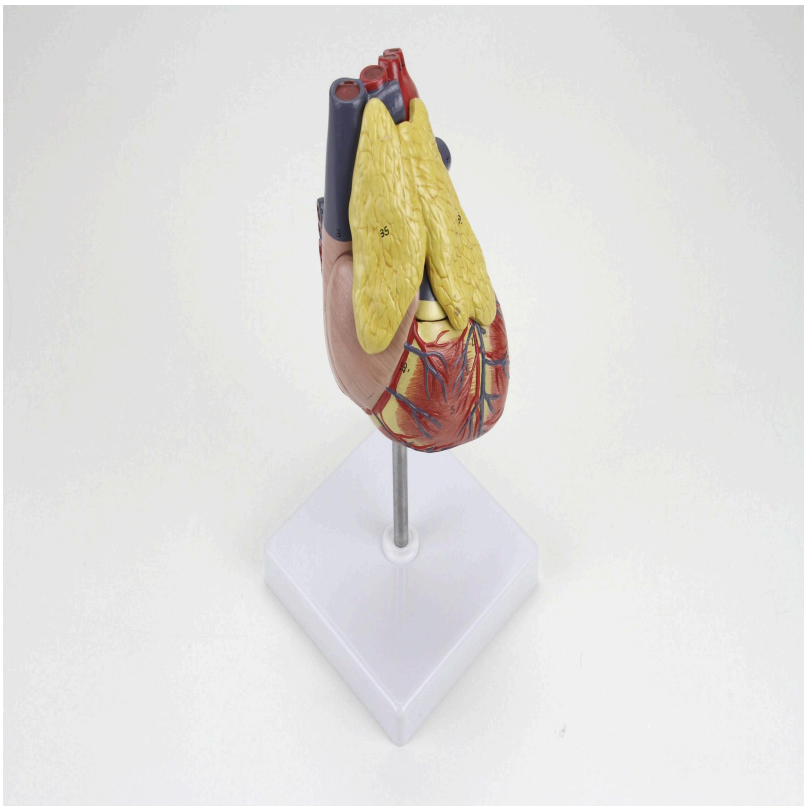

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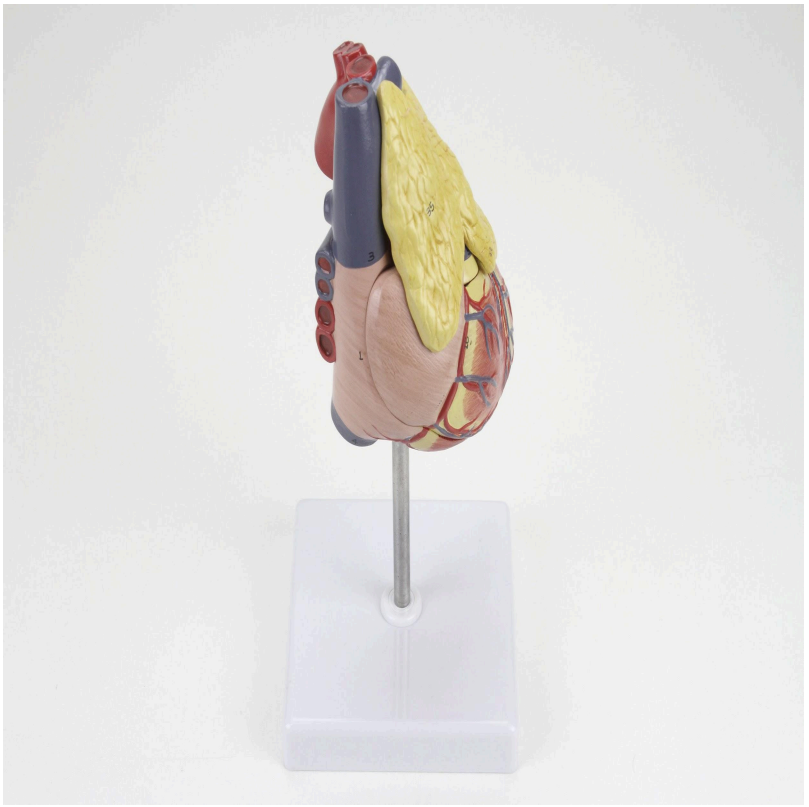

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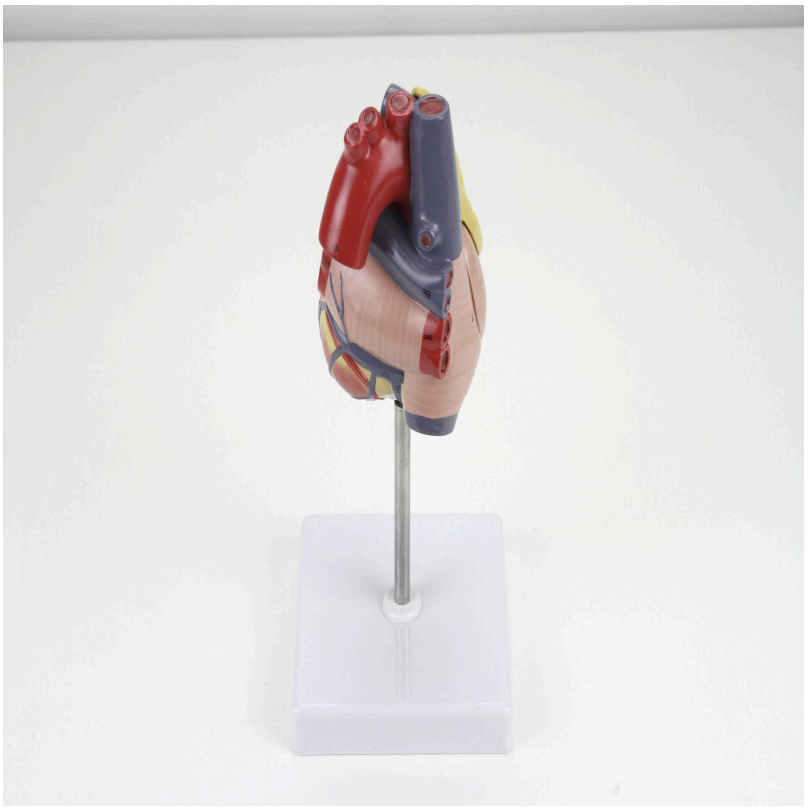

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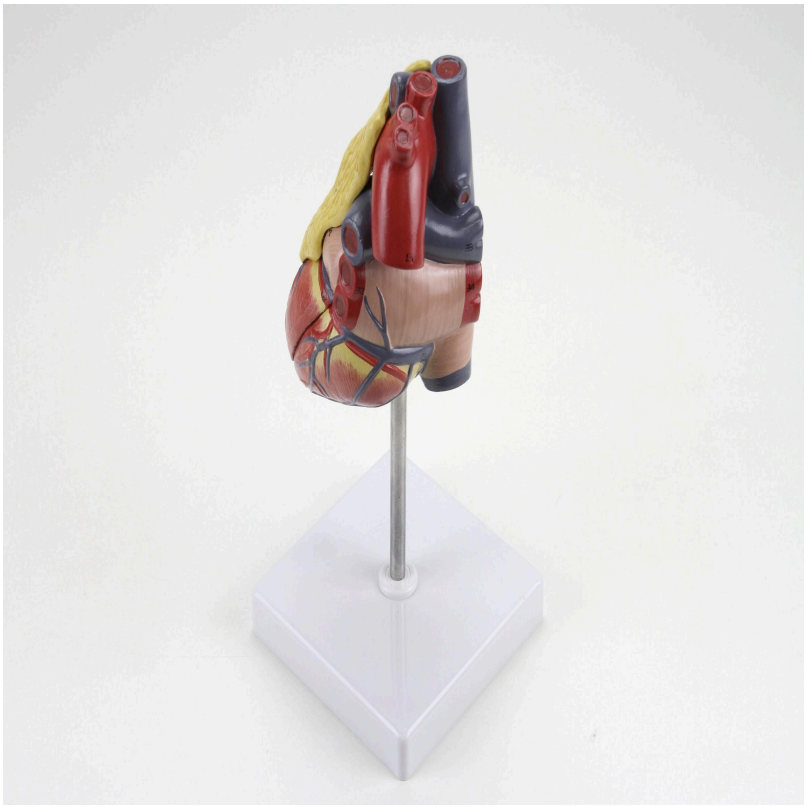

Nasco HEALTHCARE

Life-size three-part human heart anatomical model, demonstrating the detailed anatomy of the heart in association with the thymus gland. The anterior heart wall and thymus are removable, allowing in-depth analysis of internal structures, including atria and ventricles (right and left), valves, and papillary muscles.

Applications:
* Study of cardiac anatomy.
* Training in cardiology.
* Education in cardiac physiology and pathophysiology.
* Anatomical demonstrations in clinical and academic settings.

Technical Differentiators:
* Life-size model for accurate representation.
* Removable walls for detailed visualization of internal structures.
* Durable synthetic material.

3D Technology and Augmented Reality:
Our anatomical models offer an innovative visual complement through informative cards that activate 3D models viewable in augmented reality (AR). This exclusive interactive platform stimulates learning, allowing for comparative analysis of anatomical structures and offering opportunities for continuing education in anatomy, physiology, and pathophysiology.

Technical Specifications:
* Scale: Life-size
* Material: Durable synthetic material
* Number of parts: 3

Main Structures:

Left Ventricle: It is one of the four chambers of the heart, responsible for pumping oxygenated blood to the aorta, which distributes it throughout the body. It has thick muscular walls, adapted to generate the high pressure required for systemic circulation.

Right Ventricle: It is one of the four chambers of the heart, responsible for pumping deoxygenated blood to the pulmonary artery, which carries it to the lungs to be oxygenated. Its walls are thinner than those of the left ventricle, since the pressure required for pulmonary circulation is lower.

Left Anterior Descending Artery: It is a main branch of the left coronary artery, responsible for irrigating the anterior part of the left ventricle, the interventricular septum, and part of the right ventricle. Its obstruction is often associated with extensive and severe infarcts.

Right Coronary Artery: It originates from the right aortic sinus and irrigates the right atrium, the right ventricle, the lower part of the left ventricle, and the sinoatrial node in most people. It is essential for the proper functioning of the heart.

Great Cardiac Vein: It is one of the main veins of the heart, responsible for draining blood from the anterior region of the heart, accompanying the left anterior descending artery. It drains into the coronary sinus.

Circumflex Artery: Branch of the left coronary artery, it irrigates the lateral and posterior wall of the left ventricle, in addition to the left atrium. Its importance lies in the irrigation of areas crucial for cardiac function.

Coronary Sinus: It is a large venous vessel located on the posterior surface of the heart, which receives venous blood from almost the entire myocardium through various cardiac veins. It drains into the right atrium.

Middle Cardiac Vein: It accompanies the posterior interventricular artery and drains blood from the posterior region of the heart, draining into the coronary sinus. It is an important route of venous drainage of the myocardium.

Posterior Interventricular Artery: Branch of the right coronary artery (in right dominance) or the circumflex artery (in left dominance), it irrigates the lower portion of the ventricles and

the posterior interventricular septum.

Right Pulmonary Vein: Transports oxygenated blood from the lungs to the left atrium of the heart. There are two right pulmonary veins (superior and inferior) that drain the corresponding lung lobes.

Other structures can be verified directly on the aphysical piece or in the interactive 3D model.

Smart Tags:
Designed to provide comprehensive training in the healthcare area, with interactive simulations that cover Heart exams. This solution assists in the development of diagnostic skills in different clinical scenarios, allowing professionals and students to explore and improve their skills with greater safety and accuracy.

Heart sound recognition: Recognize 23 unique heart sounds with different patient postures and tools.
- Apex, Normal S1 S2, Supine, Bell
- Apex, Split S1, Supine, Bell
- Apex, S4, LLD, Bell
- Apex, Mid Systolic Click, Supine, Bell
- Apex, S3, LLD, Bell
- Apex, Early Systolic Murmur, Supine, Bell
- Apex, Mid Systolic Murmur, Supine, Bell
- Apex, Late Systolic Murmur, Supine, Bell
- Apex, Holosystolic Murmur, Supine, Bell
- Apex, Systolic Click & Late Systolic Murmur, LLD, Bell
- Apex, S4 & Mid Systolic Murmur, LLD, Bell
- Apex, S3 & Holosystolic Murmur, LLD, Bell
- Apex, OS & Diastolic Murmur, LLD, Bell
- Aortic, Normal S1 S2, Sitting, Bell
- Aortic, Systolic Murmur & Absent S2, Sitting, Bell
- Aortic, Early Diastolic Murmur, Sitting, Bell
- Aortic, Systolic & Diastolic Murmur, Sitting, Bell
- Pulmonary, Single S2, Supine, Diaphragm
- Pulmonary, Split S2 Persistent, Supine, Diaphragm
- Pulmonary, Split S2 Transient, Supine, Diaphragm
- Pulmonary, Ejection Systolic Murmur & Transient Split S2, Supine, Diaphragm
- Pulmonary, Split S2 & Ejection Systolic Murmur, Supine, Diaphragm
- Pulmonary, Ejection Systolic Murmur & Single S2 & Ejection Click, Supine, Diaphragm

Virtual Patient Monitor: Provides an immersive and realistic training environment for healthcare students. It allows instructors to customize parameters for various vital signs,

empowering students to interpret signals, develop critical thinking, and enhance their clinical reasoning skills through realistic scenarios.

Customizable Vital Signs

- Blood Pressure
- SpO2
- Heart Rate

ECG Interpretation: Train on 18 diverse ECG scenarios, including: Atrial Fibrillation, Ventricular Tachycardia and Heart Blocks. The monitor also simulates synchronized pulses with ECG for truly realistic cardiology training.

ECG Patterns

- Sinus Rhythm
- Atrial Extrasystole
- Atrial Flutter
- Atrial Fibrillation
- Paroxysmal Supraventricular Tachycardia (PSVT)
- Ventricular Extrasystole
- Ventricular Tachycardia (VT)
- Ventricular Fibrillation (VF)
- First-Degree Atrioventricular Block (AVB)
- Second-Degree Atrioventricular Block
- Third-Degree Atrioventricular Block (Complete Block)
- Long QT Syndrome
- ST Segment Elevation
- ST Segment Depression
- T Wave Inversion
- Left Ventricular Hypertrophy (LVH)
- Right Ventricular Hypertrophy (RVH)
- Wolff-Parkinson-White Syndrome (WPW)

Breathing Patterns

- Normal
- Dyspnea
- Apnea
- Cheyne-Stokes
- Biot
- Kussmaul

About Anatomical Models:

They are developed with resin replication technology, supplying the scarcity of natural

anatomical pieces for teaching and research. They present all the essential morphological characteristics with excellent cost-benefit, resistance, manual painting, and numbering for precise identification of structures.

List of all visible structures:

- Left Ventricle
- Right Ventricle
- Left Anterior Descending Artery
- Right Coronary Artery
- Great Cardiac Vein
- Circumflex Artery
- Coronary Sinus
- Middle Cardiac Vein
- Posterior Interventricular Artery
- Right Pulmonary Vein
- Left Pulmonary Vein
- Right Pulmonary Artery
- Right Atrium
- Descending Aorta
- Ligamentum Arteriosum
- Subclavian Artery
- Common Carotid Artery
- Brachiocephalic Trunk
- Aortic Arch
- Superior Vena Cava
- Left Thymus Lobe
- Right Thymus Lobe
- Left Atrium
- Aortic valve
- Left atrium
- Bicuspid valve (mitral valve)
- Left atrium
- Pulmonary valve
- Tricuspid valve
- Opening of the coronary sinus
- Fossa ovalis
- Right atrium
- Superior vena cava
- Right pulmonary artery
- Right pulmonary vein
- Descending aorta
- Left pulmonary vein

- Coronary sinus
- Middle cardiac vein
- Posterior interventricular branch of the right coronary artery
- Small cardiac vein
- Pulmonary trunk
- Left pulmonary artery
- Ligamentum arteriosum
- Aortic arch
- Subclavian artery
- Common carotid artery
- Brachiocephalic trunk
- Right lobe of the thymus
- Left lobe of the thymus
- Right atrium
- Right coronary artery
- Right ventricle
- Left anterior descending coronary artery
- Left atrium
- Left ventricle
- Great cardiac vein
- Left circumflex coronary artery