

Zygote Human Anatomy Version 4.5 Upgrades

Upgrade 4.5: Skull - Interior Cranium

- * Sella Turcica
- * Clivus
- * Grooves for Sinuses and Meningeal Vessels
- * Internal Occipital Crest and Protuberance
- * Basilar Part
- * Trigeminal Impression
- * Arcuate Eminence

Upgrade 4.5: Skull - Sinuses

- * Frontal
- * Maxillary
- * Sphenoidal
- * Ethmoidal Air Cells

Upgrade 4.5: Skull - Foramina, Fissures, Canals

- * Foramen Magnum
- * Jugular Fossa
- * Carotid Canal
- * Condylloid Canal
- * Foramen Lacerum
- * Foramen Ovale
- * Foramen Rotundum
- * Foramen Spinosum
- * Greater Palatine Foramen
- * Incisive Fossa
- * Optic Canal
- * Superior Orbital Fissure
- * Inferior Orbital Fissure
- * Lacrimal Foramen
- * Cribriform Plate
- * Foramen Cecum
- * Internal Auditory Meatus
- * External Auditory Meatus
- * Mental Foramen
- * Infraorbital Foramen
- * Supraorbital Foramen

Upgrade 4.5: Skull - Sutures/Articulations of Each Bone

Upgrade 4.5: Skull - Inner Ear

- * Tympanic Cavity
- * Incus, Stapes, and Malleus
- * Round and Oval Windows
- * Vestibule

- * Semicircular Canals
- * Ampullae
- * Cochlea

Upgrade 4.5: Skull - Detailed Nasal Cavity

- * Inferior, Middle, and Superior Nasal Concha
- * Uncinate Process
- * Ethmoidal Bulla
- * Palatine Process of Maxilla
- * Palatine Bone
- * Vomer
- * Perpendicular Plate

Upgrade 4.5: Skull - Inner Ear

- * 3 Bone-Specific, Highly Detailed Color Maps
- * 3 Bone-Specific, Highly Detailed Bump Maps

Upgrade 4.5: Skull - New Nasal Cavity, Mouth and Pharynx

- * New Tissues of Nasal Septum
- * New Tissues of Nasal Cavity
- * New Tissues of Maxillary, Sphenoidal and Frontal Sinus
- * New Tissues of Ethmoidal Air Cells
- * Palatine and Pharyngeal Tonsils
- * Pharyngeal Opening of Auditory Tube

Upgrade 4.5: Skull - New Eye with Interior

- * Optic Nerve
- * Central Retinal Artery and Vein
- * Retina
- * Choroid
- * Sclera
- * Cornea
- * Lens
- * Anterior Chamber
- * Iris
- * Zonular Fibers
- * Ciliary Processes
- * Medial, Lateral, Superior, and Inferior Rectus Muscles
- * Inferior Oblique Muscle
- * Superior Oblique Muscle

Upgrade 4.5: Circulatory System - New & Circulation to Head, Neck & Face

- * Superior Thyroid Artery and Vein
- * Superior Laryngeal Artery and Vein
- * Posterior Auricular Artery and Vein
- * Occipital Artery and Vein
- * Meningeal Arteries and Veins

Upgrade 4.5: Circulatory System - Improved Circulation to Head, Neck and Face

- * Facial Artery and Vein
- * Superficial Temporal Artery and Vein
- * Angular Artery and Vein
- * Alveolar Artery and Vein
- * Deep Temporal Artery and Vein
- * Maxillary Artery and Vein
- * Retromandibular Vein

Upgrade 4.5: Nervous System - New Nerves of Head, Neck and Face

- * Lingual Nerve

Upgrade 4.5: Nervous System - Improved Nerves of Head and Face

- * Optic Nerve – synchronized with eye model
- * Facial Nerves
- * Trigeminal Nerve

Upgrade 4.5: New Spleen Model

- * Geometry derived from scan data
- * High resolution texture map

Upgrade 4.5: Improved Harmony Between Systems

- * Urinary
 - o Kidneys
- * Digestive
 - o Large Intestines
 - o Small Intestines
- * Reproductive
- * Circulatory
 - o Renal Arteries and Veins
- * Nervous System Changed to Accommodate New Skull

Upgrade 4.5: Improved Integumentary System

- * Compatible with New Skull Upgrades
- * Compatible with Reproductive Upgrades
- * Compatible with Digestive Upgrades