DIGITAL ANATOMIC 3D PRINTING - Authentic Medical Models, reproduced with anatomical precision and haptics

Samed GmbH Dresden is mainly known for its endoscopic training models for the education and training of physicians.
We are now pleased to extend our product range for you with anatomical models.
These models are produced by the company S3D Repro GmbH from Austria, which already has years of experience in 3D printing. They reproduce their models based on parameters from digital sources.
Also custom-made anatomical models are possible and allow you to create your individual model.

Thomas Sparborth
Samed GmbH Dresden

Thomas Sparborth

S3D Repro GmbH is a specialist in 3dimensional reproductions and 3D-printing. We are a European and global competence brand for the development and manufacture of 3D-printed medical multimaterial models, based on original CT and MRT patient data.
This kind of model development is modern symbiosis of newest 3D printing technology, digital anatomic materials, anatomical and medical knowledge and competent customers from whom we learn. The realistic model is prepared from CT and / or MRT patient data, digitally modeled and produced using multimaterial 3D printing. This is the only way to ensure a realistic look and feel as well as the procedure with the usual surgical instruments. These
models allow the medical technology industry to offer suitable demonstration and training models for their instruments.
For training of intravascular interventions or diagnostic applications we are specialized in producing of vascular models. They can be modeled with customized pathological peculiarities or can be filled with fluids to simulate blood flow or for diagnostic methods using contrast media.

Jörn-Henrik Stein
Oliver Simon
S3D Repro GmbH

Jörn-Henrik Stein

Oliver Simon

Inhalt

Circulus Willisii (single)

PROPERTIES:
Body part: arterial ring of the brain
Special features: contains aneurysms
Use: advanced training, neurosurgical training, medical technology demonstrations
Accessories: connectors for filling with liquid
Process: 3D print from digital anatomical material with a realistic feel

DESCRIPTION:
The model of the Circulus Willisii is a 3D-printed replica, based on patient-specific DICOM data from a CT scan. The used tissue material is prerequisite for realistic material properties such as flexibility, wall tension and slip behavior in a moist environment.
The arteries are semi-transparent and have a wall thickness of approx. 1.5 mm and an inside diameter of approx. 2 - 3 mm. There are various pathological peculiarities like Aneurysms shown.

Order No. AM10CW

Circulus Willisii with brain base

PROPERTIES:
Body part: arterial ring of the brain
Special features: contains aneurysms
Use: advanced training, neurosurgical training, medical technology demonstrations
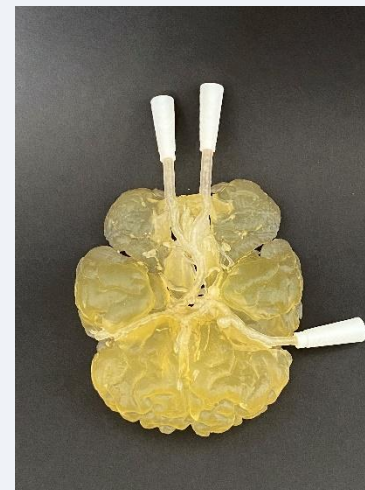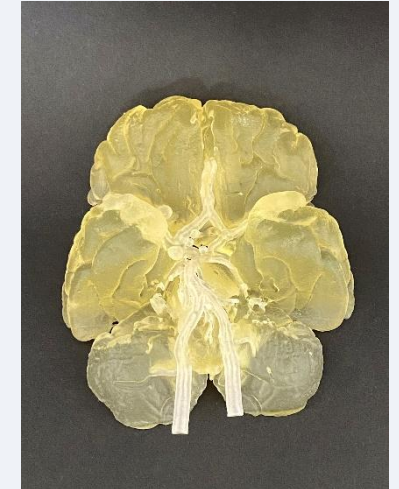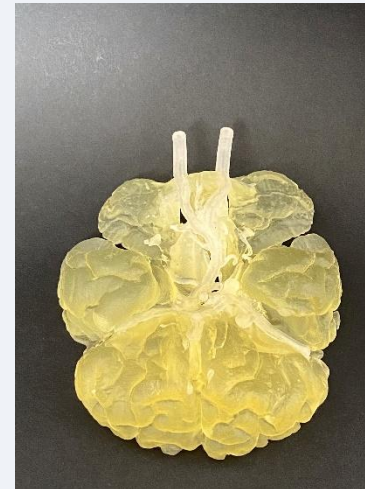Accessories: connectors for filling with liquid
Process: 3D print from digital anatomical material with a realistic feel

DESCRIPTION:
The model of the Circulus Willisii is a 3D-printed replica, based on patient-specific DICOM data from a CT scan. The used tissue material is prerequisite for realistic material properties such as flexibility, wall tension and slip behavior in a moist environment.
The arteries are semi-transparent and have a wall thickness of approx. 1.5 mm and an inside diameter of approx. 2 - 3 mm. There are various pathological peculiarities like Aneurysms shown.

Order No. AM20CW

Brain model with Circulus Willisii and Aneurysms, Skull with craniotomy

PROPERTIES:
Body part: Brain with arterial ring, and base of brain
Special features: contains aneurysms, embedded in base of skull with craniotomy
Use: advanced training, neurosurgical training, medical technology demonstrations
Accessories: Skull and brain model separately
Process: 3D print from digital anatomical material with a realistic feel, commercially available skull model made of plastic

DESCRIPTION:
The model of the base of brain with Circulus Willisii and aneurysms, is a 3D-printed replica, based on patient-specific DICOM data from a CT scan. The used tissue material is prerequisite for realistic material properties such as flexibility, wall tension and slip behavior in a moist environment. The arteries are semi-transparent and have a wall thickness of approx. 1.5 mm and an inside diameter of approx. 2 - 3 mm. The brain is embedded in one commercially available skull with temporal craniotomy, over which the
Circulus Willisii with aneurysm is visible.

Order No. AM10BM

Brain model with tumor preparation and skull with craniotomy

PROPERTIES:
Body part: Brain with skull
Special features: Tumor preparation between both hemispheres, Skull with craniotomy
Use: advanced training, neurosurgical training, medical technology demonstrations
Accessories: Skull and brain model separately
Process: 3D print from digital anatomical material with a realistic feel,
commercially available skull model made of plastic

DESCRIPTION:
The model of the brain with tumor preparation, is a 3D-printed replica, based on patient-specific DICOM data from a CT scan. The used tissue material is prerequisite for realistic, soft material properties of the brain. The brain is embedded in one commercially available skull with cranial craniotomy, over which the preparation is visible.

Order No. AM20BM

Brain/Scull model with Tumor

PROPERTIES:

Body part: Skull with brain

Special features: prepared from patient-specific DICOM data, tumor

Use: advanced training, neurosurgical training, medical technology demonstrations
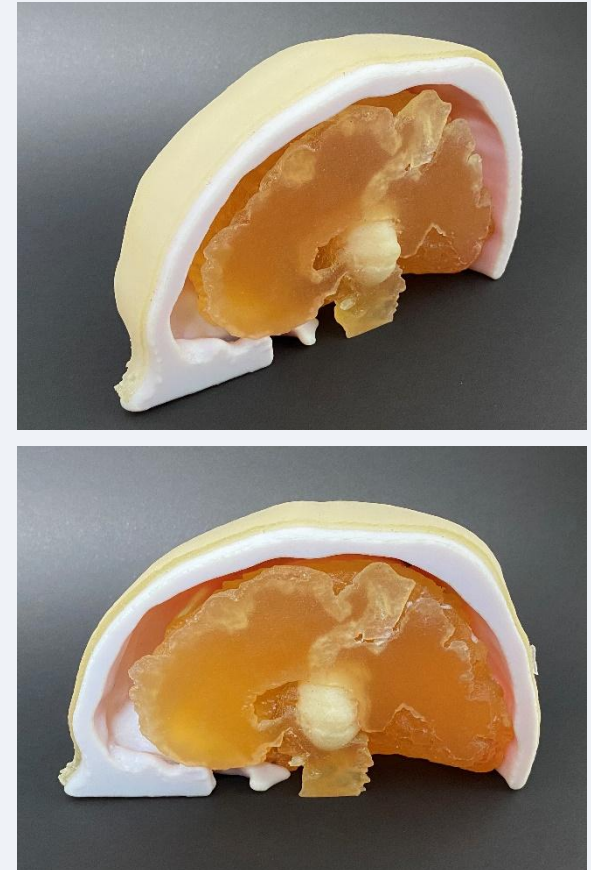
Accessories: Multi-material model

Process: 3D print from digital anatomical material with a realistic feel

DESCRIPTION:

The model of the skull with brain and tumor, is a 3D-printed replica, based on patient-specific DICOM data from a CT scan. The mixture of tissue material and hard, bone-like plastic is prerequisite for realistic material properties of the scalp, skullcap, dura, brain and tumor.

The model is available as a cut or closed model available for neurosurgical training.

Order No. AM30BM

Vascular models, customized

PROPERTIES:
Body part: on demand
Special features: DICOM data provided by the customer or individually modeled
Use: advanced training, vascular training, medical technology demonstrations and tests
Accessories: connectors and frames for filling with liquid
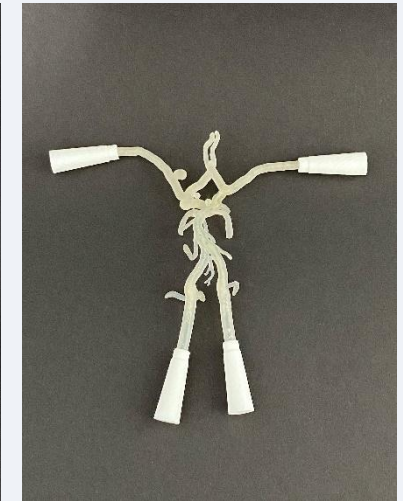Process: 3D print from digital anatomical material with a realistic feel

DESCRIPTION:
The vessel models are 3D-printed replica, based on patient-specific DICOM data from a CT scan. The used tissue material is prerequisite for realistic material properties such as flexibility, wall tension and slip behavior in a moist environment. Various pathologies can be added as needed.
Environmental situations such as frames, fabric structures, suspensions or connectors are designed individually.

Order No. AM10VM

Heart model with coronaries

PROPERTIES:
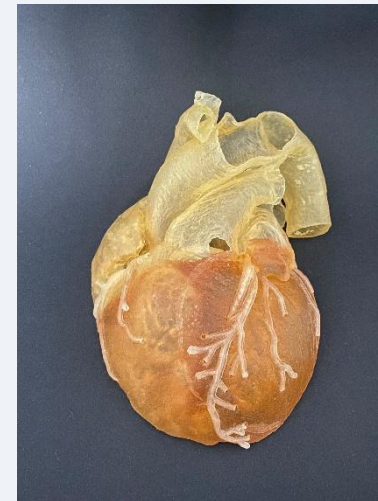Body part: Heart
Special features: individually modeled
Use: advanced training, training of catheterization, medical technology demonstrations and tests.
Accessories: battery-operated LED light to shine through
Process: 3D print from digital anatomical material with a realistic feel

DESCRIPTION:
The heart model with coronaries, is a 3D-printed replica, based on a reproduction of a real human heart. The used tissue material is prerequisite for realistic material properties such as flexibility, wall tension and slip behavior in a moist environment. The arteries are semi-transparent and have a wall thickness of approx. 1.5 mm and true to the original inside diameters. Various pathologies, connectors or other entrances can be added as required. About the course of catheterization to make it more visible, a battery-operated LED light can be included.

Order No. AM10HM

Blood circuit, original size

PROPERTIES:

Body part: Blood circuit

Special features: can filled with fluid (blood imitation)

Use: demonstration blood circuit in vessels and heart

Accessories: pump

Process: 3D print from digital anatomical material with a realistic feel

DESCRIPTION:

Circulation model with circulation pump, body vein and artery, heart, coronaries for blood circulation and pressure simulation, unfilled.

Skeleton consisting of thorax, spine and pelvis, incl. holder for the heart.

Material of the vessels and the heart, synthetic resin with approx. Shore 30.

Cleaning of the cavities is possible. Assembly of the individual parts.

Order No. AM10BKM
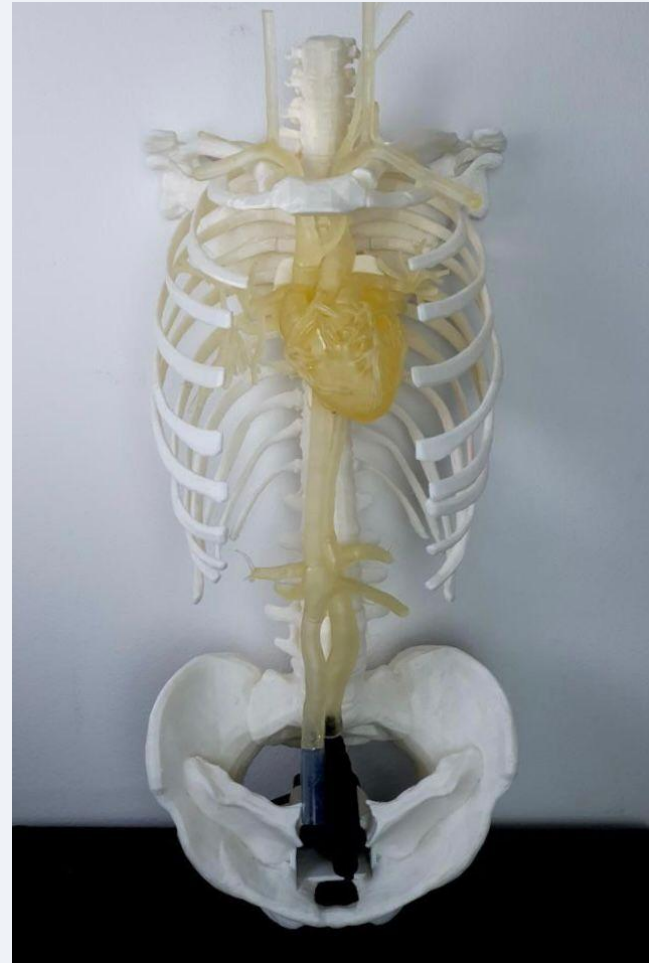
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