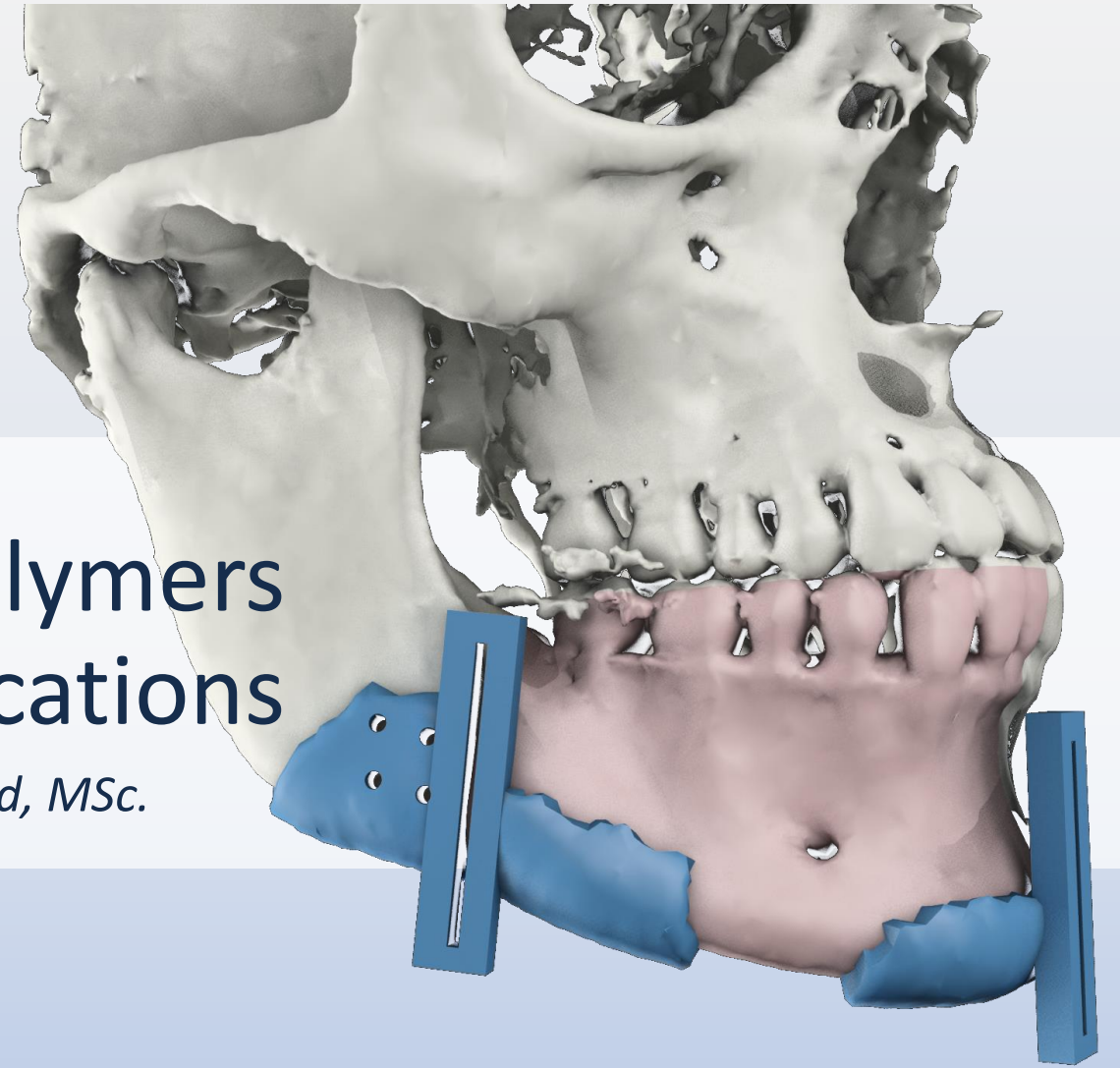


# Additive Manufacturing of Polymers for Medical Applications

*by Eva Hofland, MSc.*





[www.oceanz.eu](http://www.oceanz.eu)



# SELECTIVE LASER SINTERING

High quality surfaces

Excellent mechanical properties

High performance materials



# WHY USE 3D PRINTING?

- Single step manufacturing
- Rapid manufacturing
- Freedom of design
- Customization

## 3D SCANNING

Non-invasive

Fast

No mess!

## 3D MODELLING

Automation

Digital validation

Perfect fit

Digital storage

## 3D PRINTING

Minimal manual labour

Validated processes

Validated materials

Reproducible



# BIOCOMPATIBLE MATERIALS

*Selective Laser Sintering*

PA12

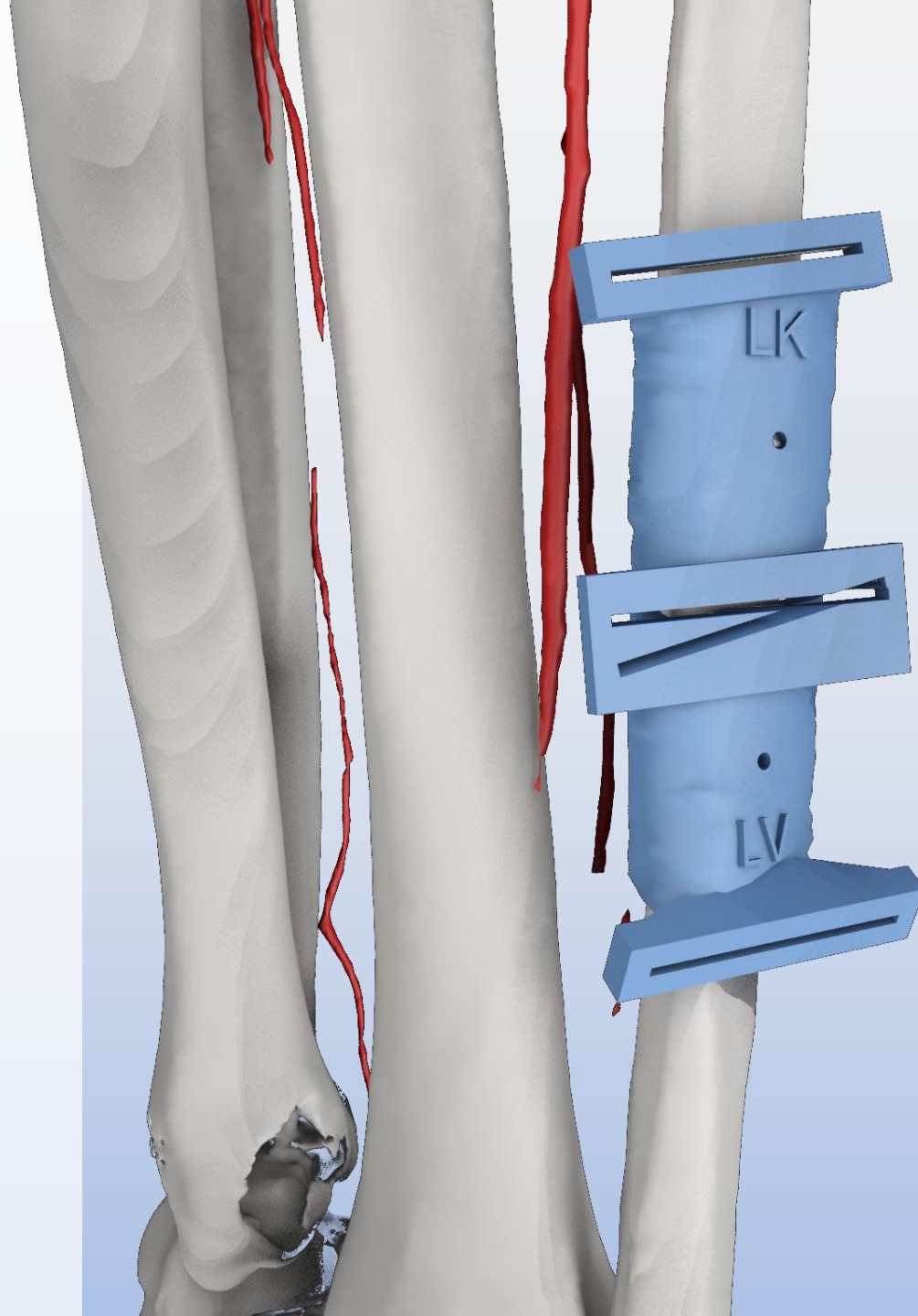
PA11

ISO 10993-1, -5, -10

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# SURGICAL GUIDES

Oncology and Reconstructive  
surgery



# ORTHOTIC DEVICES

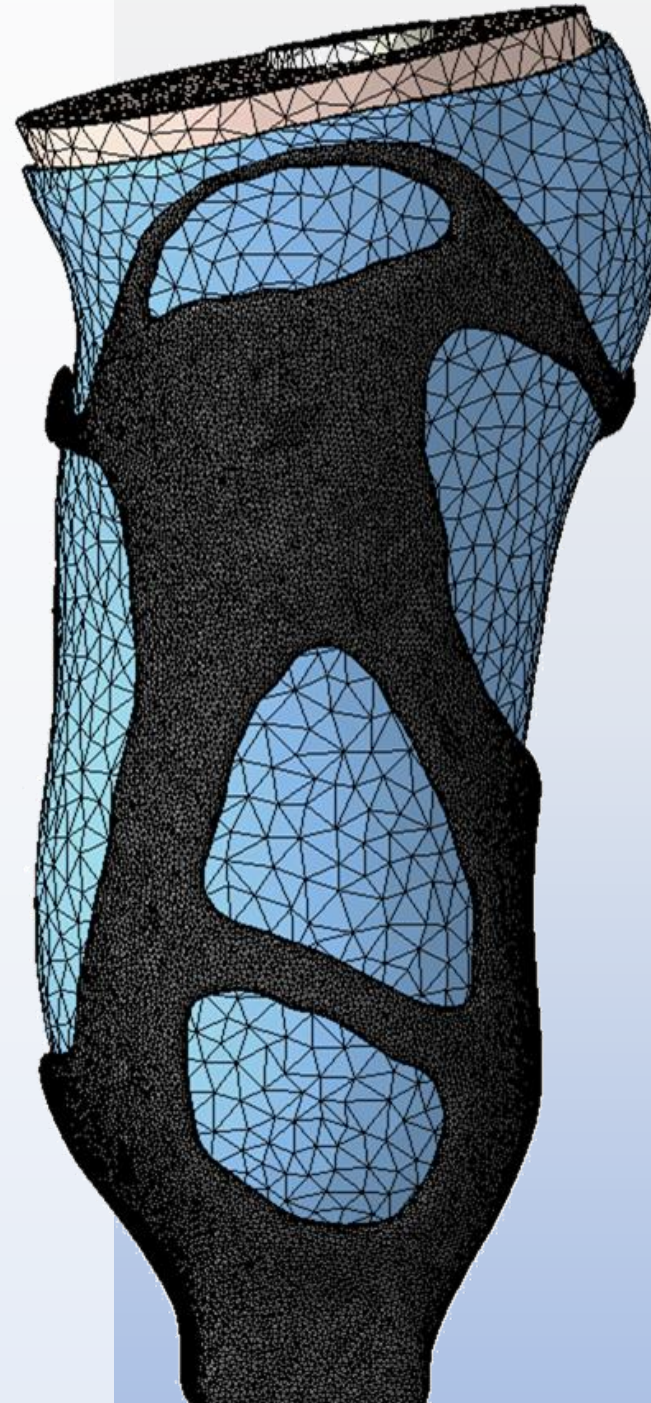
Hand brace

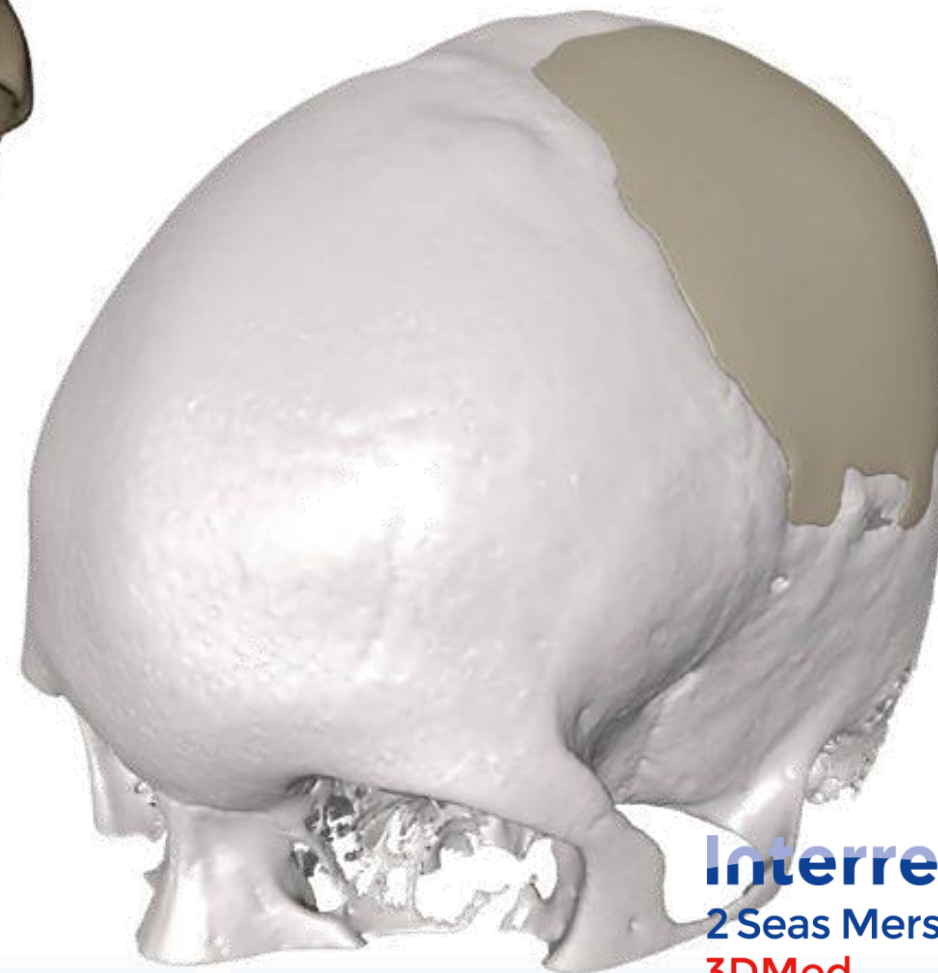




# PROSTHETIC DEVICES

Transtibial socket





# IMPLANTS

Moulds for cranial implants

Three clear, curved dental splints or wafers are shown. One is on a light grey background on the left, and two are on a dark grey background on the right. They are U-shaped and show individual teeth.

# DENTAL APPLICATIONS

Splints  
Wafers

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# And what will you print?

[www.youroceanz.eu](http://www.youroceanz.eu)





**oceanz.**  
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