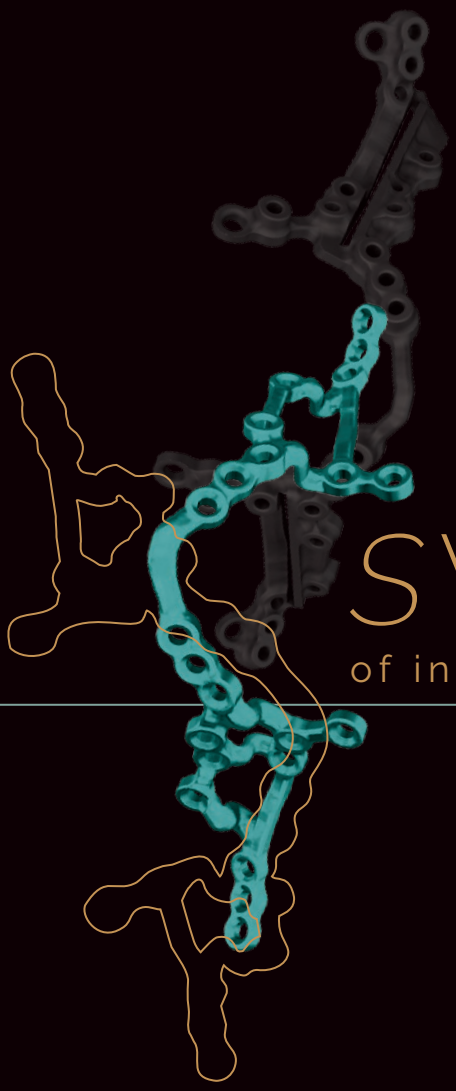


SYSTEM

of individual implants

ChM®

ChM®

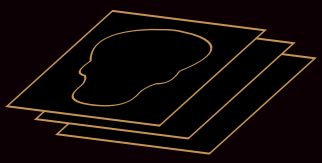
SYSTEM
of individual implants

over 40 years of experience

The history of the brand dates back to 1981, when Mr. Mikołaj Charkiewicz established the ChM company. In 1985 the production of first simple surgical instruments had started and a year after, in 1986, the design department was created. Its main task was to develop the design and manufacture technology of products used in orthopedics and traumatology. Although the available knowledge about materials, technology or functioning of medical tools was limited back then in Poland, the production of first simple metal implants was started in the beginning of the 1990s. In 2004, the company transformed into the ChM limited liability company.

We owe this success of the company to the initial limitations. These limitations contributed to constant search, self-education and creation of own research base. Today's cooperation incorporates both medical environment and research institutions in the country and abroad. 40 years of experience has taught us to listen and respond to the needs of dynamically developing medicine. This whole period was a time of development based on mutual trust. Thanks to this kind of relationship we are able to expend our product portfolio by creating a new solution – the system of craniofacial individual implants.

simple work procedure



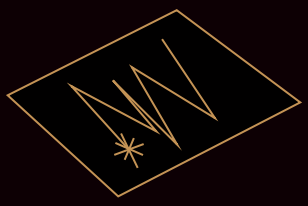
1
Delivery of CT scan with essential documents

2
Development of digital model of patient bone structures by ChM

3
Visualization of the model and consultations with a surgeon

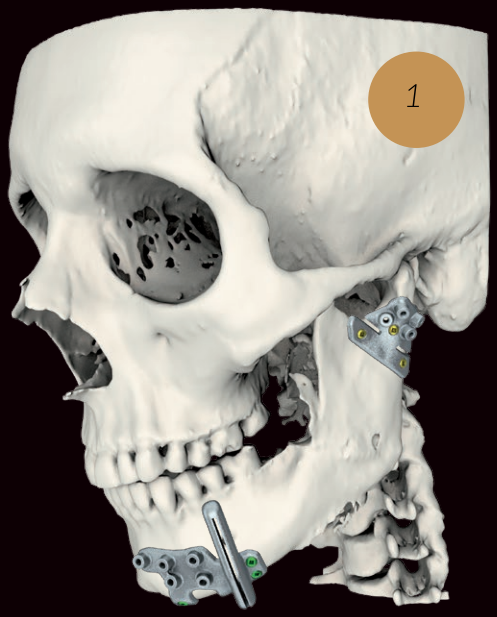
4
Project acceptance

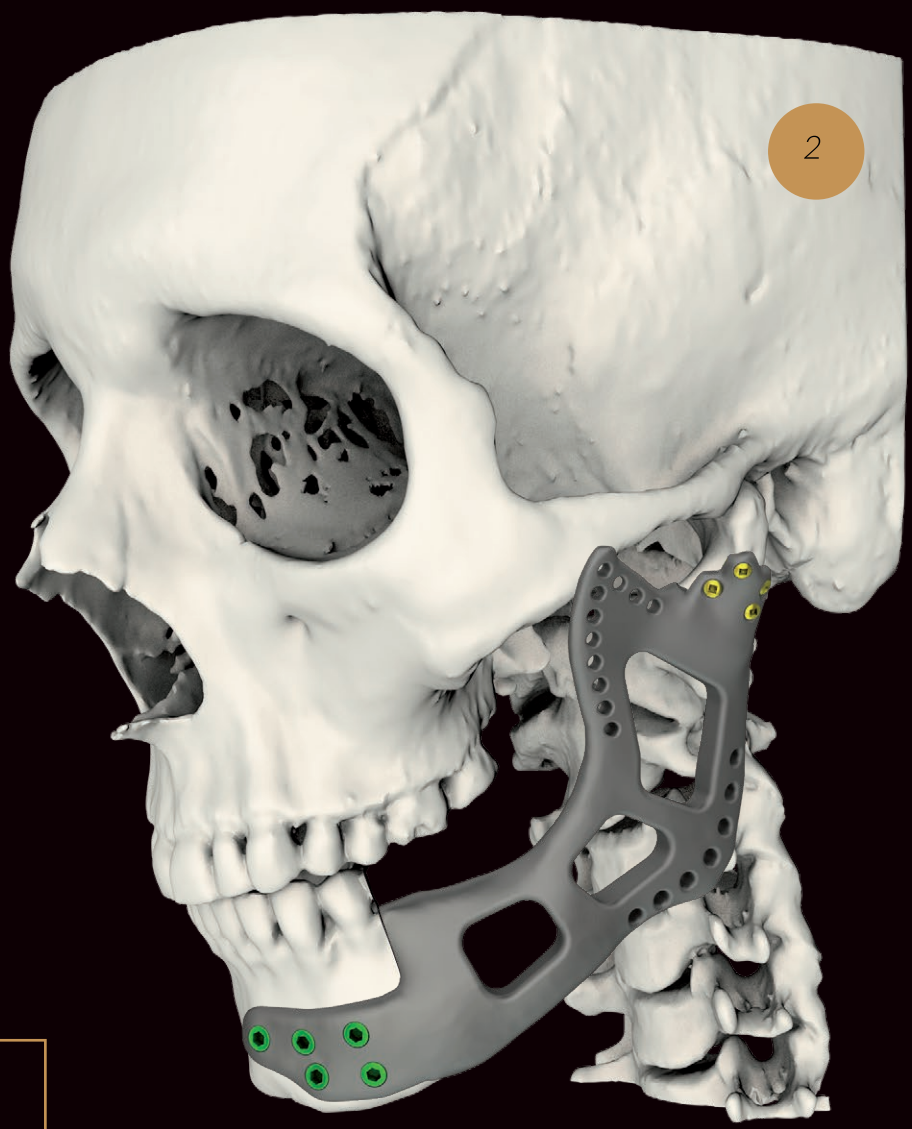
5
Order submission



6
3D printing and final processing

7
Shipment





Alice, 31 y.o.
Mandible reconstruction after tumor resection – titanium implant with retention of the condylar process

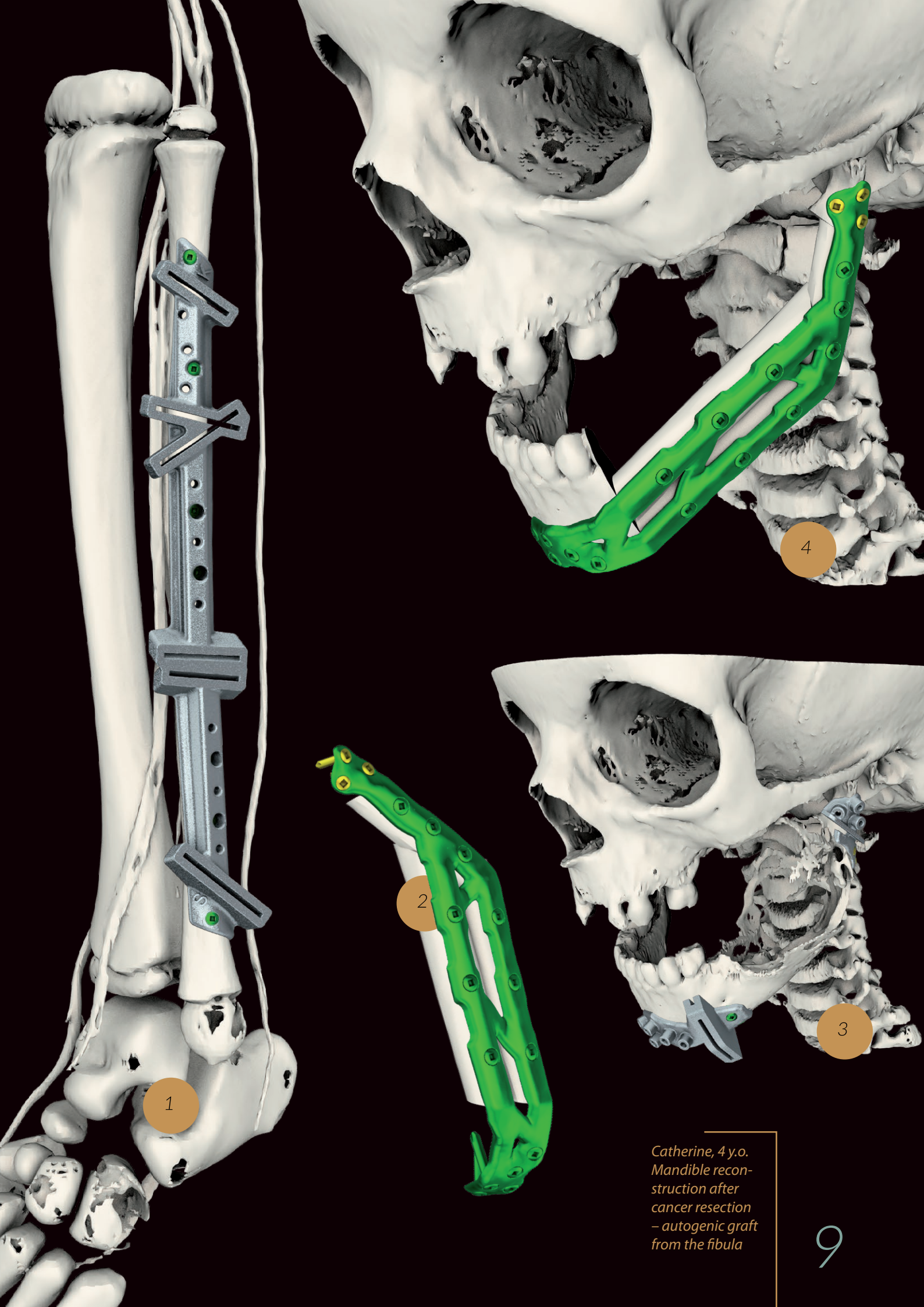
100%
personalized implant

Complicated reconstructions of the craniofacial bones are a huge challenge. Their main goal is to restore the mechanical and aesthetic functions, which require extra-ordinary precision already at the pre-operation planning stage. The ChM company developed a system of individual implants offering an effective tool for the most complex procedures.

System of individual implants means:
- possibility of performing virtual resections
- precise surgical templates
- personalized implant that fits patient's bone structures
- less invasive surgery thanks to the earlier selection of surgical techniques
- shorter surgery time
- predictability of procedures
- 14-day deadline for implementation*
- experienced and reliable partner
- many completed projects

Main application areas of individual implants:
- injuries
- bone loss within facial skeleton
- cancers, tumors, cysts
- congenital malformations
- aesthetic reconstructions

* from the date of project approval



Catherine, 4 y.o. Mandible reconstruction after cancer resection – autogenic graft from the fibula


DELL

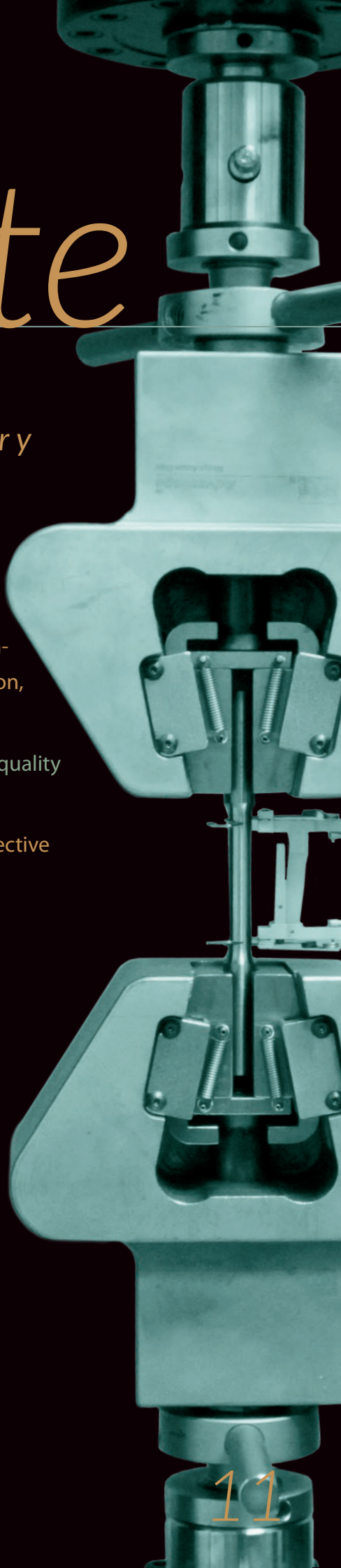
certificate

as a symbol of the highest quality of our laboratory

ChM quality management system is a base of the company's success and includes every stage of product development. Detailed monitoring of manufacturing processes ensure high level of safety. This strict process, starting from the stage of product design and development, comprises also stages of raw material and manufacturing technology selection, as well as product storage and distribution.

Individual implants are designed and produced in accordance with the quality management systems ISO 9001 and ISO 13485.

Our implants meet the requirements of the European Medical Directive 93/42/EEC

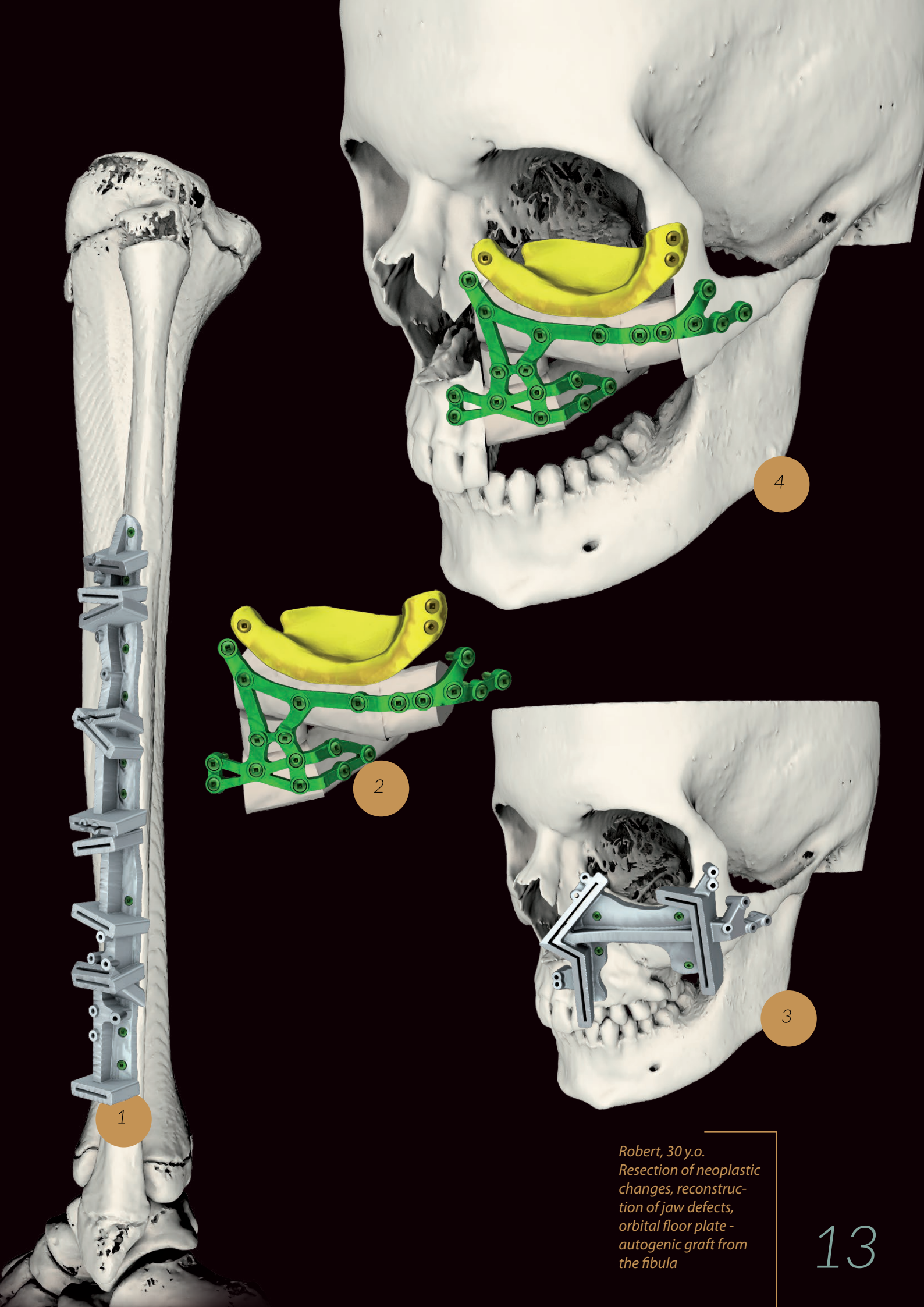


certified implant

material

The implant is produced in SLM technology, which consists of selective melting of the material layer by layer.

A certified biocompatible powder that meets the requirements of ISO 5832 is used for its production.



Robert, 30 y.o.
Resection of neoplastic changes, reconstruction of jaw defects, orbital floor plate - autogenic graft from the fibula

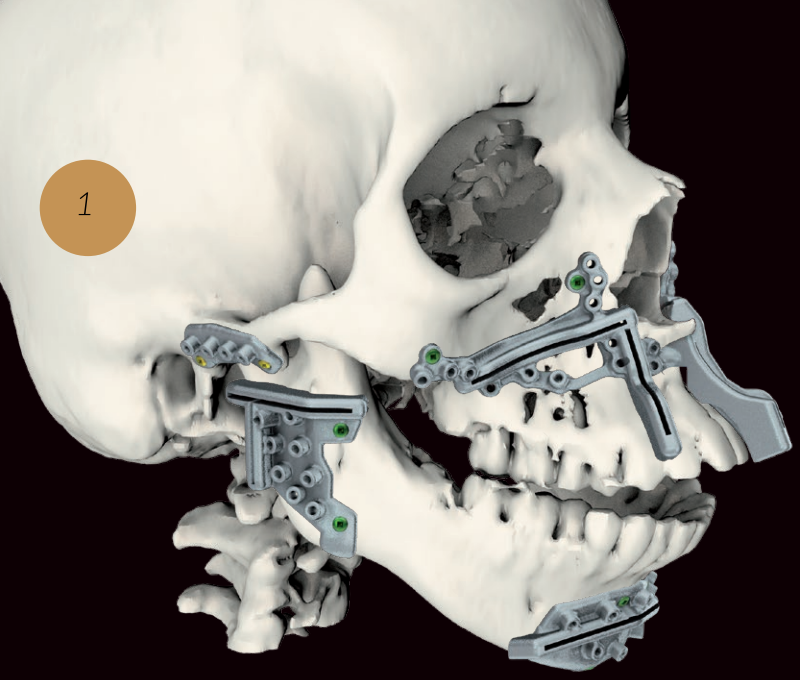
only 14 days of waiting*

3D printing technology sets new pathways in surgical procedures by giving the opportunity to create personalized implants.

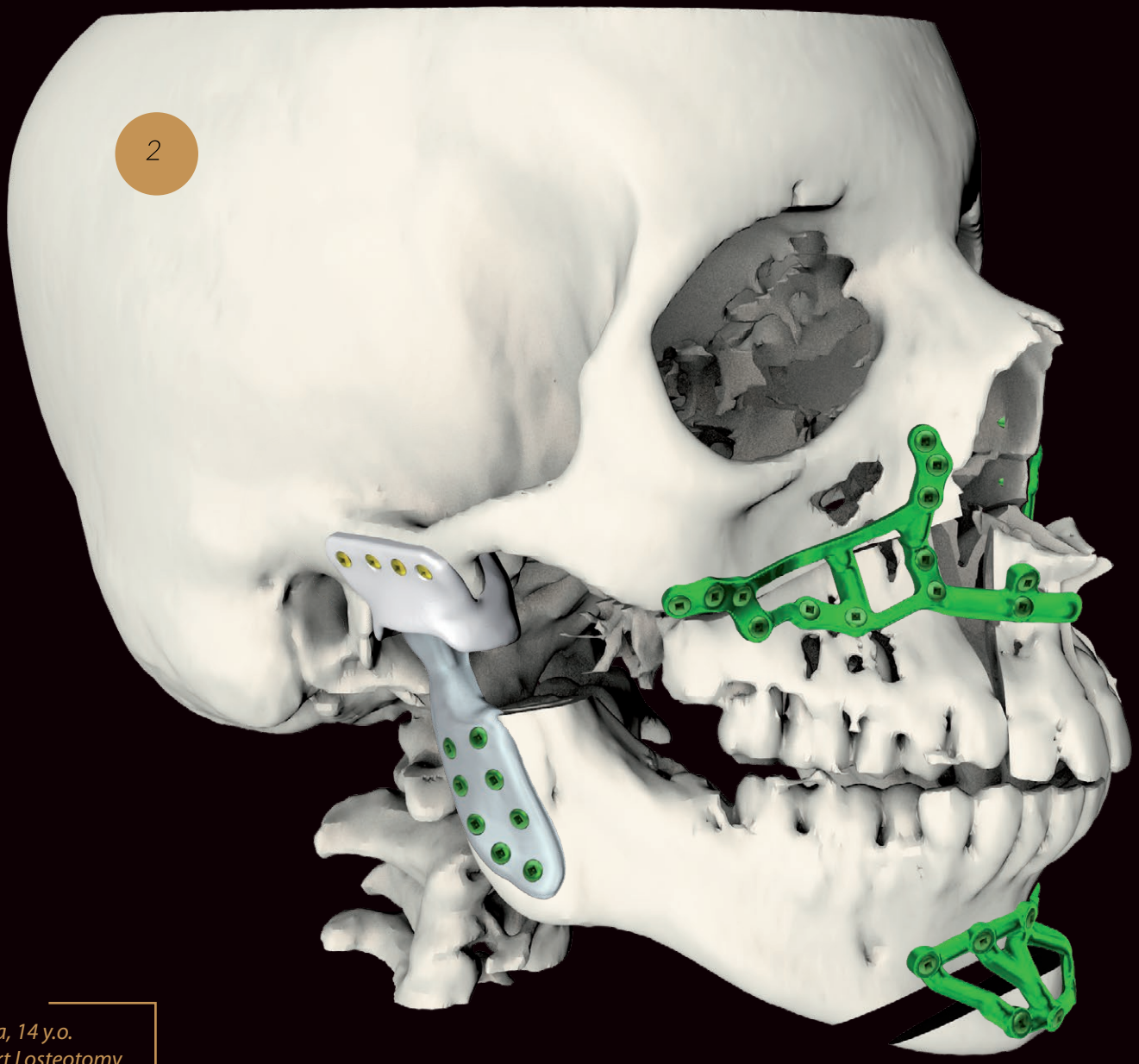
The creation process itself starts from performing a CT exam. The obtained files allow to design an anatomical 3D model.

By using detailed specifications, our engineers start the process of digital designing which is supported by consultations with the main surgeon. This proceeding gives the opportunity of precise planning and executing virtual resection and osteotomy. The result is the creation of a virtual implant that matches the patient's bone structures perfectly. On this basis a virtual surgical template is also created, which determinates precise cutting lines with accordance to the exact requirements of the medical case. After project acceptance, the templates and implants made of suitable material are printed. When all procedures are finished, implants and dedicated instrument set are sent to your hospital as medical devices.

* the waiting time is 14 days after the project is approved



1



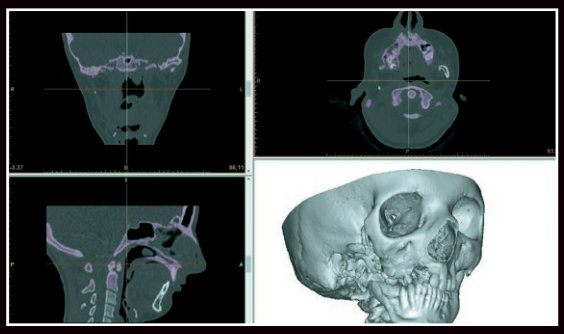
2

Anna, 14 y.o.
Lefort I osteotomy and reconstruction of TMJ (temporo-mandibular joints) with chin plasticity

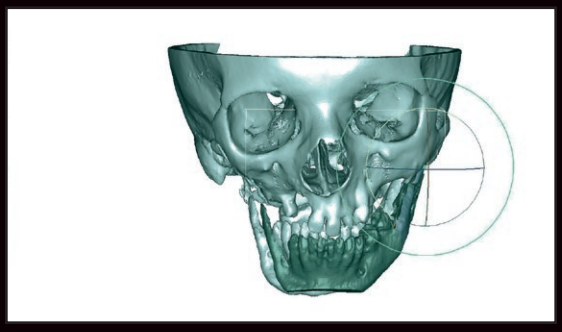
recurrent and stable

process

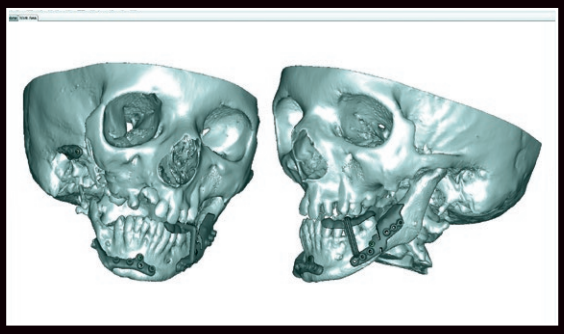
of designing and production

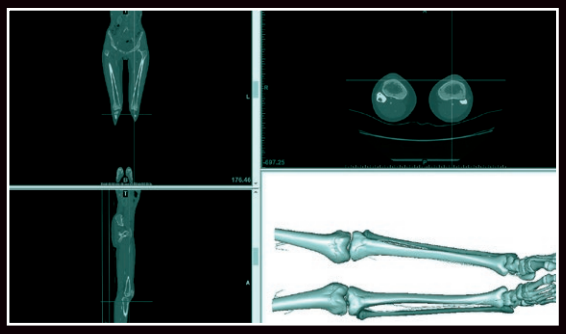


Creation of the 3D model of patient's bone structures

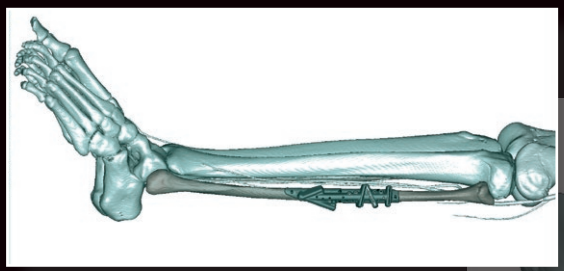


Arrangement of the resection scope

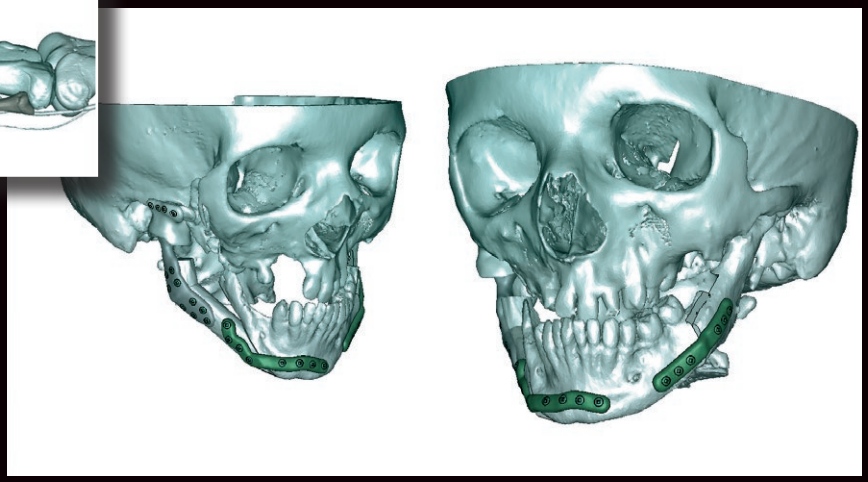




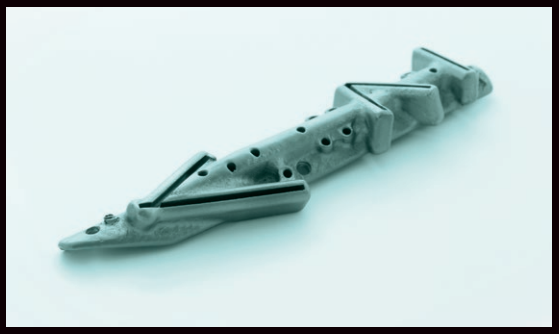
Determination of the place for autogenic material collection



Designing of surgical templates for osteotomy and resection, considering the final shape and position of the implants



Designing of implants



Finished products after heat treatment

Finished product after surface finish treatment

Ask also about our other products:

System of individual subperiosteal implants

Set for fixing membranes and bone blocks

Bone replacement materials

Bioresorbable implants

Distractors

Microsystem 1.5 and 2.0 for:

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- Orthognathics
- Traumatology

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