

CT SCAN PROTOCOL – AVINENT® DIGITAL HEALTH

This protocol describes the specifications for CT scan intended to request the services of AVINENT® Digital Health:

- **Anatomical models:** custom-made, single-use, acrylic or polyamide models designed to represent patient anatomy and used to improve and simplify surgery planning.
- **Surgical guides:** custom-made, single-use, acrylic or polyamide surgically-invasive guides designed and adapted to patient anatomy and used to improve, simplify and guide the surgical operation necessary to place titanium bone plates or other devices such as dental implants.
- **Bone plates:** custom-made, single-use, implantable, titanium alloy (Ti6Al4V ELI) plates designed and adapted to patient anatomy and planned surgical needs and used in the surgery to stabilize bone structures including bone grafts.
- **Customized prostheses:** custom-made, single-use, implantable, titanium alloy (Grade V ELI – Ti6Al4V ELI), PEEK (polyetheretherketone) or UHMWPE prostheses designed and adapted to patient anatomy and planned surgical needs and used in surgery to stabilize bone structures including bone grafts.

The quality of CT scan is the most important aspect in the planning, design and manufacture of AVINENT® Digital Health products.

1) PREPARATION OF THE PATIENT

- The patient should remove all metal items from the study area (earrings, piercings, removable dentures, etc.) and explain the importance of being still and not moving during the exploration which will not last more than a couple of minutes.
- We will place the patient supine position on the skull head, trying that the nasal spine stays parallel to the gantry, in this way we will get axial cuts to the hard palate and dental occlusion, in most cases.

2) PROTOCOL SELECTION

- We will select the protocol and proceed to the realization of the Scout (scanogram, topogram, etc.) posteroanterior and lateral.
- Once the scout is obtained, we will plan the cuts in the cranial-caudal direction from the frontal sinus to the end of the mandible, without tilting the gantry.
- The required characteristics of the protocol are:

Mode	T. Rot.	Collimation	Slice	Pitch	kV	mA	SFOV	Filter	Matrix
Helical	1s.	16x0,5	0,5 o 1	1	80-90	50-60	250	Bone	512

3) WARNINGS:

- AVINENT® Digital Health products are manufactured based on CT images of the patient. If the anatomical characteristics of the patient have changed in any important way since the date of the CT, the PRODUCTS should not be used. It is recommended that the products be used within 6 months from the date of the CT.
- It is recommended to scan 2 cm above and below the area of interest.

If you have any doubts, please consult our web: www.avinent.com, send an email to cmf@avinent.com or call our customer helpline.