# CT Scan Protocol

## Head

The CT scan quality is critical to the production of accurate personalized implants and patient-specific guides. Deviations from this protocol may result in an unusable scan and delay of surgery. Please contact Meticuly team for further clarification.

## **Scanning Parameters**

Region of interest	Complete skull
Matrix size	512 x 512
Voxel size	0.5 - 1  mm
Slice thickness	maximum 1 mm
Feed per rotation	maximum 1 mm
Pitch	1 or less
Reconstructed slice increment	maximum 1 mm
Reconstruction algorithm	Bone / Details
Export File	DICOM
File Format	Uncompressed standard



#### **CT Scanning Instruction**

- Helical (spiral) scanning mode is preferred for CT image acquisition.
- Scan must be less than three (3) months old.
- Capture complete skull, if possible, or capture complete cranium part of the skull.
- Align the patient in a way that prevents as many artifacts as possible and do not deform the soft tissue.
- Images scanned with no gantry tilt and no oblique reconstruction (i.e. use only primary axial images). No reformatting into coronal or sagittal planes.
- All slices must have the same field of view, reconstruction center, and table height.
- Scan with the same slice spacing, less than or equal to the slice thickness.
- Scan quality with clear bony edges and details

#### **Data Transfer**

- Provide the complete data set of raw/original DICOM images to the surgeon
- Do not erase patient name and ID. Data will be anonymized by Meticuly on receipt
  of the data, after cross-check with prescription of the surgeon to ensure the images of
  the right patient are provided.

