# CT Scan Protocol

## Clavicle

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	Full clavicle, acromioclavicular	
	and sternoclavicular joints.	
Body side	Both left and right clavicles	
Matrix size	512 x 512	
Voxel size	0.3 - 0.5  mm	
Slice thickness	0.625 mm or smaller	2
Feed per rotation	0.625 mm or smaller	
Pitch	1 or less	
Reconstructed slice increment	0.625 mm or smaller	
Reconstruction algorithm	Standard soft tissue	
Export File	DICOM	
File Format	Uncompressed standard	



### **CT Scanning Instruction**

- Both left and right clavicles should be scanned with approximately the same setting.
- Scan the patient bilateral with two FOVs. Use a FOV for the left and a second FOV for the right clavicle in the same bilateral scan. Reconstruct the scan separately for left and right clavicle.
- If possible, position the patient as follows: head first, supine, arms at sides of the body and with the shoulder in neutral rotation. Cervical spine is in neutral position.
- 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.
- Use the smallest field of view possible to capture the whole regions of the required bones. Capturing all soft tissue is unnecessary, only the bony regions are of interest.
- 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.

