

Materials List for

Assessment of Bone Fracture Healing Using Micro-Computed Tomography

Hwabok Wee^{*1,2}, Deepak Kumar Khajuria^{*1,2}, Fadia Kamal^{1,2,3}, Gregory S. Lewis^{1,2}, Reyad A. Elbarbary^{1,2,4}

¹Center for Orthopaedic Research and Translational Science (CORTS), The Pennsylvania State University College of Medicine ²Department of Orthopaedics and Rehabilitation, The Pennsylvania State University College of Medicine ³Department of Pharmacology, The Pennsylvania State University College of Medicine ⁴Department of Biochemistry and Molecular Biology, The Pennsylvania State University College of Medicine

*These authors contributed equally

Corresponding Authors

Gregory S. Lewis

glewis1@pennstatehealth.psu.edu

Reyad A. Elbarbary

relbarbary@pennstatehealth.psu.edu

Citation

Wee, H., Khajuria, D.K., Kamal, F., Lewis, G.S., Elbarbary, R.A. Assessment of Bone Fracture Healing Using Micro-Computed Tomography. *J. Vis. Exp.* (190), e64262, doi:10.3791/64262 (2022).

Date Published

December 9, 2022

DOI

10.3791/64262

URL

jove.com/video/64262

Materials

Name	Company	Catalog Number	Comments
10% neutral buffered formalin	Fisher chemical	SF100-20	Used for bone tissue fixation
Avizo	Thermo Scientific		Image processing and analysis software
Hydroxyapatite phantom	Micro-CT HA D4.5, QRM	QRM-70128	
Image Processing Language	Scanco		Used to convert raw images to DICOM images
Micro-Mosquito Straight Hemostatic Forceps	Medline		Used to remove the intramedullary pin
Microsoft Excel	Microsoft		Spreadsheet software
Scanco mCT system (vivaCT 40)	Scanco		Used for μ CT imaging