

Establishment of a Robust and Reproducible Model of Radiation-Induced Skin and Muscle Fibrosis

Yusuf Surucu¹, Fuat Baris Bengur¹, Katherine S. Yang¹, Benjamin K. Schilling¹, Jocelyn

S. Baker¹, Sheeba Shabbir², Renee Fisher³, Michael W. Epperly³, Joel S. Greenberger³, J. Peter Rubin¹, Asim Ejaz¹

¹Department of Plastic Surgery, University of Pittsburgh ²Department of Forensic Medicine and Toxicology, HBS Medical and Dental College ³Department of Radiation Oncology, University of Pittsburgh Cancer Institute

*These authors contributed equally

Corresponding Author

Asim Ejaz

ejaza@upmc.edu

Citation

Surucu, Y., Bengur, F.B., Yang, K.S., Schilling, B.K., Baker, J.S., Shabbir, S., Fisher, R., Epperly, M.W., Greenberger, J.S., Rubin, J.P., Ejaz, A. Establishment of a Robust and Reproducible Model of Radiation-Induced Skin and Muscle Fibrosis. *J. Vis. Exp.* (186), e64251, doi:10.3791/64251 (2022).

Date Published

August 31, 2022

DOI

10.3791/64251

URL

jove.com/video/64251

Materials

Name	Company	Catalog Number	Comments
10% Formalin	Fischer Scientific	23-427098	
Bolus	Orfit	8333.S01/R	
Clipper	Kent Scientific Corp.	CL8787-KIT	
CO2	Various		
CO2 Chamber	E-Z Systems Inc.	E-22000	
Depilatory Cream	Church & Dwight Co., Inc.		Nair
Digital Camera	Wolfgang	GA100	
Eppendorf Tubes	Eppendorf	22364111	
Eye Lubricant	Dechra		Puralube Ophthalmic Ointment
Gauze	Covidien	682252	
Image Processing Program	NIH		Image J
Isoflurane	Dechra		USP Inhalation Anesthetic
Linear Accelaerator	Varian Medical Systems, Inc.		23EX
PBS	Cytiva	SH30256.LS	
Pentobarbital	Akorn Pharmaceuticals		Nembutal
Protractor	Westcott	550-1120	
Small Animal Anesthesia System	E-Z Systems Inc.	EZ-SA800	Single animal system
Spreadsheet Software	Microsoft		Excel
Surgical Scissors	Medline	MDS0834111	
Surgical Tape	3M	1538-1	
Tape	3M	H-1113	