Copyright © by The Journal of Bone and Joint Surgery, Incorporated Berkes et al. The Impact of Three-Dimensional CT Imaging on Intraobserver and Interobserver Reliability of Proximal Humeral Fracture ... http://dx.doi.org/10.2106/JBJS.M.00199 Page 1 of 2

Reviewer	Intraobserver Reliability (Weighted Kappa Coefficient)		
	Radiographs	2-D CT Scans	3-D CT Scans
Attending surgeon 1	0.217	0.217	0.141
Attending surgeon 2	0.132	0.188	0.199
Attending surgeon 3	0.160	0.109	0.094
Senior resident 1	0.174	0.189	0.155
Senior resident 2	0.207	0.198	0.209
Junior resident 1	0.384	0.302	0.274
Junior resident 2	0.152	-0.040	0.184

TABLE E-2 Intraobserver Reliability of All Reviewers for Neer Fracture Planes Classification, by Modality

Reviewer	Intraobserver Reliability (Weighted Kappa Coefficient)			
	Radiographs	2-D CT Scans	3-D CT Scans	
Attending surgeon 1	0.388	0.124	0.086	
Attending surgeon 2	0.142	0.137	0.077	
Attending surgeon 3	0.236	0.288	0.060	
Senior resident 1	0.112	0.131	0.171	
Senior resident 2	0.285	0.184	0.035	
Junior resident 1	0.418	0.375	0.492	
Junior resident 2	0.165	0.135	0.231	

TABLE E-3 Intraobserver Reliability of All Reviewers for AO/OTA Classification, by Modality

Reviewer	Intraobserver Reliability (Weighted Kappa Coefficient)			
	Radiographs	2-D CT Scans	3-D CT Scans	
Attending surgeon 1	0.437	0.355	0.370	
Attending surgeon 2	0.472	0.427	0.402	
Attending surgeon 3	0.432	0.415	0.366	
Senior resident 1	0.522	0.427	0.419	
Senior resident 2	0.513	0.381	0.417	
Junior resident 1	0.555	0.600	0.456	
Junior resident 2	0.496	0.309	0.438	

COPYRIGHT © BY THE JOURNAL OF BONE AND JOINT SURGERY, INCORPORATED BERKES ET AL. THE IMPACT OF THREE-DIMENSIONAL CT IMAGING ON INTRAOBSERVER AND INTEROBSERVER RELIABILITY OF PROXIMAL HUMERAL FRACTURE ... http://dx.doi.org/10.2106/JBJS.M.00199 Page 2 of 2

Reviewer	Intraobserver Reliability (Weighted Kappa Coefficient)		
	Radiographs	2-D CT Scans	3-D CT Scans
Attending surgeon 1	0.885	1.000	0.793
Attending surgeon 2	0.711	0.500	0.462
Attending surgeon 3	0.174	0.250	0.298
Senior resident 1	0.224	0.184	0.188
Senior resident 2	0.353	0.375	0.593
Junior resident 1	0.336	0.731	0.498
Junior resident 2	0.172	0.223	0.250