

## Summary of baseline inter-examiner reliability results

- 1) total number of teeth per subject
  - a) 82 subjects assessed, 81 pairings (99%) were in agreement
  - b) the 1 disagreement occurred regarding an implant vs. natural tooth call
  
- 2) tooth-specific tooth counts (i.e., "present", "retained root fragment", "missing without fixed replacement", "missing with fixed replacement" calls)
  - a) 32 teeth x 82 subjects = 2,624 possible pairings
  - b) 98% of the pairings were in agreement (2,574/2,624)
  - c) 48 of the 50 pairs (96%) in disagreement were due to disagreement over tooth position, not tooth presence. One disagreement was a "present" vs. "retained root" disagreement, and the other was a "missing with fixed replacement" vs. "present" disagreement.
  
- 3) number of retained root fragments per subject
  - a) 82 subjects assessed, who had 1,686 teeth
  - b) 22 of the 1,686 teeth were called a "retained root" by at least one examiner; these roots were included in the "number of remaining teeth"
  - c) 21 of these 22 calls (95%) were in agreement
  
- 4) number of fixed prosthetic pontics or cantilevers per subject
  - a) 82 subjects assessed, who had 1,686 teeth
  - b) 36 "missing with fixed replacement" calls were made by at least one examiner; these prosthetic teeth were not included in the "number of remaining teeth"
  - c) 35 of these 36 calls (97%) were in agreement
  
- 5) number of bulk restoration fractures per subject
  - a) 82 subjects assessed, who had 1,686 teeth
  - b) 19 teeth were called as having a bulk fracture by at least one examiner (14 subjects)
  - c) For subjects with at least one call, both examiners agreed on the number of calls only 6 times (43% agreement). That is, overall, examiners agreed on the number of bulk fractures on 74 of the 82 subjects (90%).
  - d) coefficient of colligation,  $Y=0.91$ ;  $kappa=0.62$
  
- 6) number of cusp/incisal edge fractures per subject
  - a) 82 subjects assessed, who had 1,686 teeth
  - b) 26 teeth were called as having a cusp or incisal edge fracture by at least one examiner (19 subjects).
  - c) For subjects with at least one call, both examiners agreed on the number of calls only 7 times (37% agreement). That is, overall, examiners agreed on the number of cusp fractures on 70 of the 82 subjects (85%).
  - d) coefficient of colligation,  $Y=0.89$ ;  $kappa=0.60$

- 7) number of root defects per subject
- a) 82 subjects assessed, who had 1,686 teeth
  - b) 34 teeth were called as having a root defect by at least one examiner (12 subjects).
  - c) For subjects with at least one call, both examiners agreed on the number of calls only 3 times (25% agreement). That is, overall, examiners agreed on the number of root defects on 72 of the 82 subjects (88%).
  - d) coefficient of colligation,  $Y=0.84$ ;  $kappa=0.48$
- 8) number of mobile teeth per subject
- a) 82 subjects assessed, who had 1,686 teeth
  - b) 54 teeth were called as having one or more mobile teeth by at least one examiner (18 subjects).
  - c) For subjects with at least one call, both examiners agreed on the number of calls only 3 times (17% agreement). That is, overall, examiners agreed on the number of mobile teeth on 67 of the 82 subjects (82%).
  - d) coefficient of colligation,  $Y=0.88$ ;  $kappa=0.60$

Summary of inter-examiner agreement for coronal and root caries assessment

Pairing	# subj.	# pairs of teeth	CORONAL % agreement	ROOT % agreement	CORONAL kappa	CORONAL coeff. Y	ROOT kappa	ROOT coeff. Y
Overall	82	1,686	96%	97%	0.89	0.91	0.62*	0.82
Mean (S.D.)	8 (4)	75 (41)	96% (2%)	97% (2%)				

\* surface-specific root agreement:

lingual kappa=0.72; Y=0.90  
 mesial kappa=0.63; Y=0.86  
 buccal kappa=0.59; Y=0.76  
 distal kappa=0.57; Y=0.81

1=DWL; 2=TAD; 3=DEA; 4=GHG; 5=UF; 6=MLR

**Summary of inter-examiner reliability results for periodontal attachment loss, ranked by percent agreement +/- 1 mm**

<u>Pairing</u>	<u># subj.</u>	<u># pairs of teeth</u>	<u># (%) pairs +/- 1 mm</u>	<u># (%) pairs +/- 2mm</u>
Overall	81	642	535 (83%)	622 (97%)
Mean (S.D.)	7.4 (4.1)	58.4 (37.8)	83% (7%)	97% (2%)

Overall Intra-class correlation coefficient = 0.75

Mean (S.D.) attachment loss in teeth assessed was 3.9 mm (1.9 mm)

1=DWL; 2=DEA; 3=GHG; 4=UF; 5=TAD; 6=MLR