

Author's Response

Sir,

We would first like to thank Dr. Cameriere for the special interest he showed to our work. As clearly mentioned at the end of his letter, we would like to emphasize once again that this technical note was solely intended to propose a new method and that the data sets effectively need to be extended to refine the results.

Concerning measurements reliability, we agree that paired *t*-test only reveals that the mean value of the differences between pairs of measurements is equal to zero. Moreover, as mentioned by Dr. Cameriere, our study sample was not intended to be the representative of the population and therefore of tooth volumes variability. As intraclass correlation coefficients rely on such variability, we thought that it would give inappropriate or imprecise results.

Actually, here are the detailed results of reliability analysis, based on 33 repeated total volumes (measured two times by observer A: VAR00007 and VAR00008 and one time by observer B: VAR00009) and 33 pulp volumes measured the same way (VAR00010 and VAR00011 for observer A and VAR00012 for observer B):

	Intraclass Correlation Coefficient		
	Intraclass Correlation	95% Confidence Interval	
		Lower Limit	Upper Limit
Single measurements	1000	999	1000
Average measurements	1000	1000	1000

Mixed effects models of two factors when the impact on people are randomized and the effects of measurements are fixed.

	Intraclass Correlation Coefficient		
	Intraclass Correlation	95% Confidence Interval	
		Lower Limit	Upper Limit
Single measurements	996	993	998
Average measurements	999	998	999

Mixed effects models of two factors when the impact on people are randomized and the effects of measurements are fixed.

	Descriptive Statistics			
	Mean	Standard Error	Standard Deviation	Variance
VAR00007	7,073,888	2,411,669	13,853,982	19,193,281
VAR00008	7,074,042	2,401,514	13,795,848	19,031,991
VAR00009	7,072,973	2,399,535	13,784,280	19,000,638
VAR00010	182,003	163,936	941,743	88,688
VAR00011	181,312	165,514	950,303	90,403
VAR00012	180,915	166,707	957,657	91,711
<i>N</i> effective (listwise)				

For the same reason (the lack of representativeness of our sample), the given R^2 values were proposed for guidance only and we only meant to highlight the potential interests of our reconstruction technique. Since that methodological validation, the protocol has recently been applied on a much larger sample ($n = 840$) and weighted least squares multiple linear regressions (to solve the problem of residuals' heteroskedasticity) have been established ($R^2_{adjusted}$ ranging from 0.915 to 0.964 and mean absolute error ranging from 3.854 to 4.606).

We fully agree about the importance of proper statistical intake in forensic sciences and will therefore be careful to give all necessary statistical elements when providing definitive age estimation formulae in a dedicated forthcoming publication.

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