Appendix 1

Supplementary Result S1

The SPSS software results of R2 and SEE of the linear regression between the VNCa slopes and QCT-BMD of the vertebrae. SEE, standard error of estimate; VNCa, virtual non-calcium; QCT, quantitative computed tomography; BMD, bone mineral density

1. The results of linear regression between λ1 and QCT-BMD

Variables Entered/Removed			
Model	Variables Entered	Variables Removed	Method
1	λ1	.	Enter

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.957	0.916	0.916	11.91368

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1024513.767	1	1024513.767	7218.156	0.000
	Residual	94245.275	665	141.936		
	Total	1118759.042	666			

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	−7.324	1.578		−4.642	.000
	λ1	19.743	0.232	0.957	84.960	.000

2. The results of linear regression between λ2 and QCT-BMD

Variables Entered/Removed

Model	Variables Entered	Variables Removed	Method
1	λ2	.	Enter

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.957	0.916	0.916	11.91257

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1024531.174	1	1024531.174	7219.613	0.000
	Residual	94227.868	665	141.909		
	Total	1118759.042	666			

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	−7.326	1.578		−4.643	0.000
	λ2	34.161	0.402	0.957	84.968	0.000

3. The results of linear regression between λ3 and QCT-BMD

Variables Entered/Removed

Model	Variables Entered	Variables Removed	Method
1	λ3	.	Enter

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.957	0.916	0.916	11.91042

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1024565.268	1	1024565.268	7222.466	0.000
	Residual	94193.774	665	141.858		
	Total	1118759.042	666			

Coefficients

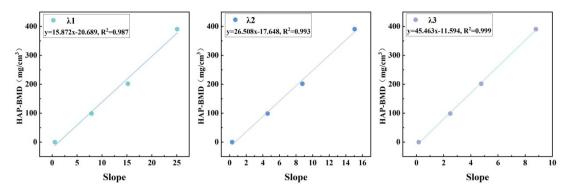| Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	−7.330	1.577		−4.647	.000
	λ3	62.846	0.739	0.957	84.985	.000

Figure S1 Scatter plots and linear regression equations of slopes ($\lambda 1$, $\lambda 2$, and $\lambda 3$) *vs.* HAP-BMD of the inserts. HAP, hydroxyapatite; BMD, bone mineral density.