

Appendix 1 Supplementary materials for the Results section

Results

Statistical test for measuring the association between variables

In the referenced figures (Figures S1-S8), each scatter plot illustrates the correlation between predicted and actual BMD values, with the degree of dispersion around the line of best fit representing the accuracy of our model. Lower dispersion indicates better prediction accuracy.

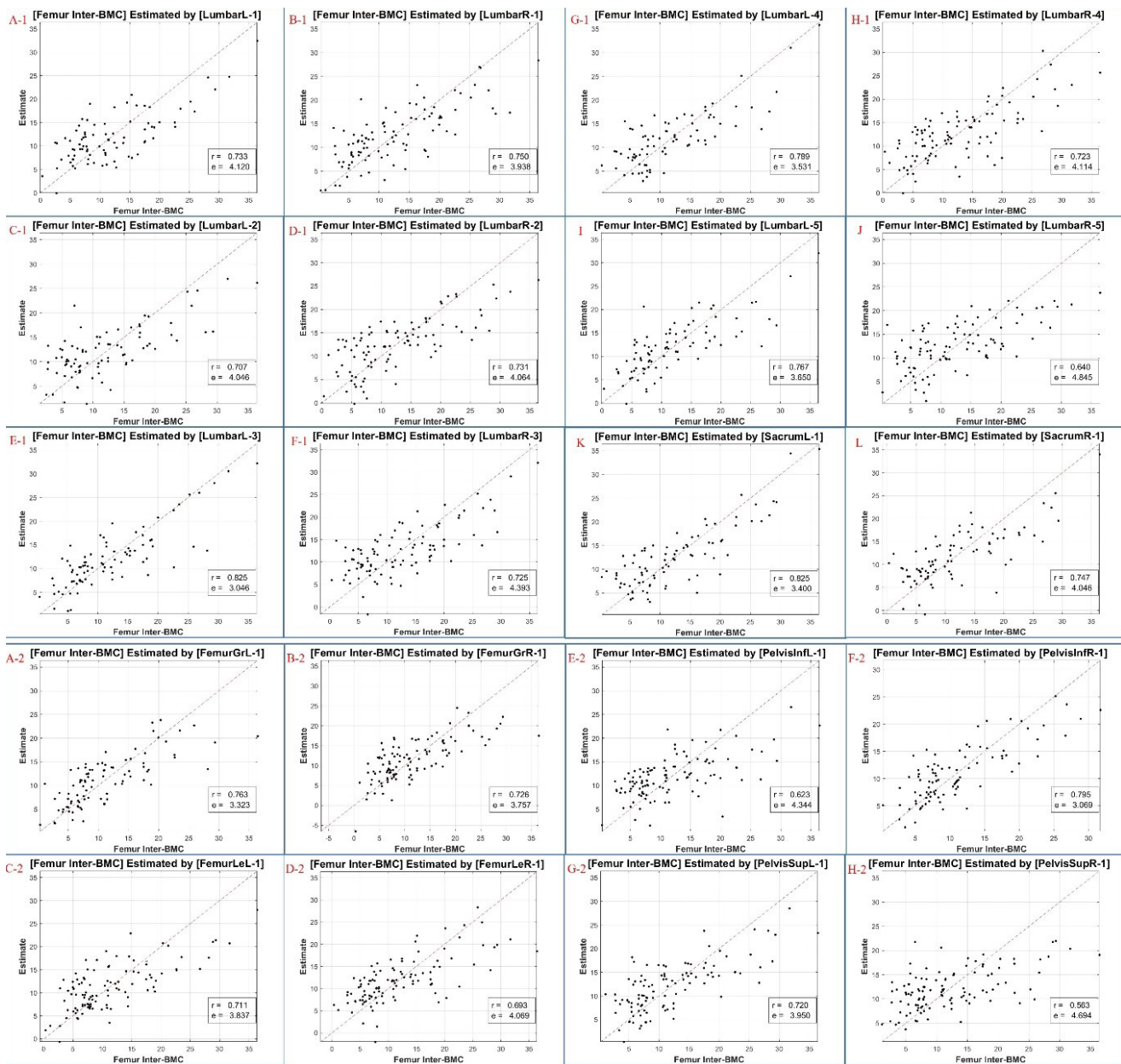
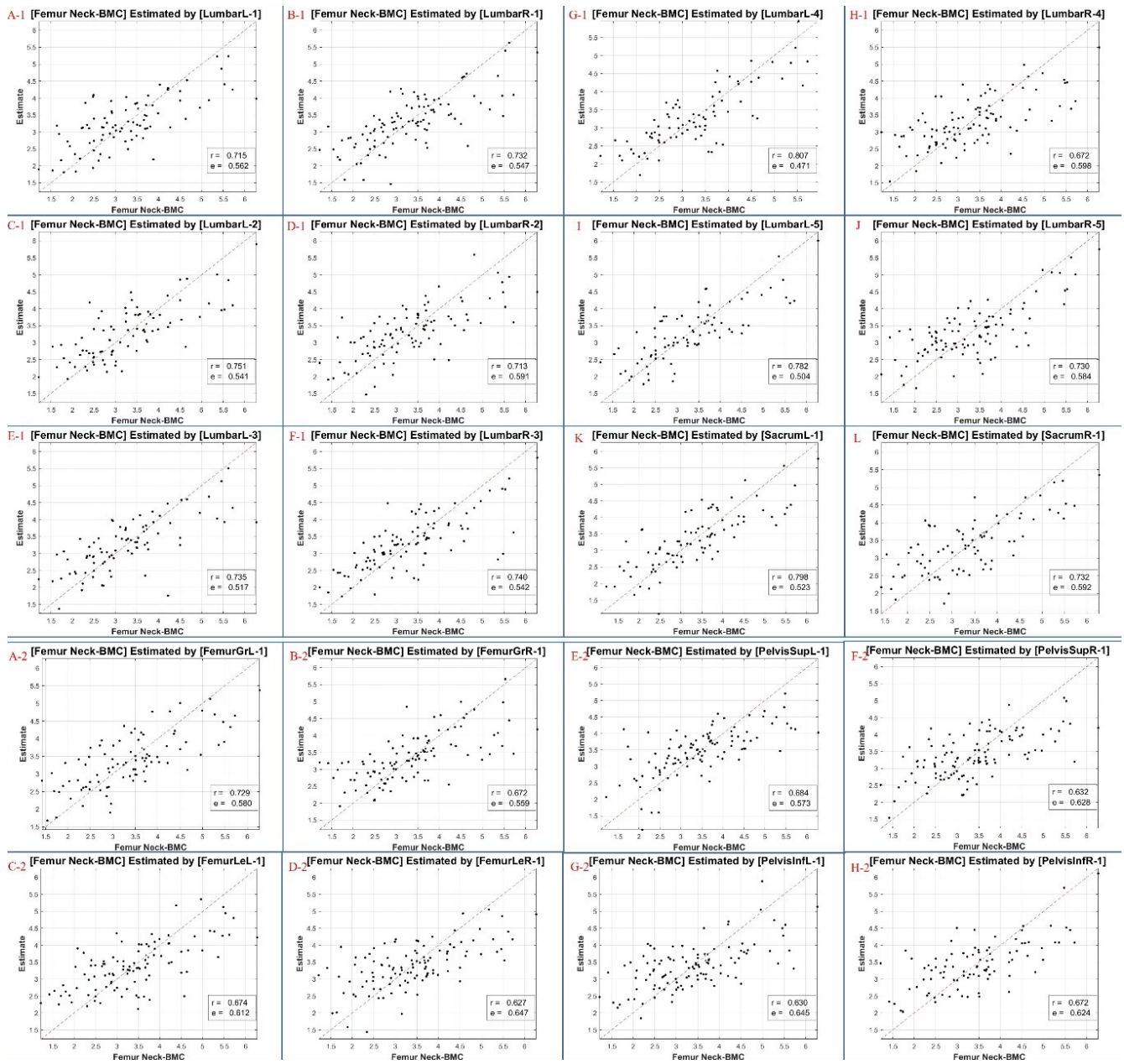


Figure S1 Scatter plots showing DXA BMC reference values for Femur Intertrochanter and corresponding estimates across cases. Circles denote their corresponding estimated values using the Linear Regression model.



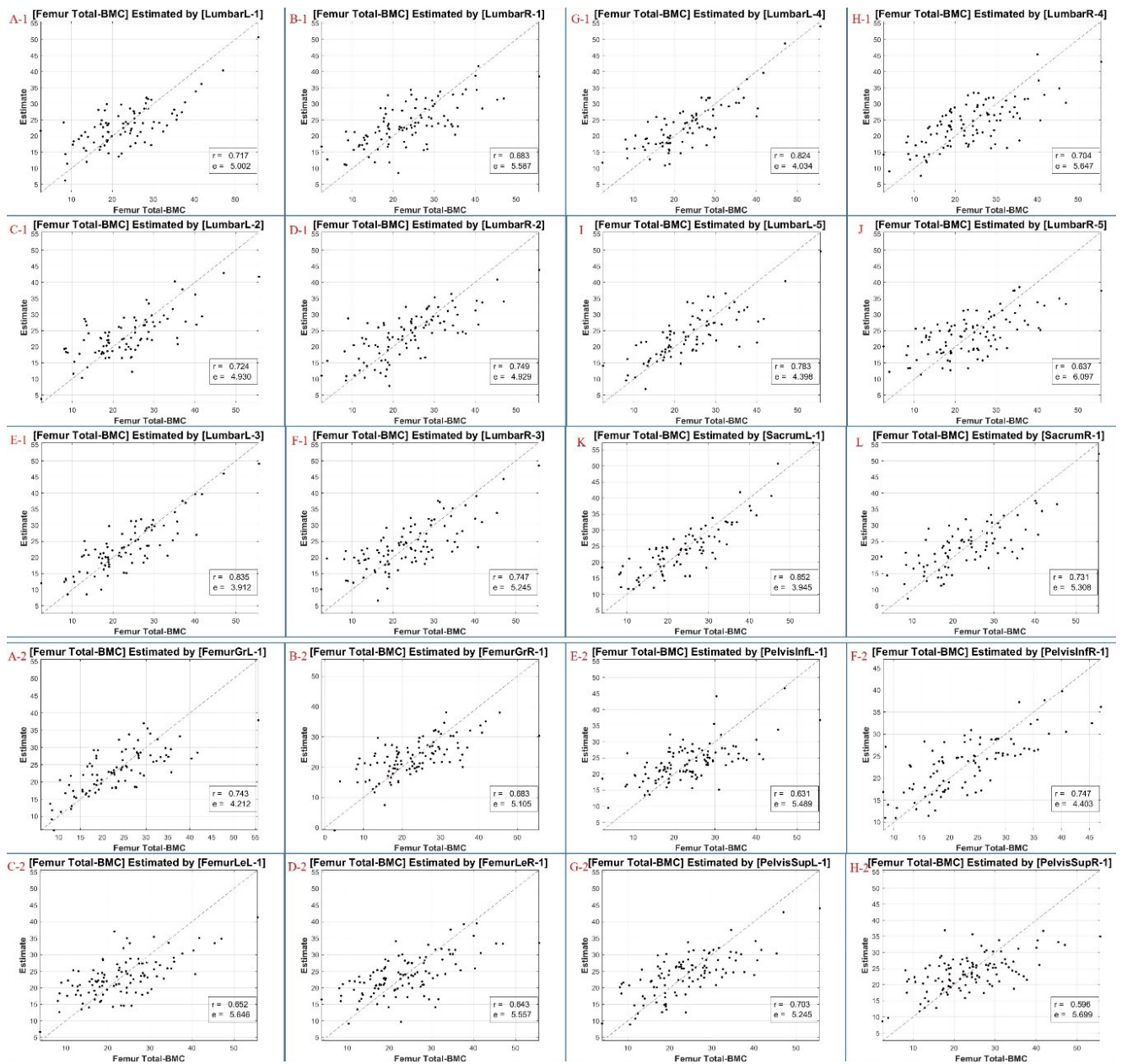
**Figure S2** Scatter plots displaying DXA BMD reference values for Femur Intertrochanter and the corresponding estimates across cases. Circles represent the corresponding estimated values derived from the Linear Regression model.



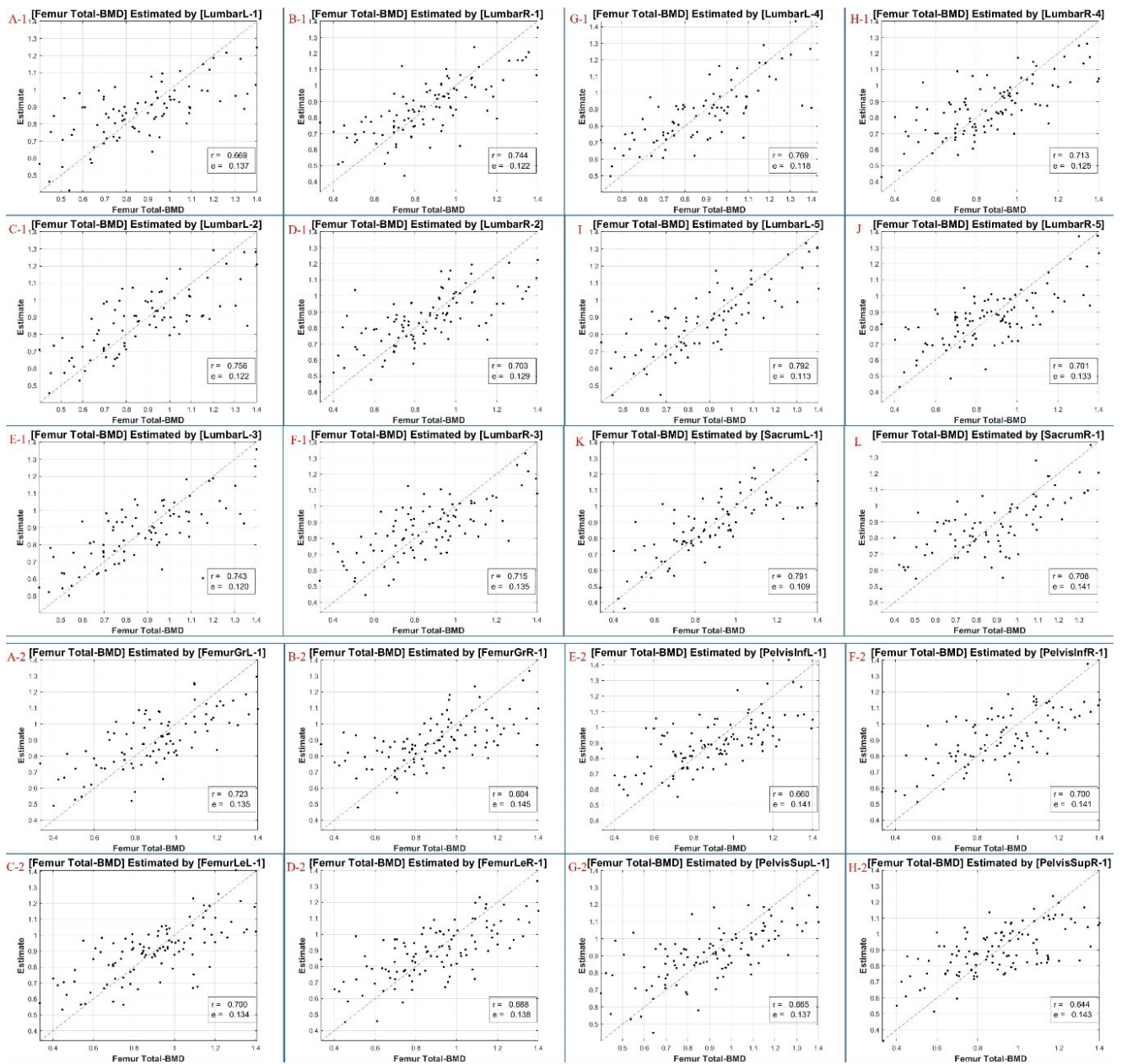
**Figure S3** Scatter plots illustrating DXA BMC reference values for Femur Neck and the corresponding estimates across cases. Circles denote their corresponding estimated values obtained through the Linear Regression model.



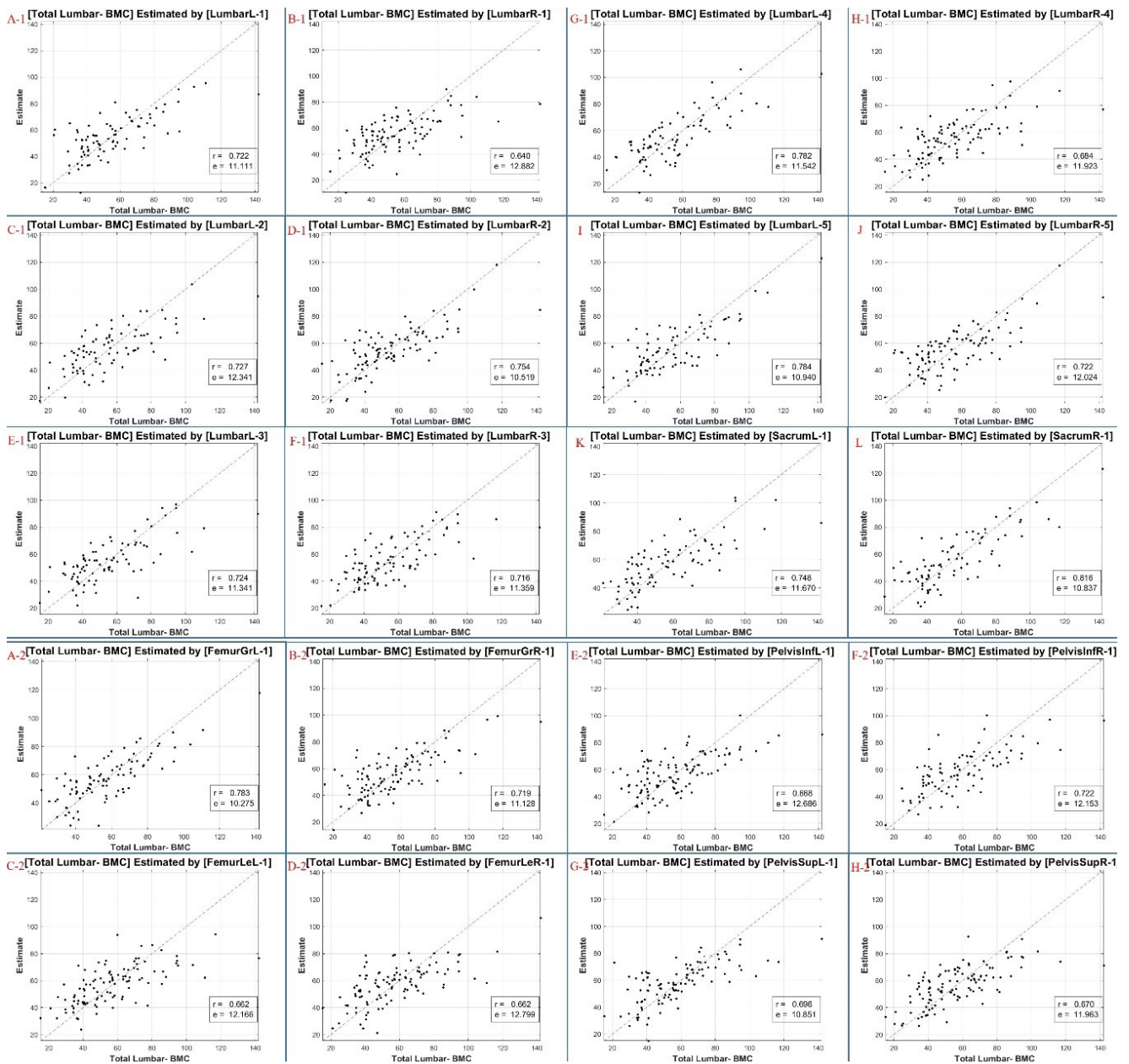
**Figure S4** Scatter plots showing DXA BMD reference values for Femur Neck and corresponding estimates across cases. Circles signify their corresponding estimated values, determined by the Linear Regression model.



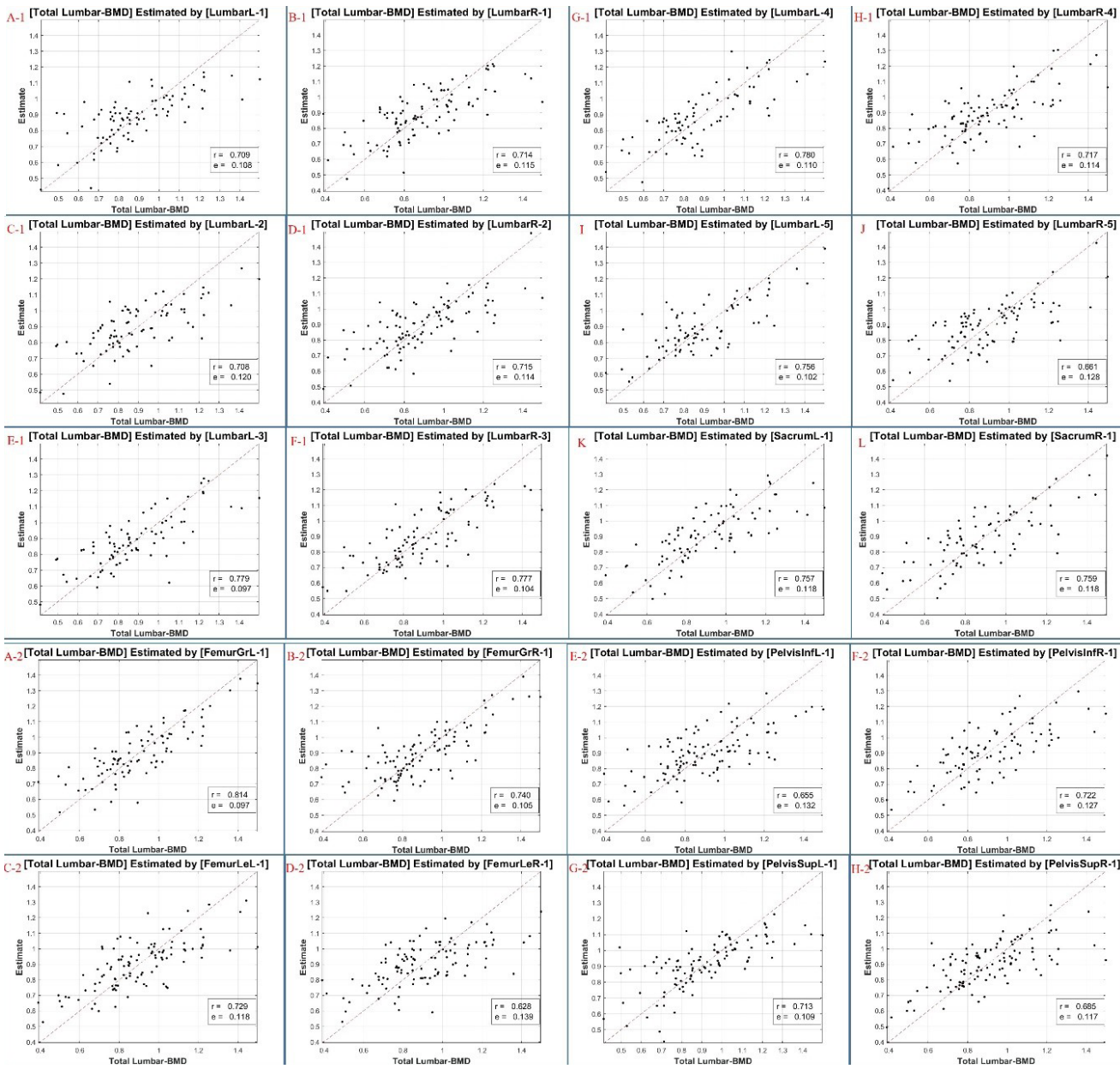
**Figure S5** Scatter plots depicting DXA BMC reference values for Femur Total and corresponding estimates across cases. Circles denote their corresponding estimated values, calculated using the Linear Regression model.



**Figure S6** Scatter plots illustrating DXA BMD reference values for Femur Total and the corresponding estimates across cases. Circles represent the corresponding estimated values derived from the Linear Regression model.



**Figure S7** Scatter plots showing DXA BMC reference values for Total Lumbar and corresponding estimates across cases. Circles denote their corresponding estimated values, determined by the Linear Regression model.



**Figure S8** Scatter plots illustrating DXA BMD reference values for Total Lumbar and the corresponding estimates across cases. Circles denote their corresponding estimated values, calculated using the Linear Regression model.