

Supplementary Table. Regression models for bSCr on age, weight and TBW

Sex	Independent variables	Model type	Best fit	Correlation
Men	Age, TBW	Linear	$0.689041 + 0.00615805 \cdot \text{age} + 0.00184082 \cdot \text{TBW}$	0.16193
Women	Age, TBW	Linear	$0.628065 + 0.00445433 \cdot \text{age} + 0.00302547 \cdot \text{TBW}$	0.16194
Men	Age, weight	Linear	$0.728724 + 0.00595947 \cdot \text{age} + 0.000628884 \cdot \text{weight}$	0.161787
Women	Age, weight	Linear	$0.671182 + 0.00442914 \cdot \text{age} + 0.000810788 \cdot \text{weight}$	0.161929
Men	Age, TBW	Nonlinear, $a + b \cdot \text{age}^g + c \cdot \text{TBW}^h$	$0.665727 + 0.000418181 \cdot \text{age}^{1.55636} + 0.0424053 \cdot \text{TBW}^{0.438353}$	0.165134
Women	Age, TBW	Nonlinear, $a + b \cdot \text{age}^g + c \cdot \text{TBW}^h$	$-0.368833 + 0.000095169 \cdot \text{age}^{1.79443} + 0.868862 \cdot \text{TBW}^{0.094867}$	0.16406
Men	Age, weight	Nonlinear, $a + b \cdot \text{age}^g + c \cdot \text{weight}^h$	$8.28867 - 9.02162 \cdot \text{age}^{-0.0395904} + 0.396278 \cdot \text{weight}^{0.0666944}$	0.151738
Women	Age, weight	Nonlinear, $a + b \cdot \text{age}^g + c \cdot \text{weight}^h$	$-0.368833 + 0.000095169 \cdot \text{age}^{1.79443} + 0.868862 \cdot \text{TBW}^{0.094867}$	0.16406

Correlation is calculated between measured and estimated SCr values. Note that multiple R-squared is the square of this correlation. Abbreviations: bSCr, baseline serum creatinine; TBW, total body water