

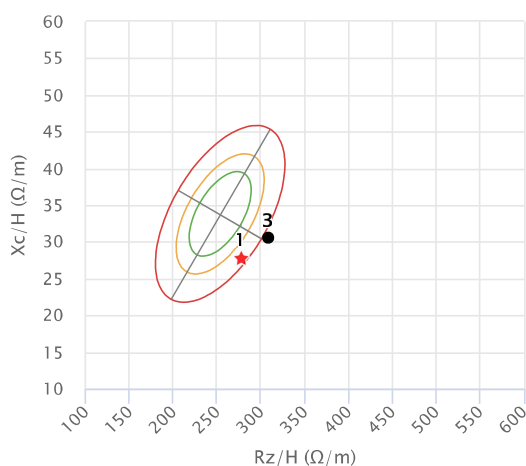

 Test User Male (AGE: 40)

Assessment of:
 02/02/2022 10:01 AM

Gender: Male	Weight: 82.0 kg	Hydration: 73.3% (TBW/FFM)	RZ: 555 Ω	BMI: 25.3 kg/m ²
Date of Birth: 01/01/1982	Height: 180.0 cm	Nutrition: 962.4 (mg 24h/htn)	XC: 55 Ω	

Biavector® qualitative BC analysis

Biavector® Sport & Activity



Estimates: quantitative BC results

Weight – related norms

Parameter	Result	%	References	Comparison
Phase Angle (PhA)	5.7 °		3.7 4.6 5.5 6.3 7.2 8.1 9.0	-0.6 °
Total Body Water (TBW)	48.3 l	58.9 %	56.6 58.8 61.0 63.2 65.4 67.6 69.8	-4.3 %
Extra Cellular Water (ECW)	19.7 l	40.8 %	37.2 38.1 39.0 39.9 40.8 41.7 42.6	0.9 %
Intra Cellular Water (ICW)	28.6 l	59.2 %	57.4 58.3 59.2 60.1 61.0 61.9 62.8	-0.9 %
Fat-Free Mass (FFM)	65.3 kg	79.6 %	76.7 80.0 83.3 86.6 89.9 93.2 96.5	-7.0 %
Fat Mass (FM)	16.7 kg	20.4 %	3.5 6.8 10.1 13.4 16.7 20.0 23.3	7.0 %
Skeletal Muscle Mass (SMM) Janssen	29.5 kg	36.0 %	31.7 35.9 40.1 44.3 48.5 52.7 56.9	-8.3 %
Basal Metabolic Rate (BMR)	2351.5 kcal			
Total Daily Energy Expenditure (TDEE)	2351.5 kcal			

Target weight

The merge between a Ideal Body Weight (IBW) linear equation and BMI is used to calculate the target weight with an easy-to-use method. Peterson CM et al. Am J Clin Nutr 2016;103:1197–203

Phase angle (PhA)

The phase angle expresses the proportion between the intra and extracellular spaces, describes properties on the quality of the cell and is used in the clinic as a prognostic index for chronic diseases. In a healthy adult subject, the normal phase angle value is between 5 and 7 degrees.

Total Body Water (TBW)

Total Body Water (TBW) comprises fluids inside (intracellular) and outside the cells (extracellular water). Usually it is expressed as a percentage of weight. TBW varies with gender and age, physiologically increasing with enlarged muscle mass.

Extra Cellular Water (ECW)

Extra Cellular Water represents the fluids outside the cells. ECW is located mostly in between the cells (interstitial), the blood and lymphatic system.

Intra Cellular Water (ICW)

The intracellular water (ICW) volume represents the fluid content within the body's cells. This volume cannot be measured directly but is calculated as the difference between the estimated TBW and the estimated ECW volume. Potassium provides the osmotic skeleton for the ICF in much the same way that sodium provides the osmotic skeleton for the ECF.

Free Fat Mass (FFM)

The Free Fat Mass or lean mass is defined as (Body weight kg Fat mass kg). Fat-free mass is the combined mass of the body of everything that is not fat (e.g. muscles, bones, skin and organs)

Fat Mass (FM)

The Fat Mass is a compound comprised of glycerol -- a substance formed in fatty acids -- and fatty acids which is required as a concentrated energy source for our muscles. Fat is a storage compartment for the body's extra calories and it fills fatty cell

Body Cell Mass (BCM)

Body Cell Mass is the living, protein based, metabolically active tissue in the body, where more over than 90% of the metabolic processes are taking place.

Total Muscle Mass (MM)

Total Muscle Mass (MM) represents the estimation of the amount of over 750 muscles present in the human body. MM correlates with physical function and health status and is involved in many processes related to physiology, nutrition, medical treatments, disease prevention and long-term rehabilitation. In healthy adult subject, MM represents from 25% to 45% of the weight according to gender and age: in the sports and / or athlete population, the quantity should be 50-70% of the weight.

Skeletal Muscle Mass (SMM)

Skeletal muscle mass (SMM) represents the estimation of the amount of over 600 muscles present in the human body. SMM correlates with physical function and health status . In healthy adult SMM presents the 30% of total weight in women and 38% of total weight in man.

Appendicular Skeletal Muscle Mass (ASMM)

Approximately 75% of skeleton muscle mass is located in the appendicular region and is called Appendicular Skeletal Muscle Mass (ASMM). Reduction of ASMM leads to negative health consequences such as weakness, disability, impaired quality of life .

Basal Metabolic Rate (BMR)

Basal Metabolic Rate (BMR) is the amount of energy expressed in calories that a person needs to keep the body functioning at rest.

Total Daily Energy Expenditure (TDEE)

Energy consumption in the body is a product of the basal metabolic rate (BMR) and the physical activity level (PAL). The physical activity level are defined for a non-pregnant, non-lactating adult as that person's Total Energy Expenditure (TDEE) in a 24-hour period, divided by his or her basal metabolic rate (BMR)

arms Lean Soft Tissue (a-LST)

Arms Lean Soft Tissue represents the Fat Free Mass, without the bone, estimated in the arms of the subject, calculated with an equation developed on almost 300 heterogeneous athletes and showing a high correlation against DEXA (gold standard). It represents a particularly suitable parameter for studying the sports population. Knowing the distribution of lean soft tissue (LST) specifically in the arms and/or legs is important for optimizing athletic performance, monitoring response to training, and assessing injury risk.

legs-Lean Soft Tissue (l-LST)

Legs Lean Soft Tissue represents the Fat Free Mass, without the bone, estimated in the legs of the subject, calculated with an equation developed on almost 300 heterogeneous athletes and showing a high correlation against DEXA (gold standard). It represents a particularly suitable parameter for studying the sports population. Knowing the distribution of lean soft tissue (LST) specifically in the arms and/or legs is important for optimizing athletic performance, monitoring response to training, and assessing injury risk.