Supplementary Material

Supplement Table 1. Heart rate variability standard parameters.

Parameters	Description	Unit
Time domain		
RMSSD	Reflects parasympathetic nerve activity.	ms
SDNN	Reflects overall heart rate variability.	ms
SDNN5	Reflects short-term heart rate variability.	ms
pNN50	An indicator of heart rate variability.	%
SDSD	An indicator of heart rate variability.	ms
Frequency domain		
LFa	The frequency and amplitude of waveforms associated with sympathetic nerve activity.	bpm^2
Hfa	The frequency and amplitude of waveforms associated with parasympathetic nerve activity.	bpm^2
Lfa/Hfa	Reflects the balance between sympathetic and parasympathetic nerve activity.	bpm^2
TSP	The total power of the heart rate signal spectrum.	ms^2
TP	Similar to TSP, it represents the total variability of heart rate.	ms^2
LF/HF	Reflects the balance of the autonomic nervous system activity.	ms^2
VLF Peak Frequency	The peak frequency of the very low-frequency wave.	Hz
VLF	A component of heart rate variability associated with long-term stress responses.	ms^2
VLFnorm	The normalized power of the VLF component.	nU
LF Peak Frequency	The peak frequency of the low-frequency wave.	Hz
LF	A component of heart rate variability associated with sympathetic nerve activity.	ms^2
LFnorm	The normalized power of the LF component.	nU

HF Peak Frequency	The peak frequency of the high-frequency wave.	Hz
HF	A component of heart rate variability associated with parasympathetic nerve activity.	ms^2
HFnorm	The normalized power of the HF component.	nU
Cardiovascular system		
BMR	The minimum amount of energy required to sustain life.	cal
BMI	The ratio of body weight to the square of height.	
SpO2	The concentration of oxygen in the blood.	%
BP	The pressure exerted on the blood vessel walls by the pumping action of the heart.	mmHg
Heart Rate	The number of heartbeats per minute.	bpm
Q	The volume of blood pumped by the heart with each beat.	l/min
PP	The difference between systolic and diastolic pressure.	mmHg
PH	The height of the pulse wave.	mm
SV	The volume of blood pumped by the left ventricle with each contraction.	ml
SVI	SV adjusted for body surface area.	ml/m^2
CI	Cardiac output adjusted for body surface area.	$l/min/m^2$
MAP	The average pressure of blood in the vessels.	mmHg
BV	The total amount of blood in the body.	L
SVR	The resistance of blood flow in the vascular system.	
EEI	An index reflecting the heart's pumping capability.	
DDI	An index reflecting vascular dilation function.	
DEI	An index reflecting vascular elasticity.	
AI	An index reflecting the characteristics of the reflected wave of the vascular wall.	
RI	An index reflecting the reflective properties of the vascular wall.	

C1	An index reflecting changes in arterial volume.	ml/mmHg
C2	An index reflecting arterial compliance.	ml/mmHg
DPTI/SPTI	An index reflecting the ratio of diastolic to systolic time within the cardiac pumping cycle.	
Functional Age	An estimated age based on cardiovascular health status.	years

Note: The main time domain indicators include: RMSSD = Root mean square of successive differences; SDNN = Standard deviation of NN intervals; SDNN5 = Mean of standard deviation of NN intervals in 5 minutes; pNN50 = Percentage of NN intervals that change by more than 50 milliseconds; SDSD = Standard deviation of successive RR intervals. The main frequency domain indicators include: LFa = Low-frequency activity; HFa = High-frequency activity; LFa/HFa = Ratio of low-frequency to high-frequency activity; TSP = Total power spectrum; TP = Total power; LF/HF = Ratio of low-frequency to high-frequency power; VLF Peak Frequency = Very low frequency peak frequency; VLF = Very low frequency; VLFnorm = Normalized very low frequency power; LF Peak Frequency = Low frequency peak frequency; LF = Low frequency; LFnorm = Normalized low frequency power; HF Peak Frequency = High frequency peak frequency; HF = High frequency; HFnorm: Normalized high frequency power. The main cardiovascular system indicators include: BMR = Basal metabolic rate; BMI = Body mass index; SpO2 = Oxygen saturation; BP = Blood pressure; Heart rate = Heartbeat frequency; Q = Cardiac output; PP = Pulse pressure; PH = Pulse height; SV = Stroke volume; SVI = Stroke volume index; CI = Cardiac index; MAP = Mean arterial pressure; BV = Blood volume; SVR = Systemic vascular resistance; EEI = Ejection elasticity index; DDI = Diastolic dilation index; DEI = Diastolic elasticity index; AI = Augmentation index; RI = Reflection index; C1 = Arterial volume compliance; C2 = Elastic or reflective arterial compliance; DPTI/SPTI = Diastolic/systolic pressure time index; Functional age = Estimated age based on cardiovascular health status.