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K : Athletes heart performance; Cardio pulmonary test

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e Cardio Pulmonary Test (CPT) is currently considered the best instrument to estimate the production of physical energy by the measurement of the aerobic metabolism. Currently among the parameters usually evaluated during the cardiopulmonary exercise test, the main factor for the assessment of the heart performance, is considered the maximum oxygen uptake (VO_{2max}) expressed in ml/kg/min [1]. However, parallel to this one, the Anaerobic reshold (AT) is o en employed to adjust the tness level and to follow the e ects of physical training [2], directly associated with the athlete's performance. In athletes the AT, as well as VO_{2max}, are generally indistinctly used even if they do not exactly correspond to the same metabolic modi cations [3].

e scale of these parameters depends on the cardiovascular workload that is strictly related to a speci c sport discipline and consequently the sports are classi ed in term of "major static" or dynamic component" [4].

Following the Sport Classi cation [4], cycling, basketball and soccer are all included in the same class with high dynamic component. On the contrary, the static component results to be high only in cyclist, while it is moderate in basketball and low in soccer. e global cardiovascular morphological and functional patterns show some slight di erence

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order to better discover any possible di erence among them.

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All the examinations were performed at the Sports Medicine Centre, of the University of Florence, Italy. Following our ethical internal committee, the subjects enrolled, gave their oral consent to

to better provide the strategy and to improve the plan of the physical training. e athletes may attain values of VO_{2max} over 20 times their