

Formatting Exercise Test Results (Daniel Dumitrescu)

Effective communication of Cardiopulmonary Exercise Test (CPET) results relies on structured interpretation and optimized visual presentation. General graphical advice includes maximizing free space, ensuring identical scaling for follow-up measurements, and maintaining legibility even in black-and-white printouts.

The **Wasserman Nine-panel Plot** is the universally accepted framework. Specific plotting rules include: using identical scaling for VO₂ and VCO₂ (square panel); plotting VO₂ against work rate (WR) using a ratio of **1:100** (VO₂ in L/Min) or **10:1** (VO₂ in ml/Min); and plotting the '**Hansen X**' (intersection of predicted peakVO₂ and predicted HR). Deviant HR response patterns should be analyzed (e.g., HF or PAH patterns).

Interpretation should be guided by a systematic approach, such as the **Nine Questions to CPET**. These questions cover: the reason for cessation, plausibility of rest measurements (RER 0.7-0.9), confirmation of maximal effort (RER > 1.10; HRR 0; BR 0\$), assessment of maximal (VO₂max/Peak VO₂) and submaximal (AT₁/VT₁) capacity, evaluation of circulatory efficiency (VO₂/HR ratio), ventilatory efficiency (VE/VCO₂ slope, PETCO₂ trajectory), detection of ventilatory dysfunction (F/V-loop analysis), and a final self-reflection: "Does it all make sense?".

The goal of the final report is not merely to list data points, but to answer the referring clinician's question, adhering to the WIIFT principle (What's In It For Them).