



# Clinical exercise testing: Advanced

## 24-25 October 2024

### Rome, Italy

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## Thursday, 24 October 2024

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08:30–09:00 Course registration

### **Session 1 - What is measured? A refresher on physiology**

**Chair:** P. Laveneziana

09:00–09:10 Introduction – P. Laveneziana, P. Palange

09:10–09:30 CPET overview: clinical usefulness and limitations - P. Palange

09:30–09:40 Q&A

09:40–10:10 Metabolic responses to exercise - S. Ward

10:10–10:20 Q&A

10:20–10:40 *Coffee break*

10:40–11:10 Cardiovascular responses to exercise - J. Neder

11:10–11:20 Q&A

11:20–11:50 Respiratory and sensory responses to exercise - M. Schaeffer

11:50–12:00 Q&A

12:00–13:15 *Lunch*



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### Session 2 – Skills workshop: How to measure? Inside the test

*Participants will be divided into 4 groups and assigned to a specific workstation.*

13:15–13:30 Introduction to workshops and groups

13:30–15:00 Equipment, test design and protocols

Group 1

- S. Ward,  
P. Onorati,  
A. Boutou

Group 2

- W. Stringer,  
M. Schaeffer,  
J. Shakespeare

Group 3

- P. Laveneziana,  
P. Palange

Group 4

- J. Neder,  
J. Hull

15:00–15:30 *Coffee break*

15:30–17:30 Test performance by a cyclist and interpretation

The key variables and their meaning

Reference values and data presentation

Group 1

- S. Ward,  
P. Onorati,  
A. Boutou

Group 2

- W. Stringer,  
M. Schaeffer,  
J. Shakespeare

Group 3

- P. Laveneziana,  
P. Palange

Group 4

- J. Neder,  
J. Hull

17:30–18:30 Welcome reception



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## Friday, 25 October 2024

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### **Session 3 - What happens in athletes and disease? Exercise pathophysiology**

**Chairs:** P. Laveneziana

- 08:30–09:00 CPET in athletes - M. Schaeffer
- 09:00–09:10 Q&A
- 09:10–09:40 CPET for assessment of dysfunctional breathing, bronchoconstriction and inducible laryngeal obstruction - A. Boutou, J. Shakespeare
- 09:40–09:50 Q&A
- 09:50–10:20 CPET in pulmonary vascular disease - J. Neder
- 10:20–10:30 Q&A
- 10:30–10:50 *Coffee break*
- 10:50–11:20 Understanding dyspnoea of uncertain origin - the value of CPET – J. Hull
- 11:20–11:30 Q&A
- 11:30–12:00 CPET for prognosis and pre-operative assessment - P. Onorati
- 12:00–12:10 Q&A
- 12:10–13:30 *Lunch*

### **Session 4 - Bringing CPET to practice: A case-based discussion**

**Chairs:** P. Palange, P. Laveneziana

- 13:30–15:00 Typical cases of respiratory and cardiocirculatory limitation to exercise - P. Palange, P. Laveneziana, W. Stringer, J. Neder, S. Ward
- 15:00–15:30 *Coffee break*



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## Friday, 25 October 2024

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- 15:30–17:30      Advanced interpretation: Cases in specific clinical scenarios  
(from faculty and participants)
- Unexplained dyspnoea - P. Laveneziana
  - Pre-operative assessment - P. Onorati
  - Dysfunctional breathing - A. Boutou, J. Hull
  - Combined COPD-heart failure - J. Neder
  - Pulmonary hypertension - J. Neder
- 17:30              Closing remarks