



# 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 Respiratory and sensory responses to exercise - D. O'Donnell

11:10–11:20 Q&A

11:20–11:50 Cardiovascular responses to exercise - J. Neder

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



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## Friday, 25 October 2024

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| 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 | <i>Coffee break</i>                                                                                                                                                                                                                                                                                                 |
| 10:50–11:20 | Understanding dyspnoea of uncertain origin - the value of CPET - D. O'Donnell                                                                                                                                                                                                                                       |
| 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 | <i>Lunch</i>                                                                                                                                                                                                                                                                                                        |
|             | <b>Session 4 - Bringing CPET to practice: A case-based discussion</b>                                                                                                                                                                                                                                               |
|             | <b>Chairs:</b> 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 | <i>Coffee break</i>                                                                                                                                                                                                                                                                                                 |
| 15:30–17:30 | Advanced interpretation: Cases in specific clinical scenarios (from faculty and participants)<br>Unexplained dyspnoea - D. O'Donnell<br>Pre-operative assessment - P. Onorati<br>Dysfunctional breathing - A. Boutou<br>Combined COPD-heart failure - J. Neder<br>Pulmonary hypertension - J. Neder, P. Laveneziana |
| 17:30       | Closing remarks                                                                                                                                                                                                                                                                                                     |