** Target-controlled infusion (TCI) for sedation **

* *IMPORTANT NOTICE: access is limited to pre-registered delegates *

** Learning objectives:**
The workshop will be run by three international experts. Attendees will be divided into three groups of 15, rotating through the three stations. Strong emphasis will be put on interaction, opportunity for questions and hands-on experience of setting up and starting the equipment.

At the end of this session attendees will:
1. be able to setup TCI pumps and drug administration lines;
2. appreciate the principles and approach needed to optimise safety and prevent errors;
3. know the differences between TCI pumps and simpler manually controlled infusion pumps;
4. understand the basic principles of how TCI pumps use pharmacokinetic models to calculate infusion rates and other safety basics;
5. understand how to use TCI pumps to titrate sedation to effect;
6. appreciate the large variability of sedation requirements in various settings;
7. be aware of safe standards in monitoring and conduct of procedural sedation;
8. know the tools necessary to find the best TCI drug combinations that will result in patients who are adequately sedated but still breathing;
9. be able to use computer simulations of drug interactions to appreciate the magnitude and nature of these interactions;
10. know which drug combinations offer the optimal clinical conditions.

**Target audience:** Anyone interested in the field of sedation, but with little or no experience of using propofol infusions and particularly target-controlled infusions for sedation.

**Chair:**
Anthony Absalom (Groningen, Netherlands)

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**How TCI pumps work. Set-up and safe use of TCI systems.**

**Fundamentals of PK/PD models used for sedation and anaesthesia**

Anthony Absalom (Groningen, Netherlands)

**Clinical examples and strategies of using TCI for procedural and loco-regional sedation. Current practice guidelines and monitoring for safe sedation.**

Stefan Schraag (Clydebank, United Kingdom)

**Choice of drugs and drug combinations. Basic theory of interactions. How to optimize sedation and safety. “Sedated and still breathing”.**

Michel Struys (Groningen, Netherlands)