

Thesis Opportunity: Clinical & Non-Clinical Validation of Active Medical Devices Bachelor / Master Thesis (m/f/d)

Thesis topic: Clinical and Non-Clinical Validation Strategies for an Active Medical Device

This project will focus on one of the active medical devices selected for round 2 of ECliPSE – such as an ICU ventilator, insulin pump, or electrosurgical generator. You will explore the role of non-clinical evidence, simulation data, and clinical follow-up strategies in the regulatory approval process.

We are now offering a thesis opportunity starting **01.10.2025 / 01.01.2026** (or by arrangement), as part of the **ECliPSE** research initiative.

General conditions:

- Duration: 4–6 months
- The position will include a contract for 15 hours per week as a working student with Escentia with a compensation of 1300 EUR / month for any student located in Germany
- Supervision and support by an experienced regulatory professional
- There may be an option to extend into a working student or junior position with **Escentia** after completion of the Thesis

What you'll be working on:

- Conducting literature reviews on clinical and non-clinical validation methods
- Mapping available data types for a selected device (e.g., ventilator, insulin pump)
- Designing appropriate validation test strategies in alignment with EU MDR
- Engaging with medical and technical experts to evaluate test appropriateness
- Contributing to the development of evidence-based validation guidelines as part of ECliPSE

Requirements:

- Background in medical technology, life sciences, biomedical engineering, or a related field
- Currently enrolled at a Technical College or University in Europe
- Familiarity with scientific literature research and evidence-based methodologies
- Structured and independent working style
- Strong communication skills and analytical thinking
- Fluent in English (written); German a plus
- Motivation to contribute to regulatory science and patient safety
- Ability to work independently and remotely in a collaborative team environment

Nice to have:

- First experience with regulatory affairs, clinical evaluation, or validation
- Interest in simulation models or pre-clinical testing methodologies and / or clinical data



Escentia advises medical device manufacturers on the clinical approval of their products. We are experts in the safety and performance of medical devices and help our clients comply with regulations in an ever-changing regulatory environment.

We work 100% remotely and offer flexible working hours. Twice a year, our team meets in person for several days of collaboration and training. With us, everyone has the chance to bring their ideas to the table, take ownership of their projects, and dive into new, exciting topics – what we don't offer are fruit baskets or foosball tables.

What we take for granted:

- Modern, needs-oriented working culture
- Flexible working hours, 100% remote
- Neurodiverse, inclusive, open and respectful team
- Dogs at team meetings (misbehaving dogs must be leashed!)
- High-quality IT and workplace equipment
- Full-time equivalent is 35 hours per week

How to apply:

Send your CV, motivational letter and other documents to **jobs@escentia.de** by **30 June 2025** for a start in October or **30 September 2025** for a start in January.

Any questions? Contact us via **jobs@escentia.de**, and we'll be happy to follow up. **Contact:** Elisabeth Oltmanns