

Specialists

Course of action before the meeting

Information gathered during the meeting

Professor Chris Bervoets

TDM of lithium for people with bipolar disorder.

TDM is of importance and potential application in measurement of receptor occupancy

Professor Peter Sinnaeve

TDM of ivabradine for patients with severe heart failure.

TDM of ivabradine is not useful in treatment but can be used as a proof-of-concept or for measurement in phase 1 clinical studies.

Professor Wim Van Paesschen

TDM of anti-epileptics such as ethosuximide for patients with daily and/or severe seizures.

TDM of ethosuximide would be of importance in the treatment of epilepsy and HEKcites could be used for personal medicine and research.

Professor Diethard Monbaliu

TDM of cyclosporine used as an immunosuppressant after organ transplantation.

TDM of immunosuppressant is needed however cyclosporine is not frequently used anymore. Tacrolimus is the newest addition. Additionally, our system could help verify patient compliance.

Integration of the meetings

During the course of our project, we decided to proceed with the calcium, potassium and HCN channel. This means that using lithium in our project was no longer possible. However, for future research sodium channels could also be implemented.

We first started doing experiments with ivabradine since this seemed the most logical step forward to change the rhythm. After the meeting with professor Sinnaeve and professor Van Paesschen, we decided to do parallel testing with ivabradine, as a proof-of-concept, and ethosuximide, for societal relevance.

Not only did we start testing ethosuximide, also cyclosporine was added. We did not use tacrolimus for the simple reason that regarding our financial situation, this drug was too expensive to use in our research.