#### Abstracts for Innoboot 2020; Precision health care (October, 27 Online)

#### Bram den Teuling Orikami

## Accelerating personalised healthcare by leveraging digital biomarkers

Bram den Teuling is CEO at orikami. He has a background in AI, neuroscience and innovation in healthcare. Orikami is a SME specialised in personalizing healthcare using data. Orikami does this by developing, validating and commercializing digital biomarkers. Bram will explain why digital biomarkers are crucial building blocks of a more data driven future in which true personalized healthcare and value based healthcare are possible.

# Marco de Boer Predica Dx

## Improving cervical cancer prevention with predictive diagnostics

Predica Diagnostics B.V. is a spinoff from the Radboudumc, active in the field of diagnostics, prognostics and prediction of treatment response in oncology. Predica Diagnostics has an exclusive worldwide license for the RNA profiling technology patent (Priority date March 7, 2017, PCT/EP2018/11555411).

Predica Diagnostics aims to bring its technology to patients in 1 to 2 years with a first focus on developing the CervicaDX test. This test allows non-invasive detection of cervical abnormalities in women who are at risk of developing cervical cancer, with unprecedented specificity.

Cervical cancer is the third most common malignancy in women and fourth in mortality worldwide (500,000 new cases yearly, 50% are lethal). Current screening programs need refinement because, although more than 99% of cervical cancers are hrHPV positive, less than 0.5% of hrHPV infections actually lead to cervical cancer. Because of this, of the yearly 60,000 women who are diagnosed as hrHPV-positive in the Netherlands, only 2,000 need medical attention. The other 58,000 women have unnecessary worries, and all receive futile follow-up examination and sometimes even invasive treatment.

This huge overdiagnosis and overtreatment is a major health, financial and social problem, which is recognized by the responsible authorities.

Predica Diagnostics will develop the CervicaDx test + analysis algorithm allowing its implementation as triage test in countries that run primary HPV screening in their cervical cancer screening programs. The test can be performed on cervical scrapes and vaginal self-samples without a need for further triage testing. Implementation of the test will therefore not only stimulate participation of women who are uncomfortable with going to their doctor for a cervical scrape, but will also result in significant health cost savings.

After successful implementation of the CervicaDx test Predica Diagnostics intends to expand its portfolio with diagnostic tests for lung cancer (PulmoDx), prostate cancer (ProcaDx), renal cancer (RenoDx), colon cancer (ColCaDx) and brain cancer (GlioDx).

These tests that will be offered as a service to hospitals and patients, generate a histology-independent molecular diagnosis, predict a prognosis and produce a list of potentially successful precision medicines, thus aiding in development of personalized treatment plans for cancer patients.