


**Tervisetehnoloogiate Arenduskeskus AS** (The Competence Centre on Health Technologies, CCHT)

	<p>Prof. Andres Salumets CEO Tel: + 372 7 330 401</p>
<p><b>Contacts</b></p>	<p>Tiigi 61b, 50410 Tartu, Estonia e-mail: ccht@ccht.ee http://www.ccht.ee</p>
<p><b>General profile</b></p>	<p>CCHT is a research and technology organization (RTO) established in 2009. It conducts high-level customer-driven research, as well as develops products and technologies in reproductive and personal medicine, oncology, laboratory and veterinary medicine.</p>
<p><b>Core expertise</b></p>	<p>The core expertise of the CCHT is closely related with research-intensive analysis: from family planning support – early menopause prediction analysis (Fertify) to prenatal testing service (NIPT) and IVF embryo diagnostics (PGS). The aforementioned solutions are necessary to help society and are an inevitable part of modern medicine. See more in the additional information section, development pipeline</p> <ul style="list-style-type: none"> <li>• Female infertility related diagnostic tests</li> <li>• Human and veterinary reproductive technologies</li> <li>• Probiotic bacteria strains related product development</li> <li>• Personal medicine: combination of gene and health data and related bioinformatics</li> <li>• Molecular technology tools/single cell technologies and related bioinformatics</li> </ul>
<p><b>Services</b></p>	<p>1) Medical laboratory services, Estonian Health Board activity licence no. L04234          – Preimplantation Genetic Screening (PGS) and Diagnostics (PGD)          – Non-Invasive Prenatal Testing (NIPT)</p> <p>2) Biomedical and drug development R&amp;D services and consultation          CCHT is one of the few private companies in Estonia that has received a positive evaluation from the Estonian Ministry of Education and Science for its research and development activities.</p>
<p><b>Proprietary technologies of the CCHT</b></p>	<p>New evidence-based personalised medicine tool <b>FERTIFY®</b> for predicting female fertility and age-related infertility. Proprietary risk-assessment based on algorithm to estimate early reproductive aging. 800 genetic variants are analysed using array genotyping – identifying women with high risk for early menopause.</p> <p>New patented molecular engineering technology <b>GlobinLock®</b> for removing globin RNA from clinical and research samples for sequencing. It significantly simplifies blood-based diagnostics and research. By overcoming the effect of globin molecule in blood, one gets rid of massive significant technical bias and will have access to all the biologically relevant molecules that typically stay undetectable. Comparing it with other technologies available, it is better in all regards: it is more robust, 10 times faster and 30 times cheaper. As a result, the GlobinLock® technology has the potential to increase the value of already collected and stored blood samples in biobanks worldwide, opening the possibility to use this valuable material in novel biomarker discovery. It contributes to the diagnostics, as well as basic research and balances healthcare related high expenditures.</p>

	<p>Patented <b>TAC-seq™</b> technology is designed for unbiased detection of RNA and DNA molecules for next generation sequencing. It is a targeted quantitative sequencing method to analyse cell free DNA and mRNA applicable for Non-Invasive Prenatal Testing (NIPT) and cancer diagnosis for possible relapse post-treatment.</p>
<b>Intellectual Property</b>	1 patent, 6 European patent applications
<b>Partners</b>	Our collaboration partners include both leading Estonian scientists and biotechnology companies, as well as scientific, medical and R&D institutions from Europe.
<b>Additional information</b>	<p>The company's research activities in reproductive medicine and biotechnology are aimed at providing novel information about the female and male reproductive biology, with the information subsequently used to identify disease biomarkers and advance the technologies for diagnostics and care.</p> <p>Development pipeline by March 2018:</p> <ul style="list-style-type: none"> <li>• Probiotic strains for Bacterial vaginosis, Candidiasis infections treatment selected, effectiveness and safety trials completed. Clinical trials phase;</li> <li>• Non-invasive test for Endometrium quality assessment. (receptivity analysis). Validation phase;</li> <li>• Non-invasive test for Endometriosis diagnose. Validation phase;</li> <li>• Bovine sperm sex selection markers identified. Validation phase;</li> <li>• Bovine embryo production technology. Validation phase</li> </ul>