

## Agenda – COMPREHENSIVE GENE PROFILING, MOLECULAR TUMOR BOARD (MTB) AND ARTIFICIAL INTELLIGENCE IN THE DIAGNOSIS AND TREATMENT OF PATIENTS WITH RARE ADULT CANCERS

Venue: Medisiina D and conference room Lauren 2, Kiinamyllynkatu 10, Turku, Finland, and Sokos Hotel Kupittaa, Joukahaisenkatu 6, Turku

Date: September the 29<sup>th</sup>-30<sup>th</sup>, 2022

Organizer: FICAN WEST Cancer Centre and Turku University Hospital (TYKS) and ERN-EURACAN and GENTURIS

All times are in EEST (Eastern European Summer Time)

Day 1 – Thursday, September the 29th

Time	Title, Speaker and Affiliation	Session name/Topic
9.00-9.10	Opening words by Pia Vihinen, Associate professor, FICAN West Cancer Centre	Session 1. Artificial intelligence and advances in pathological diagnostics Chairs: Prof. Markku Kallajoki and Dr. Katri Orte, MD, PhD
9.10-9.50	Cancer research with the help of real-world patient data, artificial intelligence, and deep-learning methods. Pekka Ruusuvaori, Prof., Turku Institute of Biomedicine, University of Turku	
9.50-10.20	Biobank studies helping in treatment of patients with rare cancers. Merja Perälä, PhD, Associate professor, Auria Biobank and Eva-Maria Talvitie, MD, Turku University Hospital	
10.20.-11.00	iCAN flagship in Finland. Tomi Mäkelä, Prof., iCAN – Digital Precision Cancer Medicine Flagship, Helsinki Institute of Life Science, University of Helsinki	
11.00-12.00	Lunch	
12.00-12.45	Machine learning-based tissue of origin classification for cancer of unknown primary diagnostics using genome-wide mutation features. Edwin Cuppen, Prof., Hartwig	Session 2. Biological basics and novel technics in comprehensive gene profiling



	Medical Foundation, Amsterdam, Netherlands	Chairs: Prof. Klaus Elenius and Associate Prof. Maria Sundvall
12.45-13.30	Crowd validation of a national broad custom DNA/RNA-capture panel for precision oncology in Sweden. Johan Botling, Associate Professor of Pathology, Department of Immunology Genetics and Pathology Rudbeck Laboratory, Uppsala University Hospital, Sweden	
13.30-14.00	Artificial intelligence for image-based melanoma diagnosis. Nina Linder, MD, Associate Prof., Institute for Molecular Medicine Finland and University of Helsinki	
14.00-14.30	CIC-rearranged sarcoma and diagnostic challenges. Patient cases. Jenni Tuominen, MSc and Katri Orte, MD, PhD, Turku University Hospital and applicants	
14.30-15.00	Coffee break	
15.00-15.30	Possibilities and limitations of clinical liquid biopsy testing. Niels Pallisgaard, Prof. Sjællands Universitetshospital, Roskilde, Denmark	
15.30-16.00	Usefulness of liquid biopsy in treatment and follow-up of cancer patients. Juha Kononen, Chief Clinical Director, Docrates Cancer Center, Helsinki	Session 3. Novel technologies in patient sampling and sample analysis Chairs: Associate Prof. Veli Kairisto and Prof. Panu Jaakkola
16.00-16.45	2 patient cases presented by applicants (30 min) and discussion	
16.45-17.15	Precision oncology using ex vivo technology: a step towards individualized cancer care? Noora Nykänen, MSc, Specializing Medical Cell Biologist, University of Jyväskylä, Finland	
18.00	<i>End of the day 1</i>	
20.00	<i>Dinner at Restaurant Grädda (Invited participants)</i>	

Day 2 - Friday, September the 30th.

Time	Speaker and Affiliation	Session name/Topic
9.00-9.45	Functional precision medicine. Olli Kallioniemi, Prof., SciLifeLab & Karolinska Institutet and FIMM, University of Helsinki	<p>Session 4. Bringing precision medicine to patients Chairs: Eva-Maria Talvitie and Katri Orte</p>
9.45-10.30	Lessons learned from Drug rediscovery program trials (DRUP) and precision medicine schemes what next? Ilse Spiekman, DRUP study coordinator, Netherlands Cancer Institute, Amsterdam Netherlands	
10.30-10.50	Arrangement and function of MTB at FICAN West Cancer Centre and importance of Finprove study in Finland. Erika Alanne, MD, PhD FICAN West Cancer Centre and Turku University Hospital	
10.50-11.10 (virtual)	Genetic counselling in patients with rare hereditary cancers. Kerry Kingham MS, CGC, Certified Genetic Counselor, Lead, Clinical Assistant Professor of Pediatrics, Cancer Genetics and Genomics, Stanford Cancer Center, USA	
11.10-12.00	Lunch	
12.00-12.30	Experiences with arrangement of a national precision cancer medicine implementation initiative. Kjetil Tasken, Prof., Institute of Clinical Medicine, University of Oslo, Norway	<p>Session 5. Optimal arrangement of Molecular Tumor Boards (MTBs) to support diagnosis of rare cancers and clinical decision-making Chairs: Dr. Erika Alanne and Dr. Maria Haanpää</p>
12.30-12.45	DRUP-like trials in the Nordics: Status of the IMPRESS-Norway study, and how to share data and improve recruitment of patients. Kjetil Tasken, Prof., Institute of Clinical Medicine, University of Oslo, Norway	



12.45-13.00	Status of Finprove study in Finland. Katriina Peltola, Chief Physician, Clinical Trial Unit, Helsinki Comprehensive Cancer Centre, Helsinki	
13.00-13.15 (virtual)	Status of ProTarget study in Denmark. Kristoffer Staal, Head of Phase I Unit, Department of Oncology, Centre for Cancer and Organ Diseases, Rigshospitalet, Copenhagen, Denmark	
13.15-13.45	The Molecular Tumor Board Portal supports clinical decisions and automated reporting for precision oncology. Janne Lehtiö, Prof., Inflames and Karolinska Institutet, Stockholm, Sweden	
13.45-14.15	Coffee break	
14.00-16.00	Molecular Tumor Board (participants from several institutes) and round table discussion	Session 6. MTB and patient cases Chairs: Dr. Erika Alanne and Dr. Maria Silvonemi)
16.00	Closing remarks and departure	

Organizing committee: Pia Vihinen, Erika Alanne, Heikki Minn, Klaus Elenius, Veli Kairisto, Maria Sundvall, Maria Silvonemi, Markku Kallajoki, Katri Orte, Maria Haanpää, Eva-Maria Talvitie, Jenni Tuominen, Mervi Siekkinen, Mervi Toriseva.

