

On-line conference “Chronic viral infections and cancer, openings for vaccines and cure”

DAY 1, November 21, 2024

10.00 SESSION 1. COMMON AND SPECIFIC MECHANISMS OF VIRAL ONCOGENICITY

10.00 – 10.30 OPENING LECTURE Elena Kashuba (RE Kavetsky Institute of Experimental Pathology, Oncology and Radiobiology of National Academy of Sciences of Ukraine, Ukraine) DNA TUMOR VIRUSES AND THEIR ROLE IN THE DEVELOPMENT OF EPITHELIAL TUMORS

10.30 Section 1.1 Molecular drivers of malignant transformation

Section Chair – Dr Elena Kashuba (RE Kavetsky Institute of Experimental Pathology, Oncology and Radiobiology of National Academy of Sciences of Ukraine, Ukraine)

10.30 – 11.00 PLENARY LECTURE Maria Lina Tornesello (Istituto Nazionale Tumori – IRCCS Fondazione Pascale, Naples, Italy) MECHANISMS OF TELOMERASE REVERSE TRANSCRIPTASE REACTIVATION IN CANCER

11.00 – 11.15 Pierre-Louis Schmit-Vergely (INSERM U1052, CNRS UMR-5286, Cancer Research Center of Lyon (CRCL), and University of Lyon, Université Claude-Bernard (UCBL), Lyon, France) ROLE OF VOLTAGE DEPENDENT ANION CHANNELS IN THE HBV LIFE CYCLE AND ASSOCIATED PATHOLOGIES *Early Career Researcher*

11.15 – 11.30 Sarkis Sarkis (Animal Models and Retroviral Vaccines Section, Vaccine Branch, Center for Cancer Research, National Cancer Institute, Bethesda, Maryland, USA) HTLV-1C LUNG DISEASE LINKED TO P16 PROTEIN INHIBITION OF EFFEROCYTOSIS IN MACAQUES

11.30 – 11.50 Kholodnyuk (Holodnuka) Irina (Institute of Microbiology and Virology, Riga Stradiņš University, Riga, Latvia) EBV INFECTION IN TREATMENT-NAÏVE PATIENTS WITH CHRONIC LYMPHOCYTIC LEUKEMIA AND MOBILITY OF THE LEUKEMIC CELLS

Discussion (10 min)

12.00 Lunch break

13.00 Section 1.2 Metabolic signatures of chronic viral infections & cancer

Section chair - Dr Juris Janson (Biomedical Research and Study Centers, and Riga Stradins University, Riga, Latvia)

13.00 – 13.30 PLENARY LECTURE Ujjwal Neogi (Karolinska Institutet) METABOLIC CHANGES IN VIRAL INFECTIONS

13.30 – 13.50 Omolara Omolara Baiyegunhi (Africa Health Research Institute, Durban, South Africa) VIRAL REPLICATION CAPACITY INFLUENCES HIV-1-INDUCED METABOLIC AND CYTOKINE REPROGRAMMING OF T CELLS *Early Career Researcher*

13.50 – 14.10 Alejandra Escós (Division of Clinical Microbiology, Department of Laboratory Medicine, Karolinska Institutet, Stockholm, Sweden) DISRUPTED ALPHA-KETOGLUTARATE HOMEOSTASIS TRAINED MONOCYTE-DERIVED MACROPHAGES TOWARDS M2-LIKE PHENOTYPE INCREASE HIV INFECTIVITY IN TREATED INFECTION

14.10 Discussion & Break (20 min)

14.30 Section 1.3 Immune response in chronic viral infections and cancer (Inflammation & Immune Evasion)

Section Chair – Dr Irina Kholodnyuk (Riga Stradins University, Riga, Latvia)

14.30 – 15.00 PLENARY LECTURE Dace Pjanova (Institute of microbiology and virology, Riga Stradins University, Riga, Latvia) IMMUNE RESPONSE IN SARS-CoV-2 INFECTION, INFLAMMATION, AND CANCER IMMUNE EVASION AND TUMOUR PROGRESSION

15.00 – 15.10 Ganna Monchakivska (RE Kavetsky Institute of Experimental Pathology, Oncology and Radiobiology of National Academy of Sciences of Ukraine, Kyiv, Ukraine) INFLUENCE OF THE COVID19 DISEASE ON THE COURSE OF CHRONIC LYMPHOCYTIC LEUKEMIA (poster) *Early Career Researcher*

15.10 – 15.30 Enkhtuul Batbold (UMR5286, CNRS, INSERM U1052, Lyon Cancer Research Center, and University of Lyon, Université Claude-Bernard (UCBL), Lyon, France) CCL5 IS UPREGULATED AND SECRETED BY HDV INDEPENDENTLY OF THE IFN RESPONSE *Early Career Researcher*

15.30 – 15.40 Larysa Kovalevska (RE Kavetsky Institute of Experimental Pathology, Oncology and Radiobiology of National Academy of Sciences of Ukraine, Kyiv, Ukraine) IDENTIFICATION OF THE "MISSING" TRANSCRIPTION FACTORS IN CHRONIC LEUKOCYTIC LEUKEMIA B-CELLS (poster)

15.40 Discussion & Break (20 min)

16.00 SESSION 2. APPROACHES TO CHRONIC VIRAL INFECTION AND CANCER CURE

Section Chair – Franco Maria Buonaguro (Istituto Nazionale Tumori – IRCCS Fondazione Pascale, Naples, Italy)

16.00 – 16.30 PLENARY LECTURE Isabelle Chemin§ & Boun Kim Tan (Center for Research on Cancer, Lyon, France) HBV VACCINATION – SUCCESS AND BARRIERS TO ACHIEVE HBV ERRADICATION

16.30 – 16.50 Ratna Ray (Department of Pathology, Saint Louis University, USA) BITTER MELON'S SWEET PROMISE: ROLE IN ORAL CANCER THERAPY

17.00 – 17.20 Subhayan Sur (Cancer and Translational Research Centre, Dr. D.Y. Patil Biotechnology and Bioinformatics Institute, Dr. D. Y. Patil Vidyapeeth (DPU), Tathawade, India) EXPLORING THE ROLE OF LONG NON-CODING RNA IN ORAL SQUAMOUS CELL CARCINOMA DEVELOPMENT AND THERAPY

17.20 – 17.40 Anna Zajakina (Latvian Biomedical Research and Study Centre, Riga, Latvia) VIRAL VECTORS AND PHOTOSENSITIVE DRUGS AS IMMUNOMODULATORS IN CANCER TREATMENT

17.40 – 18.00 Mohammad Arif Rahman (Animal Models and Retroviral Vaccines Section, National Cancer Institute, Bethesda, MD, United States) VACCINE AND SAMT-247 CONTINUOUS RELEASED BY INTRAVAGINAL RING (IVR) DECREASED RISK OF SIV ACQUISITION IN MACAQUE

18.00 Discussion & Closing of the day

DAY 2, November 22, 2024

SESSION 3. HUMAN PAPILLOMA VIRUS, CHRONIC INFECTION & ASSOCIATED CANCERS, ON THE WAY TO PROTECTION

10.00 Section 3.1 Epidemiology & Risk Factors

Section Chair – Dr Edward Kumakech (Faculty of Nursing and Midwifery, Lira University Uganda, and Karolinska Institutet, Stockholm, Sweden)

10.00 – 10.30 PLENARY LECTURE Anda Kivite-Urtane (Riga Stradins University, Riga, Latvia) EPIDEMIOLOGY OF INFECTION WITH HIGH RISK HPVs, RISK FACTORS IN DIFFERENT POPULATION GROUPS

10.30 – 10.50 Viola Daniela Kiselova (Institute of Microbiology and Virology, Riga Stradins University, Riga, Latvia) SOCIODEMOGRAPHIC AND GENERAL HEALTH FACTOR ASSOCIATION WITH HIGH-RISK HUMAN PAPILLOMA VIRUS INFECTION IN A PROSPECTIVE STUDY OF FEMALES RESIDING IN RIGA, LATVIA *Early Career Researcher*

10.50 – 11.10 Justine Grundmane (University of Latvia, and Gulbis laboratory, Riga, Latvia) HUMAN PAPILLOMA VIRUS GENOTYPE DISTRIBUTION AMONG YOUNG WOMEN IN LATVIA WITH PATHOLOGICAL FINDINGS IN CERVICAL CYTOLOGY *Early Career Researcher*

11.10 – 11.30 Liba Sokolovska (Institute of Microbiology and Virology, Riga Stradins University, and Pathology Institute, Pauls Stradins Clinical University Hospital, Riga, Latvia) SHIFT IN HIGH RISK HPV GENOTYPES IN CERVICAL LESIONS AND CANCER IN LATVIA *Early Career Researcher*

11.30 Discussion

12.00 – 13.00 Lunch break

Section 3.2 Mechanisms of HPV-associated carcinogenesis

Section Chair – Dr Maria Isaguliantis (Issagouliantis) (Riga Stradins University)

13.00 – 13.30 PLENARY LECTURE Franco Maria Buonaguro (Istituto Nazionale Tumori – IRCCS Fondazione Pascale, Naples, Italy) HPV-DRIVEN MUCOSAL CARCINOGENESIS

13.30 – 13.50 Andrea Cerasuolo (Molecular Biology and Viral Oncology Unit, Istituto Nazionale Tumori - IRCCS Fondazione G. Pascale, Napoli, Italy) HPV16 UP-REGULATES THE EXPRESSION OF RNA-BINDING PROTEIN SAM68 IN HEAD AND NECK CANCERS *Early Career Researcher*

13.50 – 14.10 Nikita Zrelavs (Scientific Laboratory of Molecular Genetics, Riga Stradins University, and Biomedical Research and Study Centers, Riga, Latvia) ANALYSIS OF FULL GENOME SEQUENCES OF HUMAN PAPILLOMA VIRUS TYPE 16 ISOLATED FROM CERVICAL CARCINOMAS IN LATVIA IN 2017-2023 *Early Career Researcher*

14.10 – 14.30 Juris Jansons (Institute of Microbiology and Virology, Riga Stradins University, and Pathology Institute, and Biomedical Research and Study Centers, Riga, Latvia) CHARACTERISTICS OF THE ONCOPROTEINS E6 AND E7 OF HPV16 ISOLATES CIRCULATING IN EUROPE WITH FOCUS ON THE BALTIC REGION

14.30 Discussion & Break

15.00 Section 3.3 HPV infection & cancer surveys

Section chair: Dr Vanja Berggren (Karolinska Institutet, Stockholm, Sweden)

15.00 – 15.30 PLENARY LECTURE PLENARY LECTURE Prof Ruth Tachezy (Faculty of Science, Charles University, Prague, Czech Republic) HPV INFECTION: PRESENT AND FUTURE OF DIAGNOSTIC AND PROGNOSTIC SURVEYS

15.30 – 15.50 Deborah Holzapfel (Enzo Life Sciences, Farmingdale, NY, USA) DETECTION OF HUMAN PAPILLOMAVIRUS (HPV) NUCLEIC ACID IN FFPE SAMPLES WITH AMPIVIEW® RNA PROBES, POWERED BY ENZO'S LOOPRNA™ ISH TECHNOLOGY

15.50 – 16.10 Karina Biserova (Pathology Institute, Pauls Stradins Clinical University Hospital, Riga, Latvia) HIGH RISK HPV POSITIVE CERVICAL SQUAMOUS CELL CARCINOMAS: CORRELATION OF TUMOR GRADES WITH VIRUS LOAD AND EXPRESSION OF P16, P53 AND Ki-67 *Early Career Researcher*

16.10 – 16.30 Maria Isaguliantis (Institute of Microbiology and Virology, Riga Stradins University, Riga, Latvia) DESIGN AND EXPRESSION OF HPV16 ONCOPROTEINS E6 AND E7 FOR THE DYNAMIC ANALYSIS OF THE LEVELS OF SPECIFIC SERUM ANTIBODIES IN WOMEN WITH AND WITHOUT CERVICAL LESIONS

16.30 Photosession & Discussion

17.00 Section 3.4 Prophylactic and therapeutic HPV vaccines & their implementation

Section Chair – Dr Maria Isaguliantis (Issagouliantis) (Riga Stradins University)

17.00 – 17.20 Edward Kumakech, Vanja Berggren (Faculty of Nursing and Midwifery, Lira University Uganda, and Karolinska Institutet, Stockholm, Sweden) PUBLIC AND PATIENT ENGAGEMENTS TO IMPROVE UPTAKE OF CERVICAL CANCER SCREENING AND HPV VACCINATION IN DEVELOPING COUNTRIES – THE CASE OF UGANDA

Awards Committee takes decision on the best presentations by early career researchers

17.20 – 17.30 RESERVED

17.30 – 18.00 PLENARY LECTURE Joakim Dillner (Karolinska Institutet, Sweden) HPV VACCINATION, HPV SCREENING AND PERSPECTIVES OF HPV ELIMINATION

18.00 Awarding the best presentations of early career researchers by VACCINES

Closing of the conference