
**INTERNATIONAL
ONCOLYTIC
VIRUS
CONFERENCE
2018**



9-12 APRIL OXFORD

PROGRAMME



IOVC PROGRAMME

MONDAY 9 APRIL

18.00-19.30 Opening symposium

Chair: Len Seymour (University of Oxford)

INV001: Len Seymour (University of Oxford)

Welcome to Oxford and meeting overview

INV002: Stacy Erholtz (Rochester, MN)

“Measles virus, myeloma and me”

INV003: Malcolm Brenner (Baylor College of Medicine, Houston, TX)

“Cancer-selective cell and immunotherapy using oncolytic viruses”

Sheldonian Theatre



20.00 Reception & bowl food dinner

Divinity School



21.00 Open bar

New College Oxford

TUESDAY 10 APRIL

08.30-10.15 Emerging technologies

Chairs: Rob Coffin (Replimune, Abingdon),
Carolina Ilkow (Ottawa Health Research Institute)

INV004: Rob Coffin (Replimune, Abingdon)

“Enhanced potency HSV-based platform expressing anti-CTLA-4 and immune co-stimulatory pathway ligands”

INV005: James Harper (MedImmune, Cambridge)

“MEDI5395 an armed oncolytic virus”

Proffered papers

- OR001: Liang Deng (Memorial Sloan Kettering Cancer Center, NYC, NY) Oncolytic vaccinia virus expressing anti-CTLA-4 antibody for cancer immunotherapy
- OR002: Miguel Angel Muñoz-Alía (Mayo Clinic, Rochester, MN) A recombinant measles virus resistant to human neutralizing antibodies

Examination Schools



IOVC PROGRAMME

TUESDAY 10 APRIL

08.30-10.15

Proffered papers

- OR003: Mark Federspiel (Mayo Clinic, Rochester) Urabe mumps virus as a virotherapy to treat breast cancer

10.15-10.45

Coffee break

10.45-12.30 Optimising oncolytic virus clinical trials: study designs and recent data

Examination Schools



Chairs: John Beadle (PsiOxus Therapeutics, Abingdon), Frank Tufaro (DNAttrix Therapeutics, Houston, TX)

John Beadle (PsiOxus Therapeutics, Abingdon)

“The importance of trial design”

INV006: Jennifer Gansert (Amgen, Thousand Oaks, CA)

“IMLYGIC from bench to bedside”

INV007: Hardev Pandha (University of Surrey, Guildford)

“A Phase 1b study of i.v. Coxsackievirus A21 combined with pembrolizumab in advanced cancer patients”

Proffered papers

- OR004: Kery Streby (Nationwide Children's Hospital/The Ohio State University, Columbus OH) Intravenous administration of Seprehvir, an oncolytic herpes viroimmunotherapeutic, is safe in children and young adults and induces sustained viremia – results of a first-in-human phase 1 clinical trial
- OR005: Manel Cascallo (VCN Biosciences, Barcelona) VCN-01 selective oncolytic adenovirus with hyaluronidase activity: first-in-human dose-escalation studies in patients with advanced or metastatic pancreatic cancer

12.30-13.30

Lunch break (provided)

TUESDAY 10 APRIL

13.30-15.15

Progress in glioblastoma virotherapy

Chairs: Nino Chiocca (Harvard Medical School Boston, MA), Sam Rabkin (Harvard Medical School Boston, MA)



INV008: Nino Chiocca (Harvard Medical School, Boston, MA)

“Preclinical and clinical trial experience with Nestin transcriptionally driven oncolytic HSV1”

INV009: Sam Rabkin (Harvard Medical School, Boston, MA)

“Stalking glioblastoma; HSV, models, and combinations”

Proffered papers

- OR006: Doug Jolly (Tocagen, San Diego, CA) Durable responses and survival lasting 3 years or longer after treatment of recurrent brain tumor patients with the retroviral replicating vector TOCA 511 and TOCA FC; status and mechanism
- OR007: Clemens Dirven (Erasmus Medical Centre, Rotterdam) Update of a phase I clinical trial of Delta24RGD oncolytic adenovirus administered by CED in patients with recurrent glioblastoma
- OR008: Mubeen Mosaheb (Duke University, Durham, NC) A poliovirus based cancer vaccine activates antigen presenting cells and elicits an anti-tumor T-cell response

15.15-15.45

Coffee break

15.45-17.15

Oncolytic vaccines & cancer heterogeneity

Chairs: David Stojdl (CHEO Research Institute, Ottawa), Gunnel Hallden (Queen Mary University of London)

Examination Schools

INV010: David Wedge (University of Oxford)

“Genomic heterogeneity and metastatic spread in prostate and oesophageal cancers”

TUESDAY 10 APRIL

15.45-17.15

INV011: David Stojdl (CHEO Research Institute, Ottawa)

Examination Schools

“Oncolytic strategies to target public and private neoantigens”

Proffered papers

- OR009: Johannes Heidbuechel (DKFZ, Heidelberg) BiTE delivery by oncolytic measles virus vectors enhances efficacy against solid tumors
- OR010: Brian Champion (PsiOxus Therapeutics, Oxford) T-SiGn viruses designed to deliver localized combination immunotherapy within the tumor microenvironment”

17.15-17.30

Break

17.30-19.00

Innate and collateral adaptive tumor immunity

Examination Schools

Chairs: Steve Russell (Mayo Clinic, Rochester), Martine Lamfers (Erasmus, Rotterdam)

INV012: Alan Melcher (Institute for Cancer Research, London)

“Monocytes: their role in viral cell carriage and immune priming by oncolytic viruses”

INV013: Florian Kühnel (Hannover Medical School)

“Using oncolytic adenovirus-based strategies to ‘warm up’ tumors for immunotherapy”

Proffered papers

- OR011: Shruthi Naik (Mayo Clinic, Rochester, MN) Intravenous vesicular stomatitis virus therapy synergizes with checkpoint blockade to promote intratumoral CD8+ T-cell responses and enhance therapeutic response
- OR012: Karen Mossman (McMaster, Hamilton, ON) Therapy-induced necrosome renders autochthonous mammary tumors susceptible to checkpoint blockade immunotherapy

19.00

Poster sessions & bowl food dinner

Examination Schools

21.30

Open bar

New College

WEDNESDAY 11 APRIL

08.30-10.15 **Translation, imaging & clinical breakthroughs**

Examination Schools



Chairs: Kah Whye Peng (Mayo Clinic, Rochester, NY), James Burke (SillaJen Biotherapeutics, San Francisco, CA)

INV014: Kah Whye Peng (Mayo Clinic, Rochester, MN)

“Oncolytic virus encoding IFNbeta: optimizing therapeutic index”

INV015: Charles Morris (PsiOxus Therapeutics, Oxford)

“Applying learnings from the enadenotucirev clinical program”

Proffered papers

- OR013: Julia Davydova (University of Minnesota) An improved oncolytic adenovirus for radioiodine therapy and imaging
- OR014: Naomi De Silva, (Sillajen Biotherapeutics, San Diego, CA) Phase II trial of pexa-vec (pexastimogene devacirepvec; JX-594), an oncolytic and immunotherapeutic vaccinia virus, in patients with metastatic, refractory renal cell carcinoma (RCC)
- OR015: Hiroshi Nakashima (Harvard Medical School, Cambridge, MA) *In vivo* quantitative analysis of temporal kinetics of oncolytic virus replication with tumor toxicity

10.15-10.45

Break

10.45-12.45 **Anti-viral defences – friend or foe? Part I**

Examination Schools



Chairs: John Bell (Ottawa Health Research Institute, ON), Jean-Simon Diallo (Ottawa Hospital Research Institute)

INV016: Carolina Ilkow (Ottawa Health Research Institute)

“Improving oncolytic immunotherapy with multitasking viruses”

WEDNESDAY 11 APRIL

10.45-12.45 **Anti-viral defences – friend or foe? Part I** (continued)

Examination Schools

INV017: Glen Barber (University of Miami, FL)

“Oncolytic viruses, the tumour microenvironment and the STING pathway”

Proffered papers

- OR016: Julia Niemann (Hannover Medical School) Engaging antiviral antibodies for therapeutic tumor retargeting using bispecific adapter molecules
- OR017: Kevin Cassady (Nationwide Childrens Hospital and The Ohio State University, Columbus, OH) Ruxolitinib pre-treatment renders resistant malignant peripheral nerve sheath tumors (MPNSTs) susceptible to oncolytic virotherapy
- OR018: Weiyi Wang (Memorial Sloan Kettering Cancer Center, NYC, NY) Elucidating mechanisms of antitumor immunity mediated by live oncolytic vaccinia and heat-inactivated vaccinia
- OR019: Nicholas Denton (Nationwide Childrens Hospital and The Ohio State University, Columbus, OH) Modulation of tumor associated macrophages enhances oncolytic herpes virotherapy in preclinical models of Ewing sarcoma

12.45-14.15

Lunch break (provided)

14.15-14.45 **Anti-viral defences – friend or foe? Part II**

Examination Schools

Chair: John Bell (Ottawa Health Research Institute, ON), Jean-Simon Diallo (Ottawa Hospital Research Institute)

INV018: Leo James (University of Cambridge)

“Innate immune pathogen defences focused around TRIM21”

WEDNESDAY 11 APRIL

14.45-16.15 **Bacterial-based oncolytics** Examination Schools

Chairs: Grant McFadden (Arizona State University, Tempe, AZ), Neil Forbes (University of Massachusetts, Amherst, MA)



INV019: Mark Tangney (Cork Cancer Research Centre)

“Bacteria are way better than viruses”

INV020: Jung-Joon Min (Chonnam National University Medical School & Hwasun Hospital)

“Oncolytic salmonella-based cancer theranostics”

INV021: Sebastian Felgner (Helmholtz Centre for Infection Research)

“Optimizing the efficacy of tumor-therapeutic strains of Salmonella typhimurium”

Proffered papers

- OR020: Wei Kong (Arizona State University, Tempe AZ) Tumor-navigating and self-destructing salmonella serving as “time-bombs” for TRAIL delivery to fight cancer

16.15-16.45 Break

16.45-18.15 **The great oncolytic debate: For the success of oncolytic viruses – single cycle cures or repeat treatments?** Examination Schools



The great oncolytic debate: For the success of oncolytic viruses – single cycle cures or repeat treatments?

Chair: Kerry Fisher (University of Oxford)

Steve Russell (Once should be enough!) vs. Alan Melcher (Repeat dosing is crucial!)

(Audience vote before and after the debate to see who was most persuasive)

18.30-19.30 **Science tour of Oxford** Depart from Examination Schools

19.30 **Banquet** Keble College

Guest speaker: Gyles Brandreth

22.00 **Open bar** New College

THURSDAY 12 APRIL

09.00-10.45 **Virology of oncolysis** Examination Schools

Chairs: Len Seymour (University of Oxford), Naomi De Silva (SillaJen, San Francisco, CA)



INV022: Yaohe Wang (Queen Mary University of London)

“Development of a new generation vaccinia virus using CRISPR/Cas9 in neoadjuvant therapy”

INV023: Len Seymour (University of Oxford)

“Oncolytic viruses and metabolic transformation”

Proffered papers

- OR021: Huy-Dung Hoang (University of Ottawa, ON) Characterizing the host mRNAs actively translated during viral oncolysis
- OR022: Egon Jacobus (University of Oxford) Hypoxia boosts intracellular activity but can inhibit paracellular spread of oncolytic adenovirus
- OR023: Richard Vile (Mayo Clinic, Rochester, MN) APOBEC3 mediates resistance to oncolytic viral therapy

10.45-11.15 Break

11.15-13.00 **Oncolytic strategies to modulate the tumour microenvironment** Examination Schools



Oncolytic strategies to modulate the tumour microenvironment

Chairs: Kerry Fisher (University of Oxford); Caroline Breitbach (Turnstone Biologics, Ottawa, ON)

INV024: Awen Gallimore (Cardiff University)

“The tumour microenvironment as a barrier or enabler of the host immune response”

INV025: Ramon Alemany (Idibell, Barcelona)

“Oncolytic adenoviruses: a perspective from the immune system”

THURSDAY 12 APRIL

11.15-13.00

Proffered papers

- OR024: Victoria Jennings (Institute of Cancer Research, London) Oncolytic Rhabdoviruses expressing miRNA enhance anti-tumour immunity
- OR025: Chae-Ok Yun (Hanyang University, Seoul) Restoration of immune surveillance in tumor microenvironment by oncolytic adenovirus co-expressing interleukin-12 and shVEGF leads to potent antitumor immune response
- OR026: Joshua Freedman (University of Oxford) Remodelling the tumour microenvironment using an oncolytic adenovirus expressing a T Cell engager



13.00-14.00

Lunch break (provided)

14.00-15.30

Innovative strategies for virus delivery and spread

Chairs: Nori Kasahara (University of Miami, FL), Miriam Bazan Peregrino (VCN Biosciences, Barcelona)

Examination Schools



INV026: Aladar Szalay (StemImmune, San Diego, CA)

“Adipose tissue-derived stem cells for delivery of oncolytic viruses”

INV027: Grant McFadden (Arizona State University, Tempe, AZ)

“Ex vivo oncolytic virotherapy with myxoma virus”

Proffered papers

- OR027: Haider Al-Janabi (University of Sheffield) Breast cancer immunotherapy using magnetised HSV1716
- OR028: Robert Carlisle (University of Oxford) Enhanced delivery of oncolytic viruses into and throughout tumours

15.30-16.00

Break

THURSDAY 12 APRIL

16.00-17.45

Next generation design of oncolytic platforms

Chairs: Chae-Ok Yun (Hanyang University, Seoul), Ryan Cawood (Oxford Genetics)

Examination Schools



INV028: John Bell (Ottawa Health Research Institute, ON)

“Re-designing an oncolytic vaccinia virus”

INV029: Nori Kasahara (University of Miami, FL)

“Conditionally oncolytic immunotherapy with retroviral replicating vectors”

Proffered papers

- OR029: Autumn Schulze (Mayo Clinic, Rochester, MN) MicroRNA-targeted CVA21 infectious RNA is an alternative formulation for oncolytic virotherapy
- OR030: Antonio Marchini (DKFZ, Heidelberg) Development of H-1PV silencer: a novel, more potent oncolytic parvovirus expressing shRNAs against oncogenes
- OR031: Josh Del Papa (Ottawa Hospital Research Institute) Expression of the p14 fusion-associated small transmembrane protein in an oncolytic adenovirus improves vector efficiency

THURSDAY 12 APRIL

18.00-19.00

Rapid fire proffered papers

Examination Schools

- OR032: Elizabeth Illett (University of Leeds)
Anti-viral antibodies – friend or foe to oncolytic virotherapy?
- OR033: James Davies (Cardiff University)
Ad5.3D.A20 – a refined, $\alpha\beta 6$ selective oncolytic adenoviral vector with basal native tropism ablated efficiently targets epithelial ovarian cancers
- OR034: Hideki Kasuya (Nagoya University)
Combination therapy of oncolytic HSV HF10 and immune checkpoint inhibitor
- OR035: Ahmed Al-Shammari (Iraqi Center for Cancer and Medical Genetic Research, Mustansiriyah University, Baghdad)
Hyaluronidase co-administration with oncolytic Newcastle disease virus enhances its antitumor efficacy in mice mammary adenocarcinoma
- OR036: Henry Smith (Institute of Cancer Research, London)
Vaccinia virus delivered by isolated limb perfusion combines with PD1 blockade to prevent local and distant relapse in soft-tissue sarcoma

19.30

Conference dinner

New College

Guest speaker: Mark Middleton
(CRUK Oxford Centre)

Awarding of:

- Poster prizes
- Travel grants
- Golden Virus award
- Charles Conrad awards

22.00

Open bar