

Scientific Program

[Interactive Program](#)PROGRAM AT A GLANCE

14:00 – 14:10

WELCOME ADDRESS

Plenary Hall (Ballsaal)

Dirk Busch, Technical University of Munich, Germany

Adi Barzel, Tel-Aviv University, Israel

14:10 – 14:45

KEYNOTE LECTURE: BALANCING PERSISTENCE AND EFFECTOR FUNCTIONS IN CAR T CELLS

Plenary Hall (Ballsaal)

Chair: Adi Barzel, Tel-Aviv University, Israel

14:10 – 14:35 Presentation

Michel Sadelain, Memorial Sloan Kettering Cancer Center, USA

14:35-14:45 – Q&A

14:45 – 16:00

SESSION 1: NOVEL CLINICAL APPROACHES AND COMBINATION THERAPIES

Plenary Hall (Ballsaal)

Chair: Luigi Naldini, San Raffaele Telethon Institute for Gene Therapy, Italy

14:45 – 15:00

SINGLE-CELL RNA-SEQ DEVELOPMENT OF NOVEL CELLULAR THERAPIES

Sebastian Kobold, Ludwig Maximilian University of Munich,
Germany

15:00 – 15:15

**COMBINED ENGINEERING OF TUMOR-ASSOCIATED MACROPHAGES AND T
CELLS TO ESTABLISH ANTI-CANCER IMMUNITY**

Luigi Naldini, San Raffaele Telethon Institute for Gene
Therapy, Italy

15:15 – 15:25

**COMBINATION OF TCR-T CELLS COENGINEERED TO SECRETE SIRP-ALPHA
DECOYS AND ANTI-TUMOR ANTIBODIES TO AUGMENT MACROPHAGE
PHAGOCYTOSIS**

Evangelos Stefanidis, Ludwig Institute for Cancer Research,
University of Lausanne and Lausanne University Hospital,
Switzerland

15:25 – 16:00

Panel discussion

16:00 – 16:45

COFFEE BREAK, EXHIBITION AND POSTER PRESENTATIONS

Exhibition & Networking Area (Grosser Saal)

16:45 – 18:20

SESSION 2: SUPERPOWERED LYMPHOCYTES

Plenary Hall (Ballsaal)

Chair: **George Coukos**, Lausanne University Hospital,
Switzerland

16:45 – 17:00

**SENSITIVE AND SELECTIVE TARGETING OF HETEROGENEOUS TUMOR CELLS
WITH ENGINEERED T CELLS**

Stanley Riddell, Fred Hutchinson Cancer Research Center, USA

17:00 – 17:15

PREPARATION IS EVERYTHING: HOW TO GET THE MOST OUT OF ELECTROPORATION FOR T-CELL ENGINEERING

Renata Stripecke, University Hospital Cologne, Germany
(Supported By Maxcyte)

17:15 – 17:30

ENGINEERING LYMPHOCYTES TO OVERCOME EXHAUSTION

George Coukos, Lausanne University Hospital, Switzerland

17:30 – 17:40

EMPOWERING CYTOTOXICITY OF CAR T CELLS TO ENHANCE ANTI-CANCER RESPONSES

Victor Peperzak, University Medical Center Utrecht, Netherlands

17:40 – 18:20

Panel discussion

18:20 – 20:00

TOP 10 POSTERS – PRESENTATIONS & WELCOME RECEPTION

Exhibition & Networking Area (Grosser Saal)

Chair: Adam Keren, Tel Aviv University, Israel

18:40 – 18:45

NKG2D-CAR MEMORY T CELLS TARGET PEDIATRIC T-CELL ACUTE LYMPHOBLASTIC LEUKEMIA IN VITRO AND IN VIVO BUT FAIL TO ELIMINATE LEUKEMIA INITIATING CELLS

Lucía Fernández, National Cancer Research Center, Spain

18:45 – 18:50

FCYRIIA-SPECIFIC DARPINS DISPLAYED ON VIRAL VECTORS FOR HIV GENE THERAPY

Samuel Theuerkauf, Paul Ehrlich Institute, Germany

18:50 – 18:55

THE INTEGRATED MULTI-OMIC CHARACTERIZATION OF “OFF-THE-SHELF” CD19-CAR-T CELLS ALLOWS THE IDENTIFICATION OF ENGINEERED CELLS

ENDOWED WITH SUPERIOR ANTI-TUMOR FITNESS AND LOWER PRO-INFLAMMATORY ACTIVITY

Cristina Maccalli, Sidra Medicine, Qatar

18:55 – 19:00

ISOLATION AND CHARACTERIZATION OF NEOEPITOPE-SPECIFIC TCRS FOR T CELL THERAPY IN GASTROINTESTINAL CANCER

Linda Warmuth, Technical University of Munich, Germany

19:00 – 19:05

THIRD-GENERATION CHIMERIC ANTIGEN RECEPTOR (CAR) T CELLS IN ADULT ALL AND NHL PATIENTS

Michael Schmitt, University Hospital Heidelberg, Germany

19:05 – 19:10

BANANA LECTIN EXPRESSING CAR T CELLS ENHANCE ANTI-TUMOR ACTIVITY AGAINST HETEROGENOUS SOLID TUMORS

Katie McKenna, Baylor College of Medicine, United States

19:10 – 19:15

COMBINATION OF CD4+ AND CD8+ T CELLS IN T CELL THERAPY OF HBV INFECTION ENHANCES VIRUS CONTROL IN VIVO BY INCREASING IFN-G AND TNF-A SECRETION

Sophia Schreiber, Technical University of Munich, Germany

19:15 – 19:20

IMMUNOTHERAPY TARGETING MUTANT NUCLEOPHOSMIN-1 ON ACUTE MYELOID LEUKEMIA

Georgia Koutsoumpli, Leiden University Medical Center, Netherlands

19:20 – 19:25

SYNTHETIC DUAL-COSTIMULATION FOR TCR AND TCR-LIKE TARGETED CELL THERAPIES

Anton Dobrin, Memorial Sloan Kettering Cancer Center, United States

19:25 – 19:30

THERAPEUTIC GENE EDITING OF T CELLS CORRECTS CTLA4

INSUFFICIENCY

Thomas Fox, University College London, United Kingdom

09:00 – 10:10

SESSION 3: NON VIRAL CAR/TCR ENGINEERING

Plenary Hall (Ballsaal)

Chair: Chiara Magnani, University of Zurich, Switzerland

09:00 – 09:15

NON-VIRAL ENGINEERING OF THERAPEUTIC CELLS WITH THE SLEEPING BEAUTY TRANSPOSON SYSTEM

Zoltan Ivics, Paul-Ehrlich-Institut, Germany

09:15 – 09:30

ACADEMIC VIRUS-FREE CAR T-CELL DEVELOPMENT

Chiara Magnani, University of Zurich, Switzerland

09:30 – 09:40

PERSISTENT GENETIC MODIFICATION OF HUMAN HEMATOPOIETIC STEM AND PROGENITOR CELLS USING S/MAR DNA NANOVECTORS

Patrick Derigs, German Cancer Research Center, Germany

09:40 – 10:10

Panel discussion

10:10 – 10:50

COFFEE BREAK, EXHIBITION, MEET THE EXPERT & POSTER PRESENTATIONS

Exhibition & Networking Area (Grosser Saal)

10:25 – 10:40

Meet the Expert: Michel Sadelain, Memorial Sloan Kettering Cancer Center, USA

10:50 – 12:15

SESSION 4: UNIVERSAL DONOR CELLS & ADVANCED TCR ENGINEERING

Plenary Hall (Ballsaal)

Chair: **Dirk Busch**, Technical University of Munich, Germany

10:50 – 11:10

KEYNOTE LECTURE: GENOME EDITING FOR CANCER IMMUNOTHERAPY

Chiara Bonini, Vita-Salute San Raffaele University, Italy

11:10 – 11:25

ADVANCED TCR ENGINEERED T CELLS FOR THE TREATMENT OF INFECTIONS AND CANCER

Dirk Busch, Technical University of Munich, Germany

11:25 – 11:40

ENHANCED T-CELLS FOR IMMUNOTHERAPY WITH IMPROVED TCRs AND REDIRECTED METABOLISM

Cyrille Cohen, Bar-Ilan University, Israel

11:40 – 11:50

REDIRECTING TCR SPECIFICITY IN REGULATORY T CELLS TOWARD CLASS I HLA-RESTRICTED ISLET ANTIGENS

Raphael Porret, University Hospital of Lausanne, Switzerland

11:50 – 12:15

Panel discussion

12:15 – 13:45

LUNCH BREAK, EXHIBITION, INDUSTRY & POSTER PRESENTATIONS

Exhibition & Networking Area (Grosser Saal)

13:45 – 15:30

LATEST UPDATES AND PARTNERSHIP POTENTIAL

Industry Supported Session

Plenary Hall (Ballsaal)

Chair: **Adi Barzel**, Tel Aviv University, Israel

13:45 – 14:00

TUMOR INFILTRATING LYMPHOCYTES FROM PEDIATRIC SOLID TUMORS EXPANSION IN G-REX DEVICE AND A THREE-SIGNAL-BASED METHOD

África González Murillo, Foundation for Biomedical Research,
The Niño Jesús University Children's Hospital, (supported by
ScaleReady)

14:00 – 14:15

T-CELL KILLING ASSAYS WITH LIVECYTE, LABEL-FREE EFFECTOR CELL TRACKING PROVIDES A KINDER INSIGHT INTO IMMUNE-CELL POLICING

Peter Djali, Head of European Business Development, Phase
Focus, UK

14:15 – 14:30

ADVANCING THE FIELD THROUGH PARTNERSHIPS: THE GOCART COALITION

Christian Chabannon, GO-CART Coalition, France

14:30 – 15:00

ACHIEVING FLEXIBILITY AND SCALABILITY IN CELL THERAPY MANUFACTURING THROUGH OPTIMIZED CELL ISOLATION AND ACTIVATION

Hany Meås, Thermo Fisher Scientific, Norway

15:00 – 15:30

Panel discussion

15:30 – 15:40

SHORT BREAK

15:40 – 16:50

SESSION 5: BEYOND ALPHA-BETA T CELLS

Plenary Hall (Ballsaal)

Chair: **Giulia Casorati**, San Raffaele Hospital, Italy

15:40 – 15:55

$\gamma\delta$ T CELL-INSPIRED THERAPIES: FROM BENCH TO CLINICAL DATA

Jurgen Kuball, University Medical Center Utrecht, Netherlands

15:55 – 16:10

REDIRECTING T AND iNKT CELLS AGAINST CD1C EXPRESSING LEUKEMIA FOR ADOPTIVE IMMUNOTHERAPY

Giulia Casorati, San Raffaele Hospital, Italy

16:10 – 16:20

TCR-ENGINEERED INKT CELLS INDUCE ROBUST ANTI-TUMOR RESPONSE BY DUAL TARGETING CANCER AND SUPPRESSIVE MYELOID CELLS

Gloria Delfanti, San Raffaele Scientific Institute, Italy

16:20 – 16:50

Panel discussion

16:50 – 17:30

COFFEE BREAK, EXHIBITION, MEET THE EXPERT & POSTER PRESENTATIONS

Exhibition & Networking Area (Grosser Saal)

17:05 – 17:20

Meet the Expert: Stanley Riddell, Fred Hutchinson Cancer Research Center, USA

17:30 – 19:10

SESSION 6: UPDATED CLINICAL DATA

Plenary Hall (Ballsaal)

Chair: Claire Roddie, University College London, UK

17:30 – 17:45

BETTER TARGETS, BETTER TARGETING: EVOLUTION OF THE UCL CAR-T PROGRAMME

Claire Roddie, University College London, UK

17:45 – 18:00

NEW TARGETS AND TECHNOLOGIES FOR CAR T CELLS

Michael Hudecek, University Hospital Würzburg, Germany

18:00 – 18:15

MESOTHELIN-TARGETED CAR T-CELL THERAPY TRIALS

Prasad Adusumilli, Memorial Sloan Kettering Cancer Center, USA

18:15 – 18:30

IMMUNE DYSREGULATION DETERMINES OUTCOME POST CD19 CART IN LYMPHOMA

Marion Subklewe, Ludwig-Maximilians-University Munich, Germany

18:30 – 18:40

PHASE 1/2 MULTICENTER CLINICAL TRIAL OF DONOR SPECIFIC TOLERANCE INDUCTION IN LIVING DONOR LIVER TRANSPLANTATION VIA ENGINEERED T CELLS WITH SUPPRESSING FUNCTIONS

Yui Maehara, Juntendo University, Japan

18:40 – 19:10

Panel discussion

08:30 – 09:40

SESSION 7: TARGETING NON-MALIGNANT DISEASES

Plenary Hall (Ballsaal)

Chair: Samik Basu, Cabalettabio, USA

08:30 – 08:45

TCR ENGINEERING OF TREGS TO TREAT MULTIPLE SCLEROSIS

Hans Stauss, University College London, UK

08:45 – 09:00

CD19 CAR T-CELL THERAPY FOR AUTOIMMUNE DISEASE

Samik Basu, Cabalettabio, USA

09:00 – 09:10

MRNA TECHNOLOGY FOR THE DEVELOPMENT OF CAR-T CELLS TARGETING FIBROTIC DISEASES

Sandro Bräuning, Fraunhofer Institute for Cell Therapy and Immunology IZI, Germany

09:10 – 09:40

Panel discussion

09:40 – 10:50

SESSION 8: SELECTED ABSTRACTS FOR ORAL PRESENTATION

Plenary Hall (Ballsaal)

Chair: **Dirk Busch**, Technical University of Munich, Germany

09:40 – 09:50

SELECTIVE DEPLETION OF ALLOREACTIVE B CELLS IN SOLID ORGAN TRANSPLANTATION: CHIMERIC ALLO-ANTIGEN-SPECIFIC T CELLS OVERCOMING REJECTION BY ANTIBODIES (CORA-TS)

Anna Christina Dragon, Hannover Medical School, Germany

09:50 – 10:00

INFECTED HEPATOCYTE CLEARANCE AND SUSTAINED TUMOR REGRESSION BY HBSAG-SPECIFIC TCR-T THERAPY FOR HBV-RELATED HCC

Karin Wisskirchen, Helmholtz Munich, Germany

10:00 – 10:10

DEVELOPING NOVEL TARGETING CARS FOR GLIOBLASTOMA

Ryan Cross, Walter and Eliza Hall Institute of Medical Research, Australia

10:10 – 10:20

GD2.CAR T-CELLS AUGMENTED WITH A CONSTITUTIVELY ACTIVE INTERLEUKIN-7 RECEPTOR FOR TREATMENT OF PEDIATRIC CNS TUMORS

Bilal Omer, Baylor College of Medicine, United States

10:20 – 10:50

Panel discussion

10:50 – 11:30

COFFEE BREAK, EXHIBITION, MEET THE EXPERT & POSTER PRESENTATIONS

Exhibition & Networking Area (Grosser Saal)

11:05 – 11:20

Meet the Expert: Luigi Naldini, San Raffaele Telethon Institute for Gene Therapy, Italy

11:30 – 12:40

SESSION 9: IN VIVO T CELL ENGINEERING

Plenary Hall (Ballsaal)

Chair: **Adi Barzel**, Tel Aviv University, Israel

11:30 – 11:45

IN VIVO ENGINEERING OF B CELLS AND T CELLS

Adi Barzel, Tel Aviv University, Israel

11:45 – 12:00

SURFACE ENGINEERED GENE VECTORS FOR IN VIVO CAR T CELL GENERATION

Christian Buchholz, Paul Ehrlich Institute, Germany

12:00 – 12:10

MULTI-OMICS INFORMED ENHANCEMENT OF CAR GENE DELIVERY BY RAPAMYCIN-INDUCED REDUCTION OF ANTIVIRAL MECHANISMS AGAINST T-CELL TARGETED LENTIVIRAL VECTORS

Elham Adabi, Paul Ehrlich Institute, Germany

12:10 – 12:40

Panel discussion

12:40 – 13:00

SESSION 10: BEST POSTER ANNOUNCEMENT & CONFERENCE CLOSURE

Plenary Hall (Ballsaal)

Moderators: Adi Barzel, Tel-Aviv University, Israel
Dirk Busch, Technical University of Munich, Germany

12:40 – 12:50

Announcement of the top 3 Posters

12:50 – 12:55

Presentation on stage of the BEST Poster ranked 1st

12:55 – 13:00

Summary of the event and closing words by the Conference Co-chairs

***The program could be subject to changes.**