

02/01/2024

**PERSONAL INFORMATION**

First Name: Federico  
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 Date of Birth: 7th September 1980  
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**CURRENT POSITION**

**Senior Attending Physician**, Division of Hematology, Department of Oncology, Geneva University Hospitals  
**Group leader**, Translational Research Center for Oncohematology, Department of Medicine, University of Geneva  
**Privat-Docent**, University of Geneva, School of Medicine

**EDUCATION**

2016- 2019 **Postdoctoral Training**, Division of Blood and Marrow Transplantation, Stanford University, Stanford, CA, USA. Mentor: Pr. R.S. Negrin  
 2016 **Specialist in General Internal Medicine**, Swiss Diploma from the Foederatio Medicorum Helveticorum (FMH), Berne, CH  
 2007- 2011 **PhD in Immunology**, ED 425, Université Paris SUD XI  
 Title: "*CD4+ FOXP3+ Regulatory T cells Homeostasis: role of interleukin-7 and implication in HIV infection pathophysiology*". Supervisor: Dr. C. Bourgeois. Laboratory: INSERM U-1012  
 2006- 2007 **Master of Science**, IMVI, Fundamental Immunology, Université Paris VII/Institut Pasteur, Paris  
 2006 **Medical habilitation**, "Università degli Studi di Genova", Genova, Italy.  
 2006 **Doctor in Medicine MD (cum laude)**, "Università degli Studi di Genova", Genova, Italy.  
 Title: "*Biological therapies against cancer: role of the anti-CD40 monoclonal antibody*"  
 Supervisor: Pr. F. Indiveri Division of Internal Medicine and Clinical Immunology  
 1999-2006 **Medical school**, Università degli Studi di Genova, Genova, Italy  
 Others **Diploma in Vaccinology**, 2009, Institut Pasteur, Paris  
**Diploma in Advanced Immunology**, 2007, Institut Pasteur, Paris  
**Diploma in Human Genetics and Infectious Diseases**, 2007, Institut Pasteur, Paris  
**Diploma inter-University (DIU)**, Polyarthritis and systemic diseases, 2014, Université Paris Sud-XI  
**3<sup>rd</sup> ISCT & ASTCT Cell Therapy Training Course**, 2019, University of Pennsylvania, Philadelphia  
**EHA hematology exam 2022**  
**FMH hematology exam 2022**

**EMPLOYMENT HISTORY**

Current position Since 2023 **Senior Attending Physician**, Division of Hematology, HUG, Geneva, Switzerland  
**Principal Investigator**, Translational Research Center for Oncohematology, University of Geneva, Switzerland  
**Privat-Docent**, University of Geneva, School of Medicine  
 2020-2023 **Senior Clinical Associate**, Division of Hematology, HUG, Geneva, Switzerland. Head: Pr. Y. Chalandon  
 2016-2019 **Postdoctoral Research Fellow**, Division of Blood and Marrow Transplantation, Stanford University, Stanford, CA, USA. Mentor: Pr. R.S. Negrin  
 2015-2016 **Clinical Fellow**, Division of Hematology, HUG, Geneva, Switzerland. Head: Pr. Y. Chalandon  
 2014-2015 **Clinical Fellow**, Division of Clinical Immunology, HUG, Geneva, Switzerland. Head: Pr. J. Seebach

2012-2014 **Resident in Internal Medicine**, Division of Internal Medicine, HUG, Geneva, Head: Pr. A. Perrier  
 2011-2012 **Resident in Internal Medicine**, Hôpital du Jura Bernois, Moutier, Switzerland. Head: Dr. T. Nierle

## RESEARCH GRANTS

### Overcoming B-cell lymphoma resistance to CD19-CAR T cells using combination therapies to enhance and sustain CD19 expression – Collaboration with Pr. Francesco Bertoni IOR

Swiss National Science Foundation	Year: 2024-2026	Amount: CHF 602'885
Fondation Privée des HUG	Year: 2024-2026	Amount: CHF 200'000

### Allogeneic Universal Chimeric Antigen Receptor (CAR) Invariant Natural Killer T (iNKT) Cells Against Acute Myeloid Leukemia

Henriette Meyer Foundation – PhD Scholarship	Year: 2021-2025	Amount: CHF 200'000
SAKK/BMS Grant «HEM Pioneer» Award	Year: 2023	Amount: CHF 50'000
Novartis Foundation for Medical-Biological Research	Year: 2023	Amount: CHF 80'000
Fond'Action	Year: 2023-2025	Amount: CHF 126'000
Dubois-Ferrière Dinu Lipatti Foundation	Year: 2023-2025	Amount: CHF 563'000

### ICOS-ImmunoPET for Non-Invasive Immunomonitoring of Human Chimeric Antigen Receptor (CAR) T cells

Gilead Research Grant	Year: 2023	Amount: CHF 45'000
Fondation Ernst et Lucie Schmidheiny	Year: 2023	Amount: CHF 17'000

### Impact of sorafenib on immune reconstitution after allogeneic stem-cell transplantation in FLT3-ITD Acute Myeloid Leukemia

Dubois-Ferrière Dinu Lipatti Foundation	Year: 2021-2022	Amount: CHF 60'000
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### Identification of Biomarkers for Prediction of Complications after Allogeneic Hematopoietic Stem Cell Transplantation through Systems Immunology

Fonds de service D-MED/D-ONCO/D-RG	Year: 2020	Amount: CHF 40'000
Fondation Prévot	Year: 2021-2022	Amount: CHF 49'969
Ligue genevoise contre le cancer	Year: 2021-2024	Amount: CHF 299'000
Choose Life Foundation	Year: 2021	Amount: CHF 30'000

### Uncoupling Graft-versus-Host-Disease from Graft-versus-Tumor effect through Systems Immunology

Dubois-Ferrière Dinu Lipatti Foundation	Year: 2019	Amount: CHF 161'651
Choose Life Foundation	Year: 2019	Amount: CHF 95'000

### Chimeric Antigen Receptor (CAR) invariant Natural Killer T (iNKT) cells in allogeneic hematopoietic cell transplantation (HCT)

American Society for Blood and Marrow Transplantation	Year: 2018-2021	Amount: USD 60'000
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### T-cell immune senescence and exhaustion after allogeneic hematopoietic stem cell transplantation

HUG - Projet de recherche et développement n° 3-2015-I	Year: 2015	Amount: CHF 30'000
Dubois-Ferrière Dinu Lipatti Fondation	Year: 2015	Amount: CHF 60'000

### Virological Monitoring of Teno Torque Virus (TTV) to evaluate Immunological Competence during Immunosuppression following Orthotopic Liver Transplantation

Swiss Transplant Cohort Study (STCS) FUP053rev	Year: 2014	Amount: CHF 20'000
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## TEACHING ACTIVITIES

2022, 2023	<b>Hematology Course for MD students</b> , Medical School, University of Geneva Thrombocytopenia (1.5h), Cellular therapies (1.5h)
2021, 2022, 2023	<b>Immunity and Defense class for MD students</b> , Medical School, University of Geneva (24h) Co-responsible for this teaching starting from 2024
2023	<b>Cellular Therapy Course for MD students</b> , Medical School, University of Geneva CAR T cells (1h)
2016, 2020, 2021, 2022	<b>Transplantation Course for MD students</b> , Medical School, University of Geneva Immunological tolerance (1h), Natural Killer Cells in Transplantation (1h)
2015, 2022	<b>Immunity Module for PhD students</b> , Biology-Medicine PhD school, University of Geneva Transplantation Immunology (3h)

**SUPERVISION OF JUNIOR RESEARCHERS**


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2023- Present	Chiara Bernardi MD, PhD, Research fellow, University of Geneva
2023- Present	Aurelie Ducrot, Master Student, University of Geneva
2021- Present	Sisi Wang MD, PhD Student, University of Geneva (co-director with Pr. J. Tamburini)
2019- 2023	Juliane Lohmeyer MD, Postdoctoral Research Fellow, Stanford University
2019- 2020	Arielle S. Wenokur, Undergraduate student, Stanford University
2019	Natalie Köhler PhD, Visiting Postdoctoral Fellow from University of Freiburg, Stanford University
2019	Pujan Engels, Visiting MSc student from University of Bonn, Stanford University
2018- 2021	Kristina Maas-Bauer MD, Postdoctoral Research Fellow, Stanford University (Recipient of the Jon J. van Rood Award 2022, of the CTIWP of the EBMT for our work published in Blood 2021)
2018- 2019	Lukas Scheller, Visiting MD student from University of Würzburg, Stanford University.
2017	Victor Tieu, Rotating PhD student at Stanford University, School of Engineering.

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**INDIVIDUAL SCIENTIFIC EDITORIAL AND REVIEWING ACTIVITIES**


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Reviewer editor	<i>Frontiers in Immunology</i>
Guest editor	<i>Frontiers in Immunology</i> , Research topic “Moving Towards Allogeneic Cellular Therapies: Opportunities and Challenges”, Co-edited with A. Bertaina (Stanford) and P. Bader (Frankfurt)
<i>Ad hoc reviewer</i>	<i>Blood, Clinical Cancer Research, British Journal of Haematology, Bone Marrow Transplantation, Transplantation and Cellular Therapy, Biology of Blood and Marrow Transplantation, Molecular Therapy, Molecular Cancer Therapeutics, Molecular Therapy Oncolytics, Cancer Research Communications, Theranostics, Frontiers in Medicine, Frontiers in Pharmacology, Scientific Reports, Cancers, Annals of Hematology, Therapeutic Advances in Hematology, PlosONE, Infection and Immunity, Cellular Physiology and Biochemistry, Infection Genetics and Evolution, BMJ Case Reports, Clinical Case Reports</i>
Abstract reviewer	American Society of Hematology (ASH) European Hematology Association (EHA) European Society for Molecular Imaging (ESMI)
Grant reviewer	Swiss Cancer League; Swiss Transplant Cohort Study (STCS); Krebsliga Bern; French National Cancer Institute; Agence de la biomedicine, France; Cancer Research Trust New Zeland
Award reviewer	New Investigator Award 2020 American Society for Transplantation and Cellular Therapy (ASTCT); HEM Pioneer Award 2023

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**ACTIVE MEMBERSHIP IN SCIENTIFIC SOCIETIES**


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2018-present	Member of the Scientific Committee, Swiss Transplant Cohort Study (STCS)
2020-present	Member, European Society for Blood and Marrow Transplantation (EBMT)
2020-present	Member of the Cellular Therapy & Immunobiology Working Party (CTIWP), EBMT
2020-present	Member of the Société Francophone Greffe de Moelle – Thérapie Cellulaire (SFGM-TC)
2020-present	Member of the WG Cellular Therapies, Swiss Group for Clinical Cancer Research (SAKK)
2020-present	Member of the Cellular therapy WG, Swiss Blood Stem Cell Transplantation Group (SBST)
2022-present	Swiss Board on Multiple Myeloma CAR T cells
2022-present	Co-chair of the Immune monitoring subcommittee of the CTIWP, EBMT

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**SCHOLARSHIPS, FELLOWSHIPS AND AWARDS**


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2022	<b>SAKK/BMS Grant «HEM Pioneer» Award</b> , Swiss Group for Clinical Cancer Research (SAKK)
2019	<b>Abstract Achievement Award</b> , American Society of Hematology (ASH)
2019	<b>Scholar</b> , third ISCT and ASTCT Cell Therapy Training Course
2019	<b>Best Abstract Award</b> , TCT-Transplantation & Cellular Therapy Meetings of ASBMT and CIBMTR
2018-2020	<b>New Investigator Award</b> , American Society for Blood and Marrow Transplantation
2018-2019	<b>Eugenio Litta Fellowship</b> , Fondation Genevoise de bienfaisance Valeria Rossi di Montelera
2017-2018	<b>Postdoctoral Research Fellowship</b> , Swiss Cancer League

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2016-2017	<b>Fond de perfectionnement</b> , Geneva University Hospitals
2010-2011	<b>PhD Scholarship</b> , Fondation pour la Recherche Médicale (FRM)
2007-2010	<b>PhD Scholarship</b> , Agence publique française de recherches sur le sida et les hépatites virales

### CONFERENCE ACTIVITIES

2022	<b>Session co-chair, Experimental transplantation session</b> , European Hematology Association (EHA) 2022 Congress, Wien, Austria
2022	<b>Session co-chair, Experimental transplantation session</b> , American Society of Hematology Association (ASH) 2022 Meeting, New Orleans, USA
2023	<b>Session co-chair, Microbiome</b> , European Society for Blood and Marrow Transplantation (EBMT) 2023 Meeting, Paris, France

### SCIENTIFIC PRESENTATIONS

#### *Invited talks*

Hematopoietic stem cell transplantation: Molecular imaging of alloreactive responses in transplantation. **17. Annual Symposium of the University Hospital Zurich Transplant Center 2023**, Zurich, Switzerland

Chimeric Antigen Receptor T cells, **SAMO Interdisciplinary Workshop on Lymphoma 2023**, Luzern, Switzerland

Immune-reconstitution and immune-senescence after transplantation. **Société Francophone de Greffe de Moelle et de Thérapie Cellulaire (SFGM-TC) Scientific Day 2023**, Paris, France

Mechanisms of Resistance to CAR T cells, **3rd Cuneo City ImmunoTherapy Conference (CCITC) 2023**, Cuneo, Italy

Chimeric Antigen Receptor T cells, **Lymphoma Forum of Excellence (LyFE) Course 2023**, Bellinzona, Switzerland

How to deal with the plethora of the various CD19-targeting options?, SSH/SSMO current practice lymphoma, **Swiss Oncology and Hematology Congress 2022**, Basel, Switzerland

Invariant Natural Killer T (iNKT) cell therapy for GvHD and cancer. Division of Hematology, **University of Basel, 27.04.2022**, Switzerland

Invariant Natural Killer T (iNKT) cell therapy for GvHD and cancer. Department of Medicine, **University of Tübingen, 07.03.2022**, Germany

Options for relapsed lymphomas, SSH/SSMO current practice lymphoma, **Swiss Oncology and Hematology Congress 2021**, Zurich, Switzerland

Imaging to Elucidate Mechanisms of Immune Resistance: Cellular Immunotherapies, ICIT Workshop, **World Molecular Imaging Congress 2021**, Virtual meeting.

HLA-negative relapse after allogeneic HSCT. **University of Lausanne, 23.09.2021**

Immune-senescence and immune-exhaustion in hematopoietic stem cell transplantation and adoptive immunotherapy, Moving Forward with Stem Cell Therapy, **Lifescienceevents, 2016**, Virtual meeting.

#### *Oral presentations*

**Simonetta F.** Integrated Analysis of T cell Repertoire and Transcriptome Identifies Mechanisms of Regulatory T cell (Treg) Suppression of Acute Graft-versus-Host-Disease. Experimental Hematology Workshop, **Swiss Oncology and Hematology Congress 2022**, Basel, Switzerland

**Simonetta F.** Hirai T, Lohmeyer JK, Maas-Bauer K, Alvarez M, Wenokur AS, Baker J, Aalipour A, Haile S, Mackall CL, Negrin RS. Allogeneic Chimeric Antigen Receptor-Invariant Natural Killer T Cells Exert Both Direct and Indirect Antitumor Effects through Host CD8 T Cell Cross-Priming. **2<sup>nd</sup> TCT Meeting of ASBMT and CIBMTR 2020**, Orlando, Florida, USA.

**Simonetta F.** Hirai T, Lohmeyer JK, Maas-Bauer K, Alvarez M, Wenokur AS, Baker J, Aalipour A, Haile S, Mackall CL, Negrin RS. Allogeneic Chimeric Antigen Receptor-Invariant Natural Killer T Cells Exert Both Direct and Indirect Antitumor Effects through Host CD8 T Cell Cross-Priming. **61<sup>st</sup> American Society of Hematology (ASH) Annual Meeting 2019**, Orlando, Florida, USA.

**Simonetta F.** Maas-Bauer K, Hirai T, Wenokur A, Fazal FM, Kambham N, Ribado J, Mavers M, Baker J, Bhatt AS, Chang HY, Negrin RS. Distinct Immune Regulatory Potential of Invariant Natural Killer T (iNKT) Cell Subsets: iNKT2 and iNKT17, but Not iNKT1, Protect from Graft-Versus-Host-Disease. **Best Abstract Award** at **1<sup>st</sup> TCT Meeting of ASBMT and CIBMTR 2019**, Houston, Texas, USA.

**Simonetta F.** Pradier A, Bosshard C, Masouridi-Levrat S, Dantin C, Koutsi A, Tirefort Y, Roosnek E, Chalandon Y. Dynamics of expression of Programmed cell death protein-1 (PD-1) on T cells after allogeneic hematopoietic stem cell transplantation, **43rd EBMT Annual Meeting 2017**, Marseille, France.

**Simonetta F.** Hua S, Lecroux C, Gérard S, Boufassa F, Sáez-Cirión A, Pancino G, Goujard C, Lambotte O, Venet A,

Bourgeois C. High Eomesodermin expression among CD57+ CD8 T cells identifies a CD8 T cell subset associated with viral control during human immunodeficiency virus infection. **WIRM VIII, 2014**, Davos, Switzerland

**Posters (last 5 years)**

Wang S, Arribas AJ, Tarantelli C, Pradier A, Terzi Di Bergamo L, Zucca E, Rossi D, **Simonetta F\***, Bertoni F\*. PI3K and BTK Inhibition Induces the Upregulation of CD19 and Increases Sensitivity to CAR T Cells in a Model of Marginal Zone Lymphoma (MZL). **64th American Society of Hematology (ASH) Annual Meeting 2022**, New Orleans, USA. (\* equal contribution).

**Simonetta F**, Alam IS, Lohmeyer JK, Sahaf B, Good Z, Chen W, Xiao Z, Hirai T, Scheller L, Engels P, Vermesh O, Robinson E, Haywood T, Sathirachinda A, Baker J, Malipatlolla MB, Schultz LM, Spiegel JY, Lee JT, Miklos DB, Mackall CL, Gambhir SS, Negrin RS. Molecular Imaging of Chimeric Antigen Receptor T Cells by ICOS-ImmunoPET. **62<sup>nd</sup> American Society of Hematology (ASH) Annual Meeting 2020**, Virtual meeting.

**Simonetta F**, Hirai T, Lohmeyer JK, Maas-Bauer K, Alvarez M, Wenokur AS, Baker J, Aalipour A, Haile S, Mackall CL, Negrin RS. Allogeneic Chimeric Antigen Receptor-Invariant Natural Killer T Cells Exert Both Direct and Indirect Antitumor Effects through Host CD8 T Cell Cross-Priming. **46th annual meeting of the EBMT 2020**, Virtual meeting.

**Simonetta F**, Alam IS, Mayer AT, Murty S, Vermesh O, Hirai T, Nobashi T, Lau K, Gambhir SS, and Negrin RS. Tracking T Cell Activation By OX40 ImmunoPET: A Novel Strategy for Imaging of Graft Versus Host Disease. **60th American Society of Hematology (ASH) Annual Meeting 2018**, San Diego, CA, USA; **1<sup>st</sup> TCT Meeting of ASBMT and CIBMTR**, Houston, Texas, USA.

**Simonetta F**, Pradier A, Bosshard C, Masouridi-Levrat S, Dantin C, Koutsi A, Tirefort Y, Roosnek E, Chalandon Y. Expression of Programmed cell death protein-1 (PD-1) on T cells after allogeneic hematopoietic stem cell transplantation, **FOCIS 2018**, San Francisco, USA.

**PUBLICATIONS**

Cumulative h-index: 25; last 5 years h-index: 22; total publications 73; total citations: 1928 (last 5 years= 1349). According to Google Scholar 02/01/2024

**Publications**

- 1) De Ramon Ortiz C, Wang S, Stathis A, Bertoni F, Zenz T, Novak U, **Simonetta F**. How to integrate CD19 specific CAR T cells with other CD19 targeting agents in diffuse large B cell lymphoma? **Hematological Oncology 2023**, *Accepted*.
- 2) Bernardi C, **Simonetta F**. Id3 Keeps the PD-1 Checkpoint in Check in GvHD. **Blood 2023**. *Accepted*.
- 3) Maas-Bauer K, Köhler N, Stell AV, Zwick M, Acharya S, Rensing-Ehl A, König C, Kroll J, Baker J, Koßmann S, Pradier A, Wang S, Doquier M, Lewis D, Negrin RS, **Simonetta F**. Single-cell Transcriptomics Reveal Different Maturation Stages and Sublineages Commitment of Human Thymic Invariant Natural Killer T cells. **J Leukoc Biol. 2023**. *Accepted*
- 4) Marone R, Landmann E, Devaux A, Lepore R, Seyres D, Zuin J, Burgold T, Engdahl C, Capoferri G, Dell'Aglio A, Larrue C, **Simonetta F**, Rositzka J, Rhiel M, Andrieux G, Gallagher D, Schröder M, Wiederkehr A, Sinopoli A, Do Sacramento V, Haydn A, Garcia-Prat L, Divsalar C, Camus A, Xu L, Bordoli L, Schwede T, Porteus M, Tamburini J, Corn JE, Cathomen T, Cornu TI, Urlinger S, Jeker LT. Epitope Engineered Human Haematopoietic Stem Cells are Shielded from CD123-targeted Immunotherapy. **J Exp Med 2023**; 220(12):e20231235.
- 5) Chaney AM, Cropper HC, Jain P, Wilson E, **Simonetta F**, Johnson EM, Alam IS, Patterson ITJ, Swarovski M, Stevens MY, Wang Q, Azevedo C, Nagy SC, Benitez JR, Deal EM, Vogel H, Andreasson KI, James ML. PET imaging of TREM1 identifies CNS-infiltrating myeloid cells in a mouse model of multiple sclerosis. **Sci Transl Med. 2023**; 15(702):eabm6267.
- 6) Lohmeyer JK, Hirai T, Turkoz M, Buhler S, Lopes Ramos T, Köhler N, Baker J, Ji X, Villard J, Melotti A, Wagner I, Pradier A, Wang S, Ji X, Becattini S, Villard J, Merkler D, Chalandon Y, Negrin RS#, **Simonetta F#**. Analysis of T cell Repertoire and Transcriptome Identifies Mechanisms of Regulatory T cell (Treg) Suppression of GvHD. **Blood 2023**;141(14):1755-1767. (**#co-senior author**)
- 7) Zanella MC, Vu DL, Hosszu-Fellous K, Neofytos D, Van Delden C, Turin L, Poncet A, **Simonetta F**, Masouridi-Levrat S, Chalandon Y, Cordey S, Kaiser L. Longitudinal Detection of Twenty DNA and RNA Viruses in Allogeneic Hematopoietic Stem Cell Transplant Recipients Plasma. **Viruses 2023**, 15(4), 928.

- 8) Morin S, Giannotti F, Mamez AC, Pradier A, Masouridi-Levrat S, **Simonetta F\***, Chalandon Y\*. Real-world experience of sorafenib maintenance after allogeneic hematopoietic stem cell transplantation for FLT3-ITD AML reveals high rates of toxicity-related treatment interruption. *Front Oncol* **2023**;13:1095870 (#co-senior author)
- 9) Ramos TL, Bolivar-Wagers S, Jin S, Thangavelu G, **Simonetta F**, Lin PY, Hirai T, Saha A, Koehn B, Su LL, Picton LK, Baker J, Lohmeyer JK, Riddle M, Eide C, Tolar J, Panoskaltsis-Mortari A, Wagner JE, Garcia KC, Negrin RS, Blazar BR. Prevention of acute GVHD disease using an orthogonal IL-2/IL-2R $\beta$  system to selectively expand regulatory T-cells in vivo. *Blood* **2023**;141(11):1337-1352.
- 10) Sabatier M, Birsén R, Lauture L, Mouche S, Angelino P, Dehairs J, Goupille L, Boussaid I, Heiblig M, Boet E, Sahal A, Saland E, Santos JC, Armengol M, Fernández-Serrano M, Farge T, Cognet G, **Simonetta F**, Pignon C, Graffeuil A, Mazzotti C, Avet Loiseau H, Delos O, Bertrand-Michel J, Chedru A, Dembitz V, Gallipoli P, Anstee NS, Loo S, Wei AH, Carroll M, Goubard A, Castellano R, Collette Y, Vergez F, Mansat-De Mas V, Bertoli S, Tavitian S, Picard M, Récher C, Bourges-Abella N, Granat F, Kosmider O, Sujobert P, Colsch B, Joffe C, Stuardi L, Swinnen JV, Guillou H, Roué G, Hakim N, Dejean AS, Tsantoulis P, Larrue C, Bouscary D, Tamburini J, Sarry JE. C/EBP $\alpha$  confers dependence to fatty acid anabolic pathways and vulnerability to lipid oxidative stress-induced ferroptosis in FLT3-mutant leukemia. *Cancer Discov*, **2023**;13(7):1720-1747.
- 11) Calderin-Sollet Z, Schäfer A, Ferrari-Lacruz S, Masouridi-Levrat S, Mamez AC, Pradier A, **Simonetta F**, Chalandon Y, Villard J, Buhler S. CMV serostatus and T-cell repertoire diversity 5 years after allogeneic hematopoietic stem cell transplantation. *Leukemia* **2023**;37(4):948-951.
- 12) Larrue C, Mouche S, Lin S, **Simonetta F**, Scheidegger NK, Poulain L, Birsén R, Sarry JE, Stegmaier K, Tamburini J. Mitochondrial fusion is a therapeutic vulnerability of acute myeloid leukemia. *Leukemia* **2023**;37(4):765-775.
- 13) Pradier A, Cordey S, Zanella MC, Melotti A, Wang S, Mamez AC, Chalandon Y, Masouridi-Levrat S, Kaiser L, **Simonetta F\***, Vu DL#. Human pegivirus-1 replication influences NK cell reconstitution after allogeneic haematopoietic stem cell transplantation. *Front Immunol* **2023**;13:1060886. (#co-senior author)
- 14) Pradier A\*, Mamez AC\*, Stephan C, Giannotti F, Masouridi-Levrat S, Wang S, Morin S, Neofytos D, Vu DL, Melotti A, Arm I, Eberhardt CS, Tamburini J, Kaiser L, Chalandon Y, **Simonetta F**. T Cell Receptor Sequencing Reveals Reduced Clonal Breadth of T Cell Responses against SARS-CoV-2 after Natural Infection and Vaccination in Allogeneic Hematopoietic Stem Cell Transplant Recipients. *Ann Oncol*. **2022**; ;33(12):1333-1335. doi: 10.1016/j.annonc.2022.09.153
- 15) Hirai T, Lin PY, Ramos TL, **Simonetta F**, Su LL, Picton LK, Baker J, Lohmeyer JK, Garcia KC, Negrin RS. IL-2 receptor engineering enhances regulatory T cell function suppressed by calcineurin inhibitor. *Am J Transplant*. **2022**; doi: 10.1111/ajt.17181. Online ahead of print.
- 16) Chalandon Y, Mamez AC, Giannotti F, Beauverd Y, Dantin C, Mahne E, Mappoura M, Bernard F, De Ramon Ortiz C, Stephan C, Morin S, Ansari M, **Simonetta F**, Masouridi-Levrat S. Defibrotide shows efficacy in the prevention of sinusoidal obstruction syndrome after allogeneic hematopoietic stem cell transplantation: a retrospective study on 237 patients. *Transplant Cell Ther*. **2022**;28(11):765.e1-765.e9. doi: 10.1016/j.jct.2022.08.003.
- 17) Xiao Z\*, Alam IS\*, **Simonetta F\***, Chen W, Scheller L, Murty S, Lohmeyer JK, Ramos TL, James ML, Negrin RS, Gambhir SS. ICOS ImmunoPET Enables Visualization of Activated T Cells and Early Diagnosis of Murine Acute Gastrointestinal GvHD. *Blood Advances* **2022**;6(16):4782-4792. (\*co-first author)
- 18) Dunai C, Ames E, Ochoa MC, Fernandez-Send M, Melero I, **Simonetta F**, Baker J, Alvarez M. Killers on the loose: Immunotherapeutic strategies to improve NK cell-based therapy for cancer treatment. *Int Rev Cell Mol Biol*. **2022**;370:65-122.
- 19) Xie J, El Rami F, Zhou K, **Simonetta F**, Chen Z, Zheng X, Chen M, Balakrishnan PB, Dai SY, Murty S, Alam IS, Baker J, Negrin RS, Gambhir SS, Rao J. Multiparameter Longitudinal Imaging of Immune Cell Activity in Chimeric Antigen Receptor T Cell and Checkpoint Blockade Therapies. *ACS Central Science* **2022**;8(5):590-602.
- 20) Decroocq J, Birsén R, Montersino C, Chaskar P, Mano J, Poulain L, Friedrich C, Alary AS, Guermouche H, Sahal A, Fouquet G, Gotanègre M, **Simonetta F**, Mouche S, Gestraud P, Lescure A, Del Nery E, Bosc C, Grenier A, Mazed F, Mondesir J, Chapuis N, Ho L, Boughalem A, Lelorc'h M, Gobeaux C, Fontenay M, Recher C, Vey N, Guillé A, Birnbaum D, Hermine O, Radford-Weiss I, Tsantoulis P, Collette Y, Castellano R, Sarry JE, Pasmant E, Bouscary D, Kosmider O, Tamburini J. RAS activation induces synthetic lethality of MEK inhibition with mitochondrial oxidative metabolism in acute myeloid leukemia. *Leukemia*. **2022**;36(5):1237-1252.
- 21) **Simonetta F**, Bertoni F. An epigenetic signature in CD19-CAR T cells predicts clinical outcome. *Trends in Cancer* **2022**;8(2):81-82.
- 22) **Simonetta F**. Dual Cytokine Blockade in Acute GvHD. *Blood* **2021**;138(24):2453-2454.

- 23) Legrand N, Pradier A, Poulain L, Mouche S, Birsén R, Larrue C, **Simonetta F**, Tamburini J. AMP activated protein kinase contributes to apoptosis induced by the Bcl-2 inhibitor venetoclax in acute myeloid leukemia. **Cancers** **2021**, *13*, 5966.
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