

15/12/2022

**PERSONAL INFORMATION**

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Last Name:	SIMONETTA	
Gender:	Male	
Date of Birth:	7th September 1980	
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**CURRENT POSITION**

**Scientific Chief Resident**, Division of Hematology, Department of Oncology, Geneva University Hospitals and Translational Research Center for Oncohematology, University of Geneva

**EDUCATION**

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

**EMPLOYMENT HISTORY**

Current position	<b>Scientific chief resident</b> Division of Hematology, HUG, Geneva, Switzerland, Head: Pr. Y. Chalandon
Since 2020	Translational Research Center for Oncohematology, University of Geneva, Head: Pr. J. Tamburini
2020	<b>Chief resident</b> , Division of Hematology, HUG, Geneva, Switzerland. Head: Pr. Y. Chalandon
2016-2019	<b>Postdoctoral Research Fellow</b> , Division of Blood and Marrow Transplantation, Stanford University, Stanford, CA, USA. Mentor: Pr. R.S. Negrin
2015-2016	<b>Clinical Fellow</b> , Division of Hematology, HUG, Geneva, Switzerland. Head: Pr. Y. Chalandon
2014-2015	<b>Clinical Fellow</b> , Division of Clinical Immunology, HUG, Geneva, Switzerland. Head: Pr. J. Seebach
2012-2014	<b>Resident in Internal Medicine</b> , Division of Internal Medicine, HUG, Geneva, Head: Pr. A. Perrier
2011-2012	<b>Resident in Internal Medicine</b> , Hôpital du Jura Bernois, Moutier, Switzerland. Head: Dr. T. Nierle

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

Henriette Meyer Foundation	Year: 2021-2025	Amount: CHF 200'000
SAKK/BMS Grant «HEM Pioneer» Award	Year: 2023	Amount: CHF 50'000

**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 Foundation	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	<b>Hematology Course for MD students</b> , Medical School, University of Geneva Thrombocytopenia (1.5h), Cellular therapies (1.5h)
2021, 2022 2020	<b>Immunity and Defense class for MD students</b> , Medical School, University of Geneva (24h) Focus sur les CAR-T cells : une nouvelle génération de traitements pour les hémopathies malignes, <b>Colloques du mardi</b> , Geneva University Hospitals
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)
2015	Le syndrome d'activation macrophagique en 2015 (1h), <b>Colloques du mardi</b> , HUG

**SUPERVISION OF JUNIOR RESEARCHERS**

2021- Present	Sisi Wang MD, PhD Student, University of Geneva (co-director with Pr. J. Tamburini)
2019- 2022	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- 2019	Kristina Maas-Bauer MD, Postdoctoral Research Fellow, Stanford University
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.

**INDIVIDUAL SCIENTIFIC EDITORIAL AND REVIEWING ACTIVITIES**

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)

*Ad hoc reviewer* *Blood, Clinical Cancer Research, British Journal of Haematology, Bone Marrow Transplantation, Biology of Blood and Marrow Transplantation, Molecular Therapy Oncolytics, Cancer Research Communications, Theranostics, Frontiers in Medicine, Frontiers in Pharmacology, Scientific Reports, Cancers, Annals of Hematology, Therapeutic Advances in Hematology, PlosONE*

Abstract reviewer American Society of Hematology (ASH)  
European Hematology Association (EHA)  
European Society for Molecular Imaging (ESMI)

Grant reviewer Swiss Transplant Cohort Study (STCS); Krebsliga Bern; Agence de la biomedicine, France; Cancer Research Trust New Zeland

Award reviewer New Investigator Award 2020 American Society for Transplantation and Cellular Therapy (ASTCT)

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## ACTIVE MEMBERSHIP IN SCIENTIFIC SOCIETIES

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

2022 **SAKK/BMS Grant «HEM Pioneer» Award**, Swiss Group for Clinical Cancer Research (SAKK)  
2019 **Abstract Achievement Award**, American Society of Hematology (ASH)  
2019 **Scholar**, third ISCT and ASTCT Cell Therapy Training Course  
2019 **Best Abstract Award**, TCT-Transplantation & Cellular Therapy Meetings of ASBMT and CIBMTR  
2018-2020 **New Investigator Award**, American Society for Blood and Marrow Transplantation  
2018-2019 **Eugenio Litta Fellowship**, Fondation Genevoise de bienfaisance Valeria Rossi di Montelera  
2017-2018 **Postdoctoral Research Fellowship**, Swiss Cancer League  
2016-2017 **Fond de perfectionnement**, Geneva University Hospitals  
2010-2011 **PhD Scholarship**, Fondation pour la Recherche Médicale (FRM)  
2007-2010 **PhD Scholarship**, Agence publique française de recherches sur le sida et les hépatites virales

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## CONFERENCE ACTIVITIES

2022 **Session co-chair, Experimental transplantation session**, European Hematology Association (EHA) 2022 Congress, Wien, Austria  
2022 **Session co-chair, Experimental transplantation session**, American Society of Hematology Association (ASH) 2022 Meeting, New Orleans, USA

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## SCIENTIFIC PRESENTATIONS

### *Invited talks*

**Simonetta F.** 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

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

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

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

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

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

**Simonetta F.** 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, Lecuroux 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)**

**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, **FOCUS 2018**, San Francisco, USA.

#### **PUBLICATIONS**

Cumulative h-index: 22; last 5 years h-index: 20; total publications 62; total citations: 1511 (last 5 years= 1172). According to Google Scholar 09/12/2022

#### **Preprints**

- 1) Maas-Bauer K, Acharya S, Baker J, Lewis DB, Negrin RS, **Simonetta F.** Single-cell Transcriptomics Reveal Different Maturation Stages and Sublineages Commitment of Human Thymic Invariant Natural Killer T cells. **bioRxiv 2022.08.10.503443**; doi: <https://doi.org/10.1101/2022.08.10.503443>

- 2) Sabatier M, Birsen R, Lauture L, Dehairs J, Angelino P, Mouche S, Heiblig M, Boet E, Sahal A, Saland E, Farge T, Cognet G, **Simonetta F**, Pignon C, Graffeuil A, Mazzotti C, Avet-Loiseau H, Delos O, Bertrand-Michel J, Chedru A, Vergez F, Mansat-De Mas V, Bertoli S, Tavitian S, Picard M, Récher C, Kosmider O, Sujobert P, Colsch B, Joffre C, Stuani L, Swinnen JV, Guillou H, 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 in FLT3-mutant leukemia. *bioRxiv* 2022.04.15.488522; doi: <https://doi.org/10.1101/2022.04.15.488522>

### Publications

- 1) 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<sup>#</sup>, **Simonetta F**<sup>#</sup>. Analysis of T cell Repertoire and Transcriptome Identifies Mechanisms of Regulatory T cell (Treg) Suppression of GvHD. *Blood* 2022, *Accepted* (**#co-senior author**)
- 2) Pradier A, Cordey S, Zanella MC, Melotti A, Wang S, Mamez AC, Chalandon Y, Masouridi-Levrat S, Kaiser L, **Simonetta F**<sup>#</sup>, Vu DL<sup>#</sup>. Human pegivirus-1 replication influences NK cell reconstitution after allogeneic haematopoietic stem cell transplantation. *Front Immunol* 2022, *Accepted* (**#co-senior author**)
- 3) 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, Panoskaltis-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* 2022, *Accepted*
- 4) 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
- 5) 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.*
- 6) 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.jtct.2022.08.003.
- 7) 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**)
- 8) 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.
- 9) 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.
- 10) Decroocq J, Birsen 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.
- 11) **Simonetta F**, Bertoni F. An epigenetic signature in CD19-CAR T cells predicts clinical outcome. *Trends in Cancer* 2022;8(2):81-82.
- 12) **Simonetta F**. Dual Cytokine Blockade in Acute GvHD. *Blood* 2021;138(24):2453-2454.
- 13) Legrand N, Pradier A, Poulain L, Mouche S, Birsen 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.

- 14) Mamez AC\*, Pradier A\*, Giannotti F, Petitpas A, Fabra Urdiola M, Vu DL, Masouridi-Levrat S, Morin S, Dantin C, Clerc Renaud D, Eberhardt CS, Kaiser L, **Simonetta F**<sup>#</sup>, Chalandon Y<sup>#</sup>. Antibody Responses to SARS-CoV2 Vaccination in Allogeneic Hematopoietic Stem Cell Transplant Recipients. *Bone Marrow Transplant.* **2021**; 56(12):3094-3096. (#co-senior author)
- 15) **Simonetta F**, Lohmeyer JK, Hirai T, Maas-Bauer K, Alvarez M, Wenokur AS, Baker J, Aalipour A, Ji X, Haile S, Mackall CL, Negrin RS. Allogeneic CAR-invariant Natural Killer T Cells Exert Potent Antitumor Effects Through Host CD8 T Cell Cross-Priming. *Clin Cancer Res.* **2021**; 27(21):6054-6064.
- 16) Maas-Bauer K\*, Lohmeyer JL\*, Hirai T, Ramos TL, Fazal F, Litzenburger UM, Yost KE, Ribado JV, Kambham N, Wenokur AS, Lin PY, Alvarez M, Mavers M, Baker J, Bhatt AS, Chang HY, **Simonetta F**<sup>#</sup>, Negrin RS<sup>#</sup>. Invariant Natural Killer T Cell Subsets Have Diverse Graft-Versus-Host-Disease-Preventing and Anti-Tumor Effects. *Blood* **2021**; 2021;138(10):858-870. (#co-senior author)
- 17) Hirai T, Mayer AT, Nobashi T, Lin PY, Xiao Z, Udagawa T, Seo K, **Simonetta F**, Baker J, Cheng A, Negrin RS, Gambhir S. Imaging Alloreactive T Cells Provides Early Warning of Organ Transplant Rejection. *JCI Insight* **2021**;6(13):145360
- 18) Rubio MT, Varlet P, Allain V, Ballot C, Cuffel A, Deschamps M, Ferrand C, Foguene J, Forcade E, Huynh A, Guihot A, Latouche JB, Lemarie C, Martinroche G, Morin F, Nguyen S, Schmit K, Servais S, **Simonetta F**, Yakoub-Agha I, Caillat-Zucman S. Immunomonitoring of patients treated with CAR-T cells for hematological malignancy: guidelines from the CARTi group and the Francophone Society of Bone Marrow Transplantation and Cellular Therapy (SFGM-TC). *Bulletin du Cancer* **2021**; 108(12S):S53-S64.
- 19) Beauverd Y, Morin S, Stephan C, De Ramon Ortiz C, Fabra Urdiola M, Giannotti F, Mahne E, Mamez AC, Mappoura M, **Simonetta F**, Tran TA, Ayer C, Noetzlin S, Verdon I, Masouridi-Levrat S, Chalandon Y. The EBMT Cytogenetic Risk Score maintains its prognostic significance in acute myeloid leukemia following allogeneic stem cell transplantation in a cohort with 40% of patients transplanted with in vitro partial T-cell depleted graft. *Bone Marrow Transplant.* **2021** ;56(9):2284-2286.
- 20) Hirai T, Lin PY, **Simonetta F**, Maas-Bauer K, Turkoz M, Mavers M, Baker J, Negrin RS. Activation of natural killer T cells enhances the function of regulatory T cell therapy in suppressing murine GvHD. *Blood Advances* **2021** ;5(11):2528-2538.
- 21) Hirai T, Ramos TL, Lin PY, **Simonetta F**, Su LL, Picton LK, Baker J, Lin JX, Li P, Seo K, Lohmeyer JK, Bolivar-Wagers S, Mavers M, Leonard W, Blazar B, Garcia KC, Negrin RS. Selective expansion of regulatory T cells using an orthogonal IL-2/IL-2 receptor system facilitates transplantation tolerance. *J Clin Invest.* **2021**; 131(8):e139991.
- 22) Alvarez M, Pierini A, **Simonetta F**, Baker J, Maas-Bauer K, Hirai T, Negrin RS. Infusion of Host-Derived Unlicensed NK Cells Improves Donor Engraftment in Non-Myeloablative Allogeneic Hematopoietic Cell Transplantation. *Front Immunol.* **2021**;11:614250.
- 23) **Simonetta F**<sup>\*</sup>, 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. *Clin Cancer Res.* **2021**;27(4):1058-1068. (\*co-first author)
- 24) Alam IS\*, **Simonetta F**<sup>\*</sup>, Scheller L, Mayer AT, Murty S, Vermesh O, Nobashi TW, Lohmeyer JK, Hirai T, Baker J, Lau KH, Negrin RS, Gambhir SS. Visualization of activated T cells by OX40-immunoPET as a strategy for diagnosis of acute Graft-versus-Host-Disease. *Cancer Research* **2020**;80(21):4780-4790. (\*co-first author)
- 25) Pradier A, Masouridi-Levrat S, Bosshard C, Dantin C, Vu DL, Zanella MC, Boely E, Tapparel C, Kaiser L, Chalandon Y, **Simonetta F**<sup>#</sup>, Roosnek E<sup>#</sup>. Torque Teno Virus as a Potential Biomarker for Complications and Survival after Allogeneic Hematopoietic Stem Cell Transplantation. *Front Immunol.* **2020**;11:998. (#co-senior author)
- 26) Aalipour A, Le Boeuf F, Tang M, Murty S, **Simonetta F**, Lozano A, Shaffer T, Bell J, Gambhir SS. Viral delivery of chimeric antigen receptor (CAR) targets enables effective cell therapy. *Mol Ther Oncolytics.* **2020**;17:232-240.
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