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publications

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journal paper/review

Diem S, Fässler M, Bomze D, Ali O H, Berner F, Niederer R, Hillmann D, Mangana J, Levesque M P, Dummer R, Risch L, Recher M, Risch M, Flatz L. Immunoglobulin G and Subclasses as Potential Biomarkers in Metastatic Melanoma Patients Starting Checkpoint Inhibitor Treatment. *J Immunother* 2019; 42:89-93.

Fässler M, Diem S, Mangana J, Hasan Ali O, Berner F, Bomze D, Ring S, Niederer R, Gil Cruz C, Perez Shibayama C, Krolík M, Siano M, Joerger M, Recher M, Risch L, Güsewell S, Risch M, Speiser D E, Ludewig B, Levesque M P, Dummer R, Flatz L. Antibodies as biomarker candidates for response and survival to checkpoint inhibitors in melanoma patients. *J Immunother Cancer* 2019; 7:50.

Trefny M P, Rothschild S I, Uhlenbrock F, Rieder D, Kasenda B, Stanczak M A, Berner F, Kashyap A S, Kaiser M, Herzig P, Poechtrager S, Thommen D S, Geier F, Savic S, Jermann P, Alborelli I, Schaub S, Stenner F, Früh M, Trajanoski Z, Flatz L, Mertz K D, Zippelius A, Läubli H. A Variant of a Killer Cell Immunoglobulin-like Receptor Is Associated with Resistance to PD-1 Blockade in Lung Cancer. *Clin Cancer Res* 2019; 25:3026-3034.

Berner F, Bomze D, Flatz L. Immune-Related Adverse Events of Immune Checkpoint Inhibitors-From a Clinical to Pathophysiological View-In Reply. *JAMA Oncol* 2019;.

Gil Cruz C, Perez Shibayama C, De Martin A, Ronchi F, van der Borght K, Niederer R, Onder L, Lütge M, Novkovic M, Nindl V, Ramos G, Arnoldini M, Slack E M C, Boivin-Jahns V, Jahns R, Wyss M, Mooser C, Lambrecht B N, Maeder M T, Rickli H, Flatz L, Eriksson U, Geuking M B, McCoy K D, Ludewig B. Microbiota-derived peptide mimics drive lethal inflammatory cardiomyopathy. *Science* 2019; 366:881-886.

Berner F, Bomze D, Diem S, Ali O H, Fässler M, Ring S, Niederer R, Ackermann C J, Baumgaertner P, Pikor N, Gil Cruz C, van de Veen W, Akdis M, Nikolaev S, Läubli H, Zippelius A, Hartmann F, Cheng H W, Hönger G, Recher M, Goldman J, Cozzio A, Früh M, Neefjes J, Driessen C, Ludewig B, Hegazy A N, Jochum W, Speiser D E, Flatz L. Association of Checkpoint Inhibitor-Induced Toxic Effects With Shared Cancer and Tissue Antigens in Non-Small Cell Lung Cancer. *JAMA Oncol* 2019;.

Isak V, Beerli T, Cozzio A, Flatz L. A Rare Case of Localized Argyria on the Face. *Case Rep Dermatol* 2019; 11:23-27.

- Hartwig T, Zwicky P, Schreiner B, Yawalkar N, Cheng P, Navarini A, Dummer R, Flatz L, Conrad C, Schlapbach C, Becher B. Regulatory T Cells Restrain Pathogenic T Helper Cells during Skin Inflammation. *Cell Rep* 2018; 25:3564-3572.e4.
- Schmid S, Diem S, Li Q, Krapf M, Flatz L, Leschka S, Desbiolles L, Klingbiel D, Jochum W, Früh M. Organ-specific response to nivolumab in patients with non-small cell lung cancer (NSCLC). *Cancer Immunol Immunother* 2018;.
- Hasan Ali O, Berner F, Bomze D, Fässler M, Diem S, Cozzio A, Joerger M, Früh M, Driessen C, Lenz T L, Flatz L. Human leukocyte antigen variation is associated with adverse events of checkpoint inhibitors. *Eur J Cancer* 2018; 107:8-14.
- Diem S, Fässler M, Ali O H, Siano M, Niederer R, Berner F, Roux G A, Ackermann C J, Schmid S, Güsewell S, Früh M, Flatz L. Risk score for non-small cell lung cancer patients starting checkpoint inhibitor treatment. *Cancer Manag Res* 2018; 10:5537-5544.
- Fischer S, Ali O H, Jochum W, Kluckert J T, Flatz L, Siano M. Anti-PD-1 Therapy Leads to Near-Complete Remission in a Patient with Metastatic Basal Cell Carcinoma. *Oncol Res Treat* 2018; 41:391-394.
- Remy M M, Sahin M, Flatz L, Regen T, Xu L, Kreutzfeldt M, Fallet B, Doras C, Rieger T, Bestmann L, Hanisch U K, Kaufmann B A, Merkler D, Pinschewer D D. Interferon- γ -Driven iNOS: A Molecular Pathway to Terminal Shock in Arenavirus Hemorrhagic Fever. *Cell Host Microbe* 2017; 22:354-365.e5.
- Kalkavan H, Sharma P, Kasper S, Helfrich I, Pandya A A, Gassa A, Virchow I, Flatz L, Brandenburg T, Namineni S, Heikenwalder M, Höchst B, Knolle P A, Wollmann G, von Laer D, Drexler I, Rathbun J, Cannon P M, Scheu S, Bauer J, Chauhan J, Häussinger D, Willimsky G, Löhning M, Schadendorf D, Brandau S, Schuler M, Lang P A, Lang K S. Spatiotemporally restricted arenavirus replication induces immune surveillance and type I interferon-dependent tumour regression. *Nat Commun* 2017; 8:14447.
- Diem S, Schmid S, Krapf M, Flatz L, Born D, Jochum W, Templeton A J, Früh M. Neutrophil-to-Lymphocyte ratio (NLR) and Platelet-to-Lymphocyte ratio (PLR) as prognostic markers in patients with non-small cell lung cancer (NSCLC) treated with nivolumab. *Lung Cancer* 2017; 111:176-181.
- Diem S, Hasan Ali O, Ackermann C J, Bomze D, Koelzer V H, Jochum W, Speiser D E, Mertz K D, Flatz L. Tumor infiltrating lymphocytes in lymph node metastases of stage III melanoma correspond to response and survival in nine patients treated with ipilimumab at the time of stage IV disease. *Cancer Immunol Immunother* 2017; 67:39-45.
- Hasan Ali O, Diem S, Aschwanden J, Markert E, Tasman A J, Müller J, Flatz L. GLUT1-positive recurrent basal cell carcinoma of basosquamous subtype detected by positron emission tomography. *JAAD Case Rep* 2016; 2:415-417.
- Ring S, Flatz L. Generation of Lymphocytic Choriomeningitis Virus Based Vaccine Vectors. *Methods Mol Biol* 2016; 1404:351-64.
- Hasan Ali O, Diem S, Markert E, Jochum W, Kerl K, French L E, Speiser D E, Früh M, Flatz L. Characterization of nivolumab-associated skin reactions in patients with metastatic non-small cell lung cancer. *Oncoimmunology* 2016; 5:e1231292.
- Diem S, Keller F, Rüesch R, Maillard S A, Speiser D E, Dummer R, Siano M, Urner-Bloch U, Goldinger S M, Flatz L, Diem S. Pembrolizumab-triggered Uveitis: An Additional Surrogate Marker for Responders in Melanoma Immunotherapy?. *J Immunother* 2016; 39:379-382.

- Bickel A, Koneth I,ENZLER-Tschudy A, Neuweiler J, Flatz L, Früh M. Pembrolizumab-associated minimal change disease in a patient with malignant pleural mesothelioma. *BMC Cancer* 2016; 16:656.
- Johnson S, Bergthaler A, Graw F, Flatz L, Bonilla W V, Siegrist C A, Lambert P H, Regoes R R, Pinschewer D D. Protective efficacy of individual CD8+ T cell specificities in chronic viral infection. *J Immunol* 2015; 194:1755-62.
- Sommerstein R, Flatz L, Remy M M, Malinge P, Magistrelli G, Fischer N, Sahin M, Bergthaler A, Igonet S, Ter Meulen J, Rigo D, Meda P, Rabah N, Coutard B, Bowden T A, Lambert P H, Siegrist C A, Pinschewer D D. Arenavirus Glycan Shield Promotes Neutralizing Antibody Evasion and Protracted Infection. *PLoS Pathog* 2015; 11:e1005276.
- Demaria O, De Gassart A, Coso S, Gestermann N, Di Domizio J, Flatz L, Gaide O, Michielin O, Hwu P, Petrova T V, Martinon F, Modlin R L, Speiser D E, Gilliet M. STING activation of tumor endothelial cells initiates spontaneous and therapeutic antitumor immunity. *Proc Natl Acad Sci USA* 2015; 112:15408-13.
- Bhattacharya A, Hegazy A N, Deigendesch N, Kosack L, Cupovic J, Kandasamy R K, Hildebrandt A, Merkler D, Kühl A A, Vilagos B, Schliehe C, Panse I, Khamina K, Baazim H, Arnold I, Flatz L, Xu H C, Lang P A, Aderem A, Takaoka A, Superti-Furga G, Colinge J, Ludewig B, Löhning M, Bergthaler A. Superoxide Dismutase 1 Protects Hepatocytes from Type I Interferon-Driven Oxidative Damage. *Immunity* 2015; 43:974-86.
- Roychoudhuri R, Lefebvre F, Honda M, Pan L, Ji Y, Klebanoff C A, Nichols C N, Fourati S, Hegazy A N, Goulet J P, Gattinoni L, Nabel G J, Gilliet M, Cameron M, Restifo N P, Sékaly R P, Flatz L. Transcriptional profiles reveal a stepwise developmental program of memory CD8(+) T cell differentiation. *Vaccine* 2014; 33:914-23.
- Sommerstein R, Ramos da Palma J, Olschläger S, Bergthaler A, Barba L, Lee B P L, Pasquato A, Flatz L. Evolution of Recombinant Lymphocytic Choriomeningitis Virus/Lassa Virus In Vivo Highlights the Importance of the GPC Cytosolic Tail in Viral Fitness. *J Virol* 2014; 88:8340-8348.
- Speiser D E, Flatz L. Cancer immunotherapy drives implementation science in oncology. *Hum Vaccin Immunother* 2014; 10:3107-10.
- Flatz L, Conrad C. Role of T-cell-mediated inflammation in psoriasis: pathogenesis and targeted therapy. *Psoriasis: Targets & Therapy* 2013;.
- Olschläger S, Flatz L. Vaccination strategies against highly pathogenic arenaviruses: the next steps toward clinical trials. *PLoS Pathog* 2013; 9:e1003212.
- Clayton H, Flatz L, Vollenweider-Roten S, Schoepfer A, Gilliet M, Conrad C. Anti-TNF therapy in the treatment of psoriasis in a patient with acute-on-chronic pancreatitis. *Dermatology (Basel)* 2013; 227:193-6.
- Flatz L, Cheng C, Wang L, Foulds K E, Ko S Y, Kong W P, Roychoudhuri R, Shi W, Bao S, Todd J P, Asmal M, Shen L, Donaldson M, Schmidt S D, Gall J G D, Pinschewer D D, Letvin N L, Rao S, Mascola J R, Roederer M, Nabel G J. Gene-based vaccination with a mismatched envelope protects against simian immunodeficiency virus infection in nonhuman primates. *J Virol* 2012; 86:7760-70.
- Zürcher S, Mooser C, Lüthi A U, Mühlemann K, Barbani M T, Mohacsi P, Garzoni C, Gorgievski-Hrisoho M, Schaller A, Flatz L. Sensitive and rapid detection of ganciclovir resistance by PCR based MALDI-TOF analysis. *J Clin Virol* 2012; 54:359-63.
- Kerber R, Rieger T, Busch C, Flatz L, Pinschewer D D, Kümmerer B M, Günther S. Cross-species analysis of the replication complex of Old World arenaviruses reveals two nucleoprotein sites involved in L protein function. *J Virol* 2011; 85:12518-28.

- Flatz L, Roychoudhuri R, Honda M, Filali-Mouhim A, Goulet J P, Kettaf N, Lin M, Roederer M, Haddad E K, Sékaly R P, Nabel G J. Single-cell gene-expression profiling reveals qualitatively distinct CD8 T cells elicited by different gene-based vaccines. *Proc Natl Acad Sci USA* 2011; 108:5724-9.
- Flatz L, Hegazy A N, Bergthaler A, Verschoor A, Claus C, Fernandez M, Gattinoni L, Johnson S, Kreppel F, Kochanek S, Broek M v d, Radbruch A, Lévy F, Lambert P H, Siegrist C A, Restifo N P, Löhning M, Ochsenbein A F, Nabel G J, Pinschewer D D. Development of replication-defective lymphocytic choriomeningitis virus vectors for the induction of potent CD8+ T cell immunity. *Nat Med* 2010; 16:339-45.
- Flatz L, Rieger T, Merkler D, Bergthaler A, Regen T, Schedensack M, Bestmann L, Verschoor A, Kreutzfeldt M, Brück W, Hanisch U K, Günther S, Pinschewer D D. T cell-dependence of Lassa fever pathogenesis. *PLoS Pathog* 2010; 6:e1000836.
- Bergthaler A, Flatz L, Hegazy A N, Johnson S, Horvath E, Löhning M, Pinschewer D D. Viral replicative capacity is the primary determinant of lymphocytic choriomeningitis virus persistence and immunosuppression. *Proc Natl Acad Sci USA* 2010; 107:21641-6.
- Pinschewer D D, Flatz L, Steinborn R, Horvath E, Fernandez M, Lutz H, Suter M, Bergthaler A. Innate and adaptive immune control of genetically engineered live-attenuated arenavirus vaccine prototypes. *Int Immunol* 2010; 22:749-56.
- Hegazy A N, Peine M, Helmstetter C, Panse I, Fröhlich A, Bergthaler A, Flatz L, Pinschewer D D, Radbruch A, Löhning M. Interferons direct Th2 cell reprogramming to generate a stable GATA-3(+)T-bet(+) cell subset with combined Th2 and Th1 cell functions. *Immunity* 2010; 32:116-28.
- Bergthaler A, Flatz L, Verschoor A, Hegazy A N, Holdener M, Fink K, Eschli B, Merkler D, Sommerstein R, Horvath E, Fernandez M, Fitsche A, Senn B M, Verbeek J S, Odermatt B, Siegrist C A, Pinschewer D D. Impaired antibody response causes persistence of prototypic T cell-contained virus. *PLoS Biol* 2009; 7:e1000080.
- Heikenwalder M, Prinz M, Zeller N, Lang K S, Junt T, Rossi S, Tumanov A, Schmidt H, Priller J, Flatz L, Rüllicke T, Macpherson A J, Holländer G A, Nedospasov S A, Aguzzi A. Overexpression of lymphotoxin in T cells induces fulminant thymic involution. *Am J Pathol* 2008; 172:1555-70.
- Flatz L, Bergthaler A, de la Torre J C, Pinschewer D D. Recovery of an arenavirus entirely from RNA polymerase I/II-driven cDNA. *Proc Natl Acad Sci USA* 2006; 103:4663-8.
- Navarini A A, Recher M, Lang K S, Georgiev P, Meury S, Bergthaler A, Flatz L, Bille J, Landmann R, Odermatt B, Hengartner H, Zinkernagel R M. Increased susceptibility to bacterial superinfection as a consequence of innate antiviral responses. *Proc Natl Acad Sci USA* 2006; 103:15535-9.
- Flatz L, Cottagnoud M, Kühn F, Entenza J, Stucki A, Cottagnoud P. Ceftriaxone acts synergistically with levofloxacin in experimental meningitis and reduces levofloxacin-induced resistance in penicillin-resistant pneumococci. *J Antimicrob Chemother* 2004; 53:305-10.
- Cottagnoud P, Pfister M, Acosta F, Cottagnoud M, Flatz L, Kühn F, Müller H P, Stucki A. Daptomycin is highly efficacious against penicillin-resistant and penicillin- and quinolone-resistant pneumococci in experimental meningitis. *Antimicrob Agents Chemother* 2004; 48:3928-33.
- Kühn F, Cottagnoud M, Acosta F, Flatz L, Entenza J, Cottagnoud P. Cefotaxime acts synergistically with levofloxacin in experimental meningitis due to penicillin-resistant pneumococci and prevents selection of levofloxacin-resistant mutants in vitro. *Antimicrob Agents Chemother* 2003; 47:2487-91.

Cottagnoud P, Cottagnoud M, Acosta F, Flatz L, Kühn F, Stucki A, Entenza J. Meropenem prevents levofloxacin-induced resistance in penicillin-resistant pneumococci and acts synergistically with levofloxacin in experimental meningitis. *Eur J Clin Microbiol Infect Dis* 2003; 22:656-62.