

**HORIZON  
2020**

# RELapses prevENTION in chronic autoimmune disease: common mechanisms and co-morbidities

## Results

### Project Information

#### RELENT

Grant agreement ID: 668036

[Project website](#) 

#### DOI

[10.3030/668036](https://doi.org/10.3030/668036) 

Project closed

#### EC signature date

9 December 2015

#### Start date

1 November 2015

#### End date

30 April 2020

#### Funded under

SOCIETAL CHALLENGES - Health, demographic change and well-being

#### Total cost

€ 6 469 522,50

#### EU contribution

€ 5 999 431,25

#### Coordinated by

MEDIZINISCHE UNIVERSITAET  
WIEN



Austria

CORDIS provides links to public deliverables and publications of HORIZON projects.

Links to deliverables and publications from FP7 projects, as well as links to some specific result types such as dataset and software, are dynamically retrieved from [OpenAIRE](#) .

## Deliverables

[Launch of website, Twitter, Research Gate, LinkedIn, Account and general project flyer/poster](#) 

Launch of website, Twitter, Research Gate, LinkedIn, Account and general project flyer/poster (including description of web site contents and management)

[Recruitment report update for “immune ageing in health and disease”](#) 

The report shall include an overview of recruited subjects by study site, potential recruiting problems and, if applicable, a detailed description of implemented and planned measures to compensate delays in the study subject recruitment.

[Report on status of posting results in the study registry\(s\) for “Research into Genetic variation AND Leucocyte Altered Function in health and disease \(GANDALF\)”](#) 

A report on the status of the result posting that includes timelines when final posting of results is scheduled after end of funding period.

["Midterm recruitment report for ""RELENT bank of induced pluripotent stem cells""](#) 

The report shall include an overview of recruited subjects by study site potential recruiting problems and if applicable a detailed description of implemented and planned measures to compensate delays in the study subject recruitment

[All approvals package for “RELENT bank of induced pluripotent stem cells”](#) 

The all approvals package should include all approvals from ethics committees and national competent authorities (if applicable) of all study sites once the last approval has been received.

[Recruitment report update for “AV-GWAS \(Multi-Centre Genome-Wide Association Study of ANCA-associated vasculitis\)”](#) 

The report shall include an overview of recruited subjects by study site, potential recruiting problems and, if applicable, a detailed description of implemented and planned measures to compensate delays in the study subject recruitment.

[Report on status of posting results in the study registry\(s\) for “CD4+ T cells and immune ageing, major players and predictors for disease activity in giant cell arteritis”](#) 

A report on the status of the result posting that includes timelines when final posting of results is scheduled after end of funding period.

["First study subject approvals package for ""RELENT bank of induced pluripotent stem cells""](#) 

It will be provided a final version of study protocol as submitted to regulators ethics committees b registration number of CS in a WHO or ICMJE approved registry and c approvals ethics committees and national competent authority if applicable required for invitation enrolment of first subject in at least one clinical centre

[Report on status of posting results in the study registry\(s\) for “RELENT bank of induced pluripotent stem cells”](#) 

A report on the status of the result posting that includes timelines when final posting of results is scheduled after end of funding period.

[Recruitment report update for “ANCA associated vasculitis is a relapsing disease; the role of regulatory B cells”](#) 

The report shall include an overview of recruited subjects by study site, potential recruiting problems and, if applicable, a detailed description of implemented and planned measures to compensate delays in the study subject recruitment.

[Recruitment report update for “Cambridge Hinxton Centre for Translational Research in Autoimmune Disease 2 \(CHIC TRIAD2\)”](#) 

The report shall include an overview of recruited subjects by study site, potential recruiting problems and, if applicable, a detailed description of implemented and planned measures to compensate delays in the study subject recruitment.

[Report on status of posting results in the study registry\(s\) for “immune ageing in health and disease”](#) 

A report on the status of the result posting that includes timelines when final posting of results is scheduled after end of funding period.

[Recruitment report update for “CD4+ T cells and immune ageing, major players and predictors for disease activity in giant cell arteritis”](#) 

The report shall include an overview of recruited subjects by study site, potential recruiting problems and, if applicable, a detailed description of implemented and planned measures to compensate delays in the study subject recruitment.

[Report on status of posting results in the study registry\(s\) for “AV-GWAS \(Multi-Centre Genome-Wide Association Study of ANCA-associated vasculitis\)”](#) 

A report on the status of the result posting that includes timelines when final posting of results is scheduled after end of funding period.

[Report on status of posting results in the study registry\(s\) for “Cambridge Hinxton Centre for Translational Research in Autoimmune Disease 2 \(CHIC TRIAD2\)”](#) 

A report on the status of the result posting that includes timelines when final posting of results is scheduled after end of funding period.

[Recruitment report update for “Research into Genetic variation AND Leucocyte Altered Function in health and disease \(GANDALF\)”](#) 

The report shall include an overview of recruited subjects by study site, potential recruiting problems and, if applicable, a detailed description of implemented and planned measures to compensate delays in the study subject recruitment.

[Report on status of posting results in the study registry\(s\) for “ANCA associated vasculitis is a relapsing disease; the role of regulatory B cells”](#)

A report on the status of the result posting that includes timelines when final posting of results is scheduled after end of funding period.

## Websites, patent fillings, videos etc. (3)

[Individualized press release for every partner](#)

Individualized press release for every partner (including description of the partners, scope and expected impact of the project)

[Preparation of first bi-annual newsletter](#)

Preparation of first bi-annual newsletter (including achievements and report on impact)

[Report on dissemination and communication activities](#)

## Publications

### Peer reviewed articles (50)

[ANCA-associated vasculitis](#)

**Author(s):** A. Richard Kitching, Hans-Joachim Anders, Neil Basu, Elisabeth Brouwer, Jennifer Gordon, David R. Jayne, Joyce Kullman, Paul A. Lyons, Peter A. Merkel, Caroline O. S. Savage, Ulrich Specks, Renate Kain

**Published in:** Nature Reviews Disease Primers, Issue 6/1, 2020, ISSN 2056-676X

**Publisher:** NATURE REVIEWS

**DOI:** 10.1038/s41572-020-0204-y

[Toll-like receptors in lupus nephritis](#)

**Author(s):** Satish Kumar Devarapu, Hans-Joachim Anders

**Published in:** Journal of Biomedical Science, Issue 25/1, 2018, ISSN 1423-0127

**Publisher:** Journal of Biomedical Science

**DOI:** 10.1186/s12929-018-0436-2

[CD27+CD38hi B Cell Frequency During Remission Predicts Relapsing Disease in Granulomatosis With Polyangiitis Patients](#) 

**Author(s):** Anouk von Borstel, Judith Land, Wayel H. Abdulahad, Abraham Rutgers, Coen A. Stegeman, Arjan Diepstra, Peter Heeringa, Jan Stephan Sanders

**Published in:** Frontiers in Immunology, Issue 10, 2019, ISSN 1664-3224

**Publisher:** Frontiers in Immunology

**DOI:** 10.3389/fimmu.2019.02221

[Processing and Maturation of Cathepsin C Zymogen: A Biochemical and Molecular Modeling Analysis](#) 

**Author(s):** Anne-Sophie Lamort, Yveline Hamon, Cezary Czaplewski, Artur Gieldon, Seda Seren, Laurent Coquet, Fabien Lecaille, Adam Lesner, Gilles Lalmanach, Francis Gauthier, Dieter Jenne, Brice Korkmaz

**Published in:** International Journal of Molecular Sciences, Issue 20/19, 2019, Page(s) 4747, ISSN 1422-0067

**Publisher:** Multidisciplinary Digital Publishing Institute (MDPI)

**DOI:** 10.3390/ijms20194747

[Increased miR-142-3p Expression Might Explain Reduced Regulatory T Cell Function in Granulomatosis With Polyangiitis](#) 

**Author(s):** Gerjan J. Dekkema, Theo Bijma, Pytrick G. Jellema, Anke Van Den Berg, Bart-Jan Kroesen, Coen A. Stegeman, Peter Heeringa, Wayel H. Abdulahad, Jan-Stephan Sanders

**Published in:** Frontiers in Immunology, Issue 10, 2019, ISSN 1664-3224

**Publisher:** Frontiers in Immunology

**DOI:** 10.3389/fimmu.2019.02170

[Prolonged IKK \$\beta\$  Inhibition Improves Ongoing CTL Antitumor Responses by Incapacitating Regulatory T Cells](#) 

**Author(s):** Christoph Heuser, Janine Gotot, Eveline Christina Piotrowski, Marie-Sophie Philipp, Christina Johanna Felicia Courrèges, Martin Sylvester Otte, Linlin Guo, Jonathan Leo Schmid-Burgk, Veit Hornung, Annkristin Heine, Percy Alexander Knolle, Natalio Garbi, Edgar Serfling, César Evaristo, Friedrich Thaiss, Christian Kurts

**Published in:** Cell Reports, Issue 21/3, 2017, Page(s) 578-586, ISSN 2211-1247

**Publisher:** Cell Press

**DOI:** 10.1016/j.celrep.2017.09.082

[Irf4 -dependent CD103 + CD11b + dendritic cells and the intestinal microbiome regulate monocyte and macrophage activation and intestinal peristalsis in postoperative ileus](#) 

**Author(s):** Judith-Mira Pohl, Sebastian Gutweiler, Stephanie Thiebes, Julia K Volke, Ludger Klein-Hitpass, Denise Zwanziger, Matthias Gunzer, Steffen Jung,

William W Agace, Christian Kurts, Daniel Robert Engel

**Published in:** Gut, Issue 66/12, 2017, Page(s) 2110-2120, ISSN 0017-5749

**Publisher:** BMJ Publishing Group

**DOI:** 10.1136/gutjnl-2017-313856

[Exploiting the S4–S5 Specificity of Human Neutrophil Proteinase 3 to Improve the Potency of Peptidyl Di\(chlorophenyl\)-phosphonate Ester Inhibitors: A Kinetic and Molecular Modeling Analysis](#) 

**Author(s):** Carla Guarino, Natalia Gruba, Renata Grzywa, Edyta Dyguda-Kazimierowicz, Yveline Hamon, Monika Łęgowska, Marcin Skoreński, Sandrine Dallet-Choisy, Sylvain Marchand-Adam, Christine Kellenberger, Dieter E. Jenne, Marcin Sieńczyk, Adam Lesner, Francis Gauthier, Brice Korkmaz

**Published in:** Journal of Medicinal Chemistry, Issue 61/5, 2018, Page(s) 1858-1870, ISSN 0022-2623

**Publisher:** American Chemical Society

**DOI:** 10.1021/acs.jmedchem.7b01416

[Lymphatic exosomes promote dendritic cell migration along guidance cues](#) 

**Author(s):** Markus Brown, Louise A. Johnson, Dario A. Leone, Peter Majek, Kari Vaahtomeri, Daniel Senfter, Nora Bukosza, Helga Schachner, Gabriele Asfour, Brigitte Langer, Robert Hauschild, Katja Parapatics, Young-Kwon Hong, Keiryn L. Bennett, Renate Kain, Michael Detmar, Michael Sixt, David G. Jackson, Dentscho Kerjaschki

**Published in:** The Journal of Cell Biology, 2018, Page(s) jcb.201612051, ISSN 0021-9525

**Publisher:** Rockefeller University Press

**DOI:** 10.1083/jcb.201612051

[Review: What Is the Current Evidence for Disease Subsets in Giant Cell Arteritis?](#) 

**Author(s):** Kornelis S. M. van der Geest, Maria Sandovici, Yannick van Sleen, Jan-Stephan Sanders, Nicolaas A. Bos, Wayel H. Abdulahad, Coen A. Stegeman, Peter Heeringa, Abraham Rutgers, Cees G. M. Kallenberg, Annemieke M. H. Boots, Elisabeth Brouwer

**Published in:** Arthritis & Rheumatology, Issue 70/9, 2018, Page(s) 1366-1376, ISSN 2326-5191

**Publisher:** Wiley

**DOI:** 10.1002/art.40520

[Urinary and serum soluble CD25 complements urinary soluble CD163 to detect active renal anti-neutrophil cytoplasmic autoantibody-associated vasculitis: a cohort study](#) 

**Author(s):** Gerjan J Dekkema, Wayel H Abdulahad, Theo Bijma, Sarah M Moran, Louise Ryan, Mark A Little, Coen A Stegeman, Peter Heeringa, Jan Stephan Sanders

**Published in:** Nephrology Dialysis Transplantation, Issue March 2018, 2018, ISSN 0931-0509



**Publisher:** Oxford University Press

**DOI:** 10.1093/ndt/gfy018

[Cellular immune regulation in the pathogenesis of ANCA-associated vasculitides](#)

**Author(s):** Anouk von Borstel, Jan Stephan Sanders, Abraham Rutgers, Coen A. Stegeman, Peter Heeringa, Wayel H. Abdulahad

**Published in:** Autoimmunity Reviews, Issue 17/4, 2018, Page(s) 413-421, ISSN 1568-9972

**Publisher:** Elsevier BV

**DOI:** 10.1016/j.autrev.2017.12.002

[Checks and Balances in Autoimmune Vasculitis](#)

**Author(s):** Rebeca Hid Cadena, Wayel H. Abdulahad, G. A. P. Hospers, T. T. Wind, Annemieke M. H. Boots, Peter Heeringa, Elisabeth Brouwer

**Published in:** Frontiers in Immunology, Issue 9, 2018, Page(s) 315, ISSN 1664-3224

**Publisher:** Frontiers Media

**DOI:** 10.3389/fimmu.2018.00315

[Comprehensive Proteoform Characterization of Plasma Complement Component C8αβγ by Hybrid Mass Spectrometry Approaches](#)

**Author(s):** Vojtech Franc, Jing Zhu, Albert J. R. Heck

**Published in:** Journal of The American Society for Mass Spectrometry, Issue 29/6, 2018, Page(s) 1099-1110, ISSN 1044-0305

**Publisher:** Elsevier BV

**DOI:** 10.1007/s13361-018-1901-6

[Reprint of "Dual blockade of the pro-inflammatory chemokine CCL2 and the homeostatic chemokine CXCL12 is as effective as high dose cyclophosphamide in murine proliferative lupus nephritis"](#)

**Author(s):** Satish Kumar Devarapu, Santhosh Kumar VR, Khader Valli Rupanagudi, Onkar P. Kulkarni, Dirk Eulberg, Sven Klussmann, Hans-Joachim Anders

**Published in:** Clinical Immunology, Issue 185, 2017, Page(s) 119-127, ISSN 1521-6616

**Publisher:** Academic Press

**DOI:** 10.1016/j.clim.2017.10.011

[Parsimonious Charge Deconvolution for Native Mass Spectrometry](#)

**Author(s):** Marshall Bern, Tomislav Caval, Yong J. Kil, Wilfred Tang, Christopher Becker, Eric Carlson, Doron Kletter, K. Ilker Sen, Nicolas Galy, Dominique Hagemans, Vojtech Franc, Albert J. R. Heck

**Published in:** Journal of Proteome Research, Issue 17/3, 2018, Page(s) 1216-1226, ISSN 1535-3893

**Publisher:** American Chemical Society

**DOI:** 10.1021/acs.jproteome.7b00839

[Direct quality control of glycoengineered erythropoietin variants](#)

**Author(s):** Tomislav Čaval, Weihua Tian, Zhang Yang, Henrik Clausen, Albert J. R. Heck

**Published in:** Nature Communications, Issue 9/1, 2018, Page(s) 3342, ISSN 2041-1723

**Publisher:** Nature Publishing Group

**DOI:** 10.1038/s41467-018-05536-3

[Therapeutic targeting of cathepsin C: from pathophysiology to treatment](#)

**Author(s):** Brice Korkmaz, George H. Caughey, Iain Chapple, Francis Gauthier, Josefine Hirschfeld, Dieter E. Jenne, Ralph Kettritz, Gilles Lalmanach, Anne-Sophie Lamort, Conni Lauritzen, Monika Łęgowska, Adam Lesner, Sylvain Marchand-Adam, Sarah J. McKaig, Celia Moss, John Pedersen, Helen Roberts, Adrian Schreiber, Seda Seren, Nalin S. Thakker

**Published in:** Pharmacology & Therapeutics, Issue 190, 2018, Page(s) 202-236, ISSN 0163-7258

**Publisher:** Pergamon Press

**DOI:** 10.1016/j.pharmthera.2018.05.011

[Pathogenicity of human antibodies against myelin oligodendrocyte glycoprotein](#)

**Author(s):** Melania Spadaro, Stephan Winklmeier, Eduardo Beltrán, Caterina Macrini, Romana Höftberger, Elisabeth Schuh, Franziska S. Thaler, Lisa Ann Gerdes, Sarah Laurent, Ramona Gerhards, Simone Brändle, Klaus Dornmair, Constanze Breithaupt, Markus Krumbholz, Markus Moser, Gurumoorthy Krishnamoorthy, Frits Kamp, Dieter Jenne, Reinhard Hohlfeld, Tania Kümpfel, Hans Lassmann, Naoto Kawakami, Edgar Meinl

**Published in:** Annals of Neurology, Issue 84/2, 2018, Page(s) 315-328, ISSN 0364-5134

**Publisher:** John Wiley & Sons Inc.

**DOI:** 10.1002/ana.25291

[Consequences of cathepsin C inactivation for membrane exposure of proteinase 3, the target antigen in autoimmune vasculitis](#)

**Author(s):** Seda Seren, Maha Rashed Abouzaid, Claudia Eulenberg-Gustavus, Josefine Hirschfeld, Hala Nasr Soliman, Uwe Jerke, Koffi N'Guessan, Sandrine Dallet-Choisy, Adam Lesner, Conni Lauritzen, Beate Schacher, Peter Eickholz, Nikoletta Nagy, Marta Szell, Cécile Croix, Marie-Claude Viaud-Massuard, Abdullah Al Farraj Aldosari, Shivanna Ragunatha, Mostafa Ibrahim Mostafa, Francesca Giampieri, Maurizio Battino

**Published in:** Journal of Biological Chemistry, Issue 293/32, 2018, Page(s) 12415-12428, ISSN 0021-9258



**Publisher:** American Society for Biochemistry and Molecular Biology Inc.

**DOI:** 10.1074/jbc.RA118.001922

[Extracellular traps in kidney disease](#)

**Author(s):** Daigo Nakazawa, Julian A. Marschner, Louise Platen, Hans-Joachim Anders

**Published in:** Kidney International, Issue 94/6, 2018, Page(s) 1087-1098, ISSN 0085-2538

**Publisher:** Blackwell Publishing Inc.

**DOI:** 10.1016/j.kint.2018.08.035

[Dendritic cells and routing cargo into exosomes](#)

**Author(s):** Dario A Leone, Andrew J Rees, Renate Kain

**Published in:** Immunology and Cell Biology, Issue 96/7, 2018, Page(s) 683-693, ISSN 0818-9641

**Publisher:** Blackwell Publishing Inc.

**DOI:** 10.1111/imcb.12170

[Circulating cathepsin-S levels correlate with GFR decline and sTNFR1 and sTNFR2 levels in mice and humans](#)

**Author(s):** Dominik Steubl, Santhosh V. Kumar, Maia Tato, Shrikant R. Mulay, Anders Larsson, Lars Lind, Ulf Risérus, Lutz Renders, Uwe Heemann, Axel C. Carlsson, Johan Ärnlöv, Hans-Joachim Anders

**Published in:** Scientific Reports, Issue 7, 2017, Page(s) 43538, ISSN 2045-2322

**Publisher:** Nature Publishing Group

**DOI:** 10.1038/srep43538

[HLA and kidney disease: from associations to mechanisms](#)

**Author(s):** Kate J. Robson, Joshua D. Ooi, Stephen R. Holdsworth, Jamie Rossjohn, A. Richard Kitching

**Published in:** Nature Reviews Nephrology, Issue 14/10, 2018, Page(s) 636-655, ISSN 1759-5061

**Publisher:** Nature Publishing Group

**DOI:** 10.1038/s41581-018-0057-8

[ANCA-Associated Vasculitis: Pathogenesis, Models, and Preclinical Testing](#)

**Author(s):** Holly L. Hutton, Stephen R. Holdsworth, A. Richard Kitching

**Published in:** Seminars in Nephrology, Issue 37/5, 2017, Page(s) 418-435, ISSN 0270-9295

**Publisher:** W. B. Saunders Co., Ltd.

**DOI:** 10.1016/j.semnephrol.2017.05.016

[A Novel Role for GATA3 in Mesangial Cells in Glomerular Development and Injury](#)

**Author(s):** Irina V. Grigorieva, Andre Oszwald, Elena F. Grigorieva, Helga Schachner, Barbara Neudert, Tammo Ostendorf, Jürgen Floege, Maja T. Lindenmeyer, Clemens D. Cohen, Ulf Panzer, Christof Aigner, Alice Schmidt, Frank Grosveld, Rajesh V. Thakker, Andrew Jackson Rees, Renate Kain  
**Published in:** Journal of the American Society of Nephrology, Issue 30/9, 2019, Page(s) 1641-1658, ISSN 1046-6673  
**Publisher:** Lippincott Williams & Wilkins Ltd.  
**DOI:** 10.1681/asn.2018111143

[Decreased Expression of Negative Immune Checkpoint VISTA by CD4+ T Cells Facilitates T Helper 1, T Helper 17, and T Follicular Helper Lineage Differentiation in GCA](#) 

**Author(s):** Rebeca Hid Cadena, Rosanne D. Reitsema, Minke G. Huitema, Yannick van Sleen, Kornelis S. M. van der Geest, Peter Heeringa, Annemieke M. H. Boots, Wayel H. Abdulahad, Elisabeth Brouwer  
**Published in:** Frontiers in Immunology, Issue 10, 2019, ISSN 1664-3224  
**Publisher:** Frontiers in Immunology  
**DOI:** 10.3389/fimmu.2019.01638

[Leukocyte Dynamics Reveal a Persistent Myeloid Dominance in Giant Cell Arteritis and Polymyalgia Rheumatica](#) 

**Author(s):** Yannick van Sleen, Jacoba C. Graver, Wayel H. Abdulahad, Kornelis S. M. van der Geest, Annemieke M. H. Boots, Maria Sandovici, Elisabeth Brouwer  
**Published in:** Frontiers in Immunology, Issue 10, 2019, ISSN 1664-3224  
**Publisher:** Frontiers in Immunology  
**DOI:** 10.3389/fimmu.2019.01981

[The Glycosylation Site of Myelin Oligodendrocyte Glycoprotein Affects Autoantibody Recognition in a Large Proportion of Patients](#) 

**Author(s):** Iris Marti Fernandez, Caterina Macrini, Markus Krumbholz, Paul J. Hensbergen, Agnes L. Hipgrave Ederveen, Stephan Winklmeier, Atay Vural, Asli Kurne, Dieter Jenne, Frits Kamp, Lisa Ann Gerdes, Reinhard Hohlfeld, Manfred Wuhrer, Tania Kümpfel, Edgar Meinl  
**Published in:** Frontiers in Immunology, Issue 10, 2019, ISSN 1664-3224  
**Publisher:** Frontiers in Immunology  
**DOI:** 10.3389/fimmu.2019.01189

[Premedication with a cathepsin C inhibitor alleviates early primary graft dysfunction in mouse recipients after lung transplantation](#) 

**Author(s):** Salome R. T. Rehm, Natalia F. Smirnova, Carmela Morrone, Jessica Götzfried, Annette Feuchtinger, John Pedersen, Brice Korkmaz, Ali Önder Yildirim, Dieter E. Jenne  
**Published in:** Scientific Reports, Issue 9/1, 2019, ISSN 2045-2322

**Publisher:** Nature Publishing Group

**DOI:** 10.1038/s41598-019-46206-8

[Prolonged pharmacological inhibition of cathepsin C results in elimination of neutrophil serine proteases](#) 

**Author(s):** Carla Guarino, Yveline Hamon, Cécile Croix, Anne-Sophie Lamort, Sandrine Dallet-Choisy, Sylvain Marchand-Adam, Adam Lesner, Thomas Baranek, Marie-Claude Viaud-Massuard, Conni Lauritzen, John Pedersen, Nathalie Heuzé-Vourc'h, Mustapha Si-Tahar, Erhan Förtl, Dieter E. Jenne, Francis Gauthier, Marshall S. Horwitz, Niels Borregaard, Brice Korkmaz

**Published in:** Biochemical Pharmacology, Issue 131, 2017, Page(s) 52-67, ISSN 0006-2952

**Publisher:** Elsevier BV

**DOI:** 10.1016/j.bcp.2017.02.009

[Common coding variant in SERPINA1 increases the risk for large artery stroke](#) 

**Author(s):** Rainer Malik, Therese Dau, Maria Gonik, Anirudh Sivakumar, Daniel J. Deredge, Evgeniia V. Edeleva, Jessica Götzfried, Sander W. van der Laan, Gerard Pasterkamp, Nathalie Beaufort, Susana Seixas, Steve Bevan, Lisa F. Lincz, Elizabeth G. Holliday, Annette I. Burgess, Kristiina Rannikmäe, Jens Minnerup, Jennifer Kriebel, Melanie Waldenberger, Martina Möller-Nurasyid, Peter Lichtner, Danish Saleheen,

**Published in:** Proceedings of the National Academy of Sciences, Issue 114/14, 2017, Page(s) 3613-3618, ISSN 0027-8424

**Publisher:** National Academy of Sciences

**DOI:** 10.1073/pnas.1616301114

[Regulated necrosis-related molecule mRNA expression in humans and mice and in murine acute tissue injury and systemic autoimmunity leading to progressive organ damage, and progressive fibrosis](#) 

**Author(s):** M. Honarpisheh, J. Desai, J. A. Marschner, M. Weidenbusch, M. Lech, V. Vielhauer, H.-J. Anders, S. R. Mulay

**Published in:** Bioscience Reports, Issue 36/6, 2016, Page(s) e00425-e00425, ISSN 0144-8463

**Publisher:** Kluwer Academic Publishers

**DOI:** 10.1042/BSR20160336

[Neutrophilic Cathepsin C Is Maturated by a Multistep Proteolytic Process and Secreted by Activated Cells during Inflammatory Lung Diseases](#) 

**Author(s):** Yveline Hamon, Monika Legowska, Virginie Hervé, Sandrine Dallet-Choisy, Sylvain Marchand-Adam, Lise Vanderlynden, Michèle Demonte, Rich Williams, Christopher J. Scott, Mustapha Si-Tahar, Nathalie Heuzé-Vourc'h, Gilles Lalmanach, Dieter E. Jenne, Adam Lesner, Francis Gauthier, Brice Korkmaz

**Published in:** Journal of Biological Chemistry, Issue 291/16, 2016, Page(s) 8486-8499, ISSN 0021-9258

**Publisher:** American Society for Biochemistry and Molecular Biology Inc.

**DOI:** 10.1074/jbc.M115.707109

[Surface LAMP-2 Is an Endocytic Receptor That Diverts Antigen Internalized by Human Dendritic Cells into Highly Immunogenic Exosomes](#) 

**Author(s):** Dario Armando Leone, Andrea Peschel, Markus Brown, Helga Schachner, Miriam J. Ball, Marianna Gyuraszova, Ulrike Salzer-Muhar, Minoru Fukuda, Caterina Vizzardelli, Barbara Bohle, Andrew J. Rees, Renate Kain

**Published in:** The Journal of Immunology, 2017, Page(s) ji1601263, ISSN 0022-1767

**Publisher:** American Association of Immunologists

**DOI:** 10.4049/jimmunol.1601263

[Cellular and Molecular Mechanisms of Autoimmunity and Lupus Nephritis](#) 

**Author(s):** S.K. Devarapu, G. Lorenz, O.P. Kulkarni, H.-J. Anders, S.R. Mulay

**Published in:** International Review of Cell and Molecular Biology, 2017, Page(s) 43-154, ISSN 1937-6448

**Publisher:** Elsevier BV

**DOI:** 10.1016/bs.ircmb.2016.12.001

[Quantitative analysis of protease recognition by inhibitors in plasma using microscale thermophoresis](#) 

**Author(s):** T. Dau, E. V. Edeleva, S. A. I. Seidel, R. A. Stockley, D. Braun, D. E. Jenne

**Published in:** Scientific Reports, Issue 6/1, 2016, ISSN 2045-2322

**Publisher:** Nature Publishing Group

**DOI:** 10.1038/srep35413

[Animal Models of ANCA Associated Vasculitis](#) 

**Author(s):** Lani Shochet, Stephen Holdsworth, A. Richard Kitching

**Published in:** Frontiers in Immunology, Issue 11, 2020, ISSN 1664-3224

**Publisher:** Frontiers in Immunology

**DOI:** 10.3389/fimmu.2020.00525

[Proteoform Profile Mapping of the Human Serum Complement Component C9 Revealing Unexpected New Features of N -, O -, and C -Glycosylation](#) 

**Author(s):** Vojtech Franc, Yang Yang, Albert J. R. Heck

**Published in:** Analytical Chemistry, Issue 89/6, 2017, Page(s) 3483-3491, ISSN 0003-2700

**Publisher:** American Chemical Society

**DOI:** 10.1021/acs.analchem.6b04527

[Resolving the micro-heterogeneity and structural integrity of monoclonal antibodies by hybrid mass spectrometric approaches](#) 

**Author(s):** Yang Yang, Guanbo Wang, Ting Song, Carlito B. Lebrilla, Albert J. R. Heck

**Published in:** mAbs, Issue 9/4, 2017, Page(s) 638-645, ISSN 1942-0870

**Publisher:** Landes Bioscience

**DOI:** 10.1080/19420862.2017.1290033

[Preservation with  \$\alpha\$ 1-antitrypsin improves primary graft function of murine lung transplants](#) 

**Author(s):** Jessica Götzfried, Natalia F. Smirnova, Carmela Morrone, Brice Korkmaz, Ali Önder Yildirim, Oliver Eickelberg, Dieter E. Jenne

**Published in:** The Journal of Heart and Lung Transplantation, Issue 37/8, 2018, Page(s) 1021-1028, ISSN 1053-2498

**Publisher:** Elsevier BV

**DOI:** 10.1016/j.healun.2018.03.015

[Neutrophil myeloperoxidase harbors distinct site-specific peculiarities in its glycosylation](#) 

**Author(s):** Karli R. Reiding, Vojtech Franc, Minke G. Huitema, Elisabeth Brouwer, Peter Heeringa, Albert J.R. Heck

**Published in:** Journal of Biological Chemistry, Issue 294/52, 2019, Page(s) 20233-20245, ISSN 0021-9258

**Publisher:** American Society for Biochemistry and Molecular Biology Inc.

**DOI:** 10.1074/jbc.ra119.011098

[The glomerular crescent](#) 

**Author(s):** Lidia Anguiano, Renate Kain, Hans-Joachim Anders

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**Author(s):** Kornelis S M van der Geest, Elisabeth Brouwer, Jan-Stephan Sanders, Maria Sandovici, Nicolaas A Bos, Annemieke M H Boots, Wayel H Abdulahad, Coen A Stegeman, Cees G M Kallenberg, Peter Heeringa, Abraham Rutgers

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A new role of LAMP-2 in macroautophagy

**Author(s):** Hubert V.

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[ISN Nexus 2016 Symposia: Translational Immunology in Kidney Disease—The Berlin Roadmap](#)

**Author(s):** Hans-Joachim Anders, Brad Rovin, David Jayne, Paul Brunetta, Rosanna Coppo, Anne Davidson, Satish Kumar Devarapu, Dick de Zeeuw, Jeremy Duffield, Dirk Eulberg, Alberto Fierro, Jürgen Floege, Steffen Frese, Loïc Guillevin, Stephen Holdsworth, Jeremy Hughes, Ralph Kettritz, Malte Kluger, Christian Krebs, Larissa Lapteva, Adeera Levin, Jinhua Li, Liz Lightstone, Matthias Mack, Ladan Mansouri, Steph

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**Publisher:** Elsevier Inc.

**DOI:** 10.1016/j.ekir.2016.06.009

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[The Role of Macroautophagy in T Cells](#)

**Author(s):** Wei Jia, Ian McLeod, Ming-Xiao He, You-Wen He

**Published in:** Immunology, 2018, Page(s) 23-33, ISBN 9780-128098196

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## Conference proceedings (1)



Isolation of exosomes from body fluids by differential ultracentrifugation

**Author(s):** Schulz S, Schachner H, Rees AJ, Kain R.

**Published in:** Poster, 2019

**Publisher:** 15th YSA PhD Symposium

## Datasets

### Datasets via OpenAIRE (2)



[Identification Of Significant Klh-Derived Peptide - Fig. S2](#)

**Author(s):** Dario A. Leone; Andrew J. Rees; Renate Kain

**Published in:** Zenodo

**Author(s):** Ball, Miriam Jane; Peschel, Andrea; Feenstra, Tjerk; Guerkan Sengoelge; Thompson, Barbara; Brandes, Ricarda; Oszwald, Andre; F Mustafa Awad-El-Kariem; Burgmann, Heinz; Mitteregger, Dieter; Thøgersen, Mariane S; Sommer, Rolf K; D James Haddon; Perkmann, Thomas; Wrba, Thomas; Aarestrup, Frank M; Utz, Paul J; Rees, Andrew J; Kain, Renate

**Published in:** Zenodo

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