

20th Annual Meeting of the European Macrophage and Dendritic Cell Society (EMDS)

Immunoregulatory and Antimicrobial Activities of Myeloid Cells

Freiburg, Germany, October 5 to 7, 2006

Programme

Thursday, October 5, 2006

10.00 Registration opens at the Kollegiengebäude I, Entrance Hall, Werthmann-Platz 3

12.30 Meeting of the EMDS Council

14.00 Opening of the Conference

- Regine Landmann, President of the EMDS
- Christoph Peters, Dean of the Medical Faculty of the Albert-Ludwigs University of Freiburg
- Christian Bogdan, Chairman of the local organizing committee

14.00-16.15 Symposium I: Interferon- α/β expression, signaling, and function

Chairperson: Mathias Müller (Vienna, Austria) and Christian Bogdan (Freiburg, Germany)

14.15-14.45 *Shizuo Akira, Osaka, Japan*

Viral recognition by cytoplasmic helicases and subsequent signaling pathways

14.45-15.15 *Pavel Kovarik, Vienna, Austria*

Role of interferons in the decline of inflammation

15.15-15.30 *Antonio Ricardo Khouri, Salvador, Brazil (O1)*

IFN- β impairs superoxide-dependent leishmanicidal activity in human macrophages

15.30-15.45 *Heike Weighardt, Munich, Germany (O2)*

Role of type I interferons during septic peritonitis

15.45-16.00 *Ronald Painz, Vienna, Austria (O3)*

Organ-specific expression of iNOS in Tyk2 and IFNAR1-deficient mice during LPS-induced endotoxin shock

16.00-16.15 *György Fejer, Freiburg, Germany (O4)*

Adenovirus infection induces strong early production of type I IFN from splenic myeloid DC in vivo resulting in LPS hypersensitivity

16.15-18.30 Coffee break, industrial exhibition and Poster session A

- Type I interferons and plasmacytoid dendritic cells
- Differentiation, activation, and suppression of myeloid DCs
- Pathogen recognition receptors
- LPS tolerance

18.30-19.15 EMDS Business Meeting (for EMDS members only)

Friday, October 6, 2006

08.30-10.15 Symposium II: Interferon- α/β -producing cells in immunity

Chairperson: Michael Rehli (Regensburg, Germany)

- 08.30-09.00 *Giorgio Trinchieri, Frederick, U.S.A.*
Plasmacytoid dendritic cells and immunity: friends or foes?
- 09.00-09.30 *Anne Krug, Munich, Germany*
Nucleic acid recognition by dendritic cells - induction of antiviral immune responses and autoimmunity
- 09.30-09.45 *Luisa Cervantes-Barragan, St. Gallen, Switzerland (O5)*
Control of coronavirus infection through plasmacytoid dendritic cell-derived type I interferons
- 09.45-10.00 *Zoe Waibler, Langen, Germany (O6)*
Plasmacytoid dendritic cells stimulated with high concentrations of CpG1668 express IL-10 and intracellular modulators that inhibit production of IFN- α

10.00-10.30 Coffee break, industrial exhibition and posters

10.30-12.00 Symposium III: Macrophage-pathogen interaction and pathogen recognition receptors

Chairperson: Jacques Mauël (Lausanne, Switzerland)

- 10.30-11.00 *Sabine Ehrt, New York, U.S.A.*
Macrophage responses to *Mycobacterium tuberculosis* infection - a matter of complexity
- 11.00-11.30 *David Russell, Ithaca, U.S.A.*
The phagosomal environment and mycobacteria
- 11.30-11.45 *Christoph Hölscher, Borstel, Germany (O7)*
Effector Immunity to aerogenic *M. tuberculosis* infection requires MyD88 functions distinct from its role as an adaptor to Toll-like receptors 2, 4 and 9

11.45-13.05 Symposium IV: Differentiation, activation and function of dendritic cells and other antigen-presenting cells

Chairperson: Silvano Sozzani (Brescia, Italy)

- 11.45-12.00 *Joost Oppenheim, Frederick, U.S.A. (O8)*
Alarmins activate immune responses by inducing dendritic cell maturation
- 12.00-12.15 *Alexander Dalpke, Heidelberg, Germany (O9)*
Activation of Toll-like receptors interferes with dendritic cell differentiation due to induction of suppressor of cytokine signaling (SOCS)-1
- 12.15-12.30 *Andreas Diefenbach, NewYork/Freiburg (O10)*
Dendritic cells prime natural killer cells
- 12.30-12.50 *Matthew Albert, Paris, France (BD Biosciences EMDS Award Lecture 2006)*
Antigen persistence is required for efficient cross-priming of minor histocompatibility antigen specific CD8⁺ T cells
- 12.50-13.05 *Carole Balmelli, Mittelhäusern, Switzerland (O11)*
Fibrocytes, a novel type of antigen presenting cells, are also involved in innate immune responses

13.05-14.45 Lunch break, industrial exhibition and poster session B

- Pathogen recognition receptors
- Classical and alternative macrophage activation
- Signaling events and effector functions of myeloid cells
- Macrophage deactivation
- Regulatory functions of myeloid cells
- Myeloid cells, tumors and other diseases
- Myeloid cell activation for therapy

14.45-17.15 Symposium V: IFN- γ signaling and effector functions of myeloid cells

Chairperson: Marina Karaghiosoff (Vienna, Austria) and Regine Landmann (Basel, Switzerland)

- 14.45-15.15 *John MacMicking, New Haven, U.S.A.*
IFN-inducible GTPases and immunity to intracellular pathogens
- 15.15-15.45 *Jonathan Howard, Cologne, Germany*
Interferon-inducible resistance GTPases: more questions than answers
- 15.45-16.00 *Garwin Sing, Edinburgh, United Kingdom (O12)*
A systems biology approach for analysing interferon gamma signaling pathways in mock- and virus-infected macrophages

16.00-16.30 Coffee break, industrial exhibition and posters

- 16.30-16.45 *Andres Vazquez-Torres, Aurora, U.S.A. (O13)*
Killing of Salmonella by IFN- γ -primed macrophages: novel ways by which nitric oxide enhances maturation of phagosomes
- 16.45-17.00 *Manfred Nairz, Innsbruck, Austria (O14)*
The coordinated regulation of iron homeostasis in RAW264.7 murine macrophages limits iron availability for intraphagosomal *Salmonella typhimurium*
- 17.00-17.15 *Teunis Geijtenbeek, Amsterdam, The Netherlands (O15)*
Langerhans cells function as an innate defence mechanism against HIV-1 infection

19.00-22.30 Banquet and Presentation of the EMDS Awards in the Historical Merchants' House

Saturday, October 7, 2006

08.30-11.15 Symposium VI: Classical versus alternative macrophage activation

Chairperson: Günter Weiss (Innsbruck, Austria) and Patrick de Baetselier (Brussel Belgium)

08.30-09.00 *Klaus Pfeffer, Düsseldorf, Germany*

IFN- and TNF-regulated immune effector programmes

09.00-09.15 *Alain Beschin, Brussels, Belgium (O16)*

Parasite infection as a model to unravel the role of differentially activated myeloid cells in liver pathology and anemia

09.15-09.30 *Matthew Sweet, Brisbane, Australia (O17)*

Histone deacetylases differentially regulate pro-inflammatory gene expression during classical macrophage activation

09.30-10.00 *Peter Murray, Memphis, U.S.A.*

Genetic analysis of macrophage-specific arginase

10.00-10.30 Coffee break, industrial exhibition and posters

10.30-10.45 *Roland Lang, Munich, Germany (O18)*

The emerging role of Dual-specificity phosphatases as dynamic regulators of innate immune responses

10.45-11.00 *Julia Kzhyshkowska, Mannheim, Germany (O19)*

Macrophages communicate with hormonal system: stabilin-1 mediated endocytosis and unusual processing of hormone placental lactogen

11.00-11.15 *Laura Helming, Oxford, United Kingdom (O20)*

Multinucleated giant cell formation in alternatively activated macrophages is a two-step process involving multiple target molecules

11.15-12.15 Symposium VII (part I): Regulatory functions of myeloid cells and amino acid metabolism

Chairperson: Löms Ziegler-Heitbrock (Leicester, England) and Robert Beelen (Amsterdam, The Netherlands)

11.15-11.45 *Vincenzo Bronte, Padua, Italy*

Arginine metabolism in myelomonocytic cells affects T lymphocyte response to antigen

11.45-12.00 *Markus Munder, Heidelberg, Germany (O21)*

Human granulocyte arginase suppresses T cell functions

12.00-12.15 *Leonie Boven, Rotterdam, The Netherlands (O22)*

Regulatory foamy macrophages in multiple sclerosis lesions: implications for control of brain inflammation

12.15-13.30 Lunch break, industrial exhibition and posters

13.30-14.30 Symposium VII (part II): Regulatory functions of myeloid cells and amino acid metabolism

13.30-14.00 *Andrew Mellor, Augusta, U.S.A.*

Regulatory plasmacytoid dendritic cells expressing indoleamine-2,3-dioxygenase

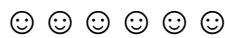
14.00-14.15 *Manfred Lutz, Erlangen, Germany (O23)*

CD4⁺CD25⁺ regulatory T cell activity in vivo is controlled by the DC maturation stage and the T cell avidity

14.15-14.30 *Julia-Stefanie Frick, Tübingen, Germany (O24)*

Induction of tolerogenic DC: an important role for IL-6

14.30 End of the conference



List of presented posters

1. Poster session A

Thematic subgroup	No.	Authors	Title
Type I interferons and plasmacytoid dendritic cells	P1	<u>Thornik Reimer</u> , Matthias Schweizer, Thomas W. Jungi	Cytosolic <i>Listeria monocytogenes</i> induces type-I interferon in human macrophages in the absence of detectable activation of interferon regulatory factor 3
	P2	<u>Thornik Reimer</u> , Matthias Schweizer, Thomas W. Jungi	Stimulus-dependent contribution of IRF3, p38 MAPK and JNK to the expression of interferon-beta in human macrophages
	P3	<u>Leslie van der Fits</u> , Grietje van Dijk, Rene Kant, and Errol P. Prens	IFN-alpha causes maturation of APC migrated from human skin, however without affecting their functional characteristics
	P4	Victoria Hoene, Matthias Peiser, and <u>Reinhard Wanner</u>	Human monocyte-derived dendritic cells express TLR9 and react directly to the D-type CpG-oligonucleotide D19
	P5	<u>Roland Züst</u> , Luisa Cervantes, Friedemann Weber, Burkhard Ludewig, and Volker Thiel	Effect of murine coronavirus non-structural protein 1 on innate immune responses
	P6	<u>Stefanie Kunz</u> , Karin Oberle, Anna Sander, Hans-Peter Pircher, Ulrike Schleicher, and Christian Bogdan	Mouse Model of <i>Bartonella</i> -Induced Cat Scratch Disease: Immune Mechanism Leading to Lymphadenopathy
	P7	<u>Carole Balmelli</u> , Isabelle E. Vincent, Esther Steiner, Artur Summerfield and Kenneth McCullough	Selective inhibition of cytokine secretion in natural interferon producing cells by PCV2 DNA
Differentiation, activation and suppression of myeloid DCs	P8	<u>Aghdami N.</u> , Alimogaddam K, Moazzeni SM	Effects of monocyte-conditioned medium on maturation of dendritic cells generated from acute myeloid leukemia (AML) blasts
	P9	<u>Cédric Vonarbourg</u> and Andreas Diefenbach	NK cells expressing class II MHC molecules: separate lineage or just NK cells?
	P10	<u>Ines Möller</u> , Nathalie Frech, Dieter Herchenbach, Hendrik Veelken, Anna-K. Thomas-Kaskel	Optimization of dendritic cell maturation for T cell priming
	P11	<u>Ghasem Mosayebi</u> , Sayed Mohammad Moazzeni	Comparison of Phenotype and Proliferative Response of Liver and Splenic Dendritic Cells from Normal C57BL/6 Mice
	P12	<u>Matthias Peiser</u> and Reinhard Wanner	Human Langerhans cells mature in response to TLR2 ligands without the need of costimulation by further TLR-ligands
	P13	<u>Samuel Garcia-Nieto</u> , Kevin Shakesheff, Farouk Shakib and Amir Ghaemmaghami	Effect of extra-cellular matrix components on adhesion and spreading ability of dendritic cells
	P14	Annette Walter, Melanie Füllbrandt, Barbara Sauer, Chris Galanos, Marina A. Freudenberg, Clemens Unger, Marc Azemar and <u>Bernd Hildenbrand</u>	In-vitro-generation of human monocyte-derived dendritic cells matured in T _H 1-direction with various highly purified LPS-derivatives from Salmonella minnesota and INF-γ under serum-free conditions
	P15	<u>Malte Bachmann</u> , Cristina	Interleukin-18 Directly Activates T-bet

		Dragoi, Josef Pfeilschifter, and Heiko Mühl	Function via p38 MAP kinase in Pre-Dendritic KG-1 Progenitor Cells
	P16	<u>Sandra Balkow</u> , Karin Loser, Jenny Apelt, Mathias Krummen, Stephan Grabbe	aCD40 plus IL-12 and IL-18 is a powerful cocktail for DC activation and efficiently stimulates antitumorale immunity
	P17	<u>Petra Gais</u> , Marit Harzenetter, Felicitas Altmayr, Heike Weighardt & Bernhard Holzmann	Neural regulation of dendritic cell function by CGRP
	P18	Kerstin Schneider, Ursula Meyer-König, Frank Hufert	Human cytomegalovirus impairs the function of plasmacytoid dendritic cells
	P19	<u>Huaping Liang</u> , Xiang Xu, Tianzhi Hao and Zhengguo Wang	Enhancement of Resistance to Post-burn Sepsis by Dendritic Cells
	P20	<u>Huaping Liang</u> , Xiang Xu, Zhenping Wang, Jian Han, Dongbo Liu and Zhengguo Wang	Dysfunction of Dendritic Cells following Trauma Mediates Suppression of Delayed Type Hypersensitivity Response in Mice
Pathogen recognition receptors	P21	Jessica Mittelstädt and <u>Sven Brandau</u>	Mycobacterial-DC encounter: Differential effects of soluble and cell wall-associated mannosylated lipoarabinomannan (ManLAM)
	P22	<u>Nina Gratz</u> , Irene Gattermeier, Barbara Schaljo, Ivo Vojtek, Shizuo Akira, Emmanuelle Charpentier and Pavel Kovarik	Role of TLR2, TLR4 and MyD88 in Responses to Infection with <i>Streptococcus pyogenes</i>
	P23	<u>M. Schmaler</u> , F. Götz and R. Landmann	Interaction between lipoproteins of <i>S. aureus</i> and TLR2
	P24	<u>Diego Serrano-Gómez</u> , Rocío T. Martínez-Nuñez, Elena Sierra-Filardi, María Colmenares, Jesús Pla, Luis Rivas, Jesús Jimenez-Barbero, José Luis Alonso-Lebrero, Salvador González and Angel L. Corbí.	Imunoferon® modulates dendritic cell pathogen-recognition capabilities by targeting DC-SIGN
	P25	<u>Diego Serrano-Gómez</u> , Elena Sierra, Rocío Martínez-Nuñez, Esther Caparrós, Mari Angeles Muñoz-Fernández, Rafael Delgado, Angel L. Corbí	Functional characterization of naturally occurring DC-SIGN isoforms : the impact of the neck domain on lectin multimerization and pathogen recognition
	P26	<u>Sandrine Tchaptchet</u> , Marina Gumenscheimer, Christoph Kalis, Nikolaus Freudenberg, Chris Galanos, and Marina A. Freudenberg	Mechanisms of immunomodulatory effects by <i>P. acnes</i>
	P27	<u>Ulrike Schleicher</u> , Jan Liese, Claudia Kurzman, Ilka Knippertz, and Christian Bogdan	The innate immune response to <i>L. infantum</i> requires TLR9, IL-12 and mDCs, but is independent of pDCs
	P28	<u>Jan Liese</u> , Claudia Kurzmann, Antje Heit, Christian Bogdan, and Ulrike Schleicher	Toll-like Receptor 9 in Murine Cutaneous Leishmaniasis

LPS tolerance	P29	Valerie Albrecht, Brian Foxwell, <u>Marion Frankenberger</u> , Loems Ziegler-Heitbrock	TLR induced tolerance in human dendritic cells: role of IRAK-1
	P30	Michael Lotz, Dominique Gütle, Sandrine Ménard, Christian Bogdan, <u>Mathias Hornef</u>	Intestinal macrophages exhibit a constitutive LPS non-responsive phenotype
	P31	<u>Natasa Kopitar-Jerala</u> , Matthew Bogoyo, Boris Turk and Vito Turk	Lysosomal cysteine cathepsins and endogenous inhibitors upon classical activation of macrophages and the induction of endotoxin tolerance
	P32	<u>Michael Lotz</u> , Dominique Guetle, Sandrine Ménard, Christian Bogdan, Mathias Hornef	Postnatal Endotoxin Exposure Leads to Tolerance in Intestinal Epithelial Cells

2. Poster session B

Thematic subgroup	No.	Authors	Title
Classical and alternative macrophage activation	P33	<u>Nora E. Paul</u> , Claudia Skazik, Jochen Salber, Marc Harwardt, Elke Bremus-Köbberling, and Gabriele Zwadlo-Klarwasser	Analysis of the inflammatory potency of primary human macrophages cultivated on micro- and nanostructured PVDF surfaces
	P34	<u>Macarena Beigier-Bompadre</u> , Christoph Meinken, Kristin Castiglione, Nives Schwerdtner, Max Bastian and Steffen Stenger	The intracellular pathogen Mycobacterium tuberculosis primes human macrophages for increased release of inflammatory cytokines
	P35	<u>Sabine Schöneberger</u> , Nicole Schütze, Marina A. Freudenberg, Reinhard K. Straubinger and Gottfried Alber	Murine bone marrow-derived dendritic cells rather than macrophages are potent producers of the interleukin-12 cytokine family after in vitro infection with Salmonella enteritidis
	P36	Michael Huber, Christoph Kalis, <u>Simone Keck</u> , Zhengfan Jiang, Philippe Georgel, Xin Du, Louis Shamel, Sosathya Sovath, Suzanne Mudd, Bruce Beutler, Chris Galanos and Marina A. Freudenberg	R-form LPS, the master key to the activation of TLR4 / MD2 positive cells
	P37	Anna Marciniak-Czochra, Julia Kzhyshkowska, Willi Jager, <u>Sergij Goerd</u> t, <u>Alexei Gratchev</u>	Mathematical modelling of LPS induced TNF-alpha production
	P38	<u>Nicholas Stoy</u> , Andrzej Kierzek, Gail Darlington, Trevor Stone	The role of heme-containing enzymes in innate and adaptive (peripheral) tolerance: a systems biology approach
	P39	<u>Marta Radwan</u> , Ingrid Miller, Birgit Strobl, Niaobh O'Donoghue, Michael Dunn, Claus Vogl, Manfred Gemeiner and Mathias Müller	The influence of Tyk2 deficiency on the murine macrophage proteome
	P40	<u>Till König</u> , Christian Bogdan, and Ulrike Schleicher	Control of Inducible NO Synthase Protein Expression by Arginase in vitro and in vivo
	P41	<u>Tomasz Mikołajczyk</u> , Małgorzata Bzowska, Joanna Skrzeczyńska-Moncznik, Mirosław Zareński, Jerzy Dobrucki, Anna Kędzierska, Juliusz Pryjma	Interaction of human peripheral blood monocytes with apoptotic cells and bacteria

Classical and alternative macrophage activation	P42	<u>Antje Prasse</u> , Dmitri V. Pechkovsky, Florian Kollert, Kathrin Engel, Karlheinz Friedrich, Joachim Müller-Quernheim, Gernot Zissel	Alternatively activated alveolar macrophages in pulmonary fibrosis show characteristic patterns of chemokine production, receptor expression and intracellular signal transduction
	P43	<u>Joanna Miller</u> , Ben de Wet and Siamon Gordon	Receptors for dengue virus on human mononuclear phagocytes
	P44	<u>Anna Kleyman</u> , Wolfgang Schmid, Mark Kenzelmann, Caren Ittrich, Walter Richter, Holger Reichardt, Günther Schütz, Jan Tuckermann	Anti inflammatory effects of Glucocorticoids require the dimerization of Glucocorticoid Receptor in myeloid cells
Signaling events and effector functions of myeloid cells	P45	Carolin Konermann, Daniel Degrandi, Cornelia Beuter-Gunia, Sandra Beer & Klaus Pfeffer	Role of the IFN-gamma inducible 65kDa murine guanylate-binding proteins (mGBPs) in pathogen defence
	P46	Sandra <u>Olsson</u> and Roger Sundler	Alternative proximal roles for Src family kinases and Btk in <i>S.aureus</i> -induced inflammatory response in macrophages
	P47	<u>Gernot Fritsche</u> , Manfred Nairz, Ernst Werner, Gabriele Werner-Felmayr, Guenter Weiss	Modulation of IL-10 expression by Nramp1 and implications on growth of <i>Salmonella typhimurium</i> in murine macrophages
	P48	Theurl I, Theurl M, Niederegger H, Mair S, Seifert M, <u>Weiss G.</u>	Role of macrophage derived hepcidin for the control of iron homeostasis and the pathogenesis of ACD
	P49	<u>N. Jann</u> , A. Peschel and R. Landmann	Regulation and Function of the murine Cathelicidin in Defense against <i>Staphylococcus aureus</i> in Macrophages
	P50	<u>Katharina Becher</u> , Christina Rinkler, Yvonne Kern, Birte Steiner, Christian Bogdan, Friederike D. von Loewenich	An unknown killing mechanism of T-cells is critical for the control of <i>Anaplasma phagocytophilum</i>
Regulatory functions of myeloid cells	P51	Heidi Barth, <u>Eva K. Schnober</u> , Christoph Neumann-Haefelin, Robert Thimme, Hubert E. Blum and Thomas F. Baumert	Scavenger receptor class B type 1 mediates uptake and crosspresentation of hepatitis C virus by human dendritic cells
	P52	<u>Marina A. Freudenberg</u> , Jan C. Dudda, Eva Bachtanian, Simone Burghard, Annalisa Lembo, Chris Galanos, and Stefan F. Martin	Simultaneous defects in toll-like receptor 4 and IL-12 receptor function result in resistance of mice to chemical-induced contact hypersensitivity
	P53	<u>Aghdami N</u> , Gharibdoost F, Moazzeni SM	Effects of IL-10 treated dendritic cells on induction of tolerance in experimental allergic encephalomyelitis in C57BL/6 mice
	P54	<u>Thomas G. Berger</u> , Hendrik Schulze-Koops, Michaela Schäfer, Ester Müller, Manfred B. Lutz	Immature maturation-resistant human dendritic cells require two stimulations to induce primary allogeneic T cell anergy in vitro
	P55	<u>A.A. Pourfathollah</u> , N. Naderi, S.M. Moazzeni, K. Alimoghaddam	The role of cord blood dendritic cells in preventing the differentiation of naive T-helper cells towards Th1 cells

Myeloid cells, tumors and other diseases	P56	<u>Monika Baj-Krzyworzeka</u> , Rafal Szatanek, Kazimierz Węglarczyk, Jarosław Baran, Danuta Stankiewicz and Marek Zembala	Interactions of tumor-derived microvesicles with human monocytes
	P57	<u>Marijn Bögels</u> , Gerben J. van der Bij, Dénise T.M. Schuckmann, H. Elga de Vries, Robert H.J. Beelen, Marjolein van Egmond	Flavonoid treatment of rats results in reduced numbers of peritoneal macrophages and inhibition of migratory capacity of monocytes
	P58	Dellrezh N, <u>Moazzeni SM</u> , Shokrgozar MA, Atri M	Cytokine Profile of Breast Cancer Antigen Pulsed Dendritic Cells, Stimulated T Lymphocytes
	P59	<u>Timo Ulrichs</u> , Bernard Burke, George A. Kosmiadi, Lydia Pradl, Stefan H.E. Kaufmann and Loems Ziegler-Heitbrock	Hypoxia-inducible markers in human tuberculous lung granulomas: induction in hypoxic and non-hypoxic sites
	P60	<u>Alexander N. Orekhov</u>	Cholesterol Accumulation and Immune Cells in Human Aorta
	P61	Małgorzata Bzowska, Joanna Skrzeczyńska-Moncznik, Tomasz Guzik, Barbara Jasiewicz-Honkisz, Andrzej Surdacki, Teresa Adamek-Guzik, <u>Juliusz Pryjma</u>	Pro-inflammatory monocytes in atherosclerosis
	P62	S. Blöcher, S. Wilker, U. Pfeil, H. Dietrich, R. Weimer, K. Steger, W. Padberg, <u>V. Grau</u>	Acute rejection of experimental lung allografts: Characterisation of intravascular mononuclear leukocytes
	P63	Andreas Hecker, Andreas Kaufmann, Matthias Hecker, Sigrid Wilker, Renate Plaß, Winfried Padberg and <u>Veronika Grau</u>	Expression of IL-21/IL-21R and friends by intravascular leukocytes during acute renal allograft rejection in rats
	P64	<u>Babs O. Fabriek</u> , Lisa van Winsen, Rianka Vloet, Holger J. Moller, Bernard M.J. Uitdehaag, Christine D. Dijkstra, Timo K. van den Berg	Regulation of monocyte CD163 expression in Multiple Sclerosis
	P65	<u>Jasmin Yalcintepe</u> , Antje Prasse, Joachim Müller-Quernheim, Gernot Zissel	Expression and functional relevance of TLR9 in BAL cells from sarcoidosis patients
Myeloid cell activation for therapy	P66	M. Salcedo, E. Ferries, A. Boyer, D. Landais, N. le Roux & J. Bartholeyns	GMP development of monocyte-derived cell therapeutic vaccines and of cytotoxic macrophage effectors
	P67	<u>Christine Thioudellet</u> , Nathalie Settelen, Michel Geist, Catherine Ledoux and Hélène Haegel	Efficient CSF-1 blockade by tumor cell-secreted antibody single-chain variable fragment vectorized in adenovirus
	P68	<u>Gerben J. van der Bij</u> , Marielle A. Otten, Steven J. Oosterling, Robert H.J. Beelen, Jan G.J. van de Winkel, Sybren Meijer and Marjolein van Egmond	Antibody therapy of liver metastases

3. Late-breaking Abstracts

Classical and alternative macrophage activation	P69	<u>Mamidi S</u> , Gratchev A, Kremmer E, Goerd S, Kzhyshkowska J.	Stabilin-1 mediates the intracellular sorting of SI-CLP in H1299 cells and alternatively activated macrophages
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