IN THIS ISSUE

LETTERS TO THE EDITOR

3559 Comment on “Impaired Priming and Activation of the Neutrophil NADPH Oxidase in Patients with IRAK4 or NEMO Deficiency”
Paolo Ruggero Errante, Carolina Prando, Jacinta Bustamante, Walnir Cutrin Araúgao Filho, Paulo Vitor Soelio Pereira, Jussara Rehder, Jean Laurent Casanova, Peter Newburger, and Antônio Condino Neto

3559 Comment on “Spontaneous Autoimmunity Sufficiently Potent to Induce Diabetes Mellitus Is Insufficient to Protect against Insulinoma”
Dan E. H. Andersson and Åke Sjöholm

3560 Response to Comment on “Spontaneous Autoimmunity Sufficiently Potent to Induce Diabetes Mellitus Is Insufficient to Protect against Insulinoma”
Oliver F. Bathe and Christa Chatten

BRIEF REVIEWS

3561 B Cell Receptor and BAFF Receptor Signaling Regulation of B Cell Homeostasis
Wasif N. Khan

CUTTING EDGE

3569 Cutting Edge: Stealth Influenza Virus Replication Precedes the Initiation of Adaptive Immunity
Bruno Moltedo, Carolina B. López, Michael Pazos, María Inés Becker, Tamar Hermesh, and Thomas M. Moran

3574 Cutting Edge: TGF-β1 and IL-15 Induce FOXP3+ γδ Regulatory T Cells in the Presence of Antigen Stimulation
Rita Catetti, Chiara Agrati, Marianne Wallace, Alessandra Sacchi, Federico Martini, Angelo Martino, Alessandra Rinaldi, and Miroslav Malkovsky

3578 Cutting Edge: Candida albicans Hyphae Formation Triggers Activation of the Nlrp3 Inflammasome
Sophie Joly, Ning Ma, Jeffrey J. Sudler, David R. Soll, Suzanne L. Cauel, and Faysaz S. Sutterwala

On the cover: Zebrafish embryo, 36 h post-fertilization, double in situ hybridization for tc1a (blue) and fll1 (brown). TC1(C8orf4) is a novel regulator of endothelial inflammation among vertebrates. Zebrafish has two homologs, tc1a and tc1b. In embryos, tc1a is mostly expressed in developing blood vessels showing fll1 and in the brain. Hematopoietic precursor cells express tc1b. Kim J., Y. Kim, H.-T. Kim, D. W. Kim, Y. Ha, J. Kim, C.-H. Kim, I. Lee, and K. Song. 2009. TC1(C8orf4) is a novel endothelial inflammatory regulator enhancing NF-κB activity. J. Immunol 183: 3996-4002.
Tumor-Derived Microvesicles Promote Regulatory T Cell Expansion and Induce Apoptosis in Tumor-Reactive Activated CD8+ T Lymphocytes
Eva U. Wierczowski, Carmen Visu, Marta Szajnik, Miroslaw J. Szczepanski, Walter J. Storkus, and Theresa L. Whiteside

Foxp3-Deficient Regulatory T Cells Do Not Revert into Conventional Effector CD4+ T Cells but Constitute a Unique Cell Subset
Michal Kuczmza, Robert Podolsky, Nikhil Garge, Daniellle Daniely, Rafał Pachołczyk, Lezek Ignatowicz, and Piotr Kraj

Efficient Induction and Expansion of Human Alloantigen-Specific CD8 Regulatory T Cells from Naïve Precursors by CD40-Activated B Cells
Jian Zheng, Yinping Liu, Gang Qin, Ping-Lung Chan, Huawei Mao, Kwok-Tai Lam, David B. Lewis, Yu-Lung Lau, and Wenwei Tu

The Sphingosine 1-Phosphate Receptor Agonist FTY720 Potently Inhibits Regulatory T Cell Proliferation In Vitro and In Vivo
Anna Maria Wolf, Kathrin Eller, Robert Zeiser, Christoph Dürr, Ulrike V. Gerlach, Michael Sixt, Lydia Markut, Guenther Gastl, Alexander R. Rosenkranz, and Dominik Wolf

Helicobacter pylori Hp(2–20) Promotes Migration and Proliferation of Gastric Epithelial Cells by Interacting with Formyl Peptide Receptors In Vitro and Accelerates Gastric Mucosal Healing In Vivo
Amato de Paulis, Nella Prevete, Francesca W. Rosi, Felice Rivellone, Fiamma Salerno, Gabriele Delfino, Bianca Liccardo, Eleina Avilla, Nanzià Montanauro, Massimo Mascolo, Stefania Siaibano, Rosa Marinella Minillo, Giuseppe D’Argenio, Vittorio Ricci, Marco Romano, and Gianni Marone

Blocking of CD27-CD70 Pathway by Anti-CD70 Antibody Ameliorates Joint Disease in Murine Collagen-Induced Arthritis

Selectively Reduced Intracellular Proliferation of Salmonella enterica Serovar Typhimurium within APCs Limits Antigen Presentation and Development of a Rapid CD8 T Cell Response
Homam Albaghdadi, Nirmal Robinson, Brett Finlay, Lakshmi Kiruban, and Subash Sad

Alveolar macrophages and Lung Dendritic Cells Sense RNA and Drive Mucosal IgA Responses
Juliana Besa, Andrea Jegerlehner, Heather J. Hinton, Paul Pumpens, Philippe Saudan, Pascal Schneider, and Martin F. Bachmann

MOLECULAR AND STRUCTURAL IMMUNOLOGY

Characterization of FIBCD1 as an Acetyl Group-Binding Receptor That Binds Chitin
Anders Schlosser, Theresa Thomsen, Jesper B. Moeller, Ole Nielsen, Ida Tornøe, Jan Mollenhauer, Søren K. Moestrup, and Uffe Holmskov

Factor G Utilizes a Carbohydrate-Binding Cleft That Is Conserved between Horseshoe Crab and Bacteria for the Recognition of β-1,3-D-Glucans
Yuki Ueda, Shuhei Ohwada, Yoshito Abe, Toshio Shibata, Manabu Iijima, Yukiko Yoshimitsu, Takumi Koshiba, Munehiro Nakata, Tadashi Ueda, and Shun-ichiro Kawabata

Divergent Roles of RelA and c-Rel in Establishing Chromosomal Loops upon Activation of the Igα Gene
Zhe Liu, Zhenyi Ma, Lance S. Terada, and William T. Garrard

MEKK1 Binds HECT E3 Ligase Itch by Its Amino-Terminal RING Motif to Regulate Th2 Cytokine Gene Expression
Thomas Enzler, Xing Chang, Valeria Facchinetti, Gerry Melino, Michael Karin, Bing Su, and Ewen Gallagher

Temporal Induction Pattern of STAT4 Target Genes Defines Potential for Th1 Lineage-Specific Programming
Seth R. Good, Vivian T. Thieu, Anubhav N. Mathur, Qing Yu, Greta L. Stritesky, Norman Yeh, John T. O’Malley, Narayan B. Perumal, and Mark H. Kaplan

Specific Requirements for Vγ9Vδ2 T Cell Stimulation by a Natural Adenylated Phosphoantigen
Expression of IgM, IgD, and IgY in a Reptile, Anolis carolinensis
Zhiguo Wei, Qian Wu, Liming Ren, Xiaoxiang Hu, Ying Guo, Gregory W. Warr, Lennart Hammarström, Ning Li, and Yaofeng Zhao

A Cell-INtrinsic Role for Mst1 in Regulating Thymocyte Egress
Yongli Dong, Xingrong Du, Jian Ye, Min Han, Tian Xu, Yuan Zhuang, and Wufan Tao

IMMUNOGENETICS

β-Catenin/Tcf Determines the Outcome of Thymic Selection in Response to αβ TCR Signaling
Damian Kovalovsky, Yu Yu, Marei Dose, Anastasia Emmanouilidou, Tassos Konstantinou, Kristine Germar, Katayoun Aghajani, Zheyan Guo, Malay Mandal, and Fotini Gounari

HOST DEFENSE

Galactoxylomannan-Mediated Immunological Paralysis Results from Specific B Cell Depletion in the Context of Widespread Immune System Damage
Magdia De Jesus, André Moraes Nicola, Susana Fresas, Ian R. Lee, Steven Mieses, and Arturo Casadevall

Persistent Viral Infection Elevates Central Nervous System MHC Class I through Chronic Production of Interferons
Phi Truong, Sara Heydari, Lucile Garidou, and Dorian B. McGavern

Disruption of Th2 Immunity Results in a Gender-Specific Expansion of IL-13 Producing Accessory NK Cells during Helminth Infection
Matthew R. Hepworth and Richard K. Grenchis

Tuberculosis-Associated Immune Restoration Syndrome in HIV-1-Infected Patients Involves Tuberculin-Specific CD4 Th1 Cells and KIR-Negative γδ T Cells
Anne Bourgarit, Guislaine Carcelain, Assia Samri, Christophe Parizot, Matthieu Lafaurie, Sophie Abgrall, Veronique Delcey, Eric Vicaut, Daniel Sereni, Brigitte Aucouturier, and the PARADOX Study Group

The Two Groups of Zebrafish Virus-Induced Interferons Signal via Distinct Receptors with Specific and Shared Chains
Dina Aggad, Martine Mazel, Pierre Boudinot, Knud Erik Mogensen, Ole Jensen Hamming, Rune Hartmann, Sergei Kotenko, Philippe Herbomel, Georges Lutfalla, and Jean-Pierre Levraud

CD4⁺ T Cell Help Has an Epitope-Dependent Impact on CD8⁺ T Cell Memory Inflation during Murine Cytomegalovirus Infection
Christopher M. Snyder, Andrea Loewendorf, Elizabeth L. Bonnett, Michael Croft, Chris A. Benedict, and Ann B. Hill

A Critical Role for Hemolysins and Bacterial Lipoproteins in Staphylococcus aureus-Induced Activation of the Nlrp3 Inflammasome
Raúl Muñoz-Planillo, Luigi Franchi, Lloyd S. Miller, and Gabriel Núñez

INFLAMMATION

Eosinophil Cationic Protein (ECP) Is Processed during Secretion
Charlotte Woitnag, Jenny Rubin, and Per Venge

ERK and Not p38 Pathway Is Required for IL-12 Restoration of T Cell IL-2 and IFN-γ in a Rodent Model of Alcohol Intoxication and Burn Injury
Xiaoling Li, Irshad H. Chaudry, and Mashkoor A. Choudhry

Regulation of Murine Splenic B Cell CR3 Expression by Complement Component 3
Amanda C. Jacobson, Kirstin M. Roundy, Janis J. Weis, and John H. Weis

Deficiency of Endothelial Heparan Sulfates Attenuates Allergic Airway Inflammation
Riaz I. Zuberi, Xiao Na Ge, Shubia Jiang, Nooshin S. Bahaie, Bit Na Kang, Reza M. Hoseinkhani, Elizabeth M. Frenzel, Mark M. Fuster, Jeffrey D. Eskin, Savita P. Rao, and P. Sirivarama
Both Complement and IgG Fc Receptors Are Required for Development of Attenuated Antiglomerular Basement Membrane Nephritis in Mice
Marielle A. Otten, Tom W. L. Groeneveld, Roelof Flieerman, Maria Pia Rastaldi, Leendert A. Trouw, Maria C. Faber-Krol, Annemieke Visser, Maria C. Essers, Jill Cla assens, J. Sjef Verbeek, Cees van Kooten, Anja Roos, and Mohamed R. Daha

TRIL, a Functional Component of the TLR4 Signaling Complex, Highly Expressed in Brain

TC1(C8orf4) Is a Novel Endothelial Inflammatory Regulator Enhancing NF-κB Activity
Jungtae Kim, Yunlim Kim, Hyun-Taek Kim, Dong Wook Kim, Yunhi Ha, Jihun Kim, Cheol-Hee Kim, Inchul Lee, and Kyuyoung Song

Inflammatory Role of ASC in Antigen-Induced Arthritis Is Independent of Caspase-1, NALP-3, and IPAF

Eosinophil Ribonucleases and Their Cutaneous Lesion-Forming Activity

Externalization of the Leaderless Cytokine IL-1F6 Occurs in Response to Lipopolysaccharide/ATP Activation of Transduced Bone Marrow Macrophages
Unja Martin, John Scholler, Jesse Gurgel, Blair Renshaw, John E. Sims, and Christopher A. Gabel

A Pivotal Role of Endothelial-Specific NF-κB Signaling in the Pathogenesis of Septic Shock and Septic Vascular Dysfunction
Jianqiang Ding, Dongmei Song, Xiaobing Ye, and Shu Fang Liu

Complement C3a Regulates Late Asthmatic Response and Airway Hyperresponsiveness in Mice
Nobuki Mizutani, Takeshi Nabe, and Shin Yoshino

Neutrophil-Derived Hyperresistinemia in Severe Acute Streptococcal Infections
Linda Johansson, Anna Linné, Jonas Sundén-Cullberg, Axana Haggar, Heiko Herwald, Karin Löré, Carl-Johan Treutiger, and Anna Norrby-Teglund

Site-Specific Carboxypeptidase B1 Tyrosine Nitration and Pathophysiological Implications following Its Physical Association with Nitric Oxide Synthase-3 in Experimental Sepsis
Saurabh Chatterjee, Olivier Lardinois, Marcel G. Bonini, Suchandra Bhattacharjee, Kristian Stadler, Jean Corbett, Leesa J. Deterding, Kenneth B. Tomer, Maria Kadiiska, and Ronald P. Mason

A Novel Humanized Neonatal Autoimmune Blistering Skin Disease Model Induced by Maternally Transferred Antibodies

Direct Expansion of Human Allospecific FoxP3+CD4+ Regulatory T Cells with Allogeneic B Cells for Therapeutic Application
Leo C. Chen, Julio C. Delgado, Peter E. Jensen, and Xinjian Chen

CLINICAL IMMUNOLOGY

Age-Dependent B Cell Autoimmunity to a Myelin Surface Antigen in Pediatric Multiple Sclerosis

Expression of Tolerance Associated Gene-1, a Mitochondrial Protein Inhibiting T Cell Activation, Can Be Used to Predict Response to Immune Modulating Therapies
Kathrin Keeren, Markku Friedrich, Inga Gebühr, Sandra Philipp, Robert Sahat, Wolfram Sterry, Christine Brandt, Christian Meisel, Gerald Grütz, Hans-Dieter Volk, and Birgit Sawitzki

A Novel Humanized Neonatal Autoimmune Blistering Skin Disease Model Induced by Maternally Transferred Antibodies

Direct Expansion of Human Allospecific FoxP3+CD4+ Regulatory T Cells with Allogeneic B Cells for Therapeutic Application
Leo C. Chen, Julio C. Delgado, Peter E. Jensen, and Xinjian Chen
4103 Chronic Human Infection with *Trypanosoma cruzi* Drives CD4<sup>+</sup> T Cells to Immune Senescence
Maria Cecilia Albareda, Gabriela Carina Olivera, Susana A. Laucella, María Gabriela Alvarez,
Esteban Rodrigo Fernandez, Bruno Lococo, Rodolfo Viotti, Rick L. Tarleton, and Miriam Postan

4109 Resident Dendritic Cells Prevent Postischemic Acute Renal Failure by Help of Single Ig IL-1 Receptor-Related Protein
Maciej Lech, Alejandro Avila-Ferrufino, Ramanjaneyulu Allam, Stephan Segerer, Alexander Khandoga, Fritz Krombach,
Cecilia Garlanda, Alberto Mantovani, and Hans-Joachim Anders

4119 De Novo Generation and Enhanced Suppression of Human CD4<sup>+</sup>CD25<sup>+</sup> Regulatory T Cells by Retinoic Acid
Jun Wang, Tom W. J. Huizinga, and Rene E. M. Toes

4127 Therapeutic Antibody Targeting of CD97 in Experimental Arthritis: the Role of Antigen Expression, Shedding, and Internalization on the Pharmacokinetics of Anti-CD97 Monoclonal Antibody 1B2
Dorien M. de Groot, Gerard Vogel, John Dulou, Leonie Teeuwen, Karin Stebbins, Jörg Hamann, Bronwyn M. Owens,
Hans van Eenennaam, Ebo Bos, and Annemieke M. Boots

4135 CORRECTIONS

4137 AUTHOR INDEX