3557 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 Ruggiero Errante, Carolina Prando, Jacinta Bustamante, Walmir Curtin Aragão Filho, Paulo Vitor Soelho 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 Ake 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, Maria Inês 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 Caetti, 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. Sadler, David R. Soll, Suzanne L. Casel, and Fayyaz S. Sutterwala

On the cover: Zebrafish embryo, 36 h post-fertilization, double in situ hybridization for tc1a (blue) and fil1 (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 fil1 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.
CELLULAR IMMUNOLOGY AND IMMUNE REGULATION

3583 Immune Suppressive Activity and Lack of T Helper Differentiation Are Differentially Regulated in Natural Regulatory T Cells
Wei-ping Zeng, Chawanshang Chang, and Jiann-jyh Lai

3591 IL-33 Activates Unprimed Murine Basophils Directly In Vitro and Induces Their In Vivo Expansion Indirectly by Promoting Hematopoietic Growth Factor Production
Elke Schneider, Anne-France Petit-Bertron, Rachel Bricard, Mélanie Levasseur, Abdelrauf Ramadan, Jean-Philippe Girard, André Herbelin, and Michiel Dy

3598 Novel Human Interleukin-15 Agonists
Xiaoyun Zhu, Warren D. Marcus, Wenxin Xu, Hyung-il Lee, Kaiping Han, Jack O. Egan, Jason L. Yovandich, Peter R. Rhode, and Hing C. Wong

3608 An Accessory Role for B Cells in the IL-12-Induced Activation of Resting Mouse NK Cells
Evette A. Haddad, Laura K. Senger, and Fumio Takei

3616 A CD26-Controlled Cell Surface Cascade for Regulation of T Cell Motility and Chemokine Signals
Zhiwen Liu, Marta Christensson, Anna Forsløw, Ingrid De Meester, and Karl-Gösta Sundqvist

3625 Early Triggering of Exclusive IFN-γ Responses of Human Vγ9Vδ2 T Cells by TLR -Activated Myeloid and Plasmacytoid Dendritic Cells
Marie-Claire Devisser, Sophie Allain, Christelle Douaset, Marc Bonneville, and Emmanuel Scotet

3634 TLR3-Stimulated Dendritic Cells Up-regulate B7-H1 Expression and Influence the Magnitude of CD8 T Cell Responses to Tumor Vaccination
Vesna Pulko, Xin Liu, Christopher J. Kreo, Kimberley J. Harris, Xavier Frigola, Eugene D. Kwon, and Haidong Dong

3642 MyD88 Adaptor-Like Is Not Essential for TLR2 Signaling and Inhibits Signaling by TLR3

3652 SHIP Represses the Generation of IL-3-Induced M2 Macrophages by Inhibiting IL-4 Production from Basophils
Etsushi Kuroda, Victor Ho, Jens Ruschmann, Frann Antignano, Melissa Hamilton, Michael J. Raub, Andrey Antov, Richard A. Flavell, Laura M. Sly, and Gerald Krystal

3661 CD21/35 Promotes Protective Immunity to Streptococcus pneumoniae through a Complement-Independent but CD19-Dependent Pathway That Regulates PD-1 Expression
Karen M. Haas, Jonathan C. Poe, and Thomas F. Tedder

3672 Estrogen Controls Vitamin D3-Mediated Resistance to Experimental Autoimmune Encephalomyelitis by Controlling Vitamin D3 Metabolism and Receptor Expression
Faye E. Nasbold, Karen M. Spach, Justin A. Spanier, and Colleen E. Hayes

3682 Disruption of TGF-β Signaling Prevents the Generation of Tumor-Sensitized Regulatory T Cells and Facilitates Therapeutic Antitumor Immunity
Ulf Petrausch, Shawn M. Jensen, Christopher Twitty, Christian H. Pobbelein, Daniel P. Haley, Edwin B. Walker, and Bernard A. Fox

3690 XBP-1-Deficient Plasmablasts Show Normal Protein Folding but Altered Glycosylation and Lipid Synthesis
Annette M. McGhee, Stephanie K. Douglas, Elizabeth J. Klemm, Guangshou Shui, Boyoun Park, You-Me Kim, Nicki Watson, Markus R. Wenk, Hidde L. Ploegh, and Chih-Chi Andrew Hu

3700 Kinin Danger Signals Proteolytically Released by Gingipain Induce Fimbriae-Specific IFN-γ- and IL-17-Producing T Cells in Mice Infected Intramuscosaly with Porphyromonas gingivalis
Ana Carolina Monteiro, Aline Scovino, Susane Raposo, Vinicius Musa Gaze, Cati Cruz, Erik Svensjö, Marcelo Sampiao Narciso, Ana Paula Coelho, João B. Pesquero, Eduardo Ferre-Filho, Ky-Anh Nguyen, Aneta Sroka, Jan Potempa, and Julio Scharfstein

3712 Inflammatory Regulation by TLR3 in Acute Hepatitis
Xiaoyan Xiao, Peng Zhao, Daniel Rodriguez-Pinto, Dake Qi, Octavian Henegariu, Lena Alexopoulou, Richard A. Flavell, F. Susan Wong, and Li Wen
Tumor-Derived Microvesicles Promote Regulatory T Cell Expansion and Induce Apoptosis in Tumor-Reactive Activated CD8⁺ T Lymphocytes
Eva U. Wieckowski, Carmen Visus, 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 Kuczma, Robert Podolsky, Nikhil Garge, Daniella Daniely, Rafal Pacholszyn, Lezak Ignatowicz, and Piotr Kraj

Efficient Induction and Expansion of Human Alloantigen-Specific CD8 Regulatory T Cells from Naive 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. Rosenkrantz, 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. Ross, Felice Rivellone, Fiamma Sartono, Gabriele Delfino, Bianca Liccardo, Eleina Avilà, Nunzia Montuori, Massimo Massolo, Stefania Staibano, Rosa Marinella, 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 Krishnan, and Subash Sad

Alveolar Macrophages and Lung Dendritic Cells Sense RNA and Drive Mucosal IgA Responses
Juliana Besa, Andrea Jegerlehner, Heather J. Hinton, Paul Pumps, 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 Schlos, Therese Thomsen, Jesper B. Moeller, Ole Nielsen, Ida Tornoe, Jan Mollenbauer, Soen 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 Ohuda, Yong Shi, Toshio Shibata, Manabu Iijima, Yukiko Yoshimitsu, Takumi Koshiba, Munehiro Nakata, Tadashi Ueda, and Shin-ichiro Kawabata

Divergent Roles of RelA and c-Rel in Establishing Chromosomal Loops upon Activation of the Igκ 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, Vijian 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 German, Katayoun Aghajani, Zhuyan 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 Fraes, 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 Vicaux, Daniel Sereni, Brigitte Autran, 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, Ola 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 Wochnag, 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, Shusia Jiang, Nooshin S. Babaie, Bit Na Kang, Reza M. Hoseinkhani, Elizabeth M. Frenzel, Mark M. Faster, Jeffrey D. Esko, Savita P. Rao, and P. Sriramarao
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. Trous, Maria C. Faber-Krol, Annemieke Visser, Maria C. Essers, Jill Claassens, 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
Laeticia Kolly, Mahir Karababa, Leo A. B. Joosten, Sharmal Narayan, Roberto Salvi, Virginie Pétrilli, Jurg Tschopp, Wim B. van den Berg, Alexander Kai-Lik So, and Nathalie Buiso

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. Sins, 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 Linnér, Jonas Sundén-Cullberg, Axana Hagger, Heiko Herwald, Karin Loré, 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, Marcelo G. Bonini, Suchandra Bhattacharyee, Kristian Stadler, Jean Corbett, Leesa J. Deterding, Kenneth B. Tomer, Maria Kadiiska, and Ronald P. Mason

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
Chronic Human Infection with *Trypanosoma cruzi* Drives CD4⁺ T Cells to Immune Senescence
María Cecilia Albareda, Gabriela Carina Olivera, Susana A. Laucella, María Gabriela Alvarez, Esteban Rodrigo Fernandez, Bruno Lococo, Rodolfo Viotti, Rick L. Tarleton, and Miriam Postan

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

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

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 Duloe, Leonie Teeuwen, Karin Stebbins, Jörg Hamann, Bronwyn M. Owens, Hans van Eenennaam, Ebo Bas, and Annemieke M. Boots

CORRECTIONS

AUTHOR INDEX