This information is current as of April 17, 2017.
LETTERS TO THE EDITOR

647 Comment on “Gender Differences in 1,25 Dihydroxyvitamin D3 Immunomodulatory Effects in Multiple Sclerosis Patients and Healthy Subjects”
Adam E. Handel, Gabriele C. De Luca, and Seeram V. Ramapalan

648 Response to Comment on “Gender Differences in 1,25 Dihydroxyvitamin D3 Immunomodulatory Effects in Multiple Sclerosis Patients and Healthy Subjects”
Jorge Correale, Maria C. Ysraéli, and Maria I. Gaitán

BRIEF REVIEWS

649 The Drosophila Toll Signaling Pathway
Susanna Valanne, Jing-Huan Wang, and Mika Rämet

CUTTING EDGE

657 Cutting Edge: NKp80 Uses an Atypical Hemi-ITAM To Trigger NK Cytotoxicity
Kevin M. Dennehy, Sascha N. Klimsch, and Alexander Steinle

662 Cutting Edge: Crucial Role of IL-1 and IL-23 in the Innate IL-17 Response of Peripheral Lymph Node NK1.1+ Invariant NKT Cells to Bacteria
Jean-Marc Doisne, Valérie Soulard, Chantal Bécourt, Latifha Amnai, Pauline Henrot, Colin Havenar-Daughton, Charlene Blanchet, Laurence Zitvogel, Bernhard Ryffel, Jean-Marc Cavaillon, Julien C. Marie, Isabelle Couillin, and Kamel Benlagha

CELLULAR IMMUNOLOGY AND IMMUNE REGULATION

667 IL-21 Receptor Is Critical for the Development of Memory B Cell Responses
Andrew L. Rankin, Heather MacLeod, Sean Keegan, Tatyana Andreyeva, Leslie Lowe, Laird Bloom, Mary Collins, Cheryl Nickerson-Nutter, Deborah Young, and Heath Guay
The Role of Glycogen Synthase Kinase 3 in Regulating IFN-β–Mediated IL-10 Production
Huizhi Wang, Jonathan Brown, Carlos A. Garcia, Yunan Tang, Manjunatha R. Benakanakere, Terrace Greenway, Pascale Alard, Denis F. Kinane, and Michael Martin

A TCR Targeting the HLA-A*0201–Restricted Epitope of MAGE-A3 Recognizes Multiple Epitopes of the MAGE-A Antigen Superfamily in Several Types of Cancer
Nachimuthu Chinnasamy, Jennifer A. Wargo, Zhiya Yu, Mahadev Rao, Timothy L. Frankel, John P. Riley, Jenny J. Hong, Maria R. Parkhurst, Steven A. Feldman, David S. Schrump, Nicholas P. Restifo, Paul F. Robbins, Steven A. Rosenberg, and Richard A. Morgan

A Role for Immature Myeloid Cells in Immune Senescence
Elena Y. Enioutina, Diana Bareyan, and Raymond A. Daynes

Functional Characterization of a Nonmammalian IL-21: Rainbow Trout Oncorhynchus mykiss IL-21 Upregulates the Expression of the Th Cell Signature Cytokines IFN-γ, IL-10, and IL-22
Tiehui Wang, Patricia Diaz-Rosales, Maria M. Costa, Scott Campbell, Michael Snow, Bertrand Collet, Samuel A. M. Martin, and Christopher J. Secombes

A Role for Immature Myeloid Cells in Immune Senescence
Elena Y. Enioutina, Diana Bareyan, and Raymond A. Daynes

A Role for Immature Myeloid Cells in Immune Senescence
Elena Y. Enioutina, Diana Bareyan, and Raymond A. Daynes

Expression of the SLAM Family of Receptors Adapter EAT-2 as a Novel Strategy for Enhancing Beneficial Immune Responses to Vaccine Antigens
Yasser A. Aldhamen, Daniel M. Appledorn, Sergey S. Seregin, Chyong-ky J. Liu, Nathaniel J. Schaldt, Sarah Godbehere, and Andrea Amalfitano

Retinoic Acid-Induced CCR9 Expression Requires Transient TCR Stimulation and Cooperativity between NFATc2 and the Retinoic Acid Receptor/Retinoid X Receptor Complex
Yoshitaru Ohoka, Aya Yokota, Hajime Takeuchi, Naoko Maeda, and Makoto Iwata

Loss of IL-17–Producing CD8 T Cells during Late Chronic Stage of Pathogenic Simian Immunodeficiency Virus Infection
Pragati Nigam, Suefen Kwa, Vijayakumar Velu, and Rama Rao Amara

Type I IFN Substitutes for T Cell Help during Viral Infections
Melanie Wiesel, Wolfgang Kratky, and Annette Osenius

Macrophage Migration Inhibitory Factor Counterregulates Dexamethasone-Mediated Suppression of Hypoxia-Inducible Factor-1α Function and Differentially Influences Human CD4+ T Cell Proliferation under Hypoxia
Timo Gaber, Saskia Schellmann, Kerem B. Erekul, Monique Fangradt, Karolina Tykwinska, Martin Hahne, Patrick Maschmeyer, Markus Wagegg, Cindy Stahn, Paula Kolar, René Desturka, Max Löhning, Gerd-Rudiger Burmester, and Frank Buttgereit

Kruppel-Like Factor 2 Is Required for Trafficking but Not Quiescence in Postactivated T Cells

β-Catenin Inhibits T Cell Activation by Selective Interference with Linker for Activation of T Cells–Phospholipase C-γ1 Phosphorylation
Gregory Driessens, Yan Zheng, Frederick Locke, Judy L. Cannon, Fotini Gounari, and Thomas F. Gajewski

Systemic Immunological Tolerance to Ocular Antigens Is Mediated by TRAIL-Expressing CD8+ T Cells
Thomas S. Griffith, Erik L. Brincks, Pratul Gurung, Tamara A. Kucaba, and Thomas A. Ferguson

Bel-2–Interacting Mediator of Cell Death Influences Autoantigen-Driven Depletion and TCR Revision
J. Scott Hale, Lia T. Nelson, Kalynn B. Simmons, and Pamela J. Fink

Successful Colon Cancer Eradication after Chemoimmunotherapy Is Associated with Profound Phenotypic Change of Intratumoral Myeloid Cells
José Medina-Echeverz, Jessica Fioravanti, Maider Zabala, Nuria Ardaiz, Jesús Prieto, and Pedro Berraondo
816  Kinesin 5B Is Necessary for Delivery of Membrane and Receptors during FcγR-Mediated Phagocytosis
Kristen E. Silver and Rene E. Harrison

826  Lineage Divergence at the First TCR-Dependent Checkpoint: Preferential γδ and Impaired αβ T Cell Development in Nonobese Diabetic Mice
Ni Feng, Patricia Vegh, Ellen V. Rothenberg, and Mary A. Yui

838  TCR-Dependent and -Independent Activation Underlie Liver-Specific Regulation of NKT Cells

848  Substance P Is a Key Mediator of Stress-Induced Protection from Allergic Sensitization via Modified Antigen Presentation
Sanja Pavlovic, Christiane Liezmann, Sandra M. Blois, Ricarda Joachim, Johannes Kruse, Nikolaus Romani, Burghard F. Klapp, and Eva M. J. Peters

856  Alloimmune Response Results in Expansion of Autoreactive Donor CD4+ T Cells in Transplants That Can Mediate Chronic Graft-versus-Host Disease
Dongchang Zhao, James S. Young, Yu-Hong Chen, Elizabeth Shen, Tangsheng Yi, Ivan Todorov, Peigu G. Chu, Stephen J. Forman, and Defu Zeng

869  The C5a Receptor Impairs IL-12–Dependent Clearance of Porphyromonas gingivalis and Is Required for Induction of Periodontal Bone Loss
Shuang Liang, Jennifer L. Krauss, Hisanori Domon, Megan L. McIntosh, Kavita B. Hour, Hongchang Qu, Fenge Li, Apostolia Tzekou, John D. Lambris, and George Hajishengallis

878  TLR-2–Activated B Cells Suppress Helicobacter-Induced Preneoplastic Gastric Immunopathology by Inducing T Regulatory-1 Cells
Ayca Sayi, Esther Kohler, Isabella M. Toller, Richard A. Flavell, Werner Müller, Axel Roers, and Anne Müller

913  STIM1-Directed Reorganization of Microtubules in Activated Mast Cells
Zuzana Hájková, Viktor Bugajev, Eduarda Draberová, Stanislav Vinopal, Lubica Dráberová, Jiří Janáček, Petr Dráber, and Pavel Dráber

924  Dicer Insufficiency and MicroRNA-155 Overexpression in Lupus Regulatory T Cells: An Apparent Paradox in the Setting of an Inflammatory Milieu
Anagha A. Divekar, Shweta Dubey, Pallavi R. Gangalum, and Ram Raj Singh

MOLECULAR AND STRUCTURAL IMMUNOLOGY

931  Lipid Raft Assembly and Lck Recruitment in TRAIL Costimulation Mediates NF-κB Activation and T Cell Proliferation
Shih-Chia Huang, Hwei-Fang Tsa, Horng-Tay Tzeng, Hsiu-Jung Liao, and Ping-Ning Hsu

940  Protein Kinase D Orchestrates the Activation of DRAK2 in Response to TCR-Induced Ca2+ Influx and Mitochondrial Reactive Oxygen Generation
Ryan H. Newton, Sabrina Leverrier, Sonal Srikanth, Youang Gwack, Michael D. Cahalan, and Craig M. Walsh

951  Gα13 and Rho Mediate Endosomal Trafficking of CXCR4 into Rab11+ Vesicles upon Stromal Cell-Derived Factor-1 Stimulation
Ashok Kumar, Kimberly N. Kremer, Daniel Dominguez, Madhavi Tadi, and Karen E. Hedin
Neonatal FcR Overexpression Boosts Humoral Immune Response in Transgenic Mice

Judit Cervenak, Balázs Bender, Zita Schneider, Melinda Magna, Bogdan Valer Carstea, Károly Liliom, Anna Erdei, Zsuzsanna Bőze, and Imre Kacskovics

Ets-1 Maintains IL-7 Receptor Expression in Peripheral T Cells

Roland Grenningloh, Tzong-Shyuan Tai, Nicole Frahm, Tomoyuki C. Hongo, Adam T. Chicoine, Christian Brander, Daniel E. Kaufmann, and I-Cheng Ho

HOST DEFENSE

Modulation of Dendritic Cell Differentiation in the Bone Marrow Mediates Sustained Immunosuppression after Polymicrobial Sepsis

Eva Pastille, Sonja Didovic, Daniela Brauckmann, Meenakshi Rani, Hemant Agrawal, F. Ulrich Schade, Yang Zhang, and Stefanie B. Flohé

Seasonal FluMist Vaccination Induces Cross-Reactive T Cell Immunity against H1N1 (2009) Influenza and Secondary Bacterial Infections

Keer Sun, Jianqiang Ye, Daniel R. Perez, and Dennis W. Metzger

NLRC5 Deficiency Does Not Influence Cytokine Induction by Virus and Bacteria Infections

Himanshu Kumar, Surya Pandey, Jian Zou, Yutaro Kumagai, Ken Takahashi, Shizuo Akira, and Taro Kawai

Negative Regulation of IRF7 Activation by Activating Transcription Factor 4 Suggests a Cross-Regulation between the IFN Responses and the Cellular Integrated Stress Responses

Qiming Liang, Hongying Deng, Chiao-Wang Sun, Tim M. Townes, and Fanxiu Zhu

IgM Production by Bone Marrow Plasmablasts Contributes to Long-Term Protection against Intracellular Bacterial Infection

Rachel Racine, Maura McLaughlin, Derek D. Jones, Susan T. Wittmer, Katherine C. MacNamara, David L. Woodland, and Gary M. Winslow

Universal Vaccine Based on Ectodomain of Matrix Protein 2 of Influenza A: Fc Receptors and Alveolar Macrophages Mediate Protection

Karin El Bakkouri, Francis Descamps, Marina De Filetette, Anouk Smet, Els Festjens, Ashley Birkett, Nico Van Rooijen, Sjief Verheek, Walter Fiers, and Xavier Saelens

Infection-Induced Myelopoiesis during Intracellular Bacterial Infection Is Critically Dependent upon IFN-γ Signaling

Katherine C. MacNamara, Kwadwo Oduro, Olga Martin, Derek D. Jones, Maura McLaughlin, Kyunghae Choi, Dori L. Borjesson, and Gary M. Winslow

Blocking of α4β7 Gut-Homing Integrin during Acute Infection Leads to Decreased Plasma and Gastrointestinal Tissue Viral Loads in Simian Immunodeficiency Virus-Infected Rhesus Macaques

Aftab A. Ansari, Keith A. Reimann, Ann E. Mayne, Yoshiaki Takahashi, Suwan T. Stephenson, Rijian Wang, Xinyue Wang, Jichu Li, Andrew A. Price, Dawn M. Little, Mohammad Zaidi, Robert Lyles, and Francois Villinger

CD23-Bound IgE Augments and Dominates Recall Responses through Human Naive B Cells

Qyana K. Griffith, YanMei Liang, Daniel O. Onguru, Pauline N. Mwinzi, and Lisa M. Ganley-Leal

Genome-Based In Silico Identification of New Mycobacterium tuberculosis Antigens Activating Polynodalistic CD8+ T Cells in Human Tuberculosis


Disruption of Leptin Receptor–STAT3 Signaling Enhances Leukotriene Production and Pulmonary Host Defense against Pneumococcal Pneumonia

Peter Mancuso, Marc Peter-Golden, Deepi Goel, Jared Goldberg, Thomas G. Brock, Megan Greenwald-Yarnell, and Martin G. Myers, Jr.
INFLAMMATION

1091 An Intact Canonical NF-κB Pathway Is Required for Inflammatory Gene Expression in Response to Hypoxia

1097 Distinct Roles for the A2B Adenosine Receptor in Acute and Chronic Stages of Bleomycin-Induced Lung Injury
Yang Zhou, Daniel J. Schneider, Eva Morsch, Ling Song, Mesias Pedroza, Harry Karmouty-Quintana, Thuy Le, Chun-Xiao Sun, and Michael R. Blackburn

1107 A Mouse Model of Airway Disease: Oncostatin M-Induced Pulmonary Eosinophilia, Goblet Cell Hyperplasia, and Airway Hyperresponsiveness Are STAT6 Dependent, and Interstitial Pulmonary Fibrosis Is STAT6 Independent
Dominik K. Fritz, Christine Kerr, Ramzi Fattouh, Alba Llop-Guevara, Walid I. Khan, Manel Jordana, and Carl D. Richards

1119 Bacterial Lipoprotein TLR2 Agonists Broadly Modulate Endothelial Function and Coagulation Pathways In Vitro and In Vivo
Hae-Sook Shin, Fengyun Xu, Aranya Bagchi, Elizabeth Herrup, Arun Prakash, Catherine Valentine, Hrishikesh Kulkarni, Kevin Wilhelmsen, Shaw Warren, and Judith Hellman

1131 Neutrophils Require SHP1 To Regulate IL-1β Production and Prevent Inflammatory Skin Disease

1140 Activation of Lipopolysaccharide–TLR4 Signaling Accelerates the Ototoxic Potential of Cisplatin in Mice
Gi-Su Oh, Hyung-Jin Kim, Jae-Hyuck Choi, AiHua Shen, Chang-Hoi Kim, Se-Jin Kim, Se-Ron Shin, Seung-Heon Hong, Yunha Kim, Channy Park, Sung-Joong Lee, Shizuo Akira, Raekil Park, and Hong-Seob So

1151 Lactobacillus-Mediated Priming of the Respiratory Mucosa Protects against Lethal Pneumovirus Infection
Stanislaw J. Gabryszewski, Ofir Bachar, Kimberly D. Dyer, Caroline M. Percopo, Kristin E. Killoran, Joseph B. Domachowske, and Helene F. Rosenberg

1162 Elevated Proinflammatory Cytokine Production by a Skewed T Cell Compartment Requires Monocytes and Promotes Inflammation in Type 2 Diabetes
Madhumita Jagannathan-Bogdan, Marie E. McDonnell, Hyunjin Shin, Qasim Rehman, Hatice Hasturk, Caroline M. Apovian, and Barbara S. Nikolajczyk

1173 Natural Forms of Vitamin E and 13-9-Carboxychromanol, a Long-Chain Vitamin E Metabolite, Inhibit Leukotriene Generation from Stimulated Neutrophils by Blocking Calcium Influx and Suppressing 5-Lipoxygenase Activity, Respectively
Ziying Jiang, Xinmin Yin, and Qing Jiang

1180 Double-Stranded RNA Induces Shedding of the 34-kDa Soluble TNFR1 from Human Airway Epithelial Cells via TLR3–TRIF–RIP1-Dependent Signaling: Roles for Dual Oxidase 2- and Caspase-Dependent Pathways
Man Yu, Jonathan Lam, Balázs Rada, Thomas L. Leto, and Stewart J. Levine

1189 The Human Glucocorticoid Receptor as an RNA-Binding Protein: Global Analysis of Glucocorticoid Receptor-Associated Transcripts and Identification of a Target RNA Motif
Faoud T. Ishmael, Xi Fang, Kenneth R. Houser, Kenneth Pearce, Katb Abdelmohsen, Ming Zhan, Myriam Gorospe, and Cristiana Stellato

1199 IL-6 Trans-Signaling Modulates TLR4-Dependent Inflammatory Responses via STAT3
Claire J. Greenhill, Stefan Rose-John, Rami Lissilaa, Walter Ferlin, Matthias Ernst, Paul J. Hertzog, Ashley Manuell, and Brendan J. Jenkins
Adenosine Potentiates Human Lung Mast Cell Tissue Plasminogen Activator Activity
Michal J. Sereda, Peter Bradding, and Catherine Vial

CLINICAL IMMUNOLOGY

Antibody-Targeted NY-ESO-1 to Mannose Receptor or DEC-205 In Vitro Elicits Dual Human CD8+ and CD4+ T Cell Responses with Broad Antigen Specificity
Takemasa Tsuji, Junko Matsuzaki, Marcus P. Kelly, Venky Ramakrishna, Laura Vitale, Li-Zhen He, Tibor Keler, Kunte Oduni, Lloyd J. Old, Gerd Ritter, and Sacha Gnjatic

Deficiency of IL-22 Contributes to a Chronic Inflammatory Disease: Pathogenetic Mechanisms in Acne Inversa
Kerstin Wolk, Katarzyna Warszawska, Conny Hoeftich, Ellen Witte, Sylke Schneider-Burrus, Katrin Witte, Stefanie Kunz, Annette Bus, Hans Joachim Roewert, Markus Krause, Ansgar Lukowsky, Hani-Dieter Volk, Wolfram Sterry, and Robert Sabat

Oxidized Cellulose Binding to Allergens with a Carbohydrate-Binding Module Attenuates Allergic Reactions
Nir Shani, Ziv Shani, Oded Shoseyov, Rufayda Mruwat, and David Shoseyov

Autophagy Negatively Regulates Keratinocyte Inflammatory Responses via Scaffolding Protein p62/SQSTM1
Hye-Mi Lee, Dong-Min Shin, Jae-Min Yuk, Ge Shi, Dae-Kyoung Choi, Sang-Hee Lee, Song Mei Huang, Jin-Man Kim, Chang Deok Kim, Jeung-Hoon Lee, and Eun-Kyoung Ju

CD8 T Cells Mediate Direct Biliary Ductule Damage in Nonobese Diabetic Autoimmune Biliary Disease

IL-2–Controlled Expression of Multiple T Cell Trafficking Genes and Th2 Cytokines in the Regulatory T Cell-Deficient Scurfy Mice: Implication to Multiorgan Inflammation and Control of Skin and Lung Inflammation
Rahul Sharma, Poonam R. Sharma, Young-Chul Kim, Norbert Leitinger, Jae K. Lee, Shu Man Fu, and Shyr-Te Ju

Immune Complex-Mediated Cell Activation from Systemic Lupus Erythematosus and Rheumatoid Arthritis Patients Elaborate Different Requirements for IRAK1/4 Kinase Activity across Human Cell Types
Eugene Y. Chiang, Xin Yu, and Jane L. Grogan

LETTERS OF RETRACTION

Retraction: Endogenous IL-1R1 Signaling Is Critical for Cognate CD4+ T Cell Help for Induction of In Vivo Type 1 and Type 2 Antipolysaccharide and Antiprotein Ig Isotype Responses to Intact Streptococcus pneumoniae, but Not to a Soluble Pneumococcal Conjugate Vaccine
Quanyi Chen, Gautam Sen, and Clifford M. Snapper

CORRECTIONS

Correction: The β-Human Chorionic Gonadotropin-Related Peptide LQGV Exerts Anti-Inflammatory Effects through Activation of the Adrenal Gland and Glucocorticoid Receptor in C57BL/6 Mice
Marten van der Zee, Jan Willem van den Berg, Conny van Holten-Neelen, and Willem A. Dik

Correction: IL-17 Regulates Adipogenesis, Glucose Homeostasis, and Obesity

AUTHOR INDEX