

# Arthritis & Rheumatism

An Official Journal of the American College of Rheumatology  
www.arthritisrheum.org and www.interscience.wiley.com

VOLUME 48

DECEMBER 2003

NO. 12

## Special Articles

- Editorial: Oncostatin M: Foe or Friend?  
*Jean-Pierre Pelletier and Johanne Martel-Pelletier* ..... 3301
- Editorial: The Usual Suspects: Verdict Not Guilty?  
*Micky D. Tortorella and Anne-Marie Malfait* ..... 3304
- Review: Rheumatoid Arthritis Therapy After Tumor Necrosis Factor and Interleukin-1 Blockade  
*Kurt Redlich, Georg Schett, Günter Steiner, Silvia Hayer, Erwin F. Wagner, and Josef S. Smolen* ..... 3308
- Review: Catastrophic Antiphospholipid Syndrome: Where Do We Stand?  
*Doruk Erkan, Ricard Cervera, and Ronald A. Asherson* ..... 3320

## Rheumatoid Arthritis

- Efficacy and Safety of Tacrolimus in Patients With Rheumatoid Arthritis: A Double-Blind Trial  
*David E. Yocum, Daniel E. Furst, Jeffrey L. Kaine, Andrew R. Baldassare, Jon T. Stevenson, Mary Ann Borton, Laurel J. Mengle-Gaw, Benjamin D. Schwartz, Wayne Wisemandle, and Qais A. Mekki, for the Tacrolimus Rheumatoid Arthritis Study Group* ..... 3328
- Rheumatoid Arthritis of the Shoulder Joint: Comparison of Conventional Radiography, Ultrasound, and Dynamic Contrast-Enhanced Magnetic Resonance Imaging  
*Kay-Geert A. Hermann, Marina Backhaus, Udo Schneider, Karsten Labs, Dieter Loreck, Svenda Zühlendorf, Tania Schink, Thomas Fischer, Bernd Hamm, and Matthias Bollow* ..... 3338
- Suppression of Osteoclastogenesis in Rheumatoid Arthritis by Induction of Apoptosis in Activated CD4+ T Cells  
*Yukie Ogawa, Masahiko Ohtsuki, Miwa Uzuki, Takashi Sawai, Yoshiko Onozawa, Junichi Nakayama, Akiko Yonemura, Tomoatsu Kimura, and Hiroaki Matsuno* ..... 3350

## Osteoarthritis and Cartilage

- Physical Functioning Over Three Years in Knee Osteoarthritis: Role of Psychosocial, Local Mechanical, and Neuromuscular Factors  
*Leena Sharma, September Cahue, Jing Song, Karen Hayes, Yi-Chung Pai, and Dorothy Dunlop* ..... 3359
- Patterns of Interphalangeal Hand Joint Involvement of Osteoarthritis Among Men and Women: A British Cohort Study  
*Jason Poole, Avan Aihie Sayer, Rebecca Hardy, Michael Wadsworth, Diana Kuh, and Cyrus Cooper* ..... 3371
- Longitudinal Analysis of Cartilage Atrophy in the Knees of Patients With Spinal Cord Injury  
*B. Vanwanseele, F. Eckstein, H. Knecht, A. Spaepen, and E. Stüssi* ..... 3377
- Indentation Testing of Human Cartilage: Sensitivity to Articular Surface Degeneration  
*Won C. Bae, Michele M. Temple, David Amiel, Richard D. Coutts, Gabriele G. Niederauer, and Robert L. Sah* ..... 3382
- Molecular Phenotyping of Human Chondrocyte Cell Lines T/C-28a2, T/C-28a4, and C-28/I2  
*F. Finger, C. Schörle, A. Zien, P. Gebhard, M. B. Goldring, and T. Aigner* ..... 3395
- Oncostatin M in Combination With Tumor Necrosis Factor  $\alpha$  Induces Cartilage Damage and Matrix Metalloproteinase Expression In Vitro and In Vivo  
*W. Hui, A. D. Rowan, C. D. Richards, and T. E. Cawston* ..... 3404
- Increased Oxidative Stress With Aging Reduces Chondrocyte Survival: Correlation With Intracellular Glutathione Levels  
*Marcello Del Carlo, Jr. and Richard F. Loeser* ..... 3419
- G1 Domain of Aggrecan Cointernalizes With Hyaluronan Via a CD44-Mediated Mechanism in Bovine Articular Chondrocytes  
*Jennifer J. Embry and Warren Knudson* ..... 3431
- Reduction of Osteophyte Formation and Synovial Thickening by Adenoviral Overexpression of Transforming Growth Factor  $\beta$ /Bone Morphogenetic Protein Inhibitors During Experimental Osteoarthritis  
*Alwin Scharstuhl, Elly L. Vitters, Peter M. van der Kraan, and Wim B. van den Berg* ..... 3442

Gene Deletion of Either Interleukin-1 $\beta$ , Interleukin-1 $\beta$ -Converting Enzyme, Inducible Nitric Oxide Synthase, or Stromelysin 1 Accelerates the Development of Knee Osteoarthritis in Mice After Surgical Transection of the Medial Collateral Ligament and Partial Medial Meniscectomy <i>Kristen M. Clements, Joanne S. Price, Mark G. Chambers, Denise M. Visco, A. Robin Poole, and Roger M. Mason</i> .....	3452
Stem Cell Therapy in a Caprine Model of Osteoarthritis <i>J. Mary Murphy, David J. Fink, Ernst B. Hunziker, and Frank P. Barry</i> .....	3464
<b>Systemic Lupus Erythematosus</b>	
B Lymphocyte Stimulator Overexpression in Patients With Systemic Lupus Erythematosus: Longitudinal Observations <i>William Stohl, Samy Metyas, Soon-Min Tan, Gurtej S. Cheema, Bonifacia Oamar, Dong Xu, Viktor Roschke, Youmei Wu, Kevin P. Baker, and David M. Hilbert</i> .....	3475
Roles of CCR2 and CXCR3 in the T Cell-Mediated Response Occurring During Lupus Flares <i>Zahir Amoura, Christophe Combadiere, Sophie Faure, Christophe Parizot, Makoto Miyara, Darren Raphaël, Pascale Ghillani, Patrice Debre, Jean-Charles Piette, and Guy Gorochov</i> .....	3487
Intravenous Immunoglobulin Abrogates Dendritic Cell Differentiation Induced by Interferon- $\alpha$ Present in Serum From Patients With Systemic Lupus Erythematosus <i>Jagadeesh Bayry, Sébastien Lacroix-Desmazes, Sandrine Delignat, Luc Mouthon, Bernard Weill, Michel D. Kazatchkine, and Srinivasa V. Kaveri</i> .....	3497
<b>Systemic Sclerosis</b>	
N-Terminal Pro-Brain Natriuretic Peptide as a Diagnostic Marker of Early Pulmonary Artery Hypertension in Patients With Systemic Sclerosis and Effects of Calcium-Channel Blockers <i>Y. Allanore, D. Borderie, C. Meune, L. Cabanes, S. Weber, O. G. Ekindjian, and A. Kahan</i> .....	3503
<b>Childhood Arthritis</b>	
Prognostic Factors for Radiographic Progression, Radiographic Damage, and Disability in Juvenile Idiopathic Arthritis <i>Silvia Magni-Manzoni, Federica Rossi, Angela Pistorio, Francesca Temporini, Stefania Viola, Giampiero Beluffi, Alberto Martini, and Angelo Ravelli</i> .....	3509
Occurrence of Raynaud's Phenomenon in Children Ages 12–15 Years: Prevalence and Association With Other Common Symptoms <i>Gareth T. Jones, Ariane L. Herrick, Sarah E. Woodham, Eileen M. Baildam, Gary J. Macfarlane, and Alan J. Silman</i> .....	3518
<b>Giant Cell Arteritis</b>	
Incidence and Predictors of Large-Artery Complication (Aortic Aneurysm, Aortic Dissection, and/or Large-Artery Stenosis) in Patients With Giant Cell Arteritis: A Population-Based Study Over 50 Years <i>Dirk M. Nueninghoff, Gene G. Hunder, Teresa J. H. Christianson, Robyn L. McClelland, and Eric L. Matteson</i> .....	3522
Mortality of Large-Artery Complication (Aortic Aneurysm, Aortic Dissection, and/or Large-Artery Stenosis) in Patients With Giant Cell Arteritis: A Population-Based Study Over 50 Years <i>Dirk M. Nueninghoff, Gene G. Hunder, Teresa J. H. Christianson, Robyn L. McClelland, and Eric L. Matteson</i> .....	3532
<b>Drug Treatment</b>	
Successful Treatment of Multicentric Reticulohistiocytosis With Alendronate: Evidence for a Direct Effect of Bisphosphonate on Histiocytes <i>Hitoshi Goto, Masaaki Inaba, Keisuke Kobayashi, Yasuo Imanishi, Yasuro Kumeda, Kentaro Inui, Fumihiko Okada, and Yoshiki Nishizawa</i> .....	3538
Successful Tumor Necrosis Factor $\alpha$ Blockade Treatment in Therapy-Resistant Sarcoidosis <i>Kai U. Ulbricht, Matthias Stoll, Janine Bierwirth, Torsten Witte, and Reinhold E. Schmidt</i> .....	3542
<b>Experimental Arthritis</b>	
Reduction in the Evolution of Murine Type II Collagen-Induced Arthritis by Treatment With Rosiglitazone, a Ligand of the Peroxisome Proliferator-Activated Receptor $\gamma$ <i>Salvatore Cuzzocrea, Emanuela Mazzon, Laura Dugo, Nimesh S. A. Patel, Ivana Serraino, Rosanna Di Paola, Tiziana Genovese, Domenico Britti, Massimo De Maio, Achille P. Caputi, and Christoph Thiemermann</i> .....	3544
Splenectomy Attenuates Streptococcal Cell Wall-Induced Arthritis and Alters Leukocyte Activation <i>Donald Kimpel, Tim Dayton, John Fuseler, Laura Gray, Krishnaswamy Kannan, Robert E. Wolf, and Matthew Grisham</i> .....	3557
Chemokine Receptor Expression and In Vivo Signaling Pathways in the Joints of Rats With Adjuvant-Induced Arthritis <i>Shiva Shahrara, Mohammad A. Amin, James M. Woods, G. Kenneth Haines, and Alisa E. Koch</i> .....	3568

The Genetic Control of Rheumatoid Factor Production in a Rat Model of Rheumatoid Arthritis <i>Patrik Wernhoff, Peter Olofsson, and Rikard Holmdahl</i> .....	3584
<b>Experimental Autoimmunity</b>	
Antiidiotypic Antibodies Neutralize Autoantibodies That Inhibit Cholinergic Neurotransmission <i>Dana Cavill, Sally A. Waterman, and Tom P. Gordon</i> .....	3597
Development of Autoimmune Exocrinopathy Resembling Sjögren's Syndrome in Adoptively Transferred Mice With Autoreactive CD4+ T Cells <i>Rieko Arakaki, Naozumi Ishimaru, Ichiro Saito, Masaru Kobayashi, Natsuo Yasui, Takayuki Sumida, and Yoshio Hayashi</i> .....	3603
<b>Letters</b>	
Fibrillin 1 as an Autoantigen in the Spondylarthropathies? Comment on the Conference Summary by McGonagle et al <i>Peter A. Simkin</i> .....	3610
Reply <i>Dennis McGonagle, Helena Marzo-Ortega, Paul Emery, and Michael Benjamin</i> .....	3610
Eligibility of Rheumatoid Arthritis Patients Seen in Clinical Practice for Rheumatoid Arthritis Clinical Trials: Comment on the Article by Sokka and Pincus <i>Yusuf Yazici and Doruk Erkan</i> .....	3611
Swollen Joint Count as a Predictor of Response to Anti-Tumor Necrosis Factor $\alpha$ Therapy in Rheumatoid Arthritis: Comment on the Article by Sokka and Pincus <i>C. Estrach, S. Mpofo, R. N. Thompson, E. Williams, V. E. Abernethy, and R. J. Moots</i> .....	3611
Reply <i>Theodore Pincus and Tuulikki Sokka</i> .....	3613
Genetic Variation in CCR5 Does Not Predict Clinical Outcome in Inflammatory Arthritis <i>Sally John, Simon Smith, Jonathan F. Morrison, Deborah Symmons, Jane Worthington, Alan Silman, and Anne Barton</i> .....	3615
<b>Second-Year Fellow Abstracts and Late-Breaking Abstracts, American College of Rheumatology 2003 Annual Scientific Meeting</b> .....	3617
<b>Reviewers</b> .....	3668
<b>Contents, Volume 48, 2003</b> .....	3674
<b>Indexes</b> .....	3708
<b>ACR Announcements</b> .....	12A

**Cover image:** The figure on the cover (from Hui et al, page 3412) illustrates Safranin O staining for proteoglycans in the joint of a mouse treated with an adenovirus vector encoding tumor necrosis factor  $\alpha$ . By comparing patterns of cartilage damage and matrix metalloproteinase expression in joints from mice that overexpress tumor necrosis factor  $\alpha$  and oncostatin M alone or in combination, the effects of these cytokines on the pathogenesis of arthritis can be assessed.