Editorials

Is the Stroke Belt Worn From Childhood? Current Knowledge and Future Directions
Aiman El-Saeed, MD, PhD; Lewis H. Kuller, MD, DrPH ........................................ 2403

When Race/Ethnicity Matters More Than Size
Alexander V. Khaw, MD ................................................................. 2405

Migraine With Aura and Ischemic Stroke: Which Additional Factors Matter?
Tobias Kurth, MD, ScD ................................................................. 2407

Predicting Stroke Risk in Patients With Atrial Fibrillation
Daniel G. Hackam, MD, PhD, FRCPC ............................................... 2409

Hemicraniectomy: A Second Chance on Life for Patients With Space-Occupying MCA Infarction
Stephan A. Mayer, MD, FCCM ........................................................ 2410

Potential Impact of Sulfonylureas in the Outcome of Type 2 Diabetic Patients With Ischemic Stroke
Adrià Arboix, MD, PhD ................................................................. 2413

Original Contributions

Is the ‘Stroke Belt’ Worn From Childhood? Risk of First Stroke and State of Residence in Childhood and Adulthood
M. Maria Glymour, ScD; Mauricio Avendaño, PhD; Lisa F. Berkman, PhD ........................................ 2415

Visceral Adipose Tissue, a Potential Risk Factor for Carotid Atherosclerosis: Results of the Multicultural Community Health Assessment Trial (M-CHAT)
Scott A. Lear, PhD; Karin H. Humphries, DSc; Simi Kohli, BSc; Jiri J. Frohlich, MD; C. Laird Birmingham, MD; G.B. John Mancini, MD ................................. 2422

Racial/Ethnic Differences in Longitudinal Risk of Intracranial Hemorrhage in Brain Arteriovenous Malformation Patients
Helen Kim, PhD; Stephen Sidney, MD, MPH; Charles E. McCulloch, PhD; K.Y. Trudy Poon, MS; Vineeta Singh, MD; S. Claiborne Johnston, MD, PhD; Nerissa U. Ko, MD; Achal S. Achrol, BS; Michael T. Lawton, MD; Randall T. Higashida, MD; William L. Young, MD; for the UCSF BAVM Study Project .................................................. 2430

Probable Migraine With Visual Aura and Risk of Ischemic Stroke: The Stroke Prevention in Young Women Study
Leah R. MacClellan, PhD; Wayne Giles, MD; John Cole, MD; Marcella Wozniak, MD; Barney Stern, MD; Braxton D. Mitchell, PhD; Steven J. Kittner, MD ......................................... 2438

Stroke Symptoms in Individuals Reporting No Prior Stroke or Transient Ischemic Attack Are Associated With a Decrease in Indices of Mental and Physical Functioning
George Howard, DrPH; Monika M. Safford, MD; James F. Meschia, MD; Claudia S. Moy, PhD; Virginia J. Howard, MSPH; Leavonne Pulley, PhD; Camilo R. Gomez, MD; Martha Crowther, PhD .................................................. 2446

Transcranial Doppler Hemodynamic Parameters and Risk of Stroke: The Rotterdam Study
Michiel J. Bos, MD, MSc; Peter J. Koudstaal, MD, PhD; Albert Hofman, MD, PhD; Jacqueline C.M. Wittenman, PhD; Monique M.B. Bretelet, MD .................................................. 2453
Can Patients at Elevated Risk of Stroke Treated With Anticoagulants Be Further Risk Stratified?
Lawrence Baruch, MD; Brian F. Gage, MD; Jay Horrow, MD; Steen Juul-Møller, MD; Arthur Labovitz, MD; Maria Persson, MS; Miguel Zabalgoitia, MD

Therapeutic Benefit of Low-Dose Clopidogrel in Patients Undergoing Carotid Surgery Is Linked to Variability in the Platelet Adenosine Diphosphate Response and Patients’ Weight
David A. Payne, FRCS(Ed); Chris I. Jones, MSc; Paul D. Hayes, MD; A. Ross Naylor, MD; Alison H. Goodall, PhD

Mobile Aortic Plaques Are a Cause of Multiple Brain Infarcts Seen on Diffusion-Weighted Imaging
Yuji Ueno, MD; Kazumi Kimura, MD; Yasuyuki Iguchi, MD; Kensaku Shibazaki, MD; Takeshi Inoue, MD; Nobutaka Hattori, MD; Takao Urabe, MD

The Role of Immunity and Inflammation in the Progression of Atherosclerosis in Patients With HIV Infection
Maria Persson, MS; Miguel Zabalgoitia, MD

Can the Ischemic Penumbra Be Identified on Noncontrast CT of Acute Stroke?
Keith W. Muir, MD, FRCP; Jonathan Baird-Gunning, BSc; Leighton Walker, FRCR; Tracey Baird, MRCP; Michael McCormick, MRCP; Shelagh B. Coutts, MD, FRCP

Elevated Serum S100B Levels Indicate a Higher Risk of Hemorrhagic Transformation After Thrombolytic Therapy in Acute Stroke
Christian Foerch, MD; Michael T. Wunderlich, MT, MD; Florian Dvorak, MD; Marek Humpich, MD; Timo Kahlers, MD; Michael Goertler, MD; Jose Alvarez-Sabín, MD; Claus W. Wallesch, MD; Carlos A. Molina, MD; Helmut Steinmetz, MD; Matthias Sitzer, MD; Joan Montaner, MD

Extent of Acute Hydrocephalus After Aneurysmal Subarachnoid Hemorrhage as a Risk Factor for Delayed Cerebral Infarction
Annemiek Bakker, MD; Sanne M. Dorhout Mees, MD; Ale Algra, MD; Gabriël J.E. Rinkel, MD

Computation of Hemodynamics in the Circle of Willis
Anneleen Bakker, MD; Sanne M. Dorhout Mees, MD; Ale Algra, MD; Gabriël J.E. Rinkel, MD

Sequential-Design, Multicenter, Randomized, Controlled Trial of Early Decompressive Craniectomy in Malignant Middle Cerebral Artery Infarction (DECIIMAL Trial)
Katayoun Vahedi, MD; Eric Vicaut, MD, PhD; Joaquim Mateo, MD; Annie Kurtz, MS; Mikael Orabi, MD; Jean-Pierre Guichard, MD; Carole Boutron, BS; Gregory Couvreur, MD; François Rouanet, MD; Emmanuel Touzé, MD; Benoît Guillou, MD; Alexandre Carpentier, MD; Alain Yelnik, MD; Bernard George, MD; Didier Payen, MD, PhD; Marie-Germaine Bousser, MD

Decompressive Surgery for the Treatment of Malignant Infarction of the Middle Cerebral Artery (DESTINY): A Randomized, Controlled Trial
Eric Jättler, MD; Stefan Schwab, MD, PhD; Peter Schmiedek, MD, PhD; Andreas Unterberg, MD, PhD; Michael Hennerici, MD, PhD; Johannes Woitzik, MD; Steffen Witte, PhD; Ekkehart Jenetzky, MD; Werner Hacke, MD, PhD; for the DESTINY Study Group

Sulfonylureas Improve Outcome in Patients With Type 2 Diabetes and Acute Ischemic Stroke
Hagen Kunte, MD; Heinrich P. Mattle, MD; Michael Eliasziw, PhD; Gregory J. del Zoppo, MD; J. Marc Simard, MD, PhD; Florian Masuhr, MD; Markus Weiβ, MD; Ulrich Dinnagl, MD

Outcome of Stroke With Mild or Rapidly Improving Symptoms
Krassen Nedeltchev, MD; Benjamin Schwegr, BSc; Tobias Haeferli, MD; Caspar Brekenfeld, MD; Jan Gralla, MD; Urs Fischer, MD; Marcel Arnold, MD; Luca Remonda, MD; Gerhard Schrotz, MD

Does the Prevention of Complications Explain the Survival Benefit of Organized Inpatient (Stroke Unit) Care? Further Analysis of a Systematic Review
Lindsay Govan, BSc, Hons; Peter Langhorne, PhD; Christopher J. Weir, PhD; for the Stroke Unit Trialsists Collaboration

Sex Differences in Stroke Recovery and Stroke-Specific Quality of Life: Results From a Statewide Stroke Registry
Julia Warner Gargano, MS; Mathew J. Reeves, PhD; for the Paul Coverdell National Acute Stroke Registry Michigan Prototype Investigators
Habitual Physical Activity and Vascular Aging in a Young to Middle-Age Population at Low Cardiovascular Risk
Michaela Kozakova, MD, PhD; Carlo Palombo, MD; Leila Mhamdi, MSc; Thomas Konrad, MD; Peter Nilsson, MD; Peter Bisgaard Staehr, MD, PhD; Marco Paterni, Eng; Beverley Balkau, PhD; on behalf of the RISC Investigators ........................................ 2549

Occupational Therapists’ Identification, Assessment, and Treatment of Unilateral Spatial Neglect During Stroke Rehabilitation in Canada
Anita Menon-Nair, MSc; Nicol Korner-Bitensky, PhD; Tatiana Ogiourtsova, BSc ....................................................... 2556

Matrix Metalloproteinase-9 Inhibition Attenuates Vascular Endothelial Growth Factor-Induced Intracerebral Hemorrhage
Chanhung Z. Lee, MD, PhD; Zheng Xue, MD; Yiqian Zhi, MD; Guo-Yuan Yang, MD, PhD; William L. Young, MD .................................................. 2563

Novel Thyroxine Derivatives, Thyronamine and 3-iodothyronamine, Induce Transient Hypothermia and Marked Neuroprotection Against Stroke Injury
Kristian P. Doyle, BSc; Katherine L. Suchland, BS; Thomas M.P. Ciesielski, BS; Nikola S. Lessov, MD, PhD; David K. Grandy, PhD; Thomas S. Scanlan, PhD; Mary P. Stenzel-Poore, PhD .................................................. 2569

Fate of Disseminated Dead Neurons in the Cortical Ischemic Penumbra: Ultrastructure Indicating a Novel Scavenger Mechanism of Microglia and Astrocytes
Umeo Ito, MD, PhD, FAHA; Jun Nagasao, DVM; Emiko Kawakami, BS; Kiymitsu Oyanagi, MD, PhD .................................................. 2577

Brain Repair by Hematopoietic Growth Factors in a Rat Model of Stroke
Li-Ru Zhao, MD, PhD; Seema Singhal, MD; Wei-Ming Duan, MD, PhD; Jayesh Mehta, MD; John A. Kessler, MD .................................................. 2584

Research Letters

South Asian Patients With Ischemic Stroke: Intracranial Large Arteries Are the Predominant Site of Disease
Deidre A. De Silva, MRCP; Fung-Peng Woon, MSc; Moi-Pin Lee, RBT; Christopher P.L.H. Chen, FRCP; Hui-Meng Chang, MBBS, FAMS; Meng-Cheong Wong, MBBS, FRCP .................................................. 2592

Prevalence of Subcortical Vascular Lesions and Association With Executive Function in Mild Cognitive Impairment Subtypes
Stéphanie Bombois, MD; Stéphanie Debette, MD; Xavier Delbeuck, PhD; Amélie Bruandet, MD; Samuel Lepoittevin, PsyP; Christine Delmaire, MD, PhD; Didier Leys, MD, PhD; Florence Pasquier, MD, PhD .................................................. 2595

Increased Severity of Hemorrhage in Transgenic Mice Expressing Cerebral Protease Nexin-2/Amyloid β-Protein Precursor
Feng Xu, MD; Mary Lou Previti, BS; William E. Van Nostrand, PhD .................................................. 2598

Case Report

Cerebral Gas Embolism Caused by Pleural Fibrinolytic Treatment
Manuel Menéndez-González, MD; Pedro Oliva-Nacarino, MD; Almudena Álvarez-Cofín, MD .................................................. 2602

Comments, Opinions, and Reviews

Antiplatelets Versus Anticoagulation in Cervical Artery Dissection
Stefan T. Engelter, MD; Tobias Brandt, MD; Stéphanie Debette, MD; Valeria Caso, MD; Christoph Lichy, MD; Alessandro Pezzini, MD; Sherine Abboud, MD; Anna Bersano, MD; Ralf Dittrich, MD; Caspar Grond-Ginsbach, PhD; Ingrid Hausser, PhD; Manja Kloss, MD; Armin J. Grau, MD; Turgut Tatlisumak, MD, PhD; Didier Leys, MD, PhD; Philippe A. Lyrer, MD; for the Cervical Artery Dissection in Ischemic Stroke Patients (CADISP) Study Group .................................................. 2605

Intravenous Alteplase for Stroke: Beyond the Guidelines and in Particular Clinical Situations
Jacques De Keyser, MD, PhD; Zazana Gdovinová, MD, PhD; Maarten Uyttenboogaart, MD; Patrick C. Vroomen, MD, PhD; Gert Jan Luijckx, MD, PhD .................................................. 2612
Progression of Leukoaraiosis and Cognition
Reinhold Schmidt, MD; Katja Petrovic, PhD; Stefan Roepele, PhD; Christian Enzinger, MD; Franz Fazekas, MD

Arguments Against Left Atrial Appendage Occlusion for Stroke Prevention
Claudia Stöllberger, MD; Josef Finsterer, MD; Birke Schneider, MD

Transesophageal Echocardiography: Not for Everyone?
Edward A. Gill, Jr, MD; W.T. Longstreth, Jr, MD; Kyra J. Becker, MD; David L. Tirschwell, MD

Response to Letter by Gill et al
Sebastiaan F.T.M. de Brujin, MD, PhD; Willem R.P. Agema, MD, PhD; Gert Jan Lammers, MD, PhD; Ernst E. van der Wall, MD, PhD; Ron Wolterbeek; Eduard R. Holman, MD, PhD; Edward L.E.M. Bollen, MD, PhD; Jeroen J. Bax, MD, PhD

US Multicenter Experience With the Wingspan Stent System for the Treatment of Intracranial Atheromatous Disease: Periprocedural Results
Rishi Gupta, MD; Osama Zaidat, MD; Arshad Majid, MD

Response to Letter by Gupta et al
David Fiorella, MD, PhD; Elad I. Levy, MD; Aquilla Turk, MD; Henry H. Woo, MD; Felipe C. Albuquerque, MD; Richard Libman, MD; Thomas Kwiatkowski, MD; Rishi Gupta, MD; Osama Zaidat, MD; Arshad Majid, MD

Response to Letter by Tourmousoglou et al
Artyom Sedrakyan, MD, PhD

Should Spectrophotometry Be Used to Identify Xanthochromia in the Cerebrospinal Fluid of Alert Patients Suspected of Having Subarachnoid Hemorrhage?
Robert Beetham, PhD, FRCPath; Samden Lhatoo, MD

Response to Letter by Beetham and Lhatoo
Jeffrey J. Perry, MD, MSc; CCFP-EM; Marco L.A. Sivilotti, MD, MSc, FRCPC

Asymptomatic Hemorrhage After Thrombolysis May Not Be Benign: Prognosis by Hemorrhage Type of the Canadian Alteplase for Stroke Effectiveness Study Registry
Richard Libman, MD; Thomas Kwiatkowski, MD

Significance of Experimental Infarct Size as an Indicator of Therapeutic Efficacy in Humans
Nikolaos Sakellaridis, MD; Demetrios Panagopoulos, MD

Alteplase for Patients With Ictus: the Dilemma Persists
Emilio J. Alegre, PharmD; Esmeralda Rios, PharmD

Why a Sex Difference in Age-Adjusted Relationship Between Height and Stroke Mortality?
Thomas Walsh, MRCPI; Teresa Donnelly, MRCPI; Declan Lyons, MD

Response to Letter by Walsh et al
Atsushi Hozawa, MD; Tomonori Okamura, MD; Hirotsugu Ueshima, MD

Weekend Versus Weekday Admission and Stroke Outcome in Sweden From 1968 to 2005
Imre Janszky, MD, PhD; Staffan Ahnve, MD, PhD; Rickard Ljung, MD, MPH, PhD

Response to Letter by Janszky et al
Gustavo Saposnik, MD, MSc

Corrections

On the cover: The illustration is taken from an article in this issue, “Computation of Hemodynamics in the Circle of Willis” by Alnæs et al (Stroke. 2007;38:2500–2505.)