**EDITORIALS**

**Homocysteine and Cardiovascular Risk: Considering the Evidence in the Context of Study Design, Folate Fortification, and Statistical Power.** P.M. Ueland and R. Clarke

**Insulin Immunoassays: Fast Approaching 50 Years of Existence and Still Calling for Standardization.** R. Sapin

**REVIEW**

**Comparison of the Diagnostic Accuracy of Brain Natriuretic Peptide (BNP) and the N-Terminal Part of the Propeptide of BNP Immunoassays in Chronic and Acute Heart Failure: A Systematic Review.** A. Clerico, M. Fontana, L. Zyw, C. Passino, and M. Emdin

**ARTICLES**

**MOLECULAR DIAGNOSTICS AND GENETICS**


**SPP1 Promoter Polymorphisms: Identification of the First Modifier Gene for Pseudoxanthoma Elasticum.** D. Hendig, M. Arndt, C. Szliska, K. Klesieek, and C. Göttting

**Generation of Human Monoclonal Allergen-Specific IgE and IgG Antibodies from Synthetic Antibody Libraries.** I. Braren, S. Blank, H. Seismann, S. Deckers, M. Ollert, T. Grunwald, and E. Spillner

**Homocysteine, 5,10-Methylenetetrahydrofolate Reductase 677C>T Polymorphism, Nutrient Intake, and Incident Cardiovascular Disease in 24,968 Initially Healthy Women.** R.Y.L. Zee, S. Mora, S. Cheng, H.A. Erlich, K. Lindpaintner, N. Rifai, J.E. Buring, and P.M. Ridker

**PROTEOMICS AND PROTEIN MARKERS**

**Reproducibility in Protein Profiling by MALDI-TOF Mass Spectrometry.** J. Albrethsen

**Diagnostic Accuracy of ELISA and xMAP Technology for Analysis of Amyloid β42 and Tau Proteins.** T.S.M. Reijn, M.O. Rikkert, W.J.A. van Geel, D. de Jong, and M.M. Verbeek


**Multiple Biomarker Use for Detection of Adverse Events in Patients Presenting with Symptoms Suggestive of Acute Coronary Syndrome.** F.S. Apple, L.A. Pearce, A. Chung, R. Ler, and M.M. Murakami
Lipoproteins and Cardiovascular Risk Factors

Prognostic Value of Cardiac Troponin T Is Independent of Inflammation, Residual Renal Function, and Cardiac Hypertrophy and Dysfunction in Peritoneal Dialysis Patients.

Hematology

Chronic Granulomatous Disease (CGD) and Complete Myeloperoxidase Deficiency Both Yield Strongly Reduced Dihydrorhodamine 123 Test Signals but Can Be Easily Discerned in Routine Testing for CGD.

Endocrinology and Metabolism

Variability in the Relationship between Mean Plasma Glucose and HbA1c: Implications for the Assessment of Glycemic Control.
E.S. Kilpatrick, A.S. Rigby, and S.L. Atkin

M. Rauh, M. Gröschl, and W. Rascher

A Direct Free Thyroxine (T4) Immunoassay with the Characteristics of a Total T4 Immunoassay.
K.S. Fritz, R.B. Wilcox, and J.C. Nelson

Diagnostic Accuracy of Blood Lactate-to-Pyruvate Molar Ratio in the Differential Diagnosis of Congenital Lactic Acidosis.

Automation and Analytical Techniques

Comparison of 11 Human Insulin Assays: Implications for Clinical Investigation and Research.
S.E. Manley, I.M. Stratton, P.M. Clark, and S.D. Luzio

A. Misra, J.-Y. Hong, and S. Kim

General Clinical Chemistry

Gamma Glutamyltransferase and Long-Term Survival: Is It Just the Liver?
L. Kazemi-Shirazi, G. Endler, S. Winkler, T. Schickbauer, O. Wagner, and C. Marsik

Quantification of Proteolytically Active Pregnancy-Associated Plasma Protein-A with an Assay Based on Quenched Fluorescence.
C. Gyrup, M. Christiansen, and C. Oxvig

Clinical Immunology

Cytokine Profiling in Human Colostrum and Milk by Protein Array.

Nutrition

Detection of Vitamin B12 Deficiency in Older People by Measuring Vitamin B12 or the Active Fraction of Vitamin B12, Holotranscobalamin.

Other Areas of Clinical Chemistry

Genetic and Environmental Influences on Plasma Homocysteine: Results from a Danish Twin Study.
L. Bathum, I. Petersen, L. Christiansen, A. Konieczna, T.I.A. Sørensen, and K.O. Kyvik
Contents
Volume 53, Number 5

TECHNICAL BRIEFS


Quantifying Spurious Free T₄ Results Attributable to Thyroxine-Binding Proteins in Serum Dialysates and Ultrafiltrates. K.S. Fritz, R.B. Wilcox, and J.C. Nelson 985

LETTERS TO THE EDITOR

Detection of Unexpected Isoforms of Human Chorionic Gonadotropin by Qualitative Tests. C.S. Sigel and D.G. Grenache 989

Novel Hemoglobin (Hb Grey Lynn) Substitution (α91Leu→Phe) Affects Heme Interactions and α₁β₂ Contacts. S.O. Brennan, T. Chan, and C. Sheen 990

A Multiplex Quantitative Fluorescent PCR Test for Prenatal Diagnosis of Hb Barts Hydrops Fetalis. D. Li 991

Reply. M. Choolani, S.H. Sze Yee, and S. Chong 992


Blood Lead Misclassification Due to Defective LeadCare® Blood Lead Testing Equipment. R.M. Bossarte, M.J. Brown, and R.L. Jones 994


CORRECTION

Identification of a New Metabolite of Astilbin, 3‘-O-Methylastilbin, and Its Immunosuppressive Activity against Contact Dermatitis. J. Guo, F. Qian, J. Li, Q. Xu, and T. Chen 997

BOOK, SOFTWARE, AND WEB SITE REVIEWS


ACCENT®—CONTINUING EDUCATION CREDIT FOR READERS OF CLINICAL CHEMISTRY

For more information go to www.aacc.org/ccj/variant/