A-534  Room H, 10/16/2000 9:00 AM - 11:00 AM (PS)  Physiologic Perturbations Affect the Time-Dependent Volume of Distribution  T.C. Krejcie, MD; M.J. Arramb, PhD; Dept. of Anesthesiology, Northwestern Univ., Chicago, IL, United States. The anti-pyrene time-dependent distribution volume, V(t), (t~2 min), determined using a recirculatory kinetic model decreased 67% during 3.5% isoflurane and increased 37% during an isoproterenol infusion.

A-535  Room H, 10/16/2000 9:00 AM - 11:00 AM (PS)  Reduced Costs Using Sevoflurane Versus Propofol in the Maintenance of Anesthesia in the Elderly  S.P. Luntz, MD; E. Janning, J. Motsch, MD; E. Martin, MD; B.W. Bottiger, MD, Univ.-Dep't of Anesthesi, Heidelberg, Germany. Using sevoflurane for maintenance after induction with propofol is less expensive than using either propofol or sevoflurane for both periods of anesthesia.

A-536  Room H, 10/16/2000 9:00 AM - 11:00 AM (PS)  Target-Concentration Infusion (TCI) of Propofol and Sufentanil for Long Lasting Anesthesia  Nathalie Nathan, MD PhD; Michel Ingles, MD; Isabelle Odin, MD; Jean Marie Gauthier, PharmD; Pierre Feiss, MD, Anesthesi, CHU Dupuytren, Limoges, France. Target C of propofol and sufentanil to obtain a deep anesthesia and the faster recovery in 95% of patients were evaluated during anesthesia>3H.

A-537  Room H, 10/16/2000 9:00 AM - 11:00 AM (PS)  Cytochrome P4502B6 is the Principal Isoform Involved in the Metabolism of Propofol In Vitro  Yuuka Oda, M.D.; Naoya Hamaoka, M.D.; Ichiro Has, M.D.; Tatsuo Nakamoto, M.D.; Akira Asada, M.D., Department of Anesthesiology and Intensive Care Medicine, Osaka City University Medical School, Osaka, Japan. Propofol is metabolized predominantly by cytochrome P450 2B6 in human liver microsomes.

A-538  Room H, 10/16/2000 9:00 AM - 11:00 AM (PS)  An Alternative Approach Is Necessary to Model the Concentration-Effect Relationship of Mivacurium  Sonke Schiere, MD; Johannes H. Proost, PharmD PhD; J. Mark K.H. Wierda, MD PhD, Dpt. of Anesthesiology, University Hospital, Groningen, Netherlands. An interposed, interstitial compartment between central and effect compartment is necessary to model the PK/PD relationship of mivacurium.

A-539  Room H, 10/16/2000 9:00 AM - 11:00 AM (PS)  Propofol Enhances Primary Afferent Depolarization in Human Spinal Cord  Miyako Shimizu, M.D.; Tosiyuki Tobita, M.D.; Koki Shinohji, M.D., Anesthesiology, Niigata University School of Medicine, Niigata, Japan. Propofol increased the amplitude of P2 wave of the segmental spinal cord evoked potential, suggesting the drug augments primary afferent depolarization in the human spinal cord.

A-540  Room H, 10/16/2000 9:00 AM - 11:00 AM (PS)  In Vitro Contracture Testing and Mutation Screening in Patients with Stress-Induced Rhabdomyolysis  Markus Steinfa, M.D.; Frank Wappner, M.D.; Surjit Singh, Ph.D.; Marko Fiege, M.D.; Jens Scholz, M.D., Anesthesiology, University Hospital Eppendorf, Hamburg, Germany. A novel point mutation in the RYR1 gene was detected in a population of patients with stress-induced rhabdomyolysis and MHS phenotype.

A-541  Room H, 10/16/2000 9:00 AM - 11:00 AM (PS)  Modulation of 4-Chloro-m-Cresol-Induced Contractures in Skeletal Muscle Specimen from Malignant Hyperthermia Susceptible Pigs by Dantrolene  Frank Wappner, MD; Marko Fiege, MD; Ralf Weissborn, MD; Jens Scholz, MD; Jochen Schulte am Esch, MD, Anesthesiology, University-Hospital Eppendorf, Hamburg, Germany. Dantrolene Modulates 4-CmC-Induced Contractures in Porcine Skeletal Muscles.

A-542  Room H, 10/16/2000 9:00 AM - 11:00 AM (PS)  Comparison of the Effects of Ryndine on Skeletal Muscle Preparations from Malignant Hyperthermia Susceptible Humans and Pigs  Frank Wappner, MD; Marko Fiege, MD; Ralf Weissborn, MD; Markus Steinfa, MD; Jens Scholz, MD, Anesthesiology, University-Hospital Eppendorf, Hamburg, Germany. Mutations in the RYR1 Gene makes the Ryndine Receptor more sensitive to Specific Ligands.

A-543  Room H, 10/16/2000 9:00 AM - 11:00 AM (PS)  The α-Helical Membrane Spanning Domains of Cytochrome P450 and Cytochrome b5, Bind Via Nonspecific Hydrophobic Interactions  Lucy A. Waskell, M.D.,Ph.D.; Scott B. Mulrooney, Ph.D.; David R. Meinhardi, Student, Anesthesiology, University of Michigan, Ann Arbor, MI, United States.

A-544  Room H, 10/16/2000 9:00 AM - 11:00 AM (PS)  4-Chloro-m-Cresol In Vitro Contracture Test in Patients Suscipient for Malignant Hyperthermia and Control Individuals  Frank Wappner, MD; Frank Wappner, MD; Jens Scholz, MD; Marko Fiege, MD; Jochen Schulte am Esch, MD, Department of Anesthesiology, University Hospital Eppendorf, Hamburg, Germany. 75 μmol/l 4-CmC enables a clear discrimination of MHS from MHN and control muscle specimens.

A-545  Room H, 10/16/2000 9:00 AM - 11:00 AM (PS)  In Vitro Effects of Theophylline in Skeletal Muscle Specimens from MH Susceptible and Normal Patients  Frank Wappner, MD; Jens Scholz, MD; Marko Fiege, MD; Jochen Schulte am Esch, MD, Anesthesiology, University Hospital Eppendorf, Hamburg, Germany.

A-546  Room H, 10/16/2000 9:00 AM - 11:00 AM (PS)  Tissue Solubility of Volatile Anesthetics in Swine Jian-Xin Zbou, M.D.; Jin Liu, M.D., Department of Anesthesiology and Critical Care Medicine, The First Affiliated Hospital, West China University of Medical Sciences, Cheng-Du, Si-Chuan, China. Tissue solubility of volatile anesthetics in swine were measured. Fat content would be the most important factor determining the tissue solubility.

A-547  Room H, 10/16/2000 9:00 AM - 11:00 AM (PS)  Dynamic Change in Blood Solubility of Desflurane, Isoflurane, and Halothane during Open Heart Surgery  Jian-Xin Zbou, M.D.; Jin Liu, M.D., Department of Anesthesiology and Critical Care Medicine, The First Affiliated Hospital, West China University of Medical Sciences, Cheng-Du, Si-Chuan, China. Dynamic changes in blood solubility of volatile anesthetics were found during peri-CPB period.