

## DRUG DISPOSITION

- 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. Avram, PhD, Dept. of Anesthesiology, Northwestern Univ., Chicago, IL, United States. The antipyrine time-dependent distribution volume,  $V_d(t, t=2 \text{ min})$ , 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. Janitz; J. Motsch, MD; E. Martin, MD; B.W. Bottiger, MD, Univ.-Dept. of Anesthesia, 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 Gaulier, PharmD; Pierre Feiss, MD, Anesthesia, CHU Dupuytren, Limoges, France. Target  $C^o$  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** Yutaka Oda, M.D.; Naoya Hamaoka, M.D.; Ichiro Hase, 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** Sjouke 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.; Toshiyuki Tobita, M.D.; Koki Shimoji, 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 Steinfaß, M.D.; Frank Wappler, 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 Wappler, 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 Ryanodine on Skeletal Muscle Preparations from Malignant Hyperthermia Susceptible Humans and Pigs** Frank Wappler, MD; Marko Fiege, MD; Ralf Weissborn, MD; Markus Steinfaß, MD; Jens Scholz, MD, Anesthesiology, University-Hospital Eppendorf, Hamburg, Germany. Mutations in the RYR1 Gene makes the Ryanodine Receptor more sensitive to Specific Ligands.
- A-543** Room H, 10/16/2000 9:00 AM - 11:00 AM (PS)  
**The  $\alpha$ -Helical Membrane Spanning Domains of Cytochrome P450 and Cytochrome  $b_5$  Bind Via Nonspecific Hydrophobic Interactions** Lucy A. Waskell, M.D., Ph.D.; Scott B. Mulrooney, Ph.D.; David R. Meinhardt, 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 Susceptible for Malignant Hyperthermia and Control Individuals** Ralf Weissborn, MD; Frank Wappler, MD; Jens Scholz, MD; Marko Fiege, MD; Jochen Schulte am Esch, MD, Department of Anesthesiology, University Hospital Eppendorf, Hamburg, Germany. 75  $\mu\text{mol/l}$  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** Ralf Weissborn, MD; Frank Wappler, MD; Jens Scholz, MD; Marko Fiege, MD; Jochen Schulte am Esch, MD, Anesthesiology, University Hospital Eppendorf, Hamburg, 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 Zhou, 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 Zhou, 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.