

## 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 SteinfaB, 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 SteinfaB, 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.