A-330 Room C, 10/16/2000 2:00 PM - 4:00 PM (PS)
Origin of the Impedance Cardiogram in Dogs Determined By Sonomicrometry *John K. Hayes, Ph.D.; Jeffrey L. Peters, Ph.D., M.D.; Lee E. Baker, M.D.; Roman Plancinta, Anesthesiology, University of Utah, Salt Lake City, UT,.* Major source of the esophageal impedance signal and the determination of CO and SV was from aortic expansion and aortic blood flow.

A-331 Room C, 10/16/2000 2:00 PM - 4:00 PM (PS)
Mixed Venous CO2 Does Not Need to Remain Constant during CO2 Rebreathing Cardiac Output Measurements *Kai Kuck, Ph.D.; Dinesh G. Haryadi, Ph.D.; Lara M. Brewer; Joseph A. Orr, Ph.D., Anesthesiology, University of Utah Hospital, Salt Lake City, UT, United States.* A new CO2 rebreathing method to estimate cardiac output does not require constant venous CO2 and improves estimation bias and precision.

A-332 Room C, 10/16/2000 2:00 PM - 4:00 PM (PS)
Comparison of Quantitative Intraoperative Assessment of Regional Systolic Ventricular Function: Pulsed Tissue Doppler Imaging Vs. Percentage of Systolic Wall Thickening *Marian Kukucka, MD; Joachim Erb, MD; Andreas Koster, MD; Hermann Kuppe, MD, PhD, Anesthesiology, Deutsches Herzzentrum Berlin, Berlin, Germany.* PTDI was effective for RSVF assessment post-CABG, implying that PTDI is more sensitive.

A-333 Room C, 10/16/2000 2:00 PM - 4:00 PM (PS)
A New Pulse Contour Cardiac Output Algorithm *Nick W. Linton, MEng; Robert A. Linton, MD FRCA, The Rayne Institute, St Thomas' Hospital, London, United Kingdom.* During cardiac surgery, there are rapid changes in cardiac output and systemic vascular resistance. A new pulse contour cardiac output algorithm has been developed, based upon recent studies of the arterial system.

A-334 Room C, 10/16/2000 2:00 PM - 4:00 PM (PS)
Hemodynamic Monitoring during Cardiac Surgery: Improved Arterial Pressure Waveform Analysis - The PulseCO System *Andreas Mappes, MD; Marcus Gruendel, MD; Jens Lindert, MD; Hermann Kuppe, MD, PhD, Institute of Anesthesiology, Deutsches Herzzentrum Berlin, Berlin, Germany.* A new technique for continuous beat-to-beat monitoring of CO and guiding of therapeutic intervention is described.

A-335 Room C, 10/16/2000 2:00 PM - 4:00 PM (PS)
The Impact of Ringer's Lactate Solution Versus 0.9% Sodium Chloride in Cardiac Surgery on Blood Lactate *Nathalie Massicotte; Raymond Martineau, MD; Andre Denault, MD,FRCPC; Sylvain Belisle, MD,FRCPC; Raymond Cartier, MD, Anesthesia, Montreal Heart Institute, Montreal, QC, Canada.* RL solution in cardiac surgery resulted in type B hyperlactatemia with no evidence of poor perfusion.

A-336 Room C, 10/16/2000 2:00 PM - 4:00 PM (PS)
Pilot Study Examining the Role of the Esophageal Doppler Monitoring in Patients Undergoing Colon Resection *Jeffrey P. Meyer, M.D.; Kapil K. Anand, M.D.; Todd W. Hancock, M.D.; Glen Hooker, M.D.; Michael A.E. Ramsay, M.D., Anesthesiology and Pain Management, Baylor Medical Center, Dallas, TX,.* Cardiac output guided intra-operative fluid management may decrease hospital stay following colectomy.

A-337 Room C, 10/16/2000 2:00 PM - 4:00 PM (PS)
Computer Enhanced Cardiac Surgery: Dyskinesia during Single Lung Ventilation Quantified by Tissue Doppler *Stephan Mierdl, MD; Sigrid Kessler, MD; Wilhelm Rosskopf, MD; Christian Byhahn, MD; Klaus Westphal, MD, PhD, Dept. of Anesthesiology, J.W. Goethe-University, Frankfurt, Germany.* Dyskinesia during TECAB and single-lung ventilation can accurately be quantified by pulsed tissue doppler.

A-338 Room C, 10/16/2000 2:00 PM - 4:00 PM (PS)
Atrial Septal Aneurysms in Elderly Cardio-Vascular Surgical Patients *S.S. Moorthy, MD; T.G. Sharp, MD; P.H. Houck, MD; S.B. Kinsella, MD; B. Laurent, DO, Dept. of Anesthesia, Indiana University and RLR VA Medical Center, Indianapolis, IN, United States.* We studied 140 CV surgery patients by TEE for atrial septal aneurysm and found ten percent having the defect. Three had their ASA surgically corrected.

A-339 Room C, 10/16/2000 2:00 PM - 4:00 PM (PS)
Impact of Right Coronary Stenosis on Assessment of Right Ventricular Function by Transesophageal Echocardiography *Yoshinari Niimi, MD; Yoshiki Ishiguro, MD; Hiroaki Saegusa, MD; Takahisa Goto, MD; Shigeho Morita, MD, Anesthesiology, Teikyo University, Ichihara Hospital, Ichihara, Chiba, Japan.* RCA Stenosis on Assessment of RV Function by TEE:Niimi Y:Teikyo:TEE is useful in pts without stenosis.

A-340 Room C, 10/16/2000 2:00 PM - 4:00 PM (PS)
Transesophageal Echocardiographic Monitoring of Cardioplegia Delivery *Takeshi Nomura, MD; Hideki Kaneko, MD; Takehisa Ozawa, MD; Makoto Asano, MD, Anesthesiology, Oji General Hospital, Tomakomai, Hokkaido, Japan.* Our TEE study suggests aortic regurgitation(AR) may get greater transiently at antegrade CP delivery. During CP administration, AR should be monitored by TEE.

A-341 Room C, 10/16/2000 2:00 PM - 4:00 PM (PS)
Comparison of Cardiac Output Measurements by Thermodilution & Oesophageal Doppler Using Transit Time Ultrasound as Reference in Cardiac Surgery *Rachel A. O Farrell, MB, FCARCSI; Ingrid M. Browne, MB, FFARCSI; Denis C. Moriarty, MB, FFARCSI; Frank Chambers, MB, FFARCSI, Dept. of Anaesthesia, Mater Hospital, Dublin, Ireland.* Thermodilution and oesophageal doppler inaccurately assess cardiac output compared to transit time ultrasound.

A-342 Room C, 10/16/2000 2:00 PM - 4:00 PM (PS)
Accuracy of Ascending Aortic Pressure Derived from the Radial Pulse during Anesthesia *Alfredo L. Pauca, M.D.; Ahmad Qasem, S.M.C.; Neal D. Kon, M.D., Dept. of Anesthesiology, Wake Forest Univ. Sch. of Medicine, Winston-Salem, NC, United States.* The present SphygmoCor system accurately estimates the aortic systolic and pulse pressures from that recorded at the radial artery in anesthetized patients.

A-343 Room C, 10/16/2000 2:00 PM - 4:00 PM (PS)
Clinical Value of Aortic and Radial Pressure Wave Analysis *Alfredo L. Pauca, M.D.; Michael F. O'Rourke, M.D., D.Sc.; Neal D. Kon, M.D., Dept. of Anesthesiology, Wake Forest Univ. School of Medicine, Winston-Salem, NC, United States.* In pre-CPB, cardiac patients, the radial pulse waveform gives a better estimate of aortic and LV systolic pressure than radial artery systolic pressure.