

IN THIS ISSUE

TCT 2010 Will Impact Practices and Patient Care.....1

TCT for Surgeons Highlights.....1

Transcatheter Valve Therapies 2010 Workshop .....1

Message from the Faculty.....2

Trial Results from EuroPCR Showcase Innovative Stents, Valves .....3

CRF's Annual 'Pulse of the City' Gala Will Take Place November 10.....4

Board Review Course with Self-Assessment.....4

## TCT 2010 Will Significantly Impact Interventional Cardiology Practices and Patient Care



Transcatheter Cardiovascular Therapeutics (TCT) 2010, to be held September 21-25 in Washington, DC, will provide major clinical research updates for interventional cardiologists that will directly affect patient care. Leading medical researchers and clinicians from around the world will present the latest advances in techniques and training on the next generation of stents, valve repair and replacement, and the interactions and effectiveness of new medicines.



### Transcatheter Valve Therapies 2010 Workshop

CRF's Transcatheter Valve Therapies (TVT) workshop held in Seattle, WA, from June 6-9, 2010, experienced a 45% increase in attendance over 2009, with nearly 500 participants. Attendees at this year's TVT received an in-depth review of the diagnostic and therapeutic options for treatment of valvular heart disease using updated guidelines and clinical experience.

## TCT for Surgeons Will Highlight Hybrid Surgical and Interventional Techniques

"Emerging Directions for the Cardiothoracic and Vascular Surgeon" to be co-sponsored by the American Association for Thoracic Surgery (AATS)

TCT for Surgeons will showcase the expansion of hybrid surgical and interventional techniques in the field that are improving outcomes for patients undergoing cardiac surgery. Now in its fourth year, the course will run during TCT 2010 from September 21-25, 2010, at the Walter E. Washington Convention Center in Washington, DC.

"This meeting will drive forward the growing collaboration among interventional cardiologists and cardiac surgeons in the treatment of patients with structural and coronary artery disease," said

Mathew Williams, MD, Course Director and Surgical Director, Cardiovascular Transcatheter Therapies, at New York-Presbyterian Hospital/Columbia University Medical Center.

"The surgeon brings tremendous knowledge, a valuable skill set, and a unique perspective to the interventional environment, and the cross-trained surgeon is positioned ideally to make the most informed and unbiased treatment decision for patients with coronary and endovascular disease."

One of the course highlights will be an overview of hybrid coronary therapy, which involves a combination of traditional surgery along with the placement of coronary stents in patients with coronary artery disease. The chosen therapy, whether it is angioplasty, surgery, or a combination of the two, should be determined specifically for an individual patient, Dr. Williams said.

# MESSAGE FROM THE FACULTY

Welcome to the Cardiovascular Research Foundation's Summer Newsletter. The temperature has been rising and so has our anticipation for TCT 2010, which this year returns to Washington, DC, on September 21-25.

TCT 2010 will feature the most ambitious and comprehensive program CRF has ever put together. We have lined up a wide variety of late breaking clinical trials covering the entire range of cardiovascular topics. Landmark studies and clinical trials related to the next generation of interventional cardiology techniques and therapies will be presented in a series of Main Arena presentations and press conferences. These findings, along with hundreds of scientific abstract presentations, will have the potential to dramatically affect patient care. In addition, numerous scientific symposia will offer thorough reviews of all the different facets of interventional cardiology. Attendees will find an expanded emphasis on interactive case review sessions as well as more than 100 live cases performed by world leaders at 18 international sites and televised in high definition.

Attendees also will be treated to something new this year: TCT for the Practitioner—called 'TCT in 3' because it is concentrated into three days for the busy interventional

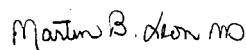
cardiologist—will emphasize patient care topics and practice management skills. In addition, there will be summary sessions aimed at reviewing and synthesizing the emerging science and lessons from the meeting for use in everyday clinical practice.

Another key meeting for CRF, Transcatheter Valve Therapies (TVT) in Seattle, WA, in June, welcomed almost 500 attendees (a 45% increase over last year). Attendees participated in comprehensive discussions concerning the therapeutic options for treating valvular heart disease. The workshop provided a unique opportunity for hands-on learning in a cadaveric lab and updates on the development and clinical investigation of percutaneous heart valves, one of the most exciting new areas in interventional cardiology today.

As always, I wish to thank the CRF staff and faculty for their tireless efforts in making TVT so successful and getting ready for TCT. All of us are looking forward to a year's worth of preparation paying off in

an exciting learning experience for the thousands of TCT attendees as well as our own faculty—one that will ultimately result in improved care for our patients.

Sincerely,



**Martin B. Leon, MD**  
Founder and Chairman  
Emeritus  
Co-Director, Medical Research  
and Education Division  
Cardiovascular Research  
Foundation



**Gregg W. Stone, MD**  
Co-Director, Medical Research  
and Education Division  
Cardiovascular Research  
Foundation

## TCT2010

TRANSCATHETER CARDIOVASCULAR THERAPEUTICS

## Highlights

### Scientific Symposia

Tuesday and Wednesday

### Main Arena

Featured Presentations

Late Breaking Trials

Live Cases

Thursday through Saturday

### Lunchtime Sessions

Thursday through Saturday

### "How to Treat" Live Case Theaters

Coronary Artery Disease

Endovascular Disease

Structural Heart Disease

Thursday through Saturday

### TCT in 3 (TCT for the Practitioner)

Thursday through Saturday

### Dedicated Oral Abstract and Poster Abstract Sessions

Wednesday

### 19th Annual Cardiovascular Nurse and Technologist Symposium

Tuesday and Wednesday

### TCT for Surgeons

Co-sponsored by AATS

Tuesday through Friday

### Board Review Course with Self-Assessment for Interventional Cardiology

Tuesday and Wednesday

### Board Review Course with Self-Assessment for Endovascular Therapy

Thursday and Friday

### Maintenance of Certification (MOC) Course

Saturday

### TCT 2010 Highlights

Dedicated Main Arena Session

Saturday

### Concurrent Sessions

Thursday through Saturday

### FDA Town Hall Meeting

Friday

### Breakfast Meetings

Wednesday through Saturday

### Evening Programs

Tuesday through Friday

### Exhibit Hall

Thursday through Saturday

## THE PULSE of CRF

PULSE of CRF is produced by the Cardiovascular Research Foundation



111 East 59th Street  
New York, NY 10022  
Tel. 646-434-4500  
www.crf.org

President and Chief Executive Officer  
William A. Himmelsbach, MPH, FACHE

### Director of External Relations

Irma J. Damhuis

### Managing Editor

Jason Kahn

### Associate Editors

Caitlin E. Cox

Kim Dalton

L.A. McKeown

Judy Romero

### Copy Editor

Scott Allan Wallick

### Project Manager

Tricia Rawh

### Designer

Leonard Posso

## Trial Results from EuroPCR Showcase Innovative Stents, Valves

*Studies presented at EuroPCR 2010, held May 25-28 in Paris, France, offered a variety of promising stent designs, catheter-based treatments for valvular disease, and ways to manage patients who respond poorly to the antiplatelet drug clopidogrel.*

### NEW DES DESIGNS DURABLE IN 'REAL-WORLD' USE

In one-year results from the randomized RESOLUTE trial, which was carried out in a "real-world" population, the zotarolimus-eluting Resolute stent was just as effective as the everolimus-eluting Xience V stent in preventing heart-related deaths, heart attacks, and repeat artery-clearing procedures. The Resolute stent is identical to the Endeavor stent except for a different polymer coating that reportedly controls drug release and reduces inflammation.

The NEVO-RES I trial also provided news about the potential for micro-reservoir technology. Although results were not statistically significant, the study showed that patients who received the cobalt chromium Nevo stent, which features tiny reservoirs loaded with a biodegradable sirolimus-eluting polymer, continued to have fewer adverse events up to 12 months after treatment than those who received standard paclitaxel-eluting stents. They also better helped maintain the open areas within their stented blood vessels.

### DIFFERENT DRUGS, DIFFERENT OUTCOMES

There were trial results on two fronts for stents featuring biodegradable polymers that elute biolimus A9, a drug related to sirolimus. An analysis of the LEADERS trial showed that the BioMatrix Flex stent reduces heart-related deaths compared with the Cypher Select stent in patients with more complicated coronary anatomy and heart disease. Meanwhile, in the NOBORI-2 registry of 3,000 patients, the Nobori stent yielded a low rate of heart-related deaths, heart attacks, and repeat artery-clearing procedures despite the fact that many of the cases were quite challenging. Rates of blood-clot formation on the stents also were low.

A pair of trials highlighted the benefits of everolimus-eluting Xience V stents across a broad spectrum of patients. In the SPIRIT V Diabetes trial, 324 diabetic patients were randomly assigned to angioplasty with either the Xience V stent or the paclitaxel-eluting Taxus Liberté stent. At nine months, Xience patients had lost less of the cleared area inside the stented artery compared with Taxus patients and were just as likely to avoid adverse events. In addition, a study of more than 5,000 real-world patients from the Xience V USA registry found a rate of blood clot formation on the stent of less than 1% at one year.

### TWO NEW STENTS GO HEAD TO HEAD AGAINST ENDEAVOR ZOTAROLIMUS-ELUTING STENT

In the TIDE trial, the Titan 2 Helistent with a "bioactive" titanium-nitride-oxide coating on a stainless-steel platform did not match Endeavor in terms of the size of the area remaining inside the stented artery at six to eight months. In addition, complication rates were equal between the two stents at one year. The trial did not show whether Titan 2's novel coating discourages the late formation of blood clots.

The EXCELLA II study compared the thin, durable polymer, novolimus-eluting DESyne stent against Endeavor. It found that the novel stent was better able to keep arteries open. Complications including heart-related death, heart attack, and repeat artery-clearing procedures were low and similar between the stents.

### EFFECTS OF DRUG-ELUTING BALLOON EXAMINED

A strategy aimed at improving angioplasty in blocked arteries that have main and side branches (called bifurcations) was tested in the DEBIUT trial. The investigation randomly assigned 120 patients to one of three angioplasty treatments: the Dior paclitaxel-eluting balloon

combined with a bare-metal stent, a paclitaxel-eluting stent alone, or a bare-metal stent alone. At six months, no significant differences emerged among the three strategies in terms of keeping the main and side branches propped open or in curbing complications. Even so, some at EuroPCR said that there were enough positive signals to warrant a larger trial utilizing the drug-eluting balloon.

### CATHETER-BASED VALVE PROCEDURES PROGRESS

One-year results from the European SOURCE registry provided new information on catheter-based aortic valve implantation. Among 1,000 patients implanted with the Sapien aortic valve, overall survival ranged from 76% to 81% among those treated via a catheter inserted in the groin and was 72% among those treated via the apex of the heart's left ventricle. No valves definitively failed, and no patients needed repeat procedures. In addition, fewer patients died in the SOURCE registry than in previous studies.

Another study, though small, found that aortic valve replacement produced small areas of plaque in the brain of over two-thirds of patients, regardless of whether they were treated via the groin or the heart's left ventricle. However, these plaques did not appear to cause any neurological or cognitive damage. By mapping the distribution of the plaques in the brain, the study may have provided clues about how the lesions can form in the brain during the catheter-based aortic valve procedure.

In another area of valve technology, a catheter-delivered clip was shown to treat leaking mitral valves effectively, whether the condition was functional or degenerative. Moreover, an update from the EVEREST II trial, which earlier found the MitraClip system equaled surgery in terms of complications at one year, strengthened the findings by showing these results lasted out to two years.

### TRANSRADIAL TURNS TO THE LEFT, THROMBECTOMY MOVES STRAIGHT AHEAD

For transradial catheterization (via an artery in the wrist), gaining access through the patient's left-

hand side slightly reduces the time and radiation dose required to X-ray the heart compared with approaching through the right-hand side, according to an analysis of the large randomized TALENT study. However, the advantage appeared to be limited to less experienced physicians and was more pronounced in older patients.

Updated results from the JETSTENT trial bolstered the case for routine thrombectomy, (the removal of clot blockages) in patients experiencing severe heart attacks. Patients with evidence of such clots were randomly assigned to stenting alone or stenting preceded by mechanical clot removal using the AngioJet device. Although the damaged area of the heart was equal between the two approaches at one month after a heart attack, in the new one-year results, the rate of complications favored thrombectomy patients.

### OVERCOMING CLOPIDOGREL 'RESISTANCE'

Finally, in the wake of the disconcerting US Food and Drug Administration black box warning that was added to the labeling for the antiplatelet drug clopidogrel, some reassuring guidance was provided by a French study. It found that incrementally increasing the initial dose of the drug helps patients who are genetically predisposed to respond poorly to clopidogrel. Patients with acute coronary syndromes whose platelets were too active after the first 600-mg clopidogrel dose were given up to three additional 600-mg doses. Tailoring the dose improved platelet response in over 80% of these patients.

Highlighting another backup strategy, the RACE trial showed that for non-emergency angioplasty with stenting in patients who do not receive or do not respond to clopidogrel, infusing the heart with adenosine may be an effective alternative for reducing heart damage and even adverse events.

THE ANNUAL  
**PULSE**  
*of the city gala*

A SALUTE TO THE INNOVATORS

Thomas J. Fogarty, MD    Julio C. Palmaz, MD    John B. Simpson, PhD, MD    Paul Yock, MD

Honoring the achievements of four visionary individuals whose innovative spirit and creative talent have transformed interventional cardiovascular medicine, touching the lives of countless individuals suffering from heart disease and improving patient care around the world

NOVEMBER 10, 2010 · 6:30 PM

MANDARIN ORIENTAL · TIME WARNER CENTER  
80 COLUMBUS CIRCLE · NEW YORK, NY



## CRF's Annual 'Pulse of the City' Gala Will Take Place November 10, 2010

CRF will hold its annual "Pulse of the City" Gala on Wednesday, November 10, 2010, at the Mandarin Oriental New York. The Gala will honor four internationally renowned innovators in interventional cardiovascular medicine: Thomas J. Fogarty, MD, Julio C. Palmaz, MD, John B. Simpson, PhD, MD, and Paul Yock, MD.

The evening will pay tribute to the achievements of these visionary individuals whose innovative spirit and creative talent have transformed interventional cardiovascular medicine. Their work has touched the lives of countless individuals suffering from heart disease, improving patient care around the world. Guests may join the honorees for an evening of cocktails, dinner, and dancing.

Earlier in the day, CRF will host a summit entitled "Medical Innovation: Responding to Today's Challenges." Participants will work to develop creative new ideas and identify opportunities and practical solutions to revitalize innovation in the United States.

For more information about the Gala or Summit, please contact Irma Damhuis at 646-434-4690 or [idadhuis@crf.org](mailto:idadhuis@crf.org).

## Board Review Course with Self-Assessment for Interventional Cardiology and Endovascular Therapy

Those seeking a comprehensive primer on the essential components of interventional cardiology and endovascular therapy or taking either the American Board of Internal Medicine (ABIM) or the American Board of Vascular Medicine (ABVM) exams need look no further. The Board Review Course with Self-Assessment, held during TCT 2010 from September 21-25, 2010, at the Walter E. Washington Convention Center in Washington, DC, will prepare anyone needing to recertify in interventional cardiology and cardiovascular disease.

This interactive course will include didactic and case presentations, image interpretation, and multiple choice questions to prepare you for your exam or enhance your overall

understanding of interventional cardiology and endovascular therapy.

The Course Director is George D. Dangas, MD, PhD, Director of Academic Affairs and Investigational Pharmacology at the Cardiovascular Research Foundation, Associate Professor of Medicine at Columbia University College of Physicians and Surgeons, as well as Director of Postgraduate Training at the Center for Interventional Vascular Therapy. The Course Co-Directors are Steven R. Bailey, MD, of the University of Texas Health Science Center, and Jeffrey W. Olin, DO, of the Mount Sinai School of Medicine.

## Medical Innovation Summit Responding to Today's Challenges

*Ideas and Opportunities for Revitalization*

Wednesday, November 10, 2010  
8:00 AM-2:00 PM  
NewYork-Presbyterian Hospital/  
Columbia University  
Medical Center

For more information about the Gala or Summit, visit [www.crf.org](http://www.crf.org) or contact Irma Damhuis at 646-434-4690 or [idadhuis@crf.org](mailto:idadhuis@crf.org).

