Angiography and Interventional Cardiology

Selected Highlights Presented by
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Working Group
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David R. Holmes, Jr.  Karen M. Smith

Total abstracts submitted: 933
Total abstracts accepted: 308
A stupid man’s report of what a clever man says is never accurate, because he unconsciously translates what he hears into something he can understand.

Bertrand Russell
You are smart when you only believe half of what you hear.
You are wise when you know which half to believe.
What’s Hot?
Last year

• Distal protection
• New thromboatherectomy devices
• Role of inflammation
• DES
• Peripheral intervention
What’s Hot?
Last year

• DES
• Peripheral intervention
• Bone marrow injection
• Valve repair
• MI - novel therapies (including distal protection)
• New diagnostic technology
• Other interventions
Drug Eluting Stents
LBCT

• SES - SMART
  – Diego Ardissino
  – University of Parma

• DIRECT
  – Jeffrey Moses
  – Lenox Hill Heart and Vascular Institute
The SES-SMART Study

Study Design

Non ST-elevation ACS
Chronic stable angina
Silent myocardial ischemia
De novo lesion coronary RVD ≤ 2.75 mm
Lesion severity 50-99%
Length fully covered by 33 mm stent

N = 129
Sirolimus-eluting stent
Bx-Velocity

N = 128
Uncoated stent
Bx-Sonic
### The SES-SMART Study
**Results of Quantitative Coronary Angiography**
**In-segment zone**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sirolimus stent group n=123</th>
<th>Uncoated stent group n=113</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Binary restenosis (%)</td>
<td>9.8</td>
<td>53.1</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Minimal luminal diameter (mm)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Before procedure</td>
<td>0.73 ± 0.23</td>
<td>0.71 ± 0.23</td>
<td></td>
</tr>
<tr>
<td>• After procedure</td>
<td>1.84 ± 0.36</td>
<td>1.79 ± 0.34</td>
<td></td>
</tr>
<tr>
<td>• After 8 months</td>
<td>1.7 ± 0.48</td>
<td>1.09 ± 0.6</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Stenosis (% luminal diameter)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Before procedure</td>
<td>66.88 ± 9.52</td>
<td>66.83 ± 10.35</td>
<td></td>
</tr>
<tr>
<td>• After procedure</td>
<td>22.39 ± 9.62</td>
<td>22.93 ± 10.32</td>
<td></td>
</tr>
<tr>
<td>• After 8 months</td>
<td>29.26 ± 15.84</td>
<td>50.78 ± 25.83</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Late luminal loss (mm)</td>
<td>0.16 ± 0.46</td>
<td>0.69 ± 0.61</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Loss index</td>
<td>0.11 ± 0.5</td>
<td>0.68 ± 0.68</td>
<td>&lt; 0.001</td>
</tr>
</tbody>
</table>
The SES-SMART Study
Major Adverse Cardiac and Cerebrovascular Events
Cumulative events during 8 months of follow-up

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sirolimus stent N = 129</th>
<th>Uncoated stent N = 128</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Death</td>
<td>0</td>
<td>2 (1.6)</td>
<td></td>
</tr>
<tr>
<td>Myocardial infarction</td>
<td>2 (1.6)</td>
<td>10 (7.8)</td>
<td>0.0372</td>
</tr>
<tr>
<td>• Q-wave</td>
<td>0</td>
<td>2 (1.6)</td>
<td></td>
</tr>
<tr>
<td>• Non Q-wave</td>
<td>2 (1.6)</td>
<td>8 (6.3)</td>
<td></td>
</tr>
<tr>
<td>Target lesion revascularization</td>
<td>9 (7)</td>
<td>27 (21.1)</td>
<td>0.0021</td>
</tr>
<tr>
<td>• Surgical revascularization</td>
<td>0</td>
<td>2 (1.6)</td>
<td></td>
</tr>
<tr>
<td>• Percutaneous revascularization</td>
<td>9 (7)</td>
<td>25 (19.5)</td>
<td>0.0053</td>
</tr>
<tr>
<td>Cerebrovascular accident</td>
<td>1 (0.8)</td>
<td>1 (0.8)</td>
<td></td>
</tr>
<tr>
<td>Any major adverse cardiac or cerebrovascular event</td>
<td>12 (9.3)</td>
<td>40 (31.3)</td>
<td>&lt; 0.001</td>
</tr>
</tbody>
</table>
# The SES-SMART Study

<table>
<thead>
<tr>
<th>GROUP</th>
<th>N° of patients</th>
<th>Sirolimus stent %</th>
<th>Uncoated stent %</th>
<th>Odds Ratios (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>236</td>
<td>9.8</td>
<td>53.1</td>
<td>0.10 (0.05, 0.19)</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- male</td>
<td>168</td>
<td>6.4</td>
<td>55.4</td>
<td>0.05 (0.02, 0.14)</td>
</tr>
<tr>
<td>- female</td>
<td>68</td>
<td>20.7</td>
<td>48.7</td>
<td>0.27 (0.03, 0.82)</td>
</tr>
<tr>
<td>Diabetes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- no</td>
<td>167</td>
<td>5.3</td>
<td>47.2</td>
<td>0.06 (0.02, 0.17)</td>
</tr>
<tr>
<td>- yes</td>
<td>69</td>
<td>25.0</td>
<td>63.4</td>
<td>0.19 (0.07, 0.56)</td>
</tr>
<tr>
<td>Clinical presentation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>chronic stable angina or silent</td>
<td>136</td>
<td>9.2</td>
<td>47.9</td>
<td>0.11 (0.04, 0.29)</td>
</tr>
<tr>
<td>ischemia acute coronary syndrome</td>
<td>100</td>
<td>10.7</td>
<td>56.4</td>
<td>0.09 (0.03, 0.27)</td>
</tr>
<tr>
<td>without ST elevation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Left anterior descending coronary</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>artery</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- no</td>
<td>149</td>
<td>11.3</td>
<td>47.4</td>
<td>0.14 (0.06, 0.33)</td>
</tr>
<tr>
<td>- yes</td>
<td>87</td>
<td>8.7</td>
<td>65.7</td>
<td>0.04 (0.01, 0.15)</td>
</tr>
<tr>
<td>Stent diameter</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 2.25 mm</td>
<td>62</td>
<td>3.6</td>
<td>51.5</td>
<td>0.03 (0.00, 0.29)</td>
</tr>
<tr>
<td>- 2.50 mm</td>
<td>128</td>
<td>10.8</td>
<td>50.8</td>
<td>0.12 (0.05, 0.30)</td>
</tr>
<tr>
<td>- 2.75 mm</td>
<td>46</td>
<td>13.8</td>
<td>64.7</td>
<td>0.09 (0.02, 0.37)</td>
</tr>
<tr>
<td>Stent length</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 6 - 13 – 18 mm</td>
<td>203</td>
<td>7.2</td>
<td>50.0</td>
<td>0.08 (0.03, 0.18)</td>
</tr>
<tr>
<td>- 23 – 28 – 33 mm</td>
<td>33</td>
<td>19.2</td>
<td>100.0</td>
<td>0.19 (0.09, 0.42)</td>
</tr>
</tbody>
</table>
**DIRECT: Study Design**

- Multi-center, prospective, non-randomized trial
- 225 pts *directly* stented w/ Cypher™
- Same stent lengths as historical control
- *De Novo* coronary lesions:
  - Diameter: \( \geq 2.5 \leq 3.5 \) mm
  - Length: \( \geq 15 \leq 30 \) mm
- Historical Control: SIRIUS Cypher™ Angiographic Cohort (SCAC) – predilated
DIRECT: Preliminary Results

Direct Stenting
n = 225

Clinical FU @ 6 Mo = 92.4%
Angio FU @ 8 Months = 76.4%

SCAC
n = 412

Clinical FU @ 6 Mo = 98.0%
Angio FU @ 8 Months = 87.1%
DIRECT: Primary Endpoints

8-mo QCA Late Loss

-0.02
[-0.11, 0.06]
Non-Inferior

In-Lesion Late Loss

0.21
0.24

Composite 30d MACCE + Angina

2.3%
[-4.1, 8.7]
p=0.377*

20%
17.7%
Drug Eluting Stents

- **TAXUS IV Diabetic subset**
  - James Hermiller
  - St. Vincent’s Hospital, Indianapolis, IN

- **FIM long-term follow-up**
  - J Eduardo Sosa
  - Institute Dante Pazzanese, Sao Paulo, Brasil

- **DES cost-efficacy**
  - David Marks
  - Medical College of Wisconsin

Benefits seen in overall study preserved in diabetics

Long-term safety and efficacy

Increased costs, but less than that of the stent itself
Peripheral intervention
LBCT

• ARCHeR
  – William Gray
  – Swedish Medical Center, Seattle
## Devices Overview of ARCHeR Trials

<table>
<thead>
<tr>
<th></th>
<th>ARCHeR 1</th>
<th>ARCHeR 2</th>
<th>ARCHeR 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Patients</strong></td>
<td>158 (+ 51 lead-ins)</td>
<td>278 (+ 25 lead-ins)</td>
<td>145</td>
</tr>
<tr>
<td><strong>Stent</strong></td>
<td></td>
<td>ACCULINK</td>
<td></td>
</tr>
<tr>
<td><strong>Stent Delivery System</strong></td>
<td>ACCULINK (OTW)</td>
<td>RX ACCULINK</td>
<td></td>
</tr>
<tr>
<td><strong>Embolic Protection Device</strong></td>
<td>None</td>
<td>ACCUNET (OTW)</td>
<td>RX ACCUNET</td>
</tr>
</tbody>
</table>
### ARChER

**Primary and Secondary Endpoints**

<table>
<thead>
<tr>
<th>ARChER 1</th>
<th>ARChER 2</th>
<th>ARChER 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary Endpoints</strong></td>
<td>All death, stroke, MI at 30 days AND Ipsilateral stroke from 31 days to 1 year</td>
<td>All death, stroke, MI at 30 days AND Ipsilateral stroke from 31 days to 1 year</td>
</tr>
<tr>
<td><strong>Key Secondary Endpoints</strong></td>
<td>• Target lesion revascularization (6 and 12 month follow-up) • Device success • Access site complications • Duplex carotid ultrasound evaluation (30 days, 6, 12, 24, and 36 month follow-up)</td>
<td></td>
</tr>
</tbody>
</table>
### 30-Day Endpoint Event Rates

<table>
<thead>
<tr>
<th>Event</th>
<th>ARCHeR 1 (N = 158)</th>
<th>ARCHeR 2 (N = 278)</th>
<th>ARCHeR 3 (N = 145)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Death</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stroke related</td>
<td>2.5%</td>
<td>2.2%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Non-stroke related</td>
<td>0.6%</td>
<td>0.7%</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>1.9%</td>
<td>1.4%</td>
<td>1.4%</td>
</tr>
<tr>
<td><strong>Stroke</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major</td>
<td>4.4%</td>
<td>5.8%</td>
<td>6.2%</td>
</tr>
<tr>
<td>Minor</td>
<td>1.9%</td>
<td>1.4%</td>
<td>1.4%</td>
</tr>
<tr>
<td></td>
<td>2.5%</td>
<td>4.3%</td>
<td>4.8%</td>
</tr>
<tr>
<td><strong>MI</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q-wave</td>
<td>2.5%</td>
<td>2.9%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Non-Q wave</td>
<td>1.3%</td>
<td>1.1%</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>1.3%</td>
<td>1.8%</td>
<td>0.7%</td>
</tr>
<tr>
<td><strong>Death/Stroke</strong></td>
<td>6.3%</td>
<td>6.8%</td>
<td>7.6%</td>
</tr>
<tr>
<td><strong>Death/Stroke/MI</strong></td>
<td>7.6%</td>
<td>8.6%</td>
<td>8.3%</td>
</tr>
<tr>
<td>Major + Fatal strokes**</td>
<td>1.9%</td>
<td>1.4%</td>
<td>1.4%</td>
</tr>
</tbody>
</table>

*Non-hierarchical

**Hierarchical

Note – In ARCHeR 3 one patient who died of unknown causes is classified as non-stroke related.
## Bone Marrow Injection

<table>
<thead>
<tr>
<th>Long term follow-up in ischemic CM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emerson Perin</td>
</tr>
<tr>
<td>Texas Heart Institute</td>
</tr>
<tr>
<td>10 patients</td>
</tr>
<tr>
<td>1 year follow-up</td>
</tr>
<tr>
<td>No arrhythmias</td>
</tr>
<tr>
<td>Sustained improvement in exercise capacity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transendocardial injection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shmel Fuchs</td>
</tr>
<tr>
<td>Washington Hospital Center</td>
</tr>
<tr>
<td>27 patients</td>
</tr>
<tr>
<td>Feasibility and safety</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Long-term outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hung-Fat Tse</td>
</tr>
<tr>
<td>John Hunter Hospital, Newcastle, Australia</td>
</tr>
<tr>
<td>12 patients</td>
</tr>
<tr>
<td>3 and 6 month follow-up</td>
</tr>
<tr>
<td>No arrhythmias</td>
</tr>
<tr>
<td>Better perfusion on SPECT-sestamibi</td>
</tr>
</tbody>
</table>
Valvular Interventions
LBCT

• Percutaneous Mitral valve repair
  (EVEREST 1)
  Ted Feldman
  Evanston Northwest Healthcare, Evanston, IL
Edge-to-Edge Surgical Repair
Endovascular Mitral Repair System
Valvular Interventions

- Percutaneous aortic valves
  - Helene Eltchaninoff
  - Charles Nicolle Hospital, Rouen, France

6 patients
Severe calcific AS
NYHA Class IV
Declined for surgery
Valve mounted on stent
5/6 successful
1 death (immediate migration)
2/6 currently alive
MI - Novel Therapies
LBCT

• EMERALD
  – Gregg Stone
  – Cardiovascular Research Foundation, NY
• AMIHOT
  – William O’Neill
  – Beaumont Hospital
• Caldaret in MI
  – Dan Tzivoni
  – Hebrew University, Jerusalem
The Emerald Trial
Enhanced Myocardial Efficacy and Removal by Aspiration of Liberated Debris

501 pts with STEMI ≤6° and ≥2 mm ST↑ or LBBB
Primary or rescue PCI

ASA 325 mg
IV heparin 70 U/kg
± Clopidogrel 300 mg
± IV β-blocker

24° continuous ST Holter

Cath lab – LV, cor angio

Eligible for the GuardWire?
Eligible for the GuardWire?

Yes

PCI with 0.028” GuardWire distal protection

PCI alone

Resting tc-99m sestamibi scan at day 5-14

Clinical follow-up at 30-days and 6-months

No

100 pt angiographic screen failure registry

Stratified by primary vs. rescue PCI and IIb/IIa use

Eligible for the GuardWire?
Primary Endpoint
ST-Segment Resolution at 30 Minutes

<table>
<thead>
<tr>
<th></th>
<th>GuardWire (n=233)</th>
<th>Control (n=216)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absent (&lt;30%)</td>
<td>9.5%</td>
<td>12.5%</td>
</tr>
<tr>
<td>Partial (30% - 70%)</td>
<td>28.3%</td>
<td>26.9%</td>
</tr>
<tr>
<td>Complete (&gt;70%)</td>
<td>62.2%</td>
<td>60.6%</td>
</tr>
<tr>
<td>Mean</td>
<td>73.8%</td>
<td>70.1%</td>
</tr>
</tbody>
</table>

P = 0.36  P = 0.75  P = 0.77  P = 0.39

1º endpoint
Infarct size by Tc-99m-SPECT
Infarct size, %LV

![Infarct size by Tc-99m-SPECT](image)

- **All (n=427):**
  - 17.1% ±17.8
  - 14.3% ±16.2

- **LAD (n=171):**
  - 26.3% ±21.6
  - 22.3% ±20.3

- **RCA/LCX (n=256):**
  - 10.4% ±10.1
  - 9.5% ±10.6

*1° endpoint*
TherOx® AO System
Study Algorithm

AMI <24-hrs
(Primary or Rescue) n=250

PCI of Native Vessel

Contrast Echo 24-hours

Normoxemic Reperfusion
(Standard Therapy)

Hyeroxemic Reperfusion with AO
for 90-minutes

ST-Monitor 24-hours

SPECT Scan 14-days

Contrast Echo 1 month

Contrast Echo 3-months
CK Data
Overall Study Population

Control (n=117)
AO (n=114)
P=0.50
ST-Segment Resolution
Median ST area (First balloon inflation to 6-hours)

- All Patients LAD:
  - Control: 3068
  - Aqueous Oxygen: 3005
  - P=NS

- LAD:
  - Control: 4625
  - Aqueous Oxygen: 3460
  - P=0.17
Reduction of Infarct Size and Improved Left Ventricular Function with IV CALDARET [MCC-135] in Patients with ST Elevation Myocardial Infarction Undergoing Primary PCI

D Tzivoni, F Bär, A F Ortiz, G Heyndrickx, J Brachmann, H Reiber, M Krucoff, J Tatsuno, M Davies, M Hibberd

On behalf of the CALDARET in ST Elevation MI (CASTEMI) Study Group
Study Design

**Population:** 387 patients with STEMI were enrolled, 247 on pre-PCI angiogram had TIMI 0/1 flow (target population)

**Total Mortality:** 2.3%

**SPECT Infarct Size - day 7:** no difference between the groups
172.5mg CALDARET vs Placebo in Patients with Anterior MI and TIMI 0/1 flow

Infarct size (LV %) (day 7)
Infarct size (LV %) (day 30)
LV ESV (day 7)
LV ESV (day 30)
LV EDV (day 7)
LV EDV (day 30)
Global LVEF (%) (day 7)
Global LVEF (%) (day 30)
CK
CK-MB
TnT
LDH

Standardized treatment difference 0 0.5 1 1.5 2

Odds Ratio
95% CI
MI - Novel Therapies

LBCT

- **On-TIME**
  - Menko Jan de Boer
  - Zwolle, The Netherlands

- **CAPITAL - AMI**
  - Michel Le May
  - University of Ottowa Heart Institute

- **POZNAŃ**
  - Tomasz Siminiak
  - University School of Medical Sciences Poznan
ON - TIME

• 457 MI patients
  – 209 from ambulance
  – 258 from referral centers
• Randomized
  – Placebo
  – Tirofiban
• Primary PCI
• Primary endpoint - TIMI 3 flow on initial angio
• [ time from Rx to angio - 59 min (11-178)]
  TIMI 3 flow not significantly different
  Better perfusion (TIMI 2/3)
  No difference in clinical events
POZNAN

- Feasibility/safety study (10 patients)
- Post-infarction heart failure
- System used to inject cells into the heart.
- Trans-venous access
- Ultrasound guided
- Skeletal myoblast injection into myocardium

9/10 successful; 1 abandoned
No arrhythmias
Cells successfully delivered
Feasible and safe
CAPITAL AMI

- 170 MI patients
- Randomized
  - 84 fibrinolytic therapy alone (TNK)
  - 86 TNK plus PCI
- Primary endpoint
death/MI/stroke/recurrent unstable ischemia
  Significant reduction with TNK plus PCI
    (9.3% vs 21.4%)
  Main difference in infarction, recurrent unstable ischemia
  No significant difference in major bleeding
New Diagnostic Technology

- **Multifractal and wavelet decomposition**
  - Liberty Yaneza
  - UT-HSC San Antonio

- **Temperature heterogeneity in ACS**
  - Darius Dudek
  - Jagiellonian University, Krakow, Poland

- **Lesion temperature measurement**
  - Jorge Belardi
  - Instituto Cardiovascular de Buenos Aires

**Texture analysis of IVUS images**
Able to distinguish plaque morphologies

**Thermography in 23 ACS patients**
Procedure safe
Heterogeneity higher in culprit segment

**Thermal sensing catheter**
Occludes blood flow in artery (30-60 sec)
11 patients, 15 lesions
Safe and feasible
New Diagnostic Technology

- **Macrophage imaging in ACS**
  - Brian MacNeill
  - Massachusetts General Hospital

  - Patients (STEMI and ACS)
  - Macrophage density calculated as normalized SD of optical signal in superficial region of fibrous cap
  - Density similar
  - Pattern of infiltration different with ACS

- **Virtual histology**
  - Gary Mintz
  - Cardiovascular Research Foundation

  - Spectral analysis of backscattered IVUS images
  - Plaque classification
  - First in-vivo studies
  - 50 patients, 60 arteries
  - Correlation noted with HDL
  - No correlation with LDL
Other Interventional Techniques

- PLAATO - Feasibility trial
  - Yves Bayard
  - CardioVascular Center, Frankfurt, Germany
The PLAATO Concept

Percutaneous Left Atrial Appendage Transcatheter Occlusion

Slide courtesy of Peter Block, M.D.
PLAATO Implant

Atrial appendage side

PTFE membrane (atrial side)

Nitinol cage with “hooks”
Transesophageal Echo (TEE) Before & After PLAATO™

Pre-PLAATO
TEE shows LA and LAA

6 mos F/U TEE shows expanded implant and complete LAA fibrosis

Slide courtesy of Peter Block, M.D.
Baseline Patient Demographics

- N = 103* enrolled, 101** treated
- M/F = 63/40
- Avg. age = 71 yrs (±9)
- Med. AF duration:
  - > 3 yrs
- Cont. AF = 91/103 (88%)
- Parox. AF = 12/103 (12%)
- Prior CVA = 38/103 (37%)

* 2/103 pts not treated, 1 pt not implanted due to groin complication during venous access and 1 pt not implanted due thrombus in right atrium

Slide courtesy of Peter Block, M.D.
Results – Primary Endpoint
(North America)

<table>
<thead>
<tr>
<th>Major Adverse Events within 30 days: cardiac/neurological death, major or minor stroke, MI or emergent CV surgery related to PLAAOT procedure</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>During index hospitalization to discharge</td>
<td>2/64*</td>
<td>3.1%</td>
</tr>
<tr>
<td>Discharge to 30 days</td>
<td>0/64</td>
<td>0%</td>
</tr>
</tbody>
</table>

Slide courtesy of Peter Block, M.D.
What’s Hot

- DES
- Peripheral intervention
- Bone marrow injection
- Valve repair
- MI - novel therapies (including distal protection)
- New diagnostic technology
- Other interventions
Science is built up with facts, as a house is with stones. But a collection of facts is no more a science than a heap of stones is a house.

Jules Henri Poincaré
Knowledge is the process of piling up facts; wisdom lies in their simplification

Martin Fisher
In theory, there is no difference between theory and practice. In practice, there is.

Yogi Berra
The essence of knowledge is:

having it – to apply it ;
not having it – to confess your ignorance

Confucius
It’s not just what you don’t know that hurts you, it’s what you think you know that just ain’t so

Satchel Paige
CME completion slide