

STS/EACTS Latin America Cardiovascular Surgery Conference

September 21-22, 2017 | Cartagena, Colombia

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www.CardiovascularSurgeryConference.org

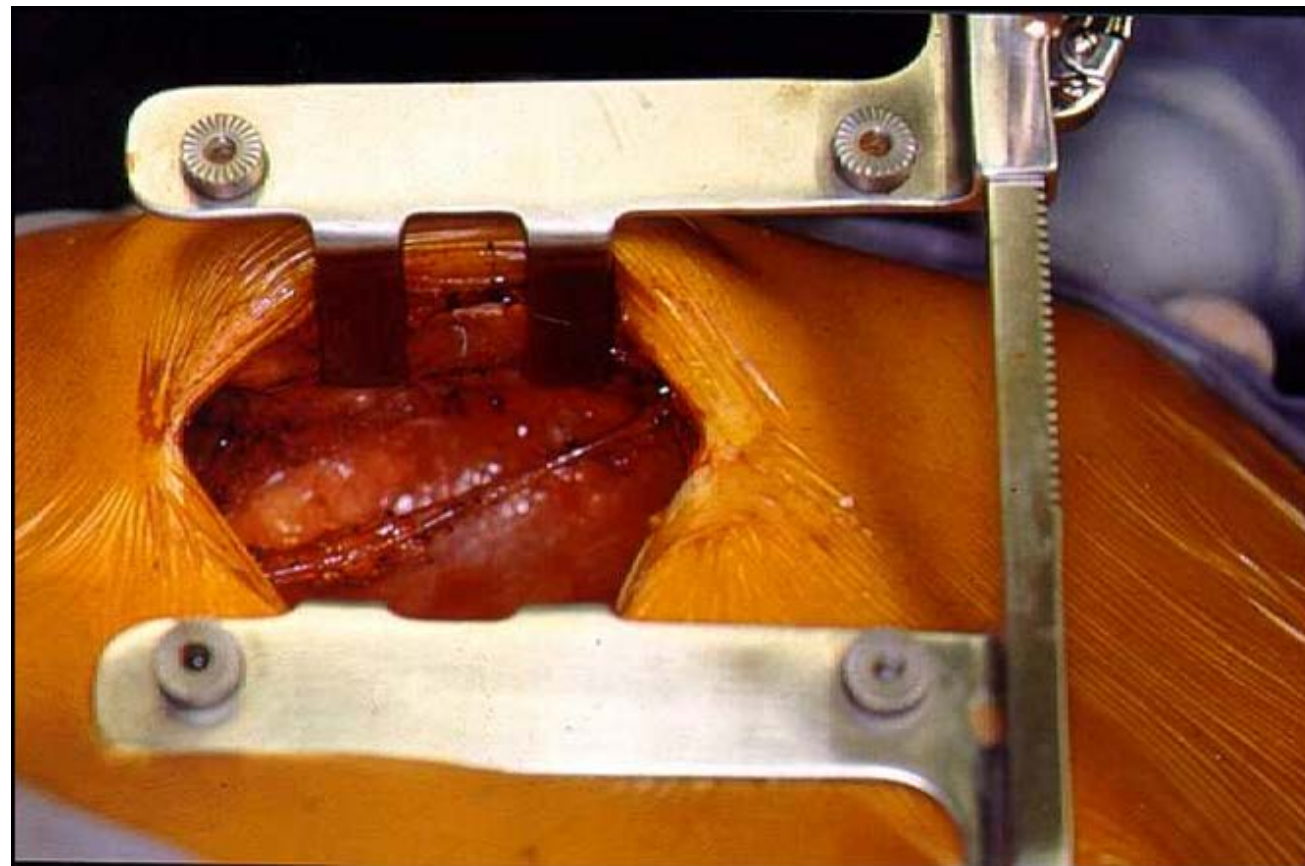
Myocardial Hybrid Revascularization vs. Coronary Artery Bypass Grafting for Complex Triple-Vessel Disease— Preliminary Results of the Merging Randomized Clinical Trial: Pilot Phase

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Cardiovascular Surgery
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São Paulo University – School of Medicine

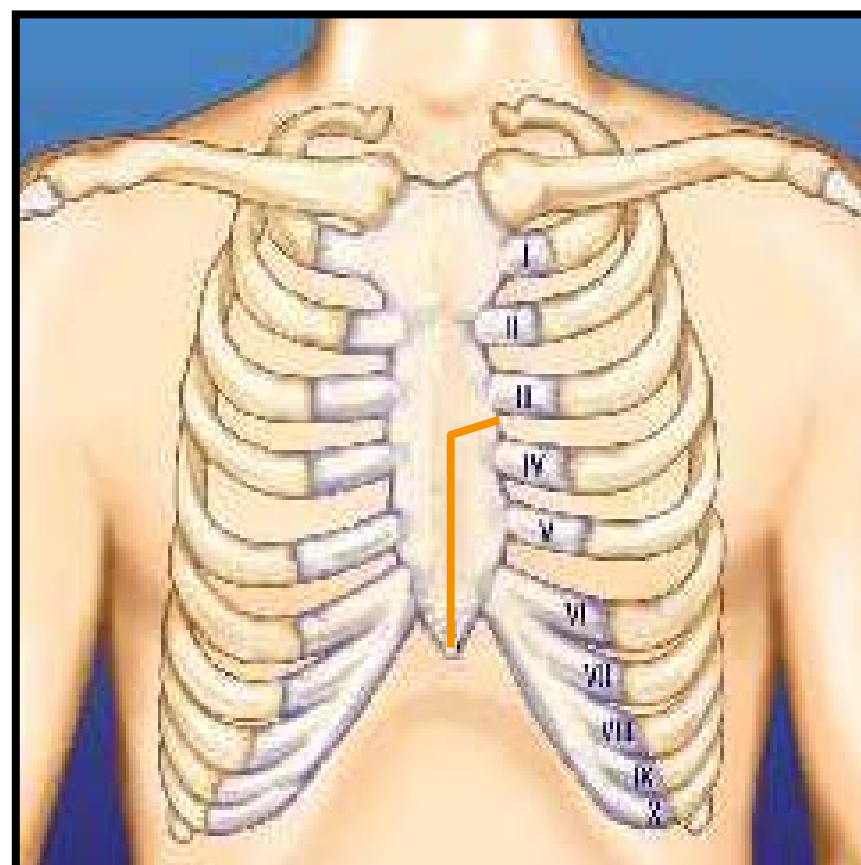


NO DISCLOSURE

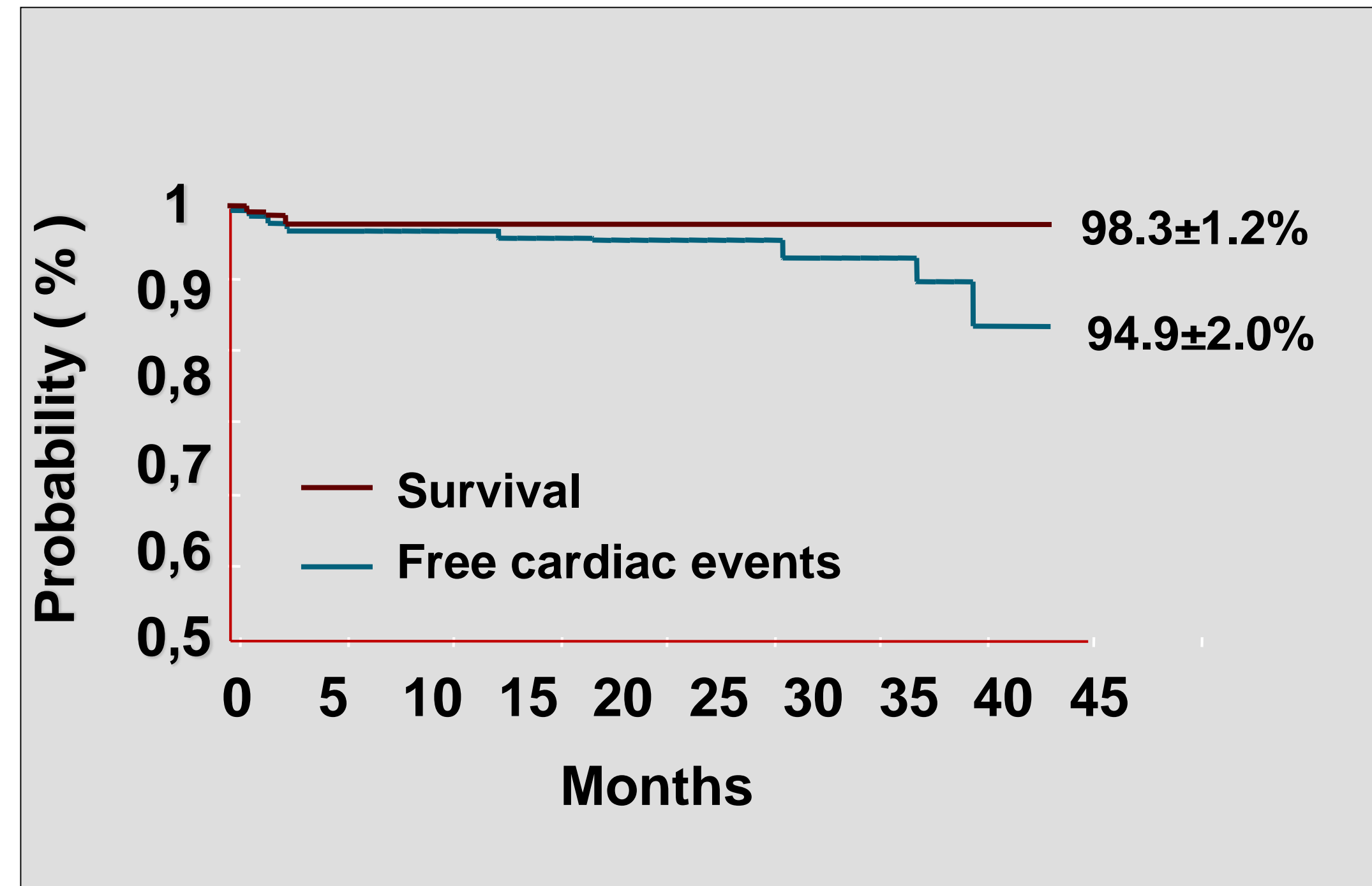
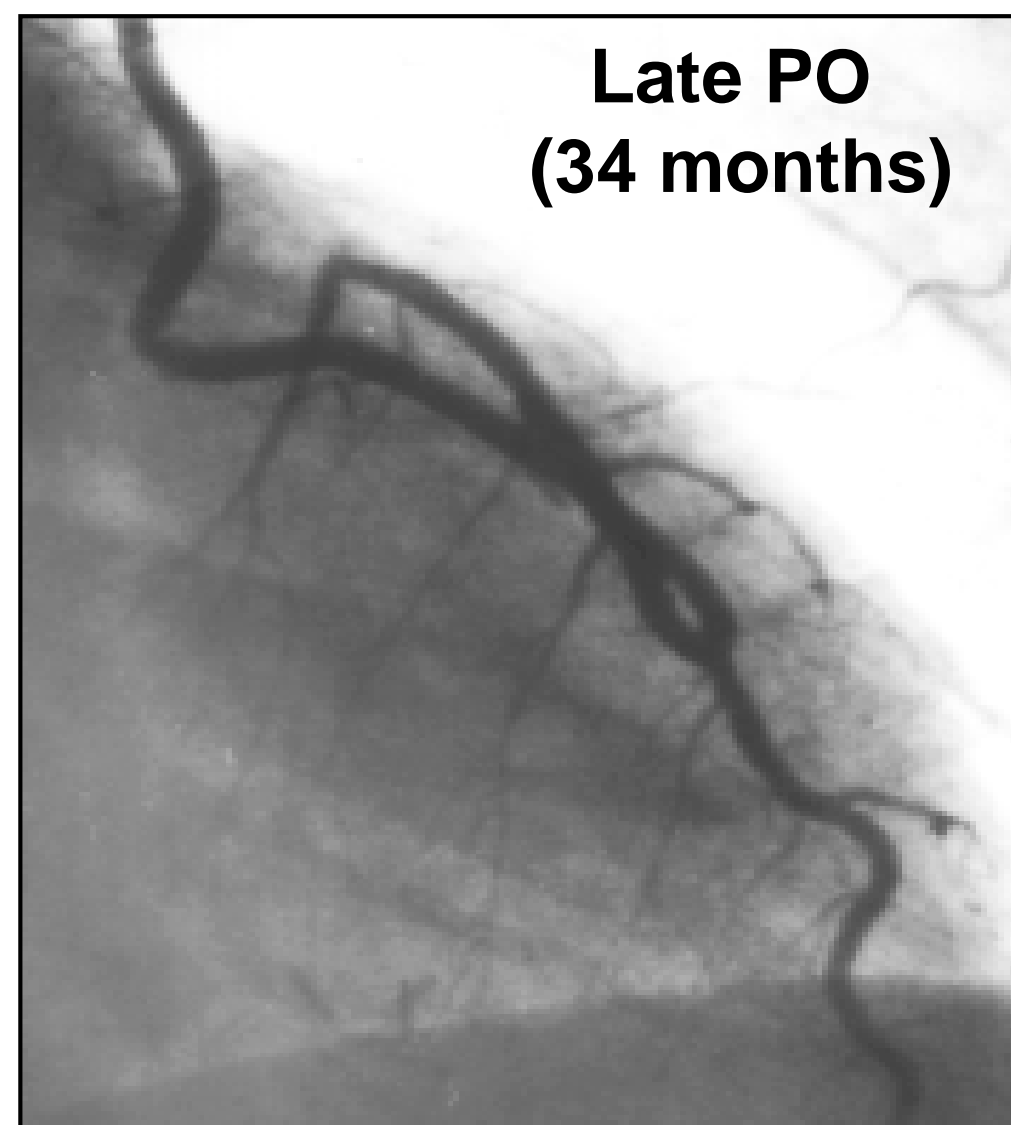
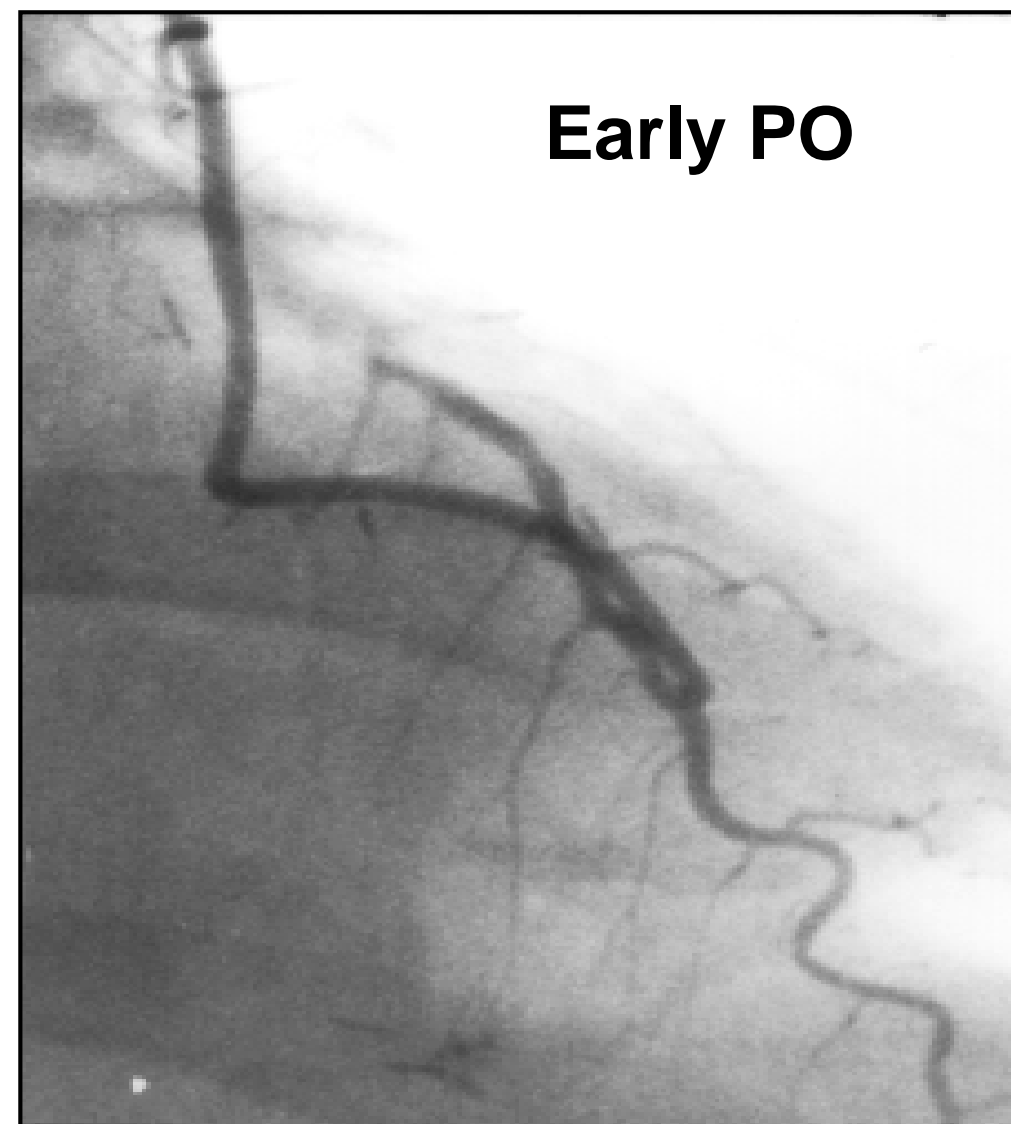
Initial Experience with Minimally Invasive CABG (Partial Sternotomy Off-Pump LITA – LAD)



Ann Thorac Surg. 2002;73(2):505-10.
Heart Surg Forum. 2002;5 Suppl 4:S362-77



Minimally Invasive Single-vessel Coronary Artery Bypass (LITA – LAD)



Ann Thorac Surg. 2002;73(2):505-10.

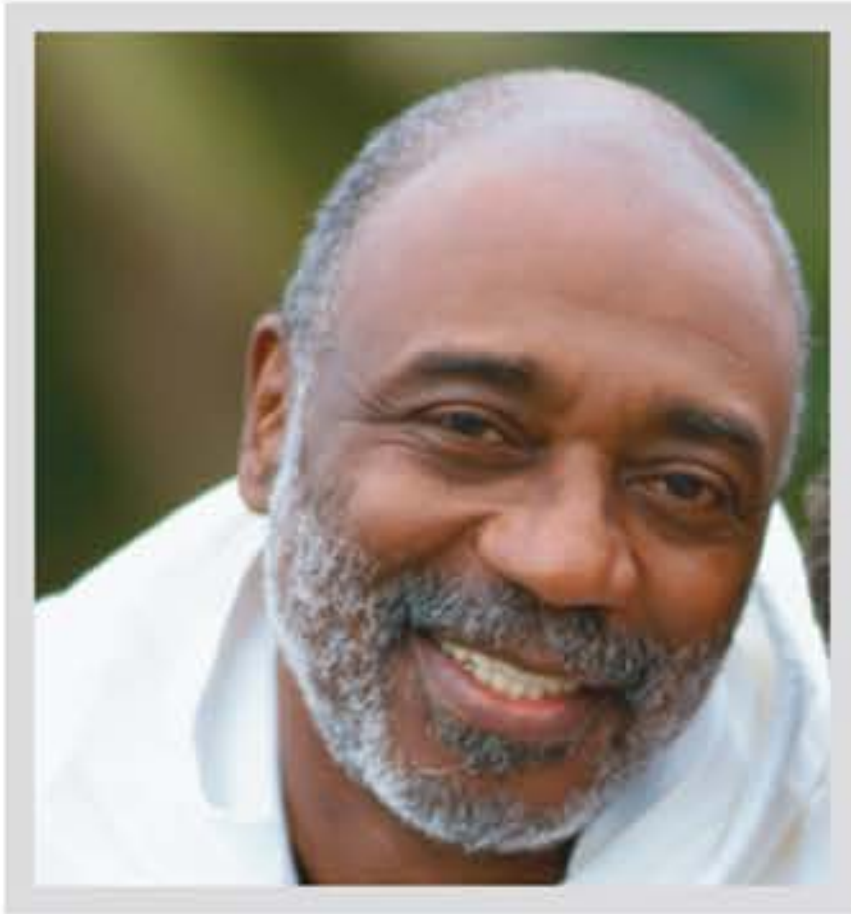
Heart Surg Forum. 2002;5 Suppl 4:S362-77

A Doctor's Vision of the Future of Medicine

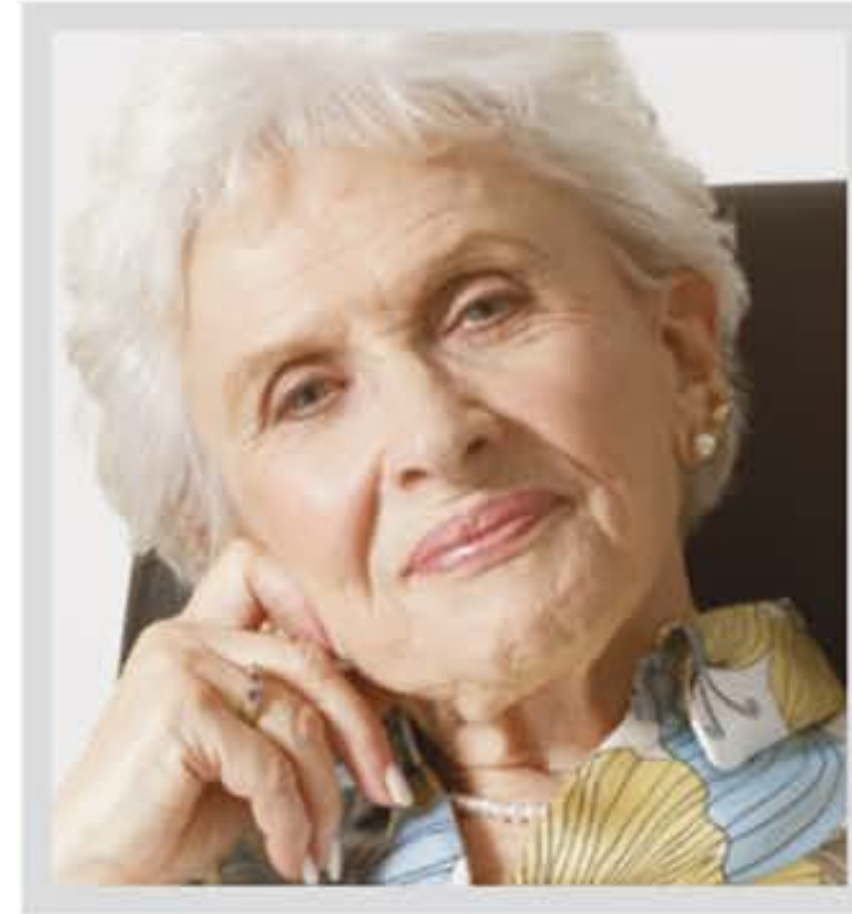
Jun 26, 2009 8:00 PM EDT

It like to call it 4P medicine:

- predictive
- preventive
- personalized
- participatory



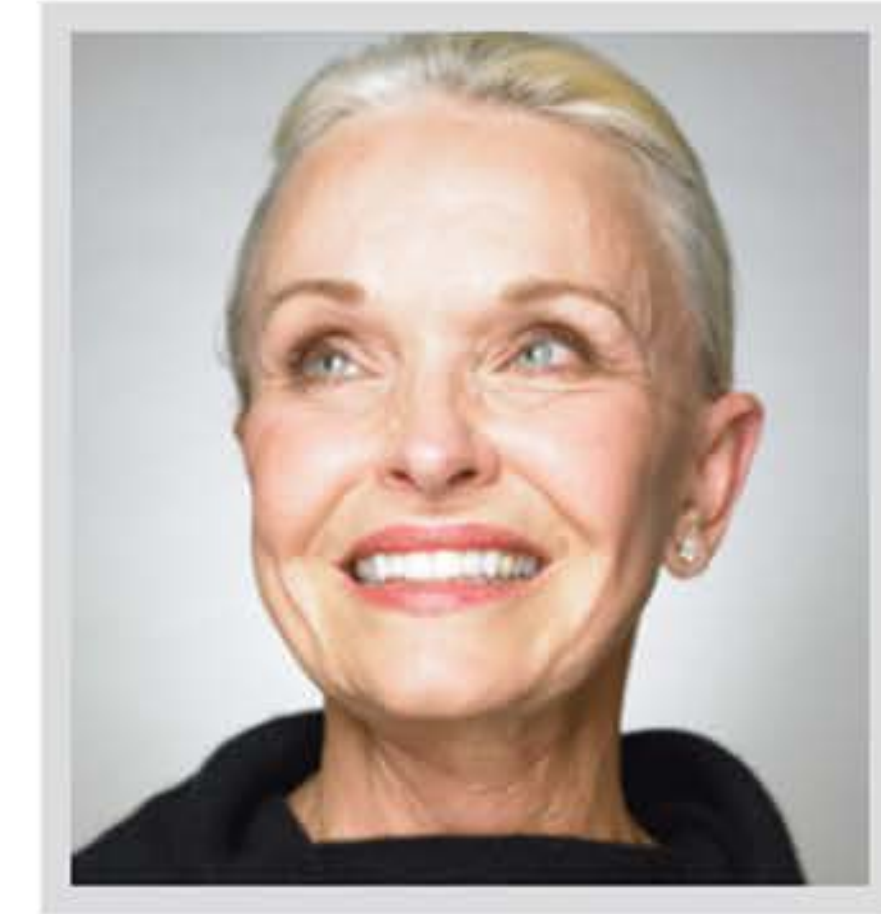
Diabetes



Elderly / frail



Comorbidities



Female

"Identify vulnerable groups and join efforts to optimize all assistance"

ClinicalTrials.gov

Myocardial hybrid revascularization versus coronary artERy bypass GraftING
for complex triple-vessel disease

MERGING Clinical Trial

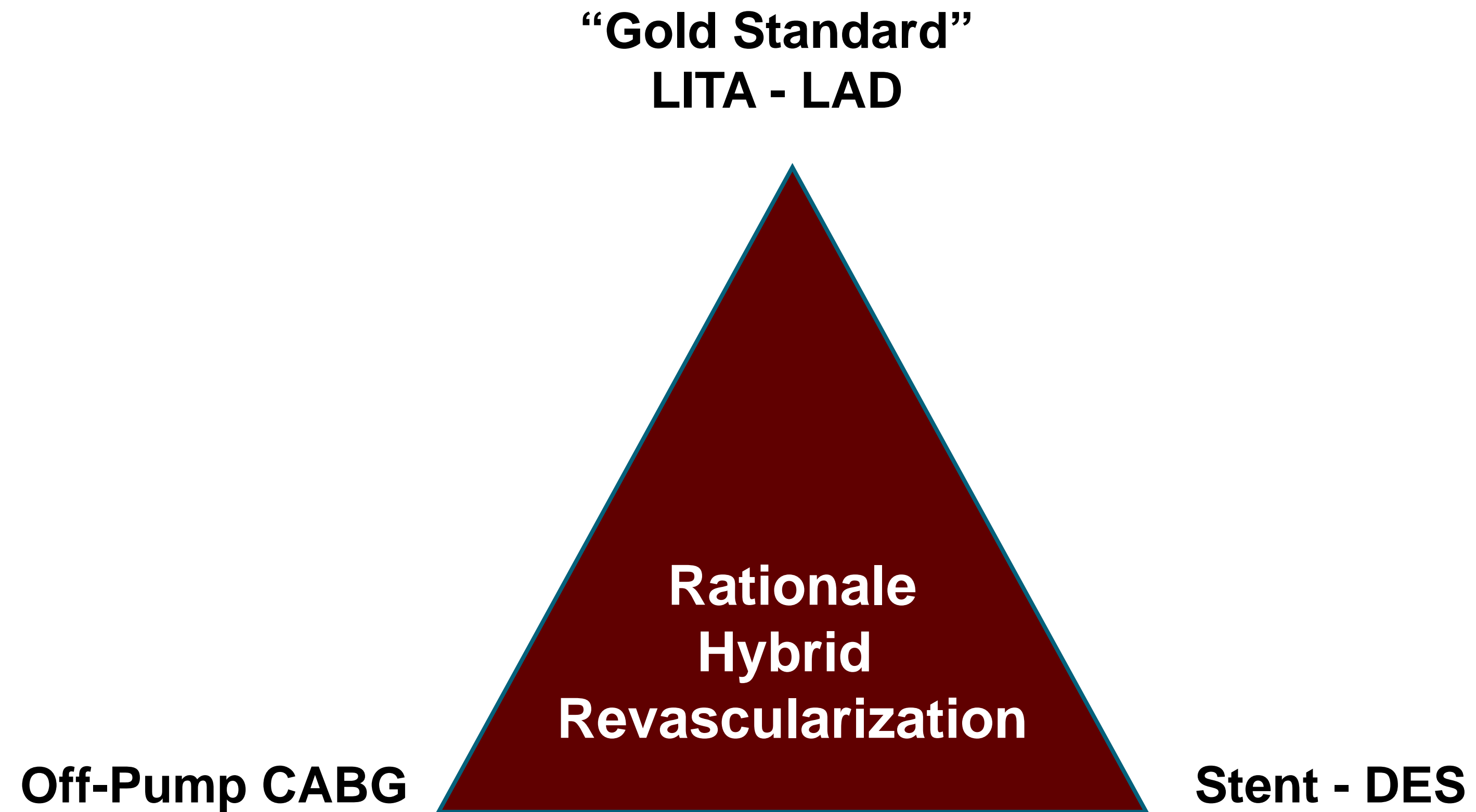
ClinicalTrials.gov Identifier: NCT02226900

Sponsor: InCor Heart Institute

Collaborator: Boston Scientific Corporation

Responsible Party: Pedro A. Lemos, Luiz A Lisboa

Hybrid Revascularization





Logged in as **luiz.lisboa** | Log out

- My Projects
- Project Home
- Project Setup

Project status: **Production**

Data Collection -

- Record Status Dashboard
- Add / Edit Records

Applications -

- Calendar
- Data Exports, Reports, and Stats
- Data Import Tool
- Data Comparison Tool
- Logging
- Field Comment Log
- File Repository
- User Rights and DAGs
- Data Quality

Reports Edit reports -

- 1) Fernanda PCI
- 2) Demographics
- 3) Baseline Data
- 4) Randomization
- 5) Surgery
- 6) PCI
- 7) ICU
- 8) Discharge
- 9) Follow up 30
- 10) Follow up 180
- 11) Follow up 1a
- 12) Follow up 2a

Help & Information -

- Help & FAQ
- Video Tutorials
- Suggest a New Feature

The MERGING Clinical Trial

Record Status Dashboard (all records)

Displayed below is a table listing all existing records/responses and their status for every data collection instrument (and if longitudinal, for every event). You may click any of the colored buttons in the table to open a new tab/window in your browser to view that record on that particular data collection instrument. Please note that if your form-level user privileges are restricted for certain data collection instruments, you will only be able to view those instruments, and if you belong to a Data Access Group, you will only be able to view records that belong to your group.

Legend for status icons:

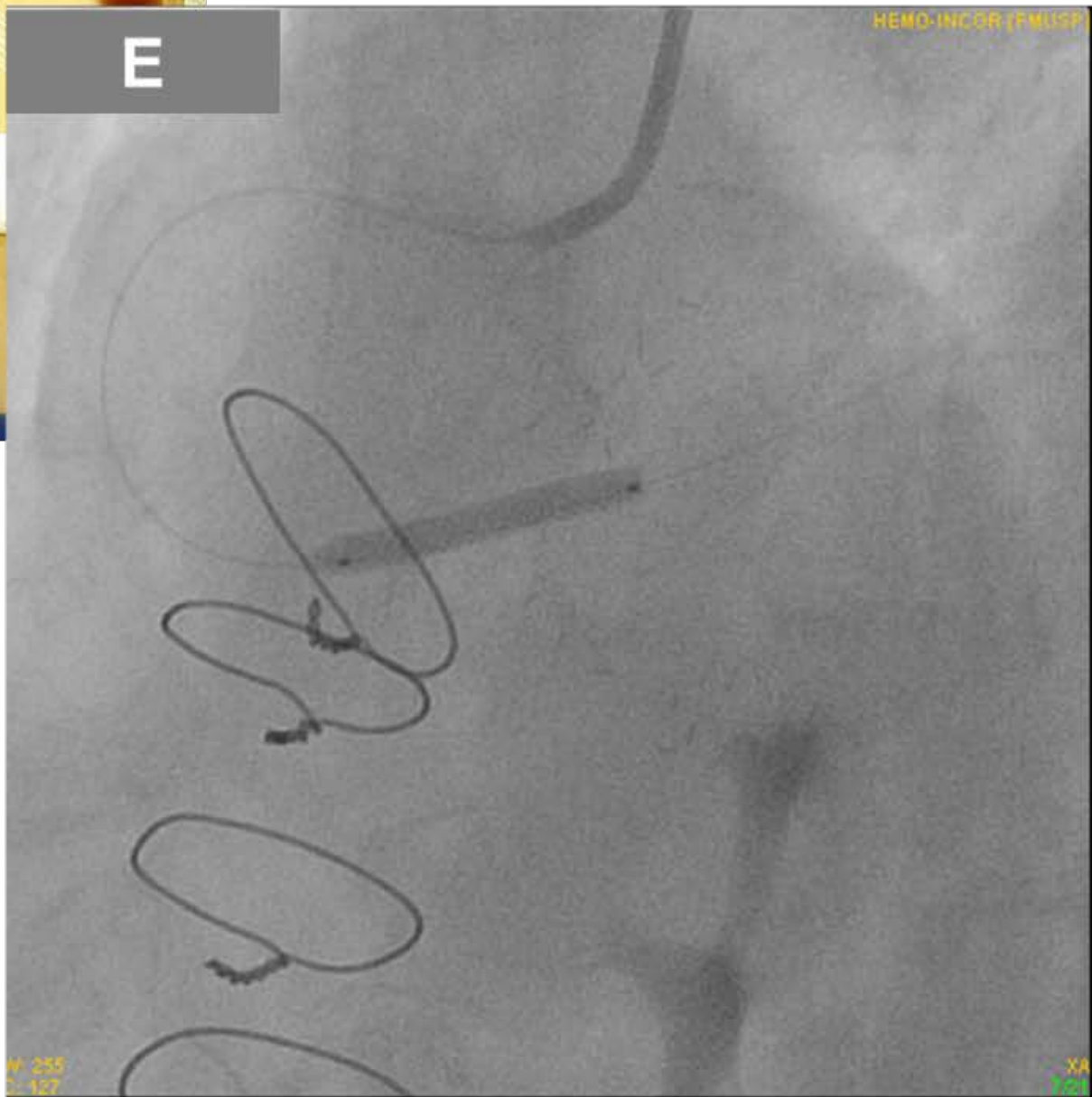
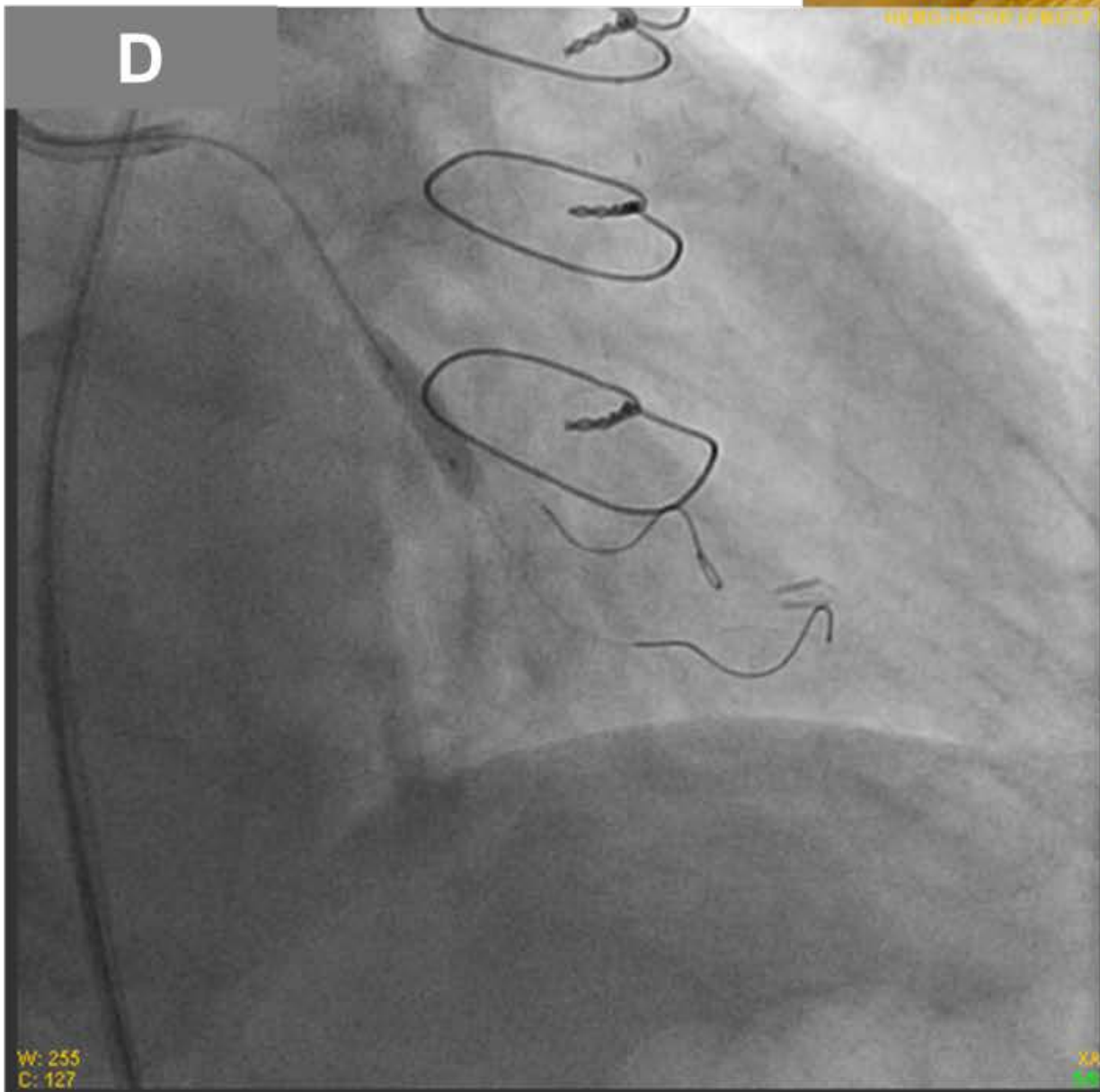
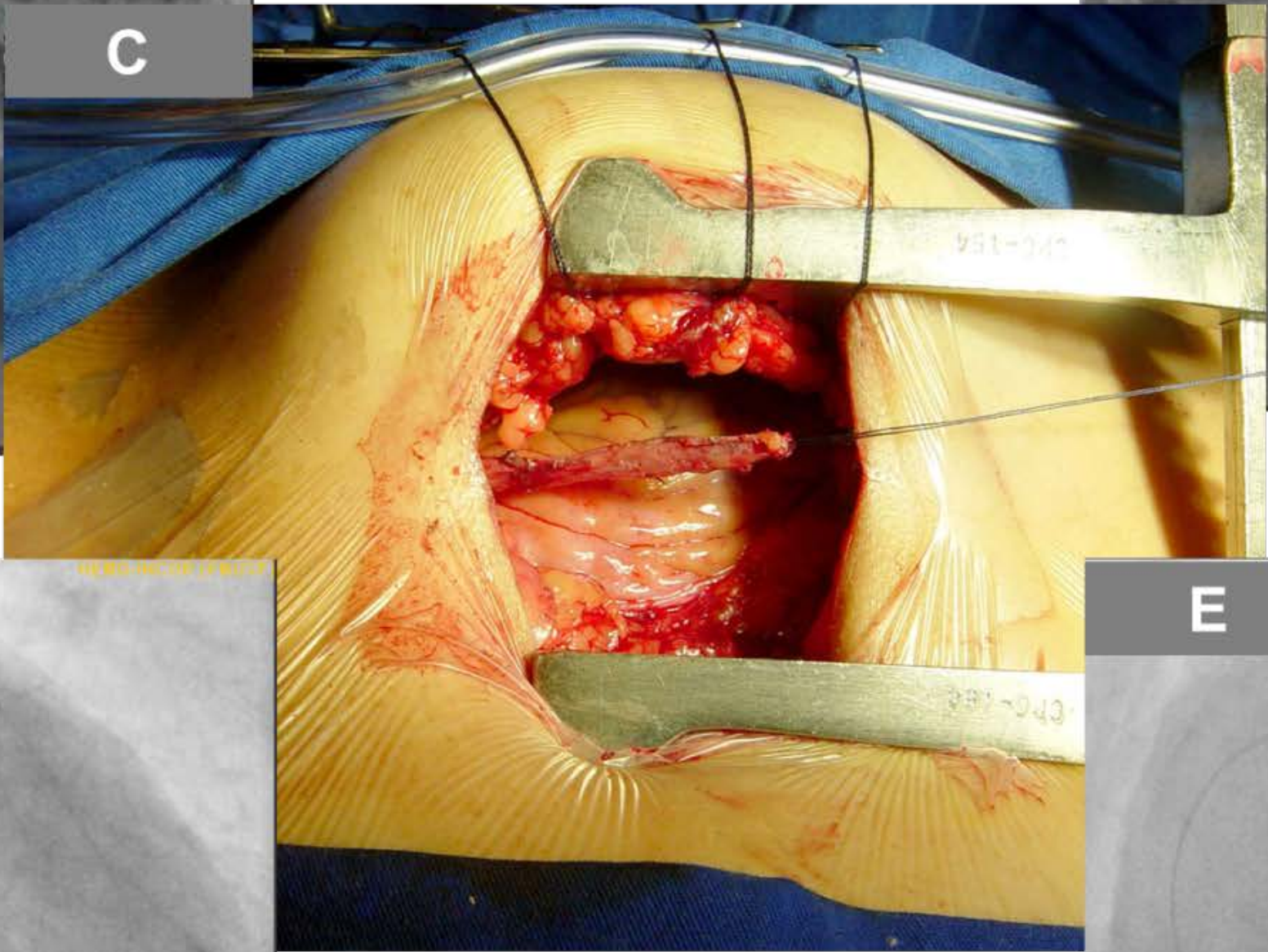
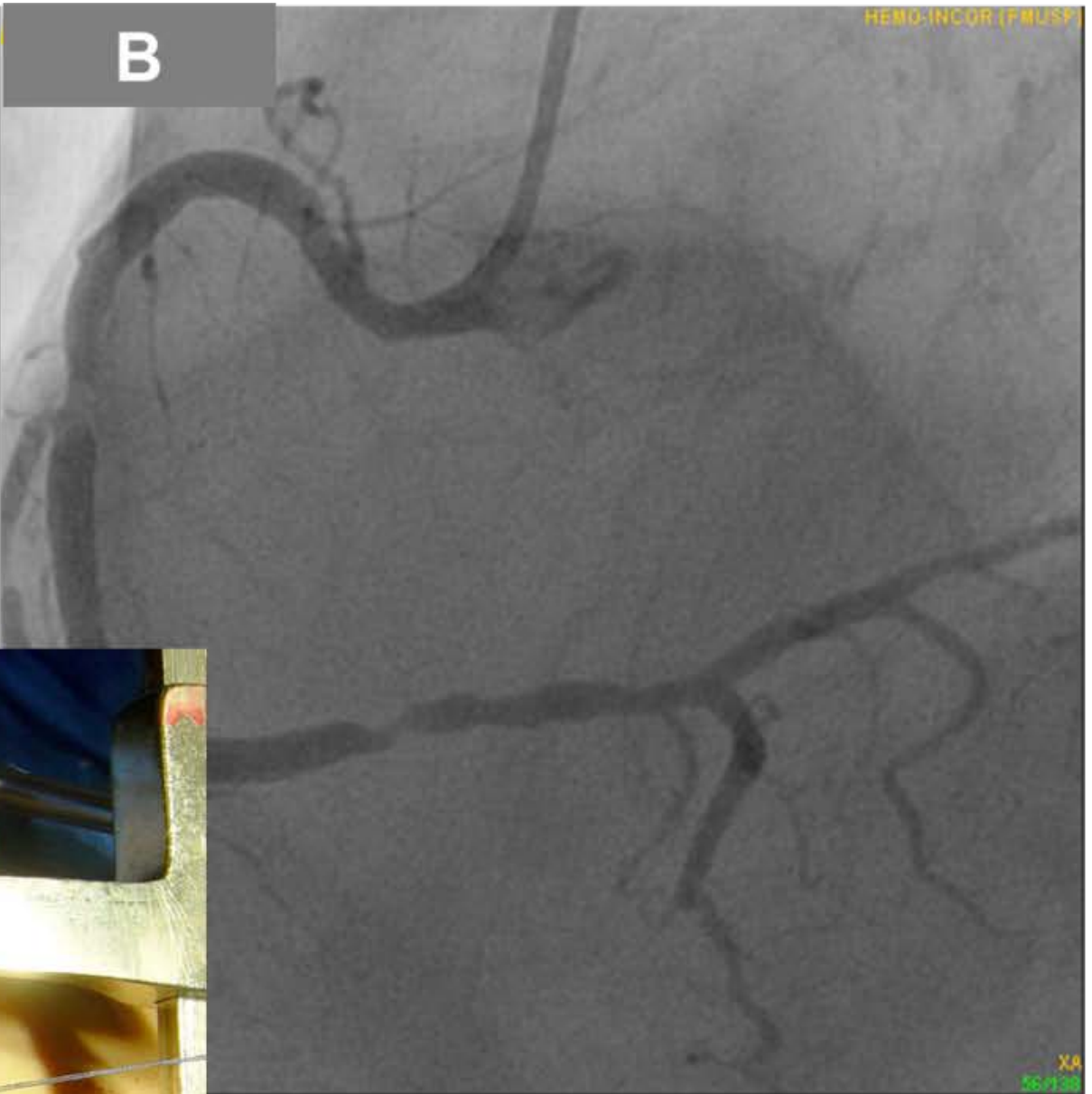
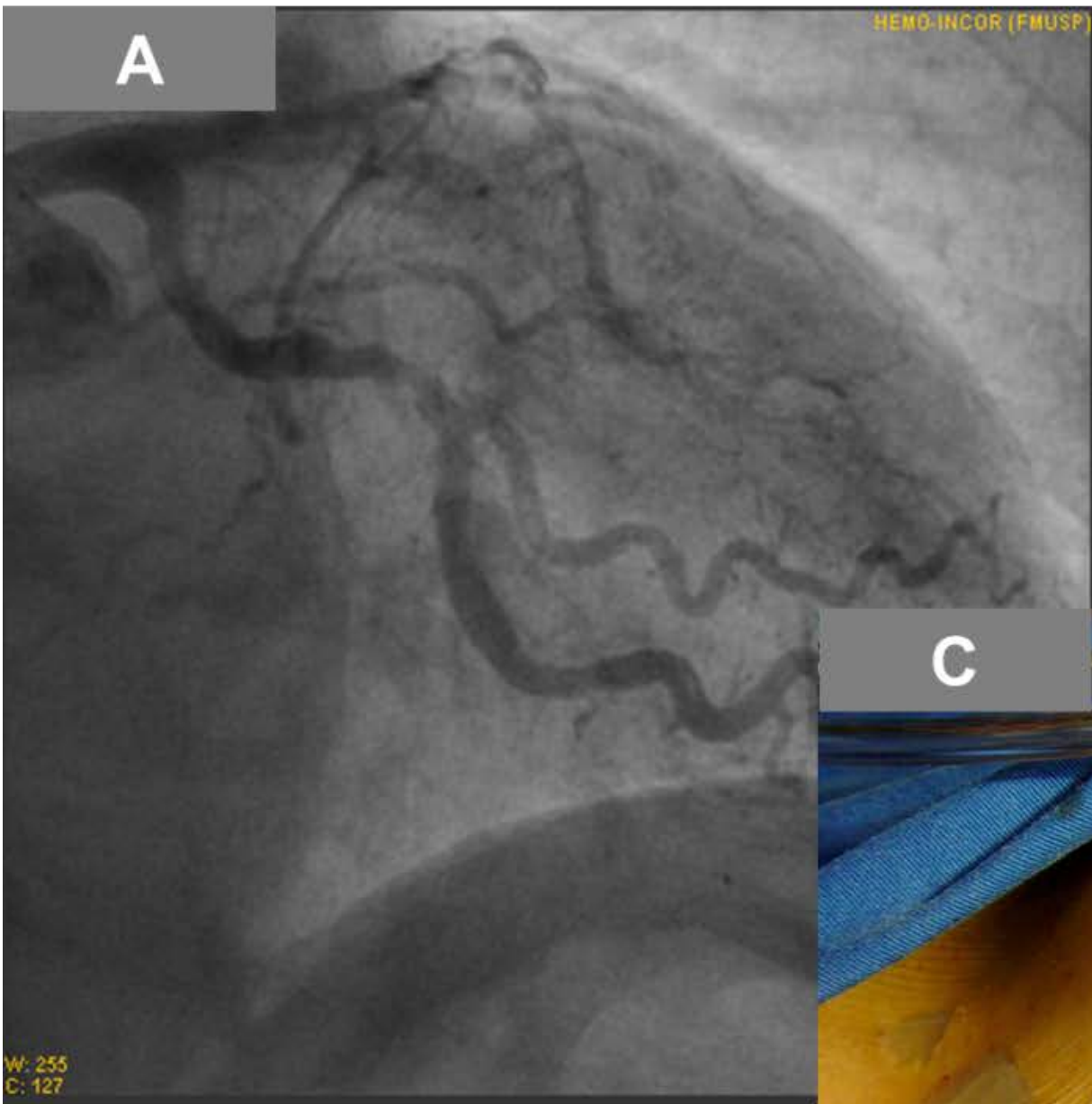
- Incomplete Incomplete (no data saved) ?
- Unverified
- Complete

Displaying record "1401-H" through "1747-H" of 47 records

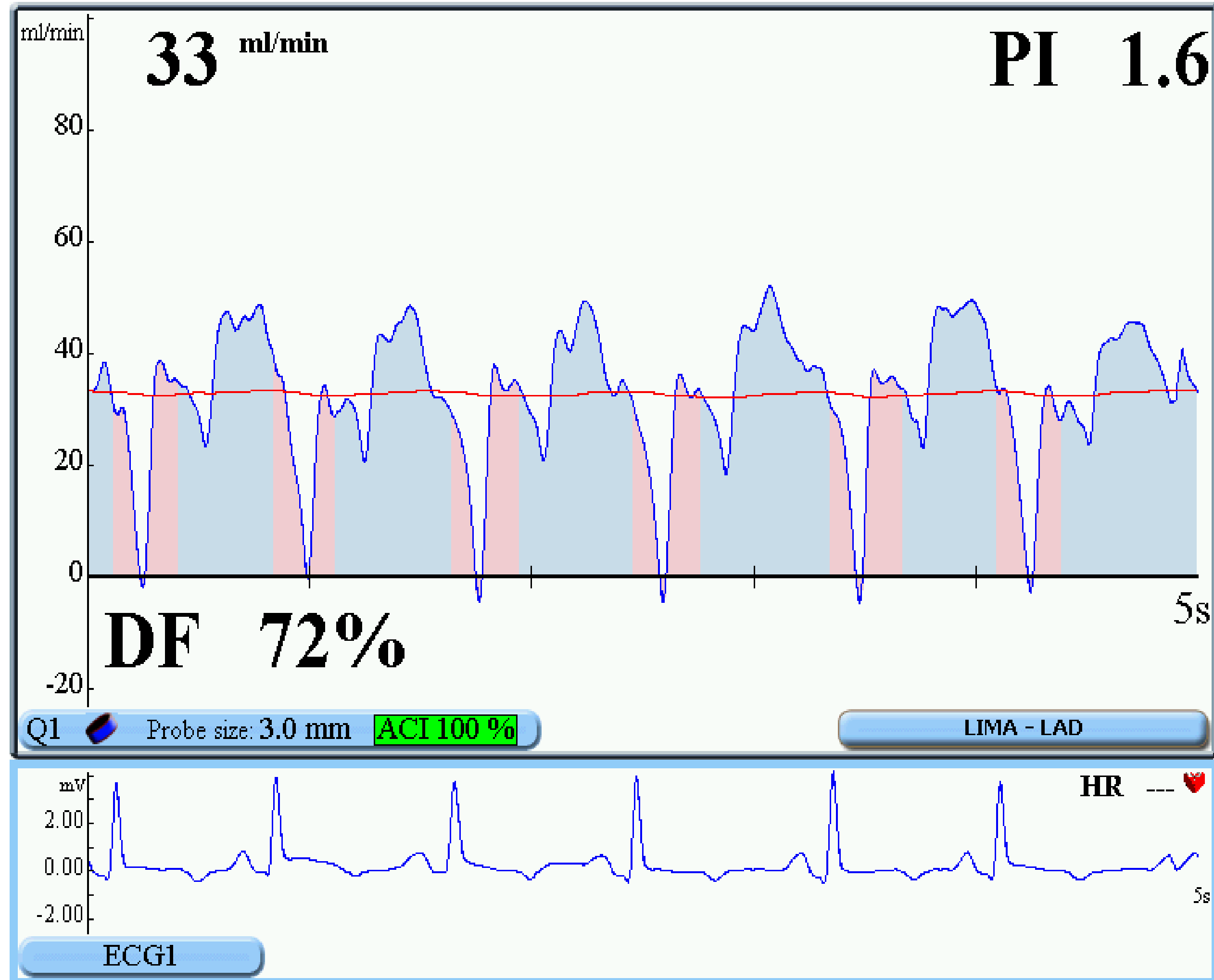
Displaying: [Instrument status only](#) | [Lock status only](#) | [All status types](#)

Study ID	Selection Patient Selection	Demographics Demographics	Baseline Data Baseline Data	Randomization Form Randomization	Surgery Surgery	PCI PCI	ICU ICU	Discharge Discharge	Fellow up Follow-up 30	Fellow up Follow-up 180	Fellow up Follow-up 1a	Fellow up Follow-up 2a	Fellow up Follow-up 3a	Fellow up Follow-up 5a	Completion Data Completion Date
1401-H	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
1402-C	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
1403-H	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
1404-H	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
1405-C	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
1406-H	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
1407-H	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
1408-H	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
1409-C	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
1410-H	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
1411-C	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
1412-H	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
1513-H	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
1514-C	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
1515-H	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
1516-H	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
1517-H	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
1518-C	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

Syntax Score > 23


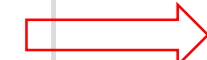

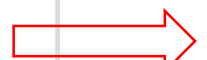



LITA - LAD



Demographic data	Hybrid Revascularization	CABG	P
	n=31	n=15	
Male sex	25 (80.6%)	13 (86.7%)	1,000
Age (year)	60.58 ± 8.14	60.4 ± 9.25	0,946
Body-mass index	27.49 ± 3.12	28.00 ± 3.96	0,637
Clearance creatinine	82.32 ± 22.64	83.84 ± 27.47	0,843
Diabetes mellitus	11 (35.5%)	8 (53.3%)	0,249
Glycated haemoglobin	6.15 (5.80 - 6.98)	6.2 (5.68 - 8.6)	0,739
Insulin-dependent diabetes mellitus	2 (18.2%)	2 (25.0%)	1,000
Prior myocardial infarction	14 (45.2%)	3 (20.0%)	0,097
Left ventricular ejection fraction	60 (55 - 65)	63 (58 - 69)	0,153
Diagnostic at the time of the procedure			0,663
Chronic coronary artery disease	27 (90.0%)	14 (93.3%)	
Instable angina	1 (3.3%)	0 (0%)	
Acute myocardial infarction	2 (6.7%)	1 (6.7%)	
Extent of coronary artery disease			
Three-vessel disease	31 (100%)	15 (100%)	1,000
Left main coronary artery disease	2 (6.5%)	1 (6.7%)	1,000

Risk Score	Hybrid Revascularization	CABG	P
	n=31	n=15	
EuroSCORE II	0.93 (0.67 - 1.28)	0.98 (0.87 - 1.24)	0,392
STS risk of mortality	0.5 (0.35 - 0.93)	0.65 (0.42 - 0.84)	0,489
STS risk of morbidity or mortality	7.42 (6.24 - 9.96)	8.85 (6.59 - 11.31)	0,682
Syntax score	26.5 (24.0 - 32.0)	29.0 (26.0 - 32.0)	0,317
PCI Syntax score II	30.40 (25.10 - 35.75)	32.40 (26.50 - 36.25)	0,446
PCI Mortality Syntax score II	7.0 (4.6 - 10.8)	8.3 (5.2 - 11.3)	0,471
CABG Syntax score II	23.2 (14.95 - 33.9)	28.4 (13.4 - 33.8)	0,860
CABG Mortality Syntax score II	3.9 (2.0 - 9.3)	6.0 (1.7 - 9.3)	0,838
Treatment recommendation			0,564
CABG or PCI	20 (69%)	8 (61.5%)	
CABG	8 (27.6%)	5 (38.5%)	
PCI	1 (3.4%)	0 (0%)	

Operative variables	Hybrid Revascularization	CABG	P
	n=31	n=15	
No of vessels grafted			<0.001
1	 31 (100%)	0 (0%)	
2	0 (0%)	2 (13.3%)	
3	0 (0%)	 11 (73.3%)	
4	0 (0%)	2 (13.3%)	
On-Pump CABG	0 (0%)	 15 (100%)	<0.001
Anesthesia time	03:30 (03:15 - 03:50)	06:00 (05:20 - 06:00)	<0.001
Surgery time	02:00 (01:50 - 02:20)	04:20 (04:00 - 04:45)	<0.001
Blood transfusion	2 (6.5%)	2 (13.3%)	0,587
Number of vessels treated with stents			
1	 3 (10.3%)		
2	11 (37.9%)		
3	13 (44.8%)		
4	2 (6.9%)		
Planned procedure performed	29 (93.5%)	15 (100%)	1,000
Treatment crossover	 1 (3.2%)	0 (0%)	1,000

Intra-hospitalar pos-operative	Hybrid Revascularization	CABG	P
	n=32	n=15	
MACCE	3 (9.7%)	0 (0%)	0,541
Myocardial Infarction	2 (6.5%)	0 (0%)	1,000
Repeat revascularization	0 (0%)	0 (0%)	1,000
Stroke	0 (0%)	0 (0%)	1,000
Death	1 (3.2%)	0 (0%)	1,000

Follow-up at 1 year	Hybrid Revascularization	CABG	P
	n=31	n=15	
MACCE	0 (0%)	1 (7.7%)	0,351
Myocardial Infarction	0 (0%)	1 (7.7%)	0,351
Repeat revascularization	0 (0%)	1 (7.7%)	0,351
Stroke	0 (0%)	0 (0%)	1,000
Death	0 (0%)	0 (0%)	1,000

To date, there has been no multicenter randomized controlled trial to establish whether hybrid revascularization achieves effort to reduce morbidity and mortality for patients with multi-vessel coronary artery disease, and increasing adoption of hybrid revascularization is proceeding slowly based on individuals experiential.

CONCLUSION

- The preliminary analysis of the study demonstrated that the strategy of revascularization by the hybrid technique was not statistically different than the control group regarding the incidence of major adverse cardiovascular events.
- All the patients with primary in hospital outcome were allocated in the hybrid group and events occurred between the two stages of procedure, that is, prior to PCI. By one year there were no events in the hybrid group.
- The low sample number does not provide precision for the analysis, and there is a need for multicenter studies.

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Thank You

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The Society
of Thoracic
Surgeons



EACTS
European Association For Cardio-Thoracic Surgery

