



Hellenic PCI Registry

Organization - Structure -

Directions - Initial Recordings

<http://registry.hellenicpci.gr/>

Georgios I. Papaioannou, MD, MPH, FACC, FSCAI

Athens Medical Center

Cardiac Catheterization Laboratory

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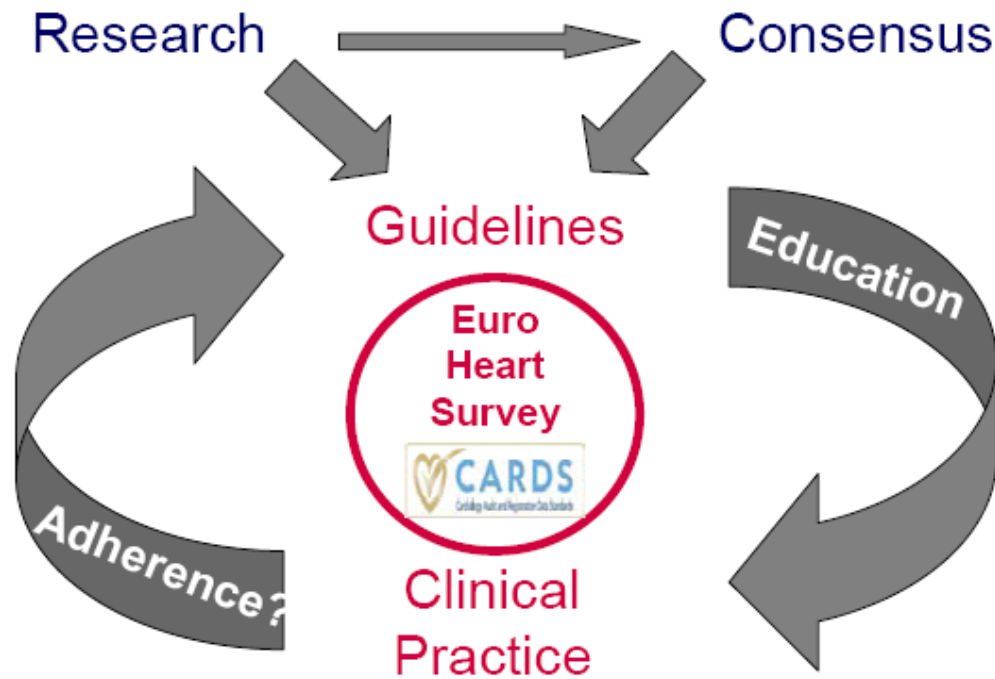
Aim of the Hellenic PCI Registry

- Common link with ESC (ESC PCI Registry) and EAPCI
- Recording of Centers/Operators/ Interventional Coronary Procedures with regional and national analyses
- Recording of basic indications, demographic, procedural and outcomes data of patients undergoing PCI
- National database for educational and professional requirements (in accordance to ESC/ACC)
- Quality and Outcomes Research

Registries & Clinical Practice



Prospective Registries / Surveys - Quality Cycle -



Greek Participation in the ESC PCI Registry

- Advantages

- Existing structure
- Simple process
- Direct participation in ESC PCI
- Instant comparison with ESC data
- No expenses on time, structure and analyses

- Disadvantages

- Certain format of database
- No independent access and analyses of center data
- No independent access and analyses of regional & national data

Hellenic Heart Registry on PCI

- Initial attempt in 1998 – paper based
- Current decision of the WG of HSC for a f/u attempt
- Analyses at a national level & submission of data to the ESC
- **Web-based** database with **secure data entry** by **individual users** (user ID/password)
- Central analyses of data by the WG of HSC
- Each center may use the database for their own data analyses upon request

Timetable of the PCI Registry

- 5/2006: WG decision
- 7/2006: Funding for the initial phase
- 9/2006: Collaboration with Philip Lees (Webmaster)
- 12/2006: Early design of database
- 3/2007: Testing version in a separate domain (Phase I)
- 7/2007: Phase II – Pilot cases entry (>300 patients, 9 centers)
- 2/2008: Phase III – Official start of Registry retrospectively from 1/1/2008 with a 3-5 year plan (>1000 patients entered so far in 2008)

Database Organization

- **Users** (case entry)
- **Local Administrators** (case entry – contact person in each center)
- **National Administrators** (new center entry – new user entry – validation process)

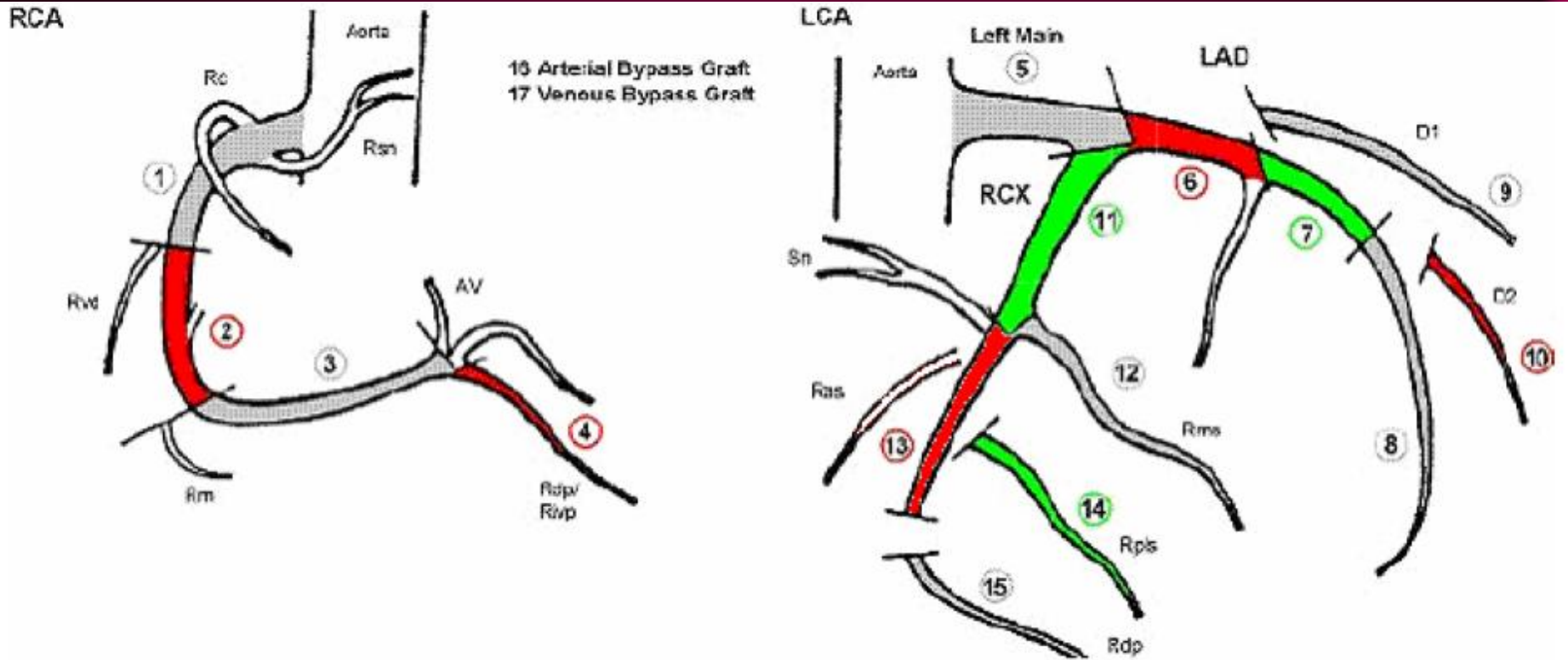
Users

- New User entry from National Administrators after User's request
- Users: Registry enter with unique personal User ID/Password (automatic generation via software)
- Unique (not shared) e-mail address
- Users may change their own information subsequently

Tables (8)

- Patient (Automatic entry ID-Demographics-Patient initials)
- Workup (History-Risk factors-Indication-Times-Admission Medications)
- PCI Angiogram (Angiographic findings based on the **15-segment model of ESC**)
- PCI Procedure (Periprocedural medications-Additional diagnostic or therapeutic devices-Complications)
- PCI Lesions (Lesion characteristics-PCI device-Result)
- Outcome (In-hospital outcome)
- Follow up (1 year/3 years/5 years)
- Submit (Automatic initial validation)

ESC 15 Segment Model



User Obligations

- List of cases entered that corresponds to the **unique system ID** (case is entered with initials only for patient confidentiality)
- Communication Information
- Watch for color coding
- F/U submission

Case submitted...

- National Administrator **confirms** valid submission or **rejects** the entry and explains the reason via e-mail
- Case is permanent
- **No edit of entered data can be performed**
- The only open table is the F/U form

Local Administrators

- Enter cases as regular Users
- Complete the form with Center Data for the previous year
- Contact Person for Center issues

National Administrators

- New Users entry
- New Centers entry
- Validation process
- National Administrators do not have any authority to change or edit any data individual Users enter

Recording Tips and Caution

- Patient history (Prior CAD, CHF, CRI) – **under reporting**
- Medications on admission (Aspirin, antiplatelets) – **over reporting**
- Timelines
 - STD: (0-3-6 hrs in STEMI) and (0-24-48 in NSTEMI)
 - DTB: Please record as much as possible accurate STEMI times due to small numbers / The majority of EU and USA centers have a DTB time >90 min
- In hospital events – Be accurate
- **Explanation question boxes: Take a look!**

Centers/Operators/CABG on site - 2007

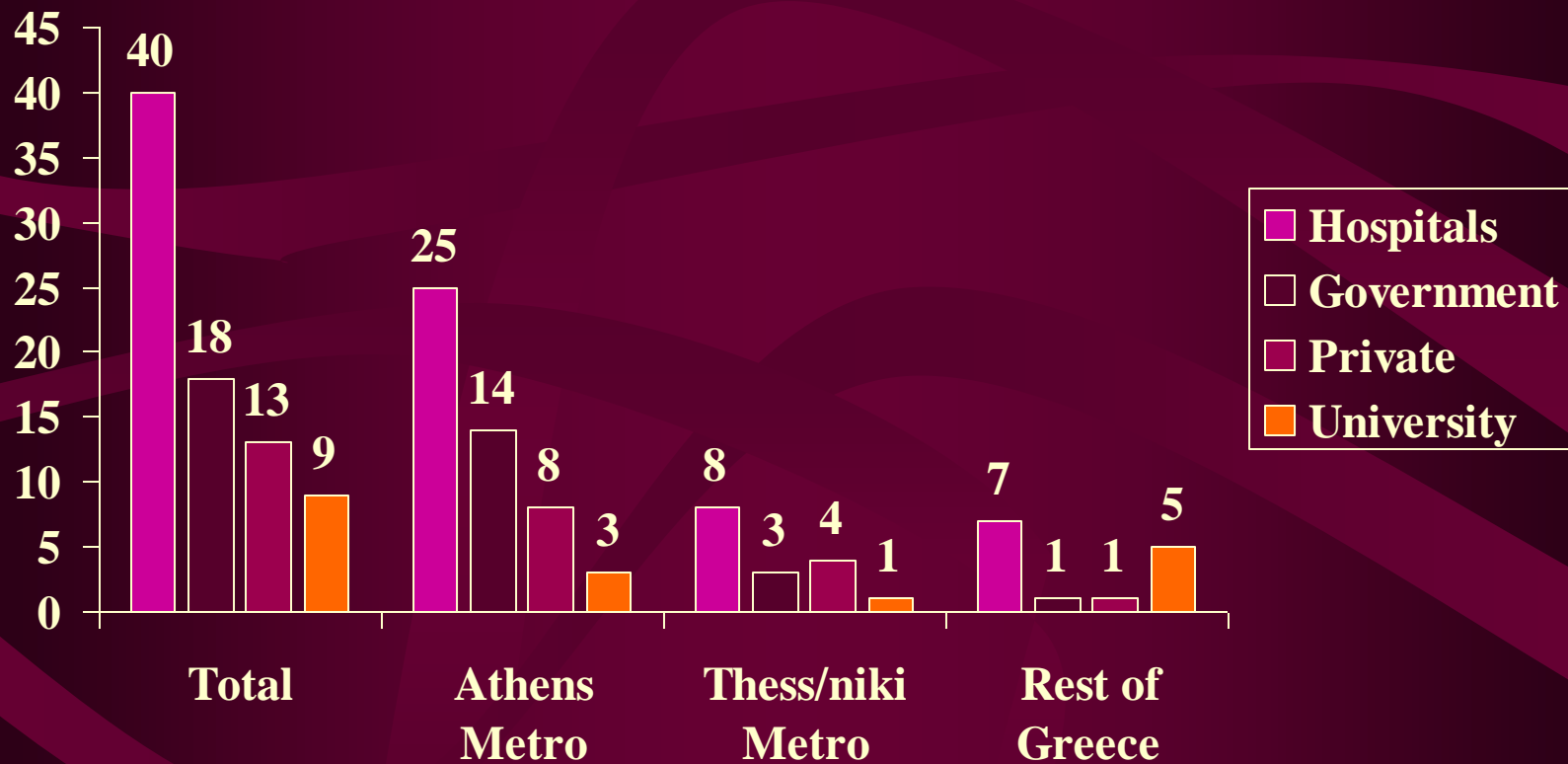
PCI Centers
n=40
208 Operators
24 with CABG on site

Athens Metro Area
n=25
129 Operators
12 with CABG on site

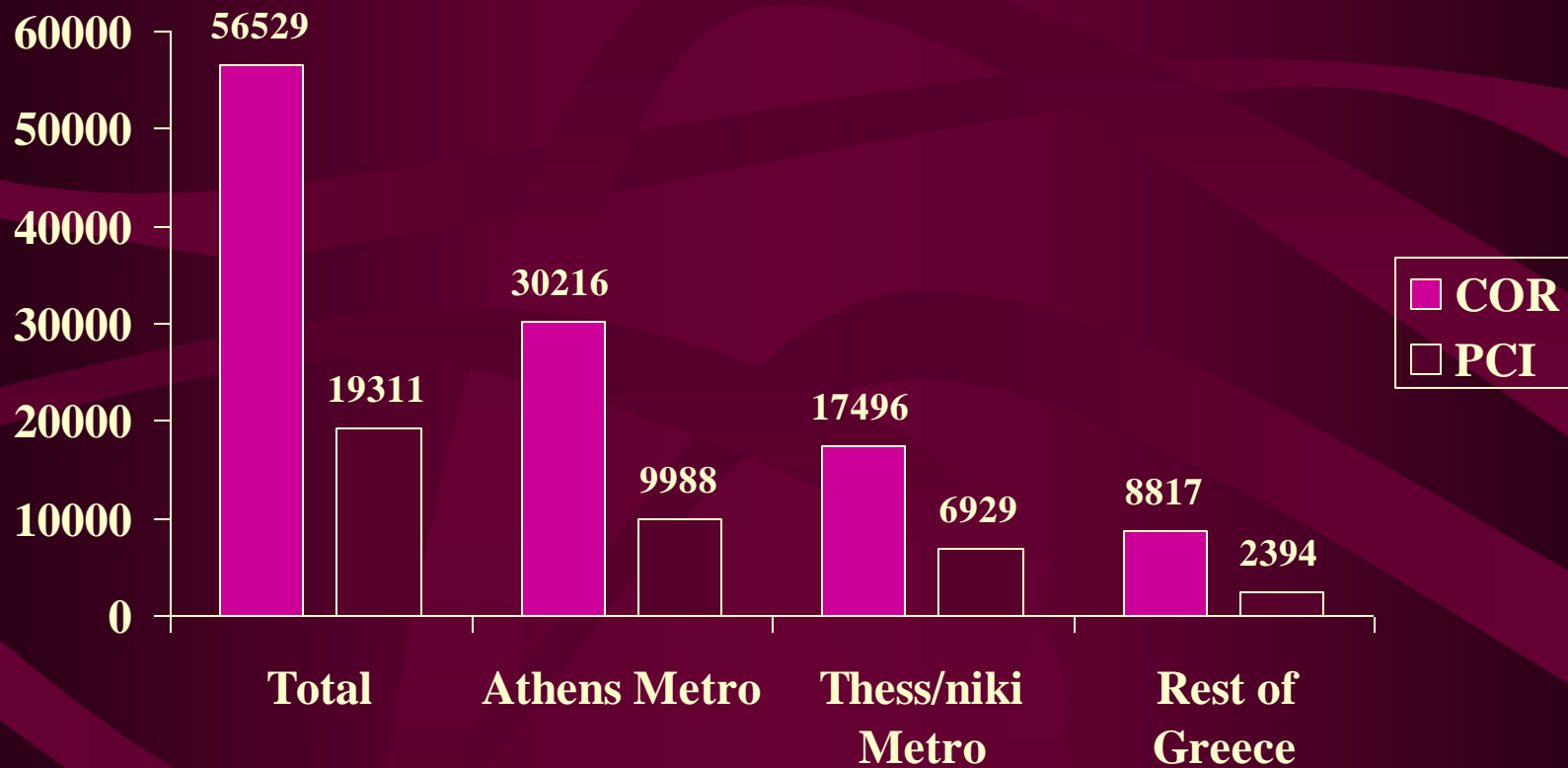
Thessaloniki Metro Area
n=8
57 Operators
7 with CABG on site

Rest of Greece
n=7
22 Operators
5 with CABG on site

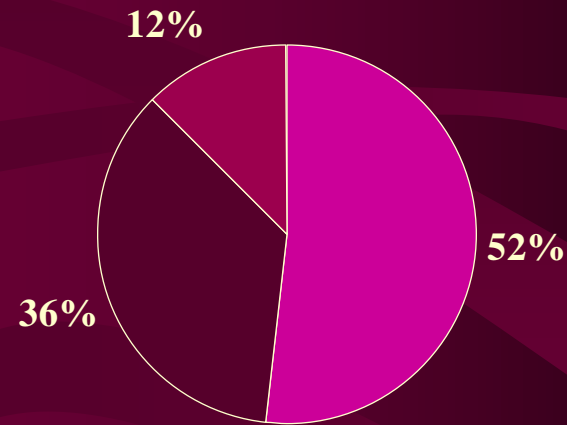
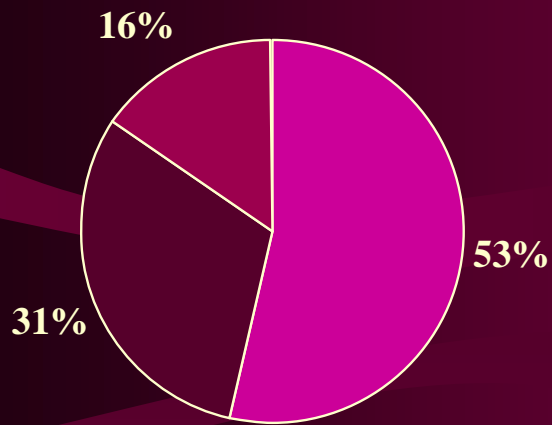
PCI Centers - 2007



COR/PCI Procedures - 2007



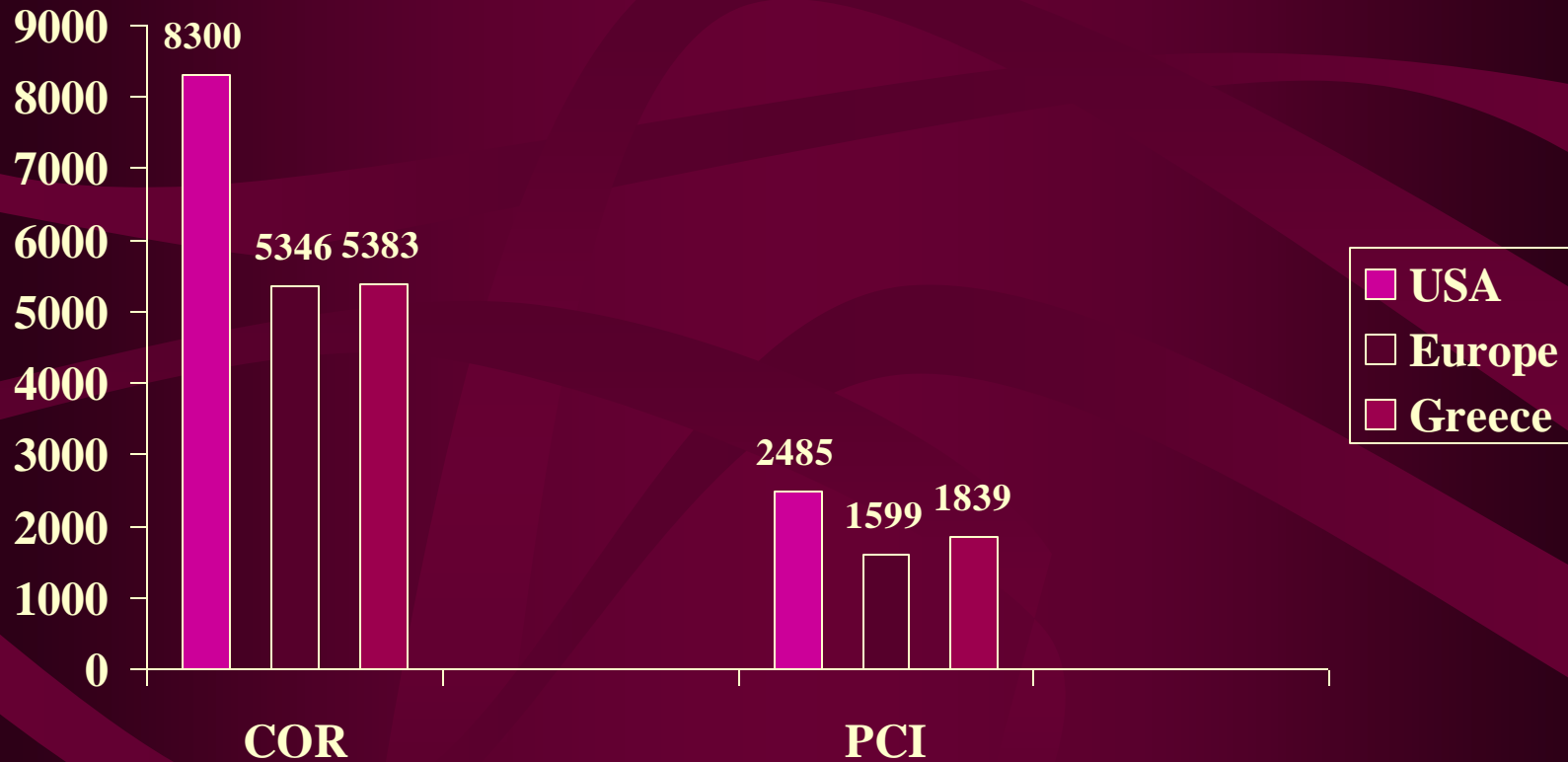
COR/PCI Procedures - 2007



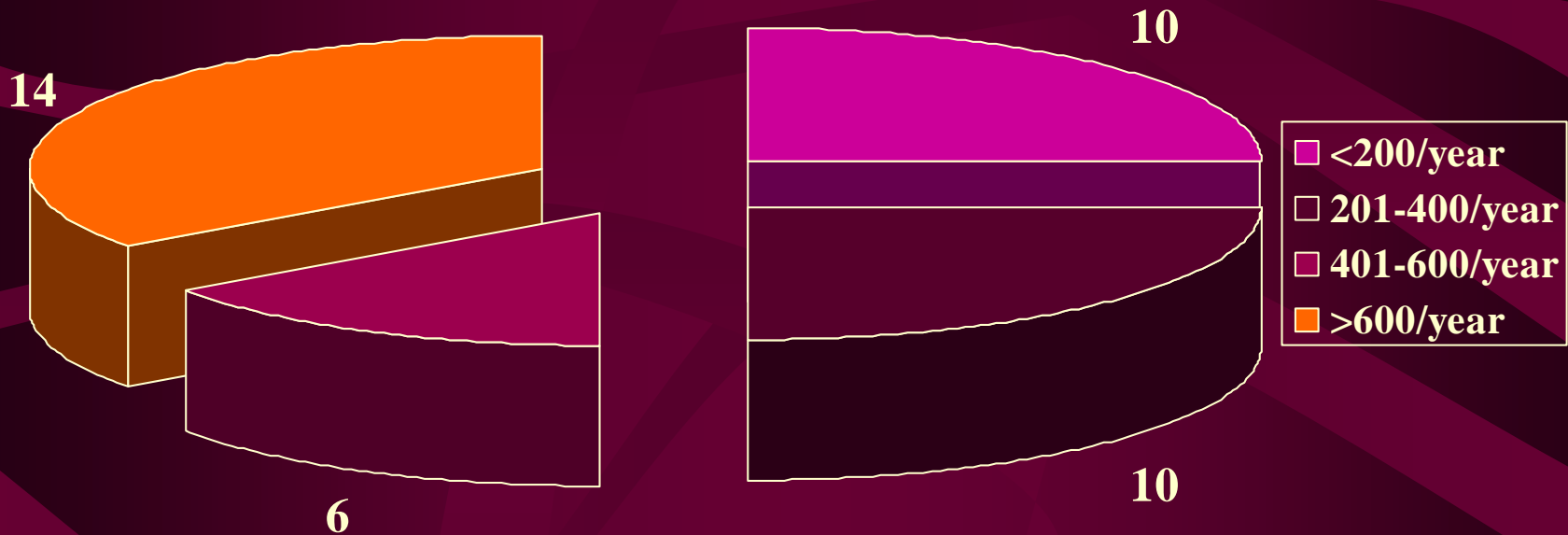
Coronary Angiograms

Percutaneous Coronary Interventions

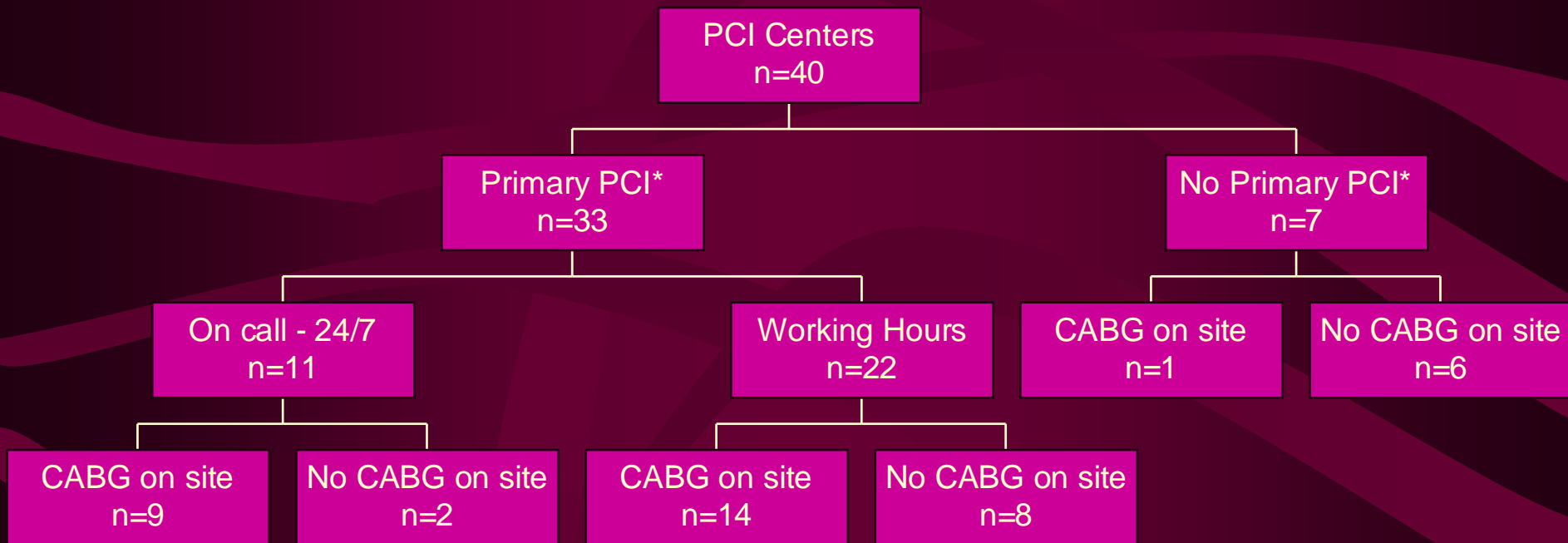
COR & PCI Procedures / 10⁶ population - 2007



PCI Volume per Center - 2007

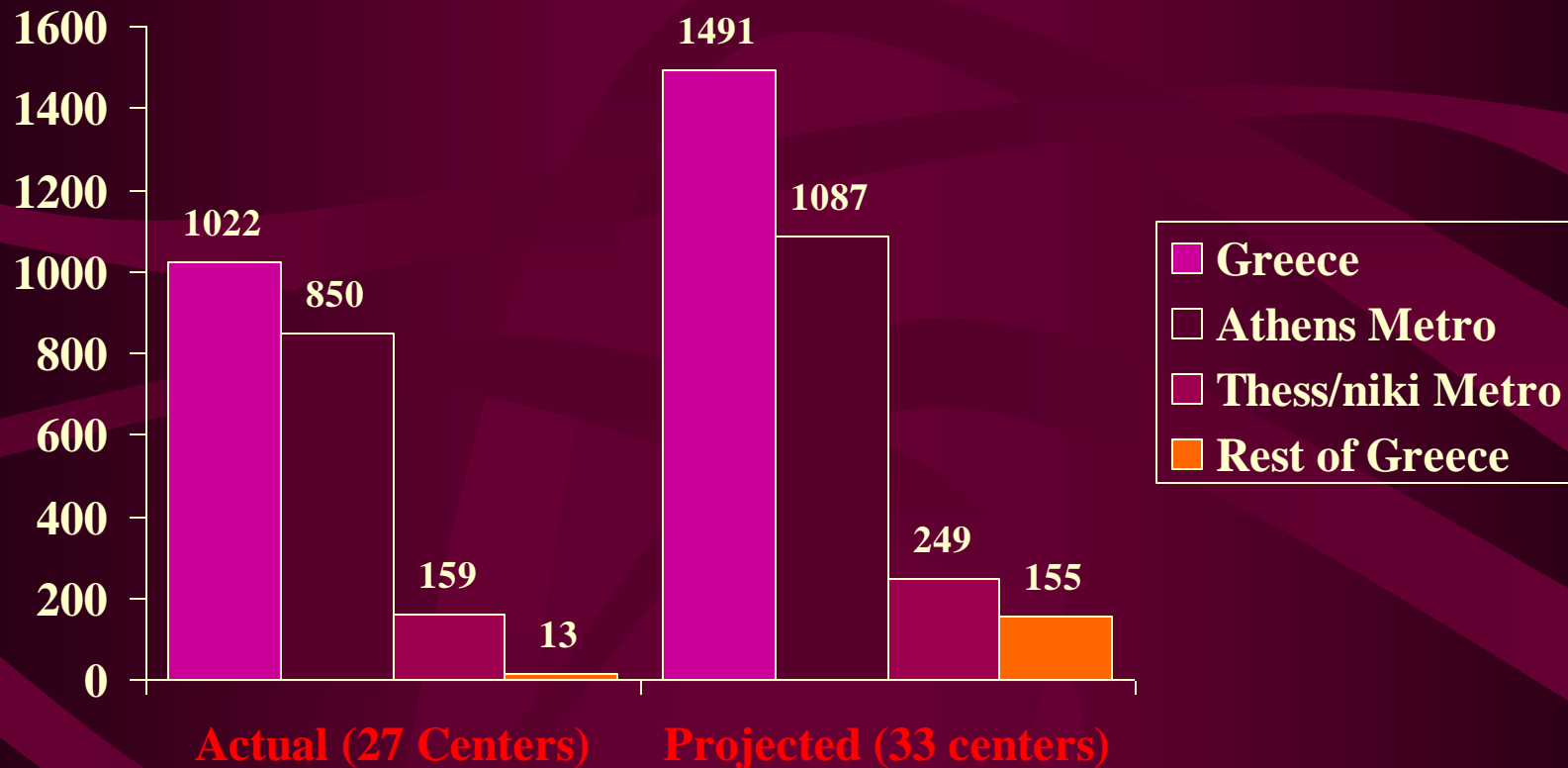


PCI Centers & Primary PCI - 2007



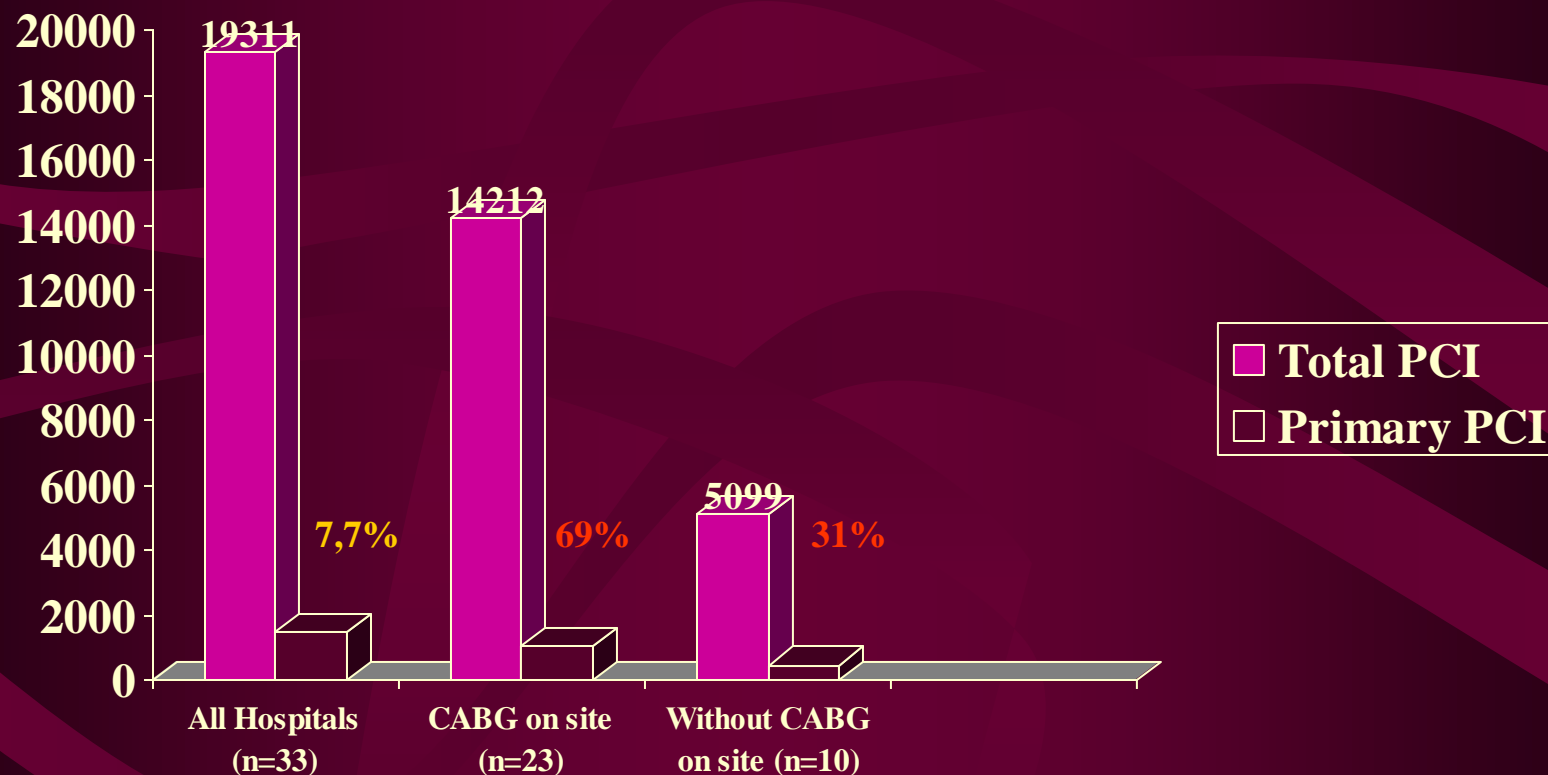
*Technical ability to perform primary PCI

Primary PCI numbers* - 2007

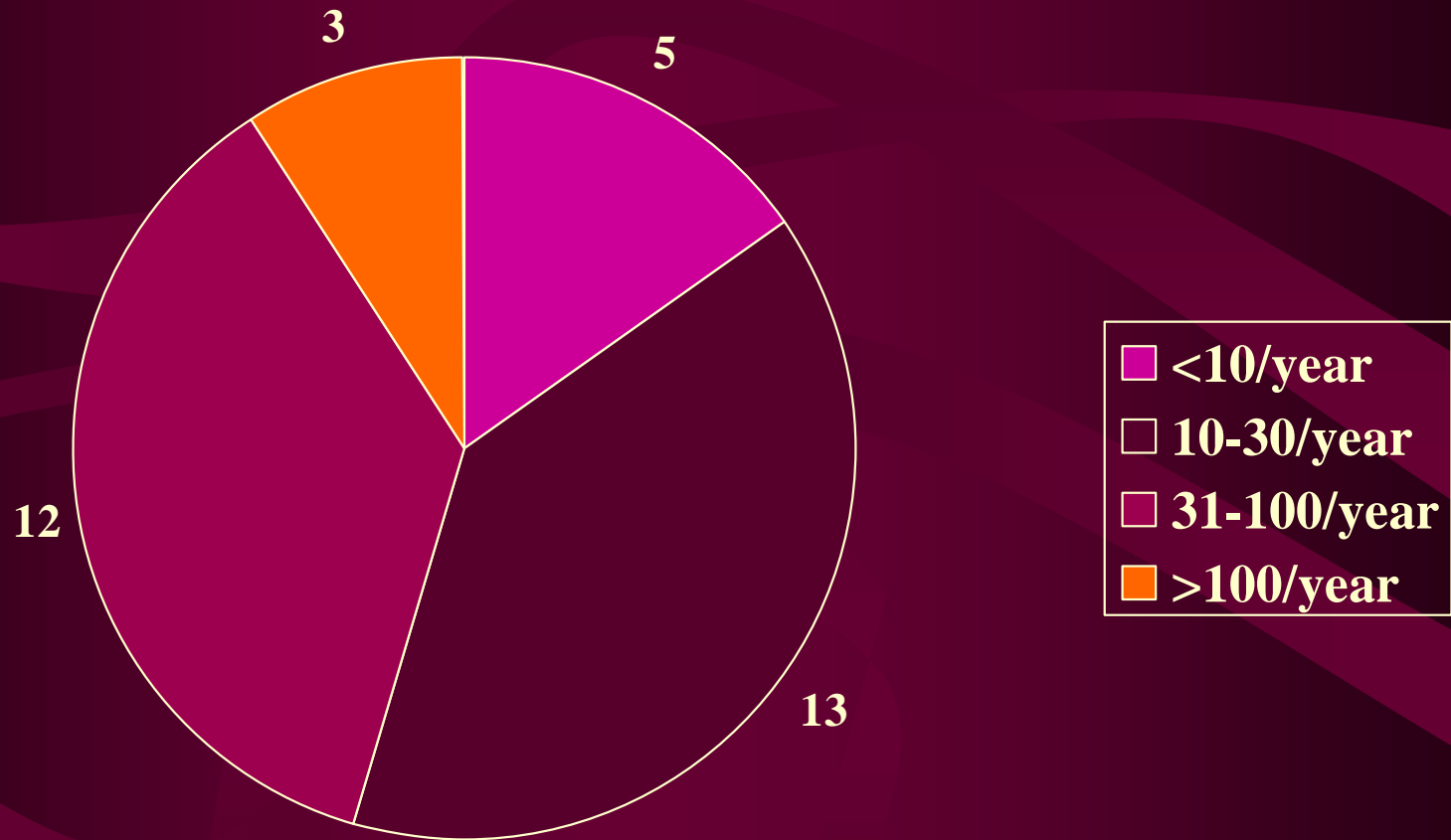


* Data from 27 Centers (6 Centers with data missing)

Volume of Primary PCI in Centers with and without CABG on site - 2007



Volume of Primary PCI per Center - 2007



ESC PCI Registry (>28,000 pts) – Greece vs Europe (Δεδομένα έως 26/11/2008)

	Greece (%)	Europe (%)	OR
Males	85.00	73.69	0.49*
Smokers	43.14	26.06	0.46*
Prior MI	20.92	35.90	2.12*
Prior CHF	1.05	14.37	>5*
STEMI	22.72	22.78	NS
Primary PCI	3.83	15.93	>5*
Resc/Fac PCI	2.64	1.50	0.4*
CS	0.54	1.60	NA
STEMI STD (hrs)	2.00	2.92	NE
STEMI DTB (hrs)	1.58	0.92	NE

*p<0.05 for OR

ESC PCI Registry (>28,000 pts) – Greece vs Europe (Δεδομένα έως 26/11/2008)

	Greece (%)	Europe (%)	OR
NSTEMI STD	2.75	7.50	NE
NSTEMI DTB	76.00	30.15	NE
Femoral Vascular access	99.34	78.17	0.02*
DES Implantation	32.10	37.95	NS
Stent length (11-20 mm)	64.21	56.02	0.71*
Stent length>20 mm	26.58	35.21	1.50*
Stent thrombosis	1.05	0.59	NS

*p<0.05 for OR

Benefits of HHR PCI Registry

- Physicians may record their own patients electronically
- Hospitals may establish their own database
- National status on PCI based on HSC
- Policy making for professional and educational reasons
- Direct participation and strengthening of Greek participation into the ESC/EAPCI

Difficulties & Problems

- Motivation of physicians (multifactorial)
- Politics
- Clear understanding of the role and the benefits of the registry with broad participation in analyses
- Establish a structure especially in high-volume centers for secretarial help
- Loss of enthusiasm of existing users if a wide participation can not be achieved



Hellenic Heart Registry on Percutaneous Coronary Interventions

- Link: <http://registry.hellenicpci.gr/>
- Επικοινωνία:
 - admin@hellenicpci.gr
 - gpaipao@otenet.gr
 - athanasios_kotsanis@hotmail.com

Thank you for your participation!