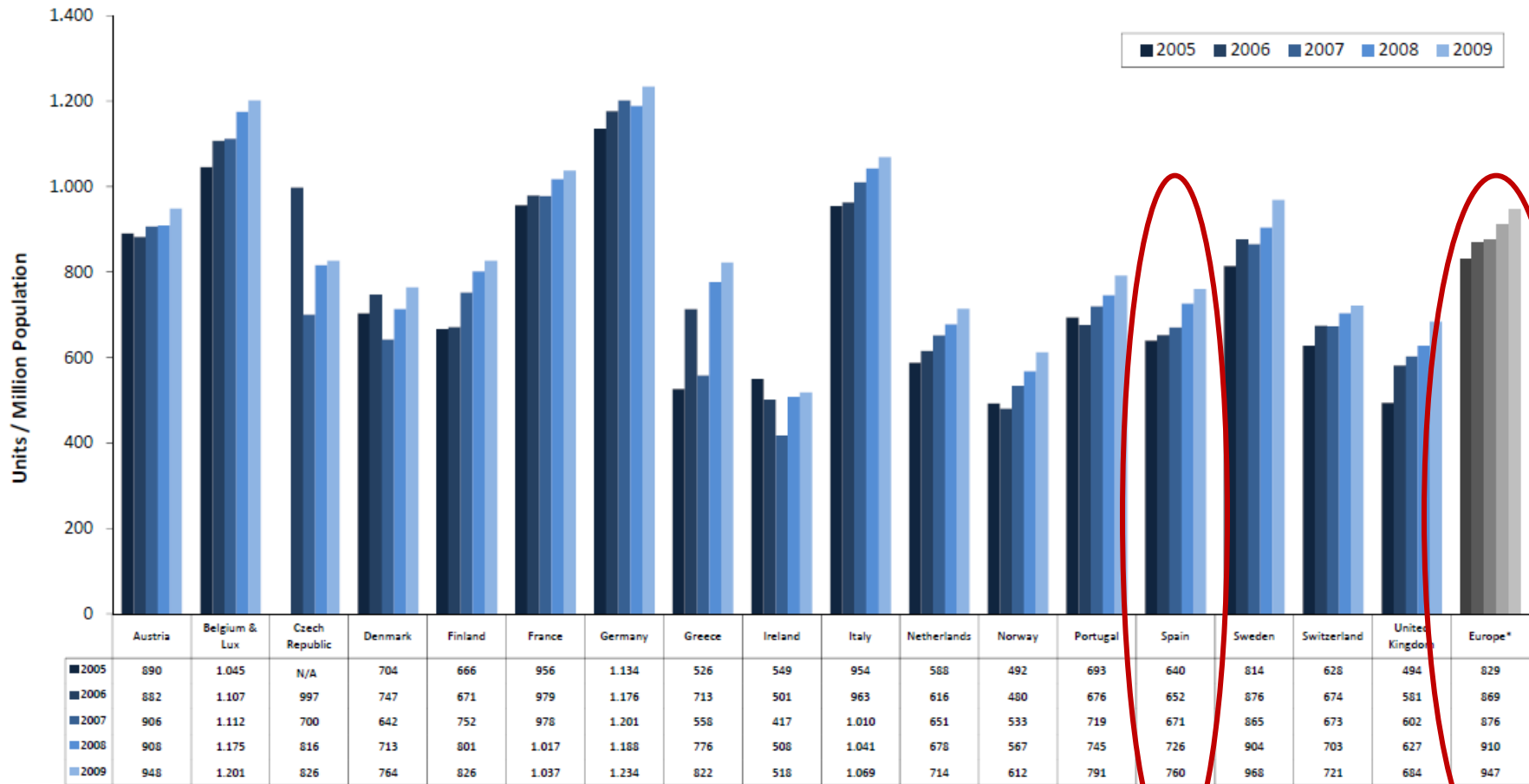


# Gaps in the implementation of Guidelines for CRM Devices in ESC country members

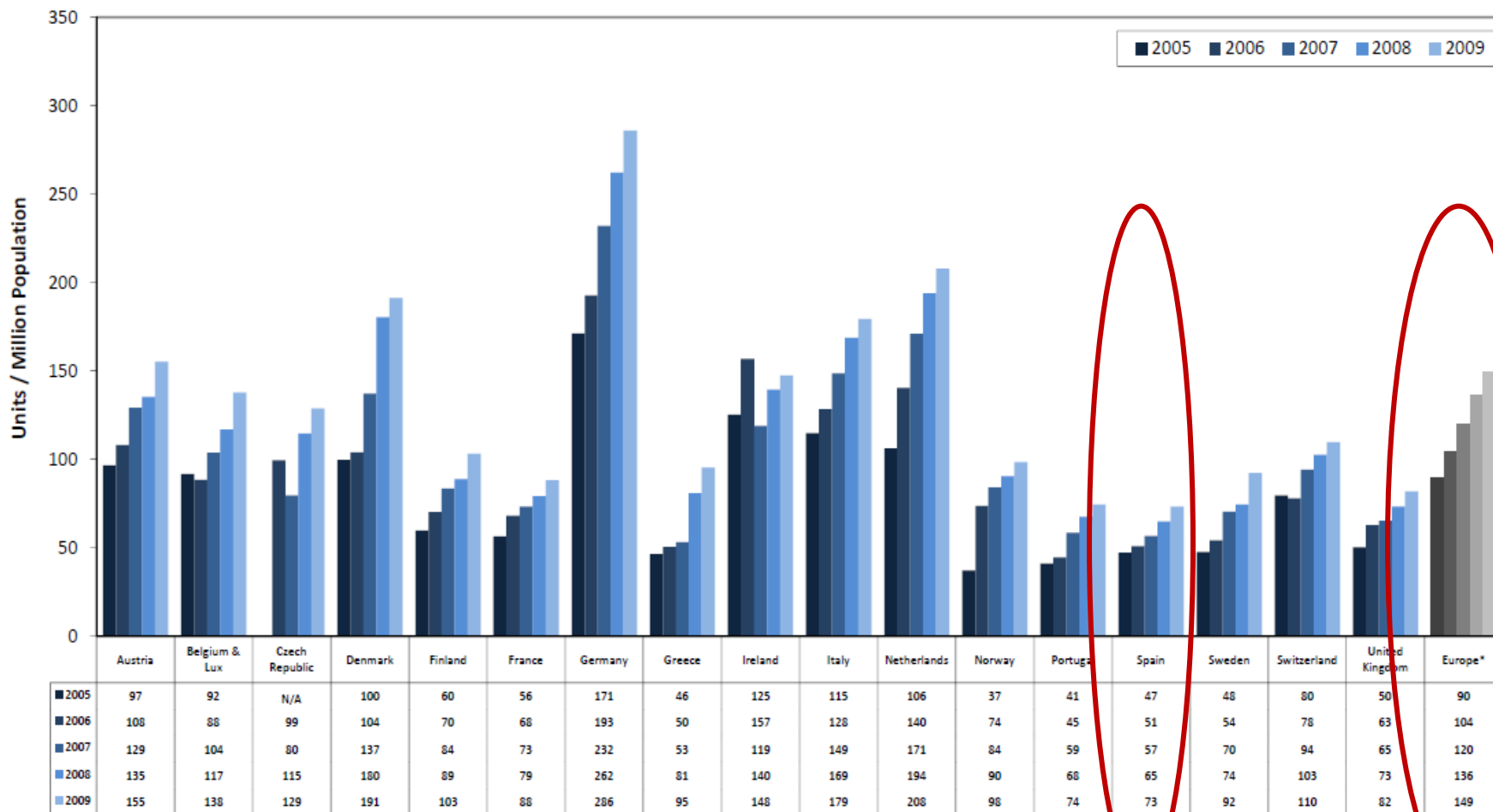
## The case of Spain

Ignacio Fernández Lozano

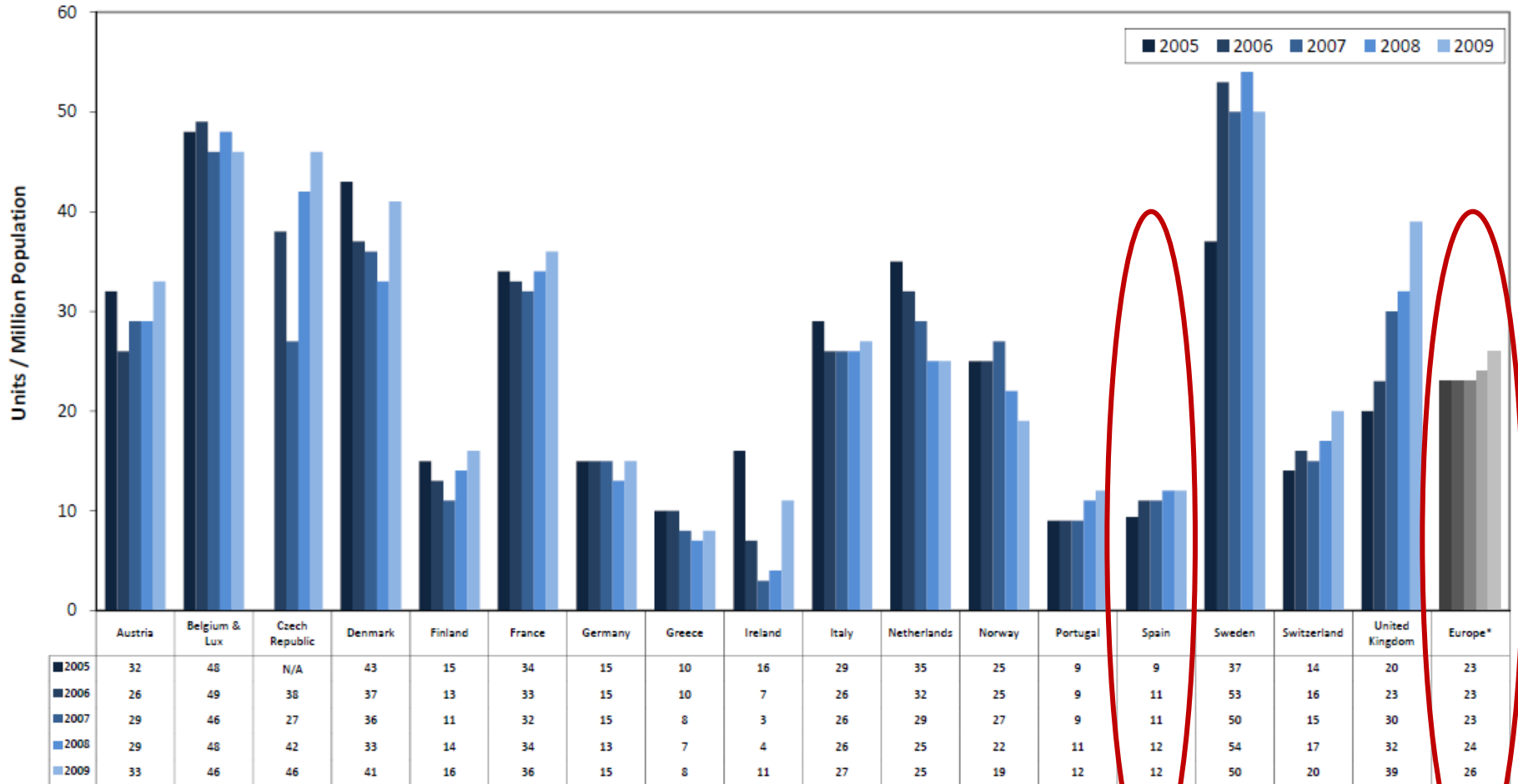
## Pacemakers - Units per million inhabitants



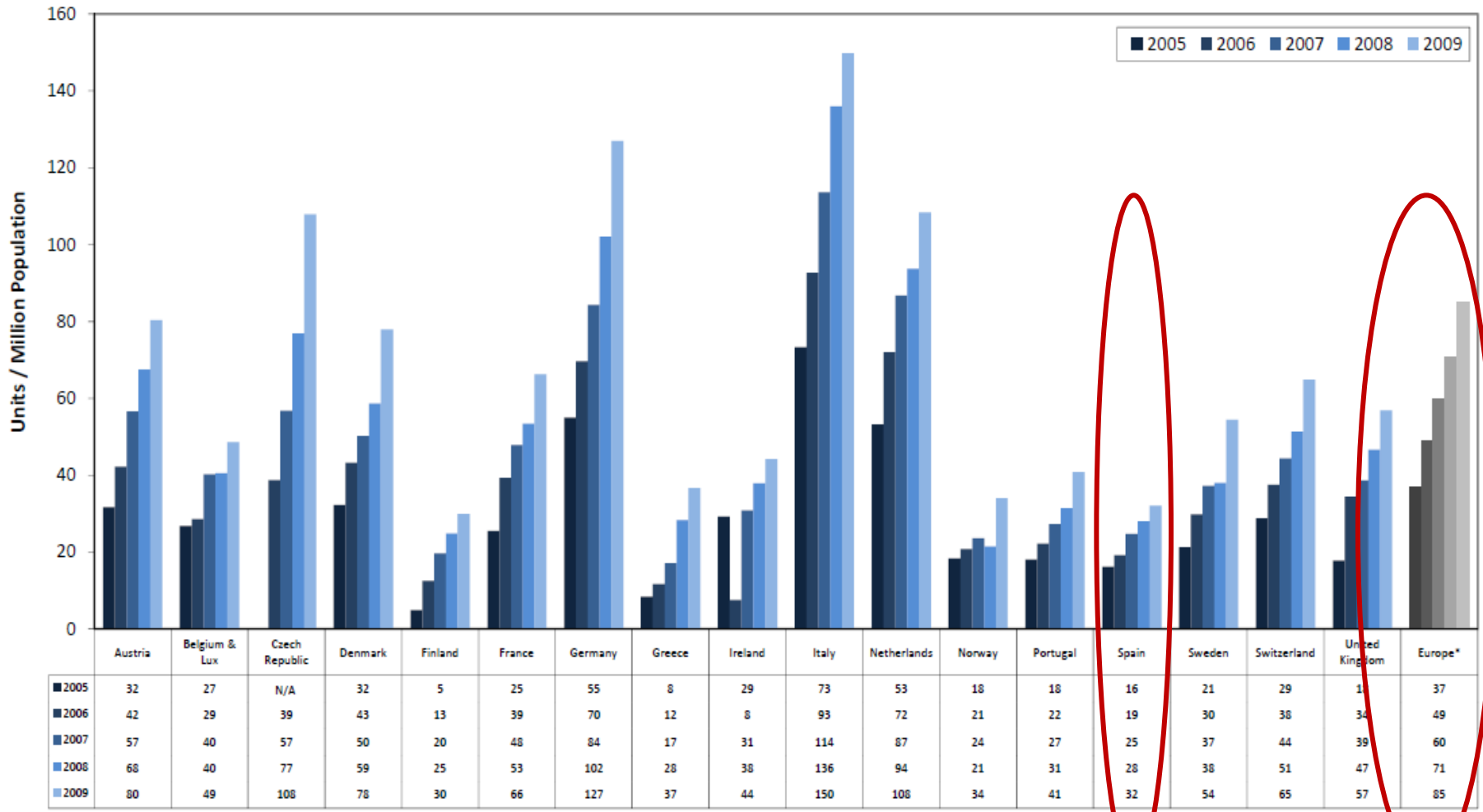
## Defibrillators - Units per million inhabitants



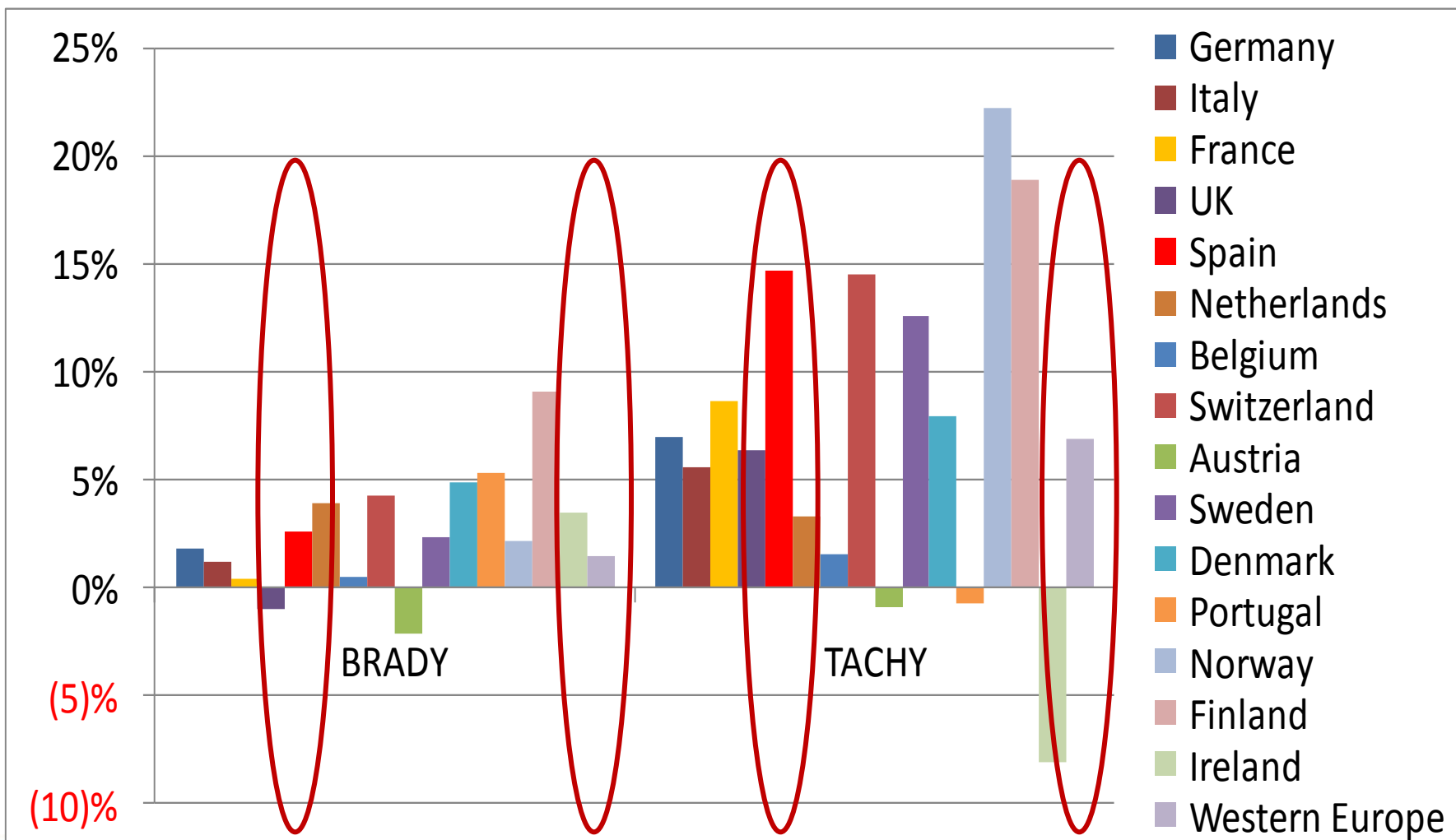
# CRT-P - Units per million inhabitants



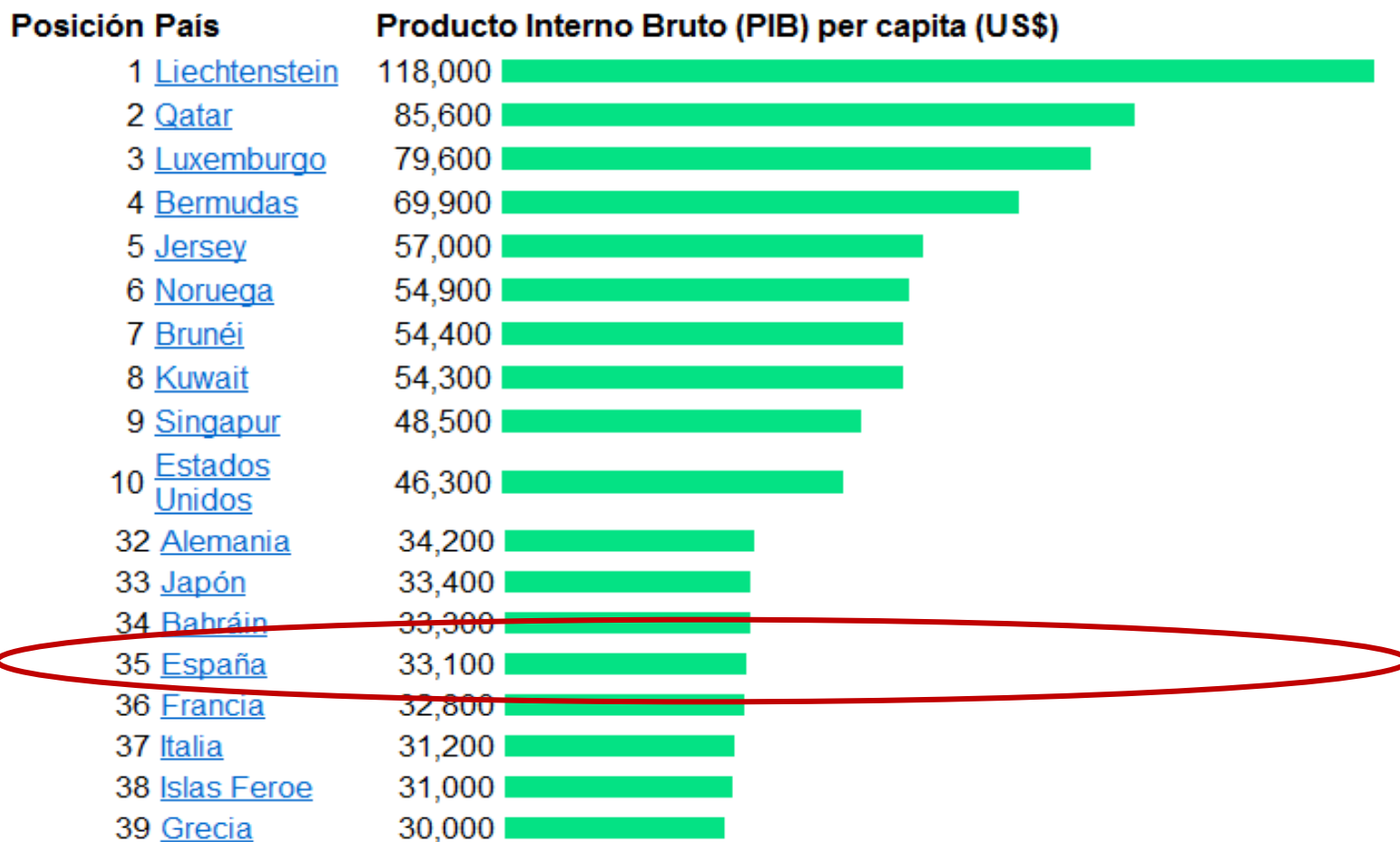
## CRT-D - Units per million inhabitants



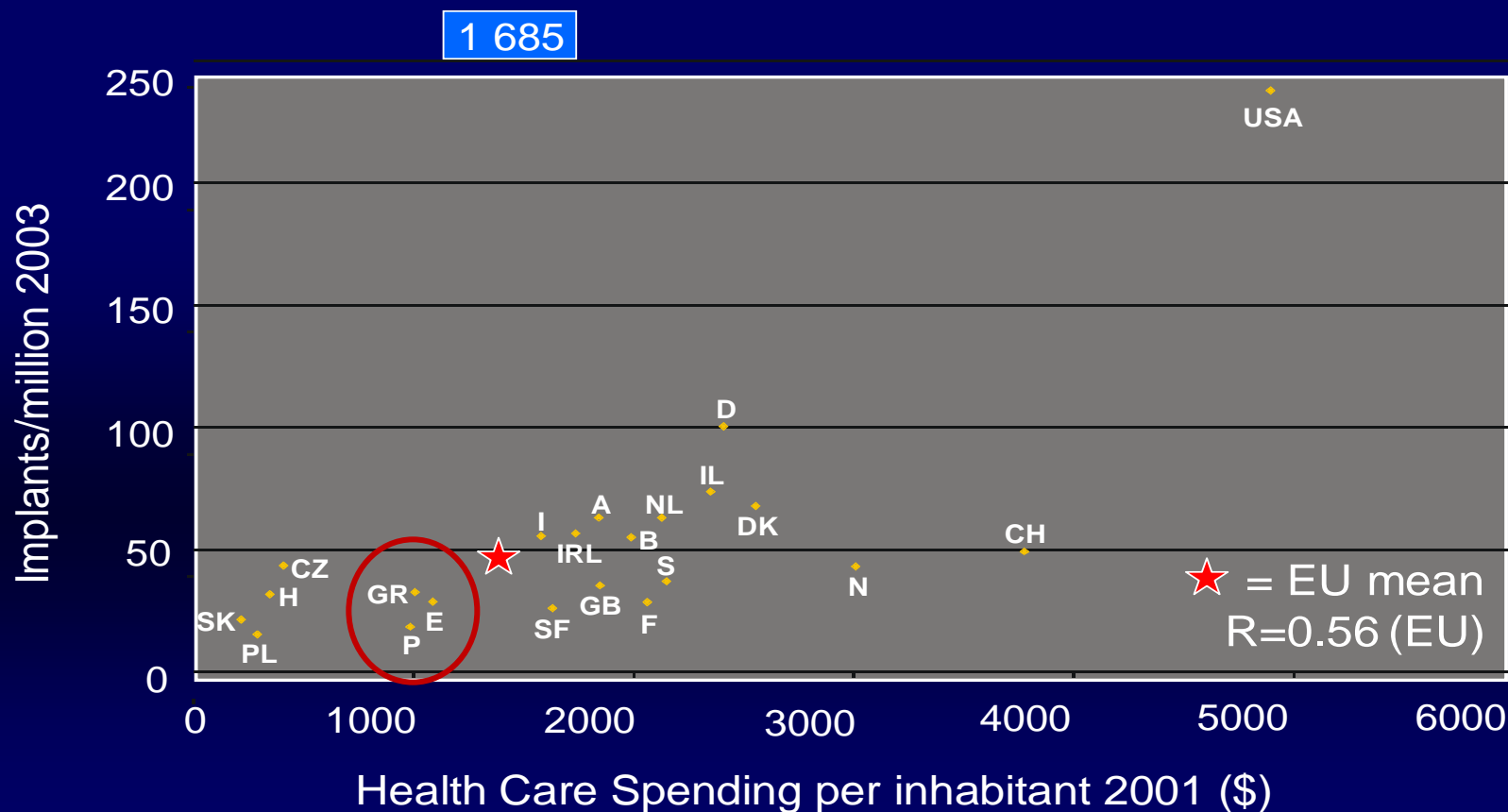
# EUCOMED 2010



## GROSS DOMESTIC PRODUCT PER INHABITAN



# ICD implants in relation to health care spending



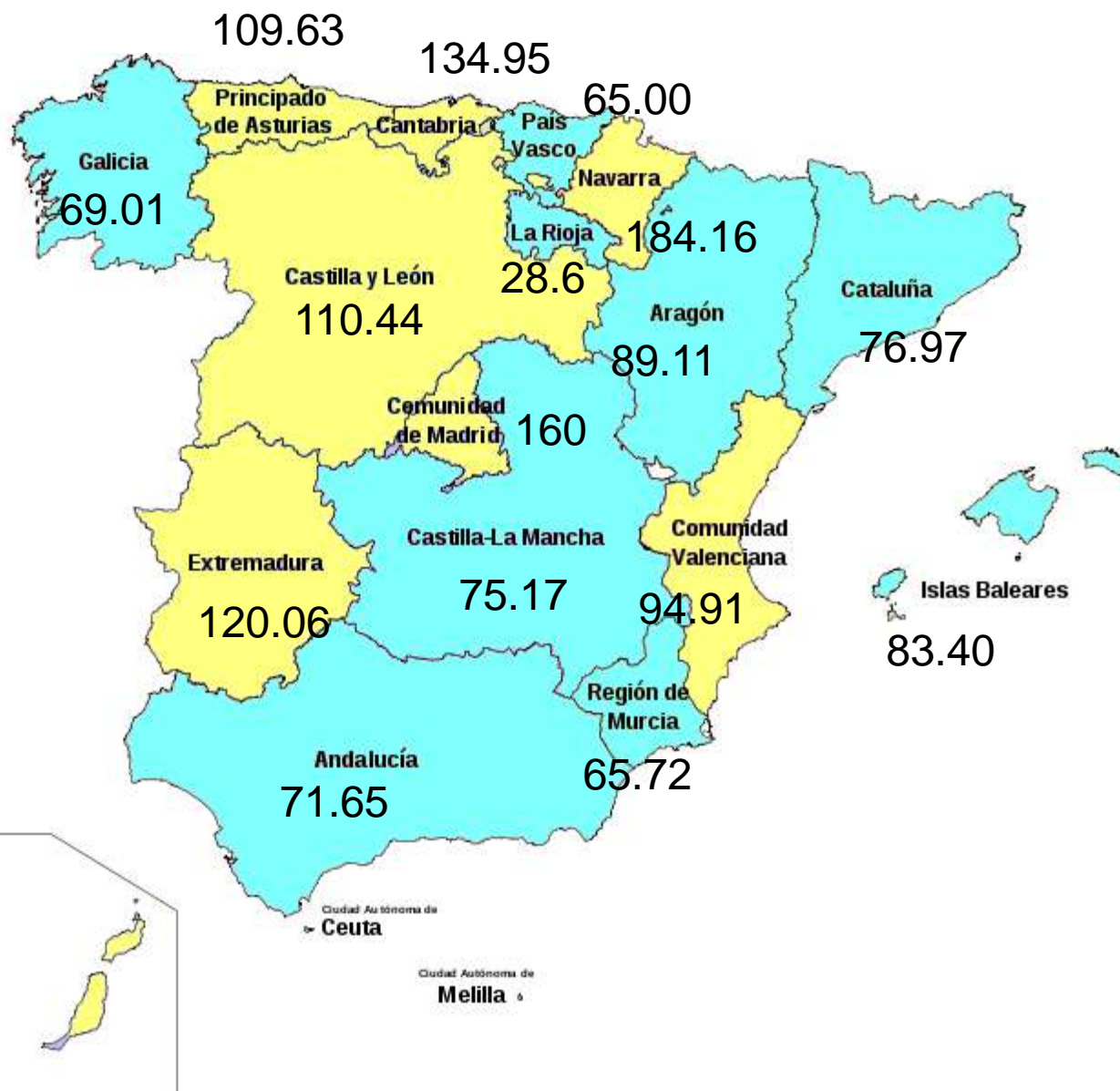
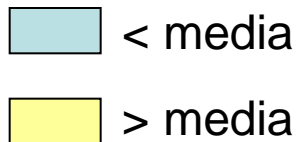


# SPANISH REGISTRY

- 134 Hospitals.
- 4.108 AICDs.
- 88,91 per million inhabitant.
- 950 replacements ( 23.12%)
- 2930 New devices (71.32%)
- 210 No data ( 5.11%).

# SPANISH REGISTRY

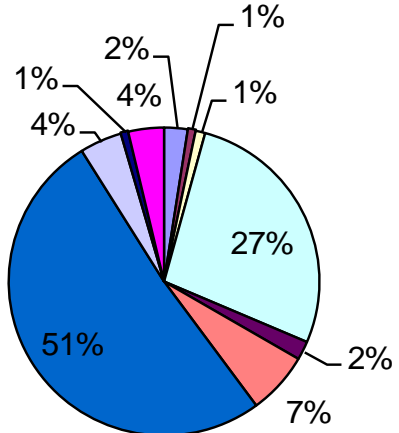
- 4.108 AICDs.
- Mean age 62,19 years (1-86)
- Males 3069 (81,7%)
- Females 686 (18,3%)
- No data 115



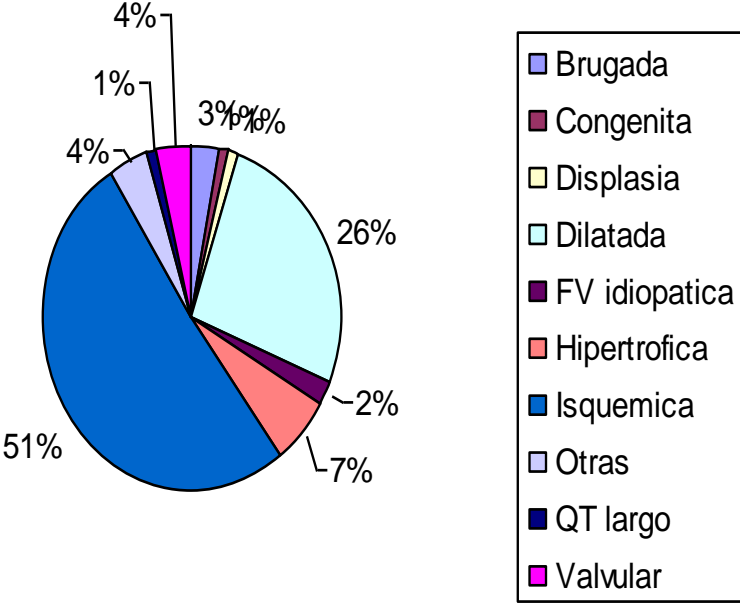


# Etiology

**Primoimplantes**

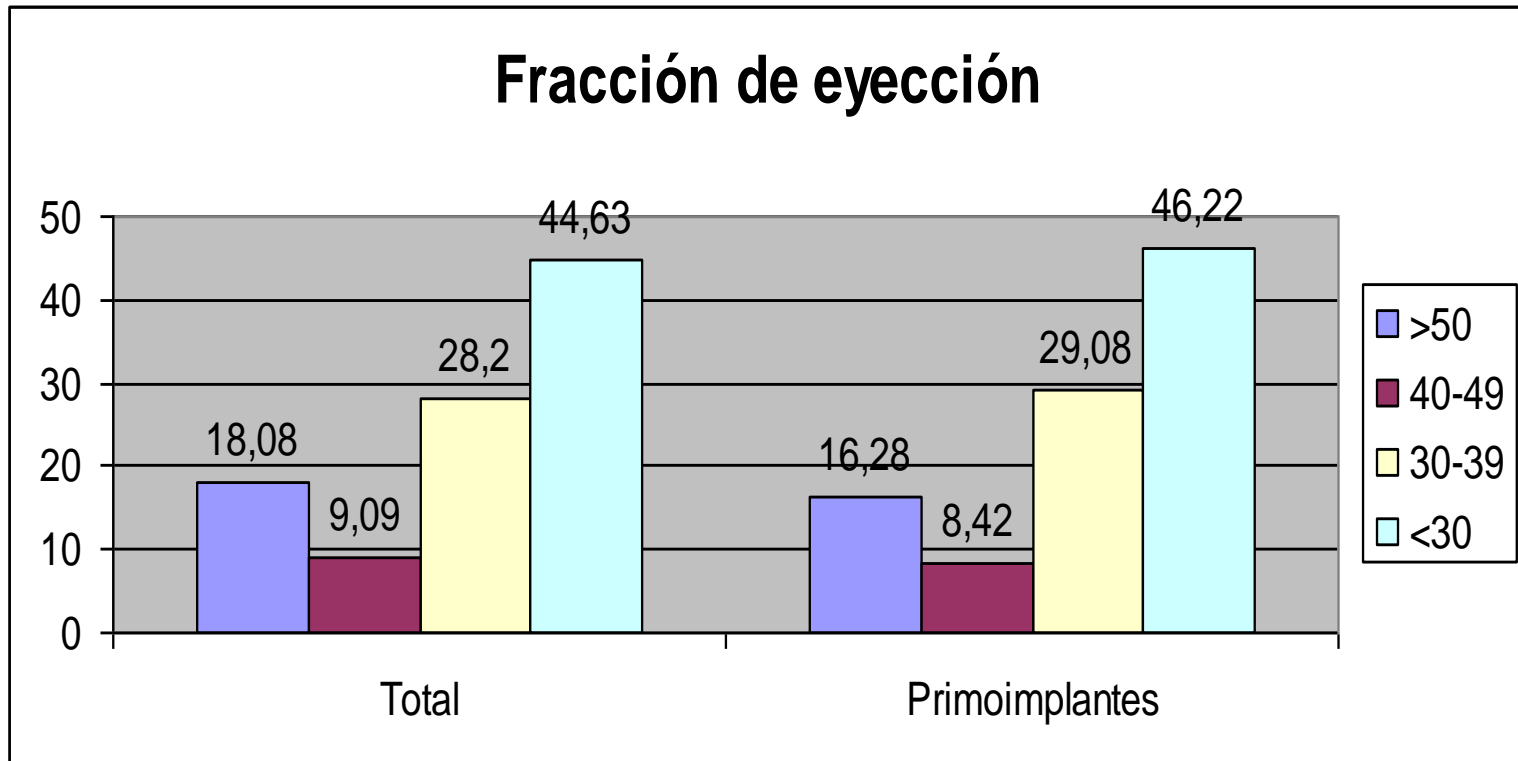


**Implantes Totales**



3.751 AICDs

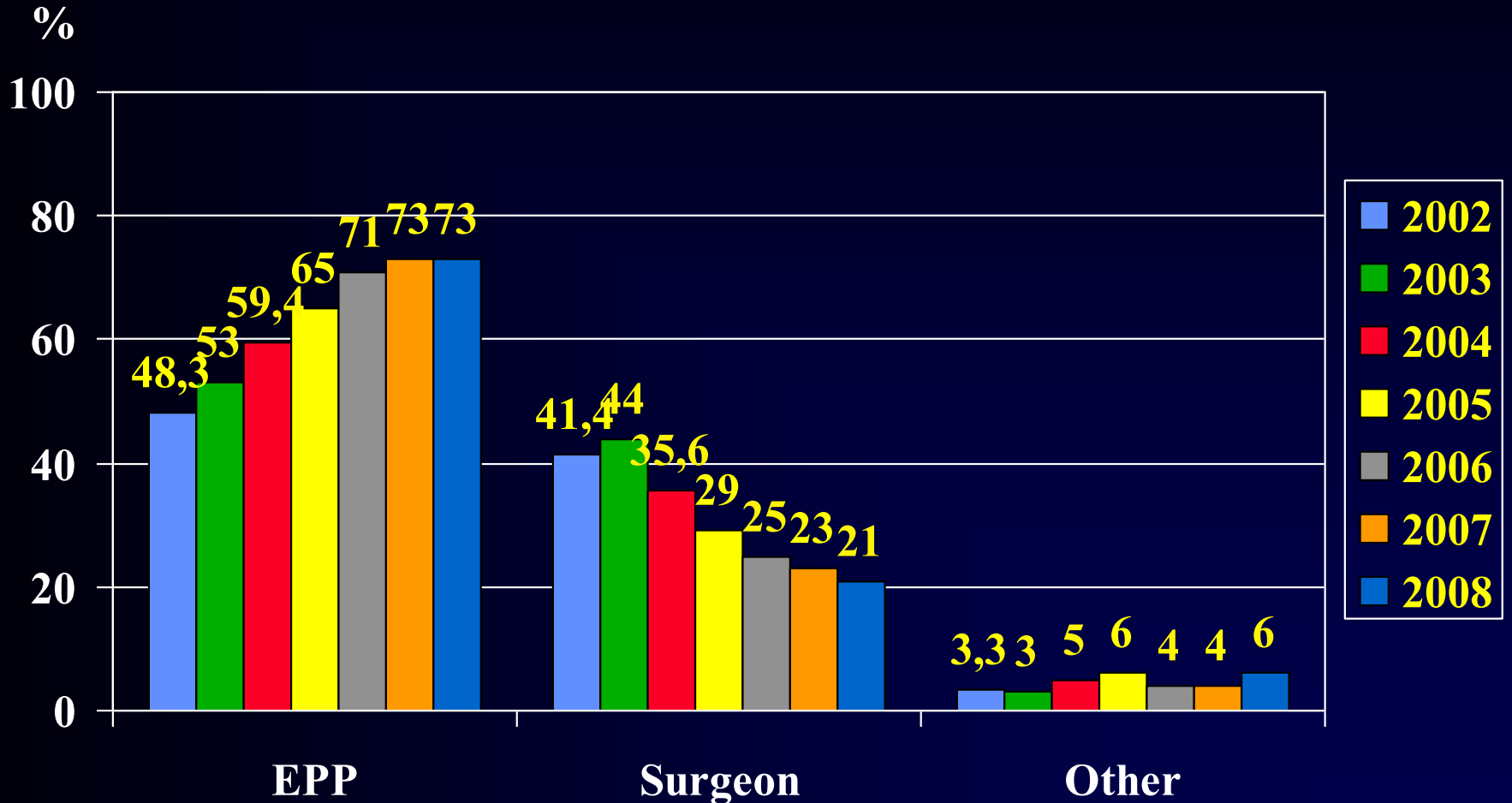
# Ejection Fraction



3.751 AICDs



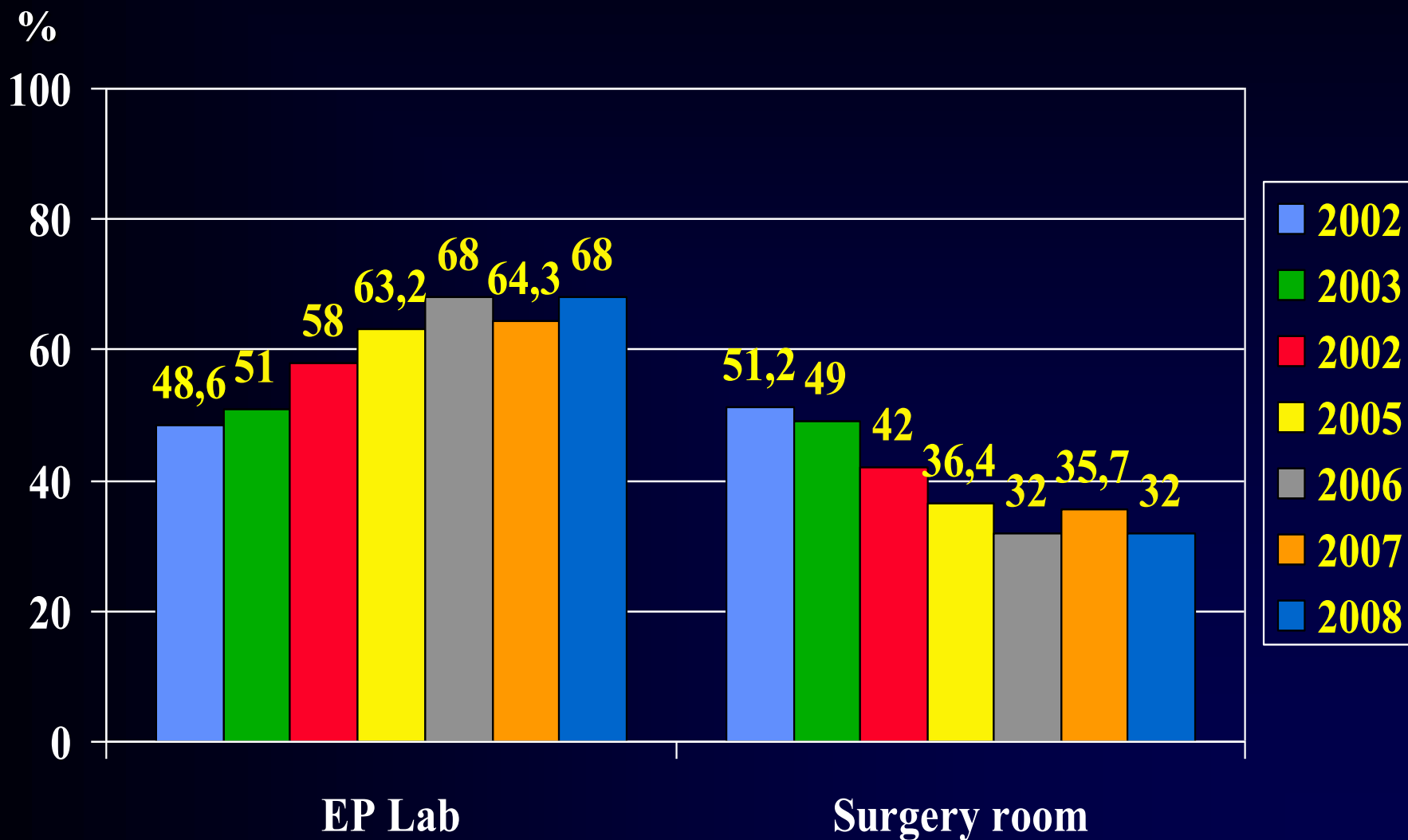
# Physician



Respuestas: 92 % (05), 94 % (06), 93 % (07), 93 % (08)

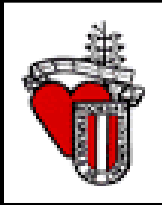


# Place



Respuestas: 96 % (05), 95 % (06), 93,5 % (07), 92 % (08)



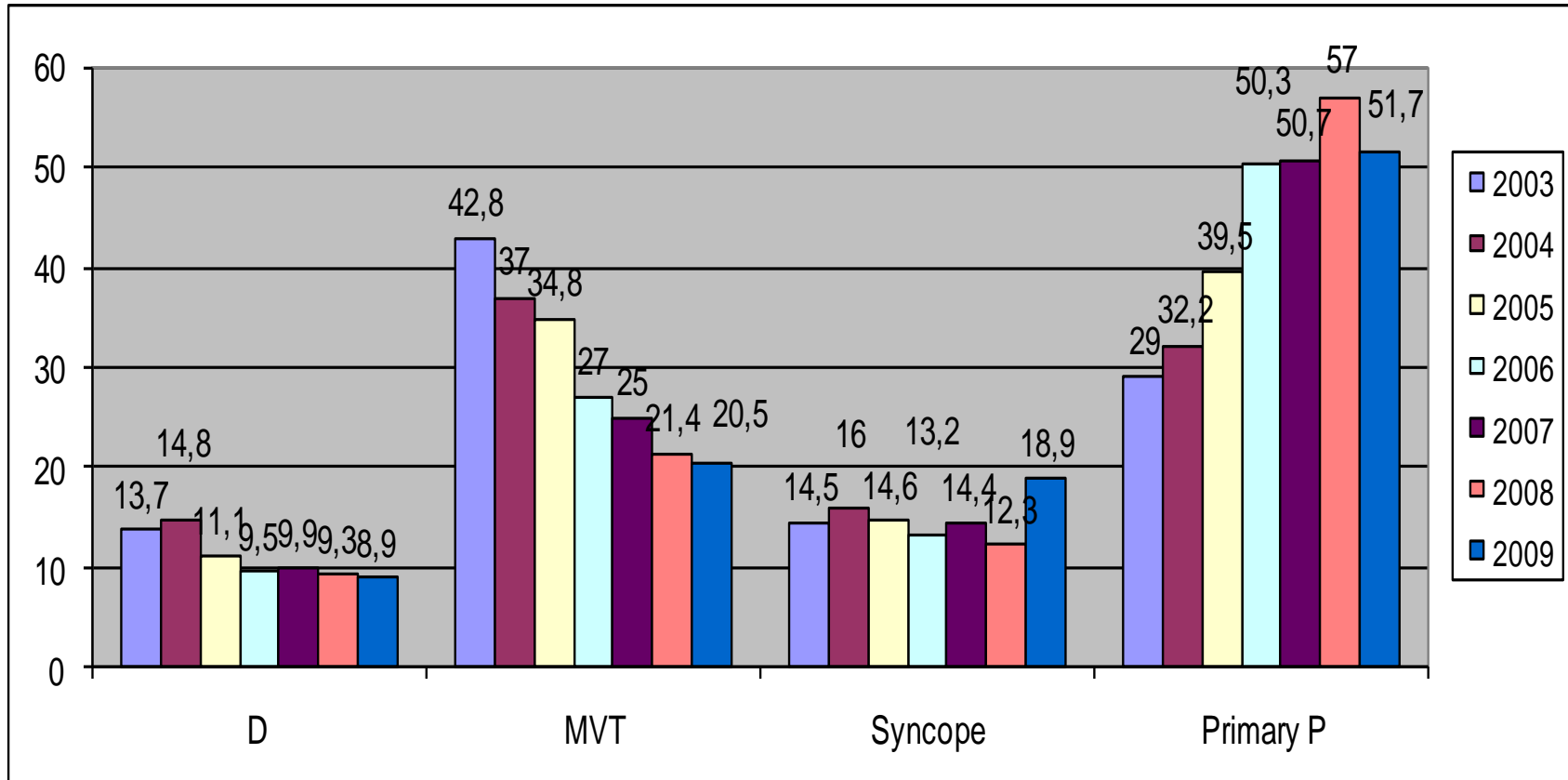


# Complications

## Intraprocedimiento

- **Mortality:** 2 (0,8 / mil)
- **Morbidity:** 8 / (3 / mil)
  - 2 cardiac tamponade
  - Other (minor): 13

# AICD Indication



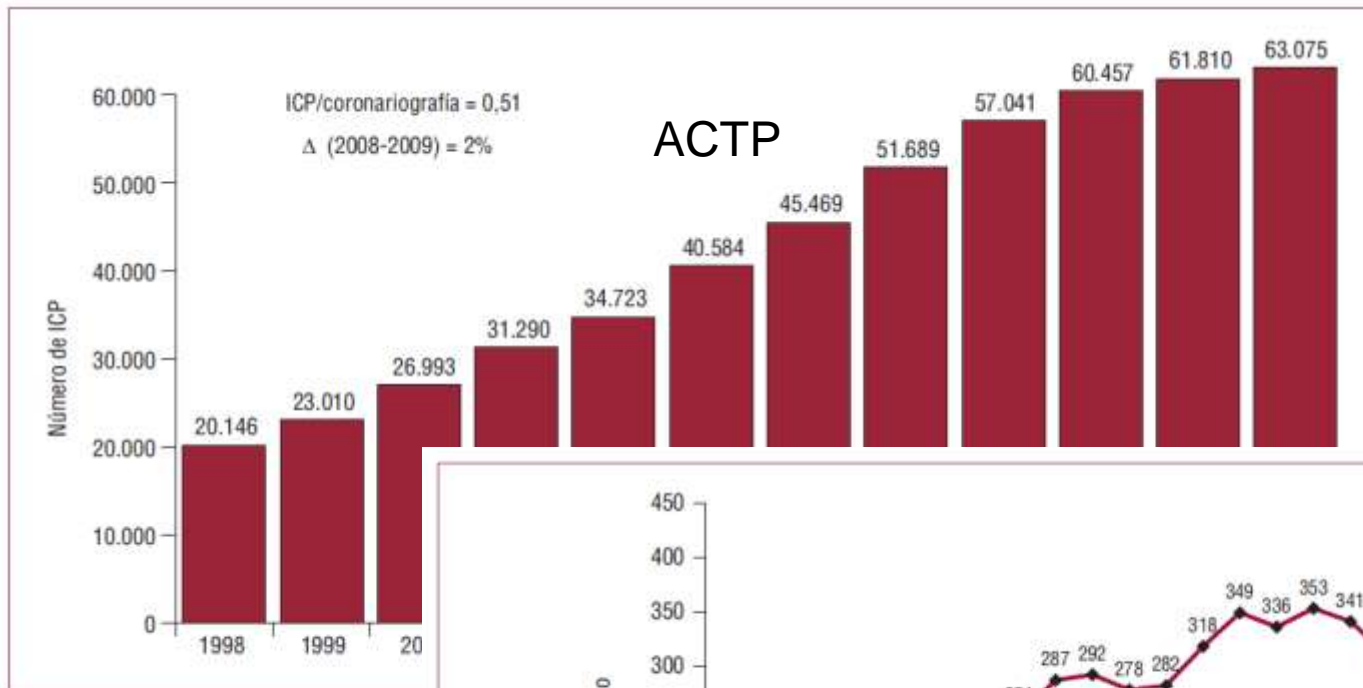


Fig. 5. Evolución del número de intervenciones

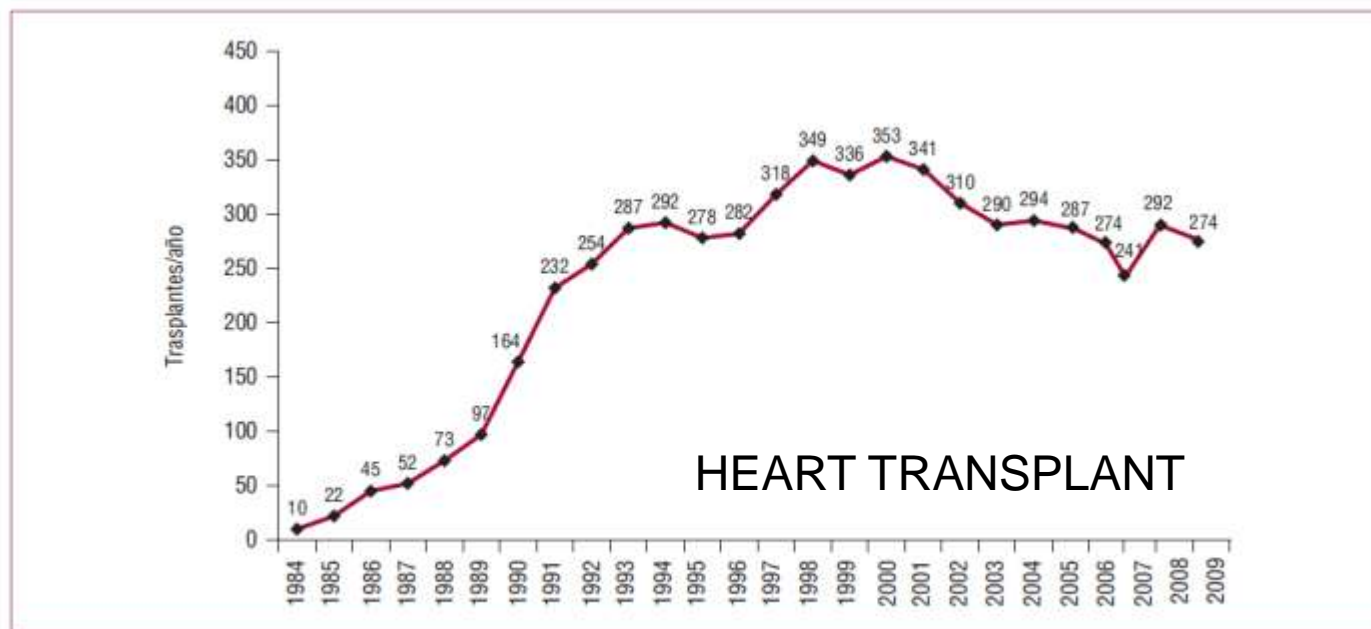


Fig. 1. Número de trasplantes por año.



# Main barriers

- We have less references than other countries in Europe.
- The Spanish Health care system is mainly funded by public funds.
- Hospitals receive a fixed budget from the government.
- There is no competition between centers.
- Doctors in the public sector receive a fixed salary and few incentives to do more procedures

# Main barriers

- The strength of the public system (good quality) limits the development of the private sector.
- In the private practice, profit is the main argument. Usually there is a delay of years in comparison with the public system.
- Heterogeneity of the system. In the practice there are seventeen different systems.
- The current economical scenario make the problem even worse during this year, and unfortunately the situation will probably not improve during the next year.

# Main barriers

- Probably Spanish EP Physician is less aggressive.

# Inicitives

- To share the problem with the sanitary authorities.
- Promote courses with general practitioners.
- Mixed congresses with internists, physicians of emergency department and clinical cardiologists.
- To initiate a registry of references.
- To promote a press campaign of information to the general population.