

# The Status of Clinical Cardiovascular Research in China

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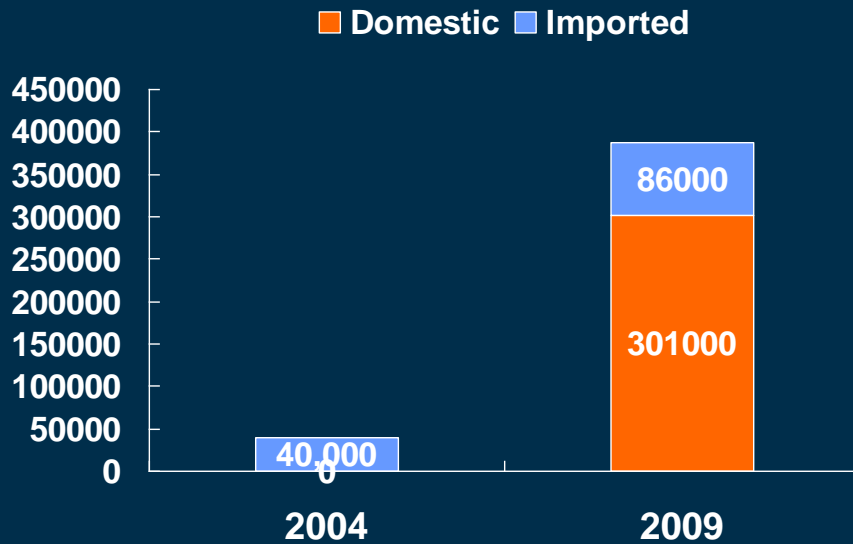
# China is Changing the World

- GDP now ranks 2nd in the world
- Factory of the world: “made in China”
- However, innovation and research work is essentially from “made in China” to “made with China”

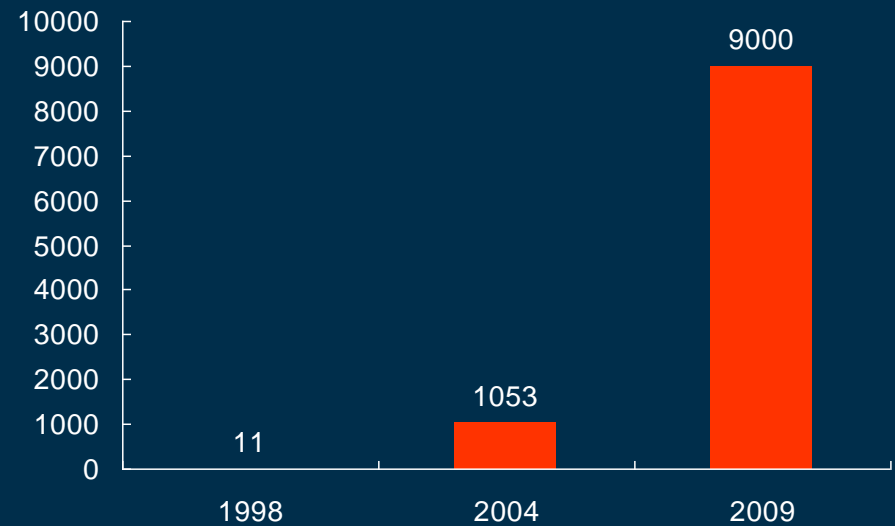


# Clinical Practice of Cardiology in China

- Clinical practice of cardiology is keeping pace with leading countries in China .
- All current techniques and strategies in cardiology are adopted in China as well as developed countries.

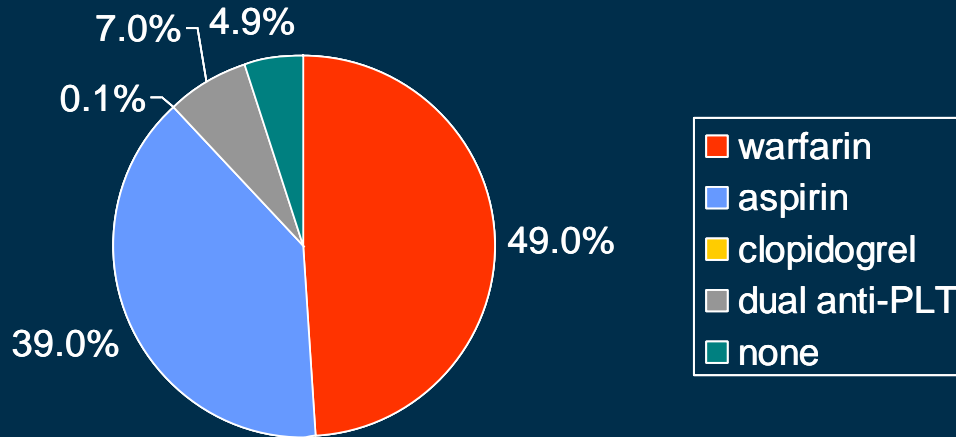


Coronary Stents inserted

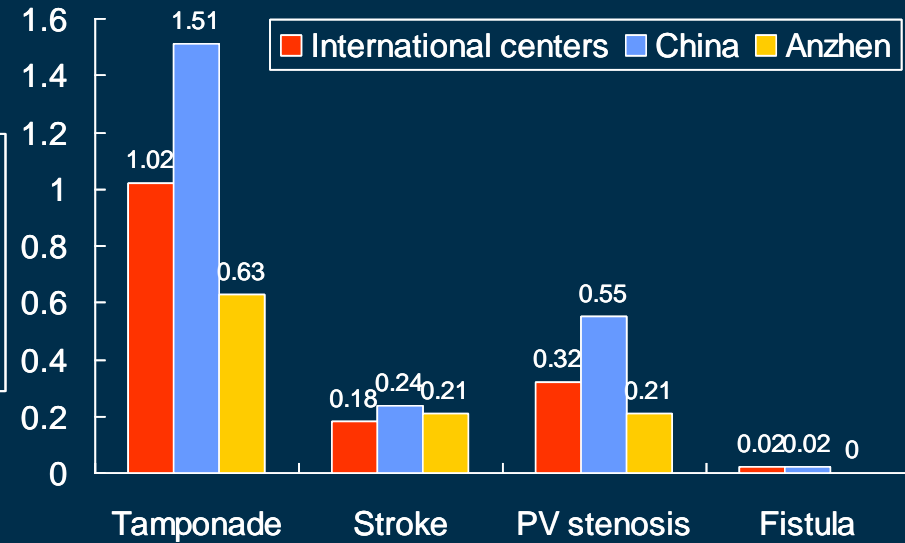


AF ablation procedures

# Clinical Practice of Cardiology in China



Registry of Elderly AF pts. In Beijing  
AF Anticoagulant Therapy



Incidence of major complications of  
AF ablation procedures

# What About Clinical Research?

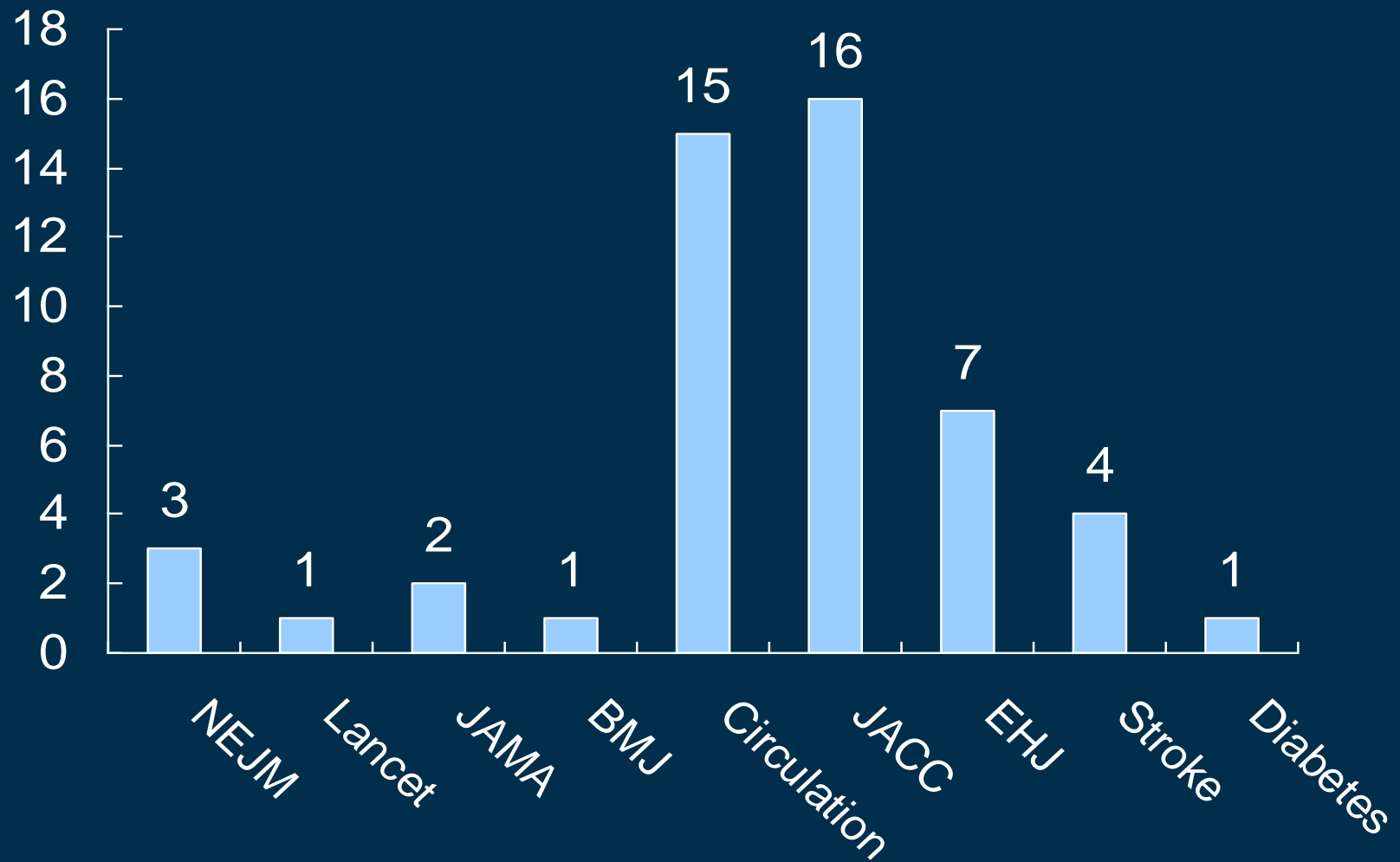
- High quality clinical practice is only essential, but not sufficient for advanced clinical medicine.
- Still a big gap exists between large clinical resource and academic contribution, just like the long journey on Great Wall.



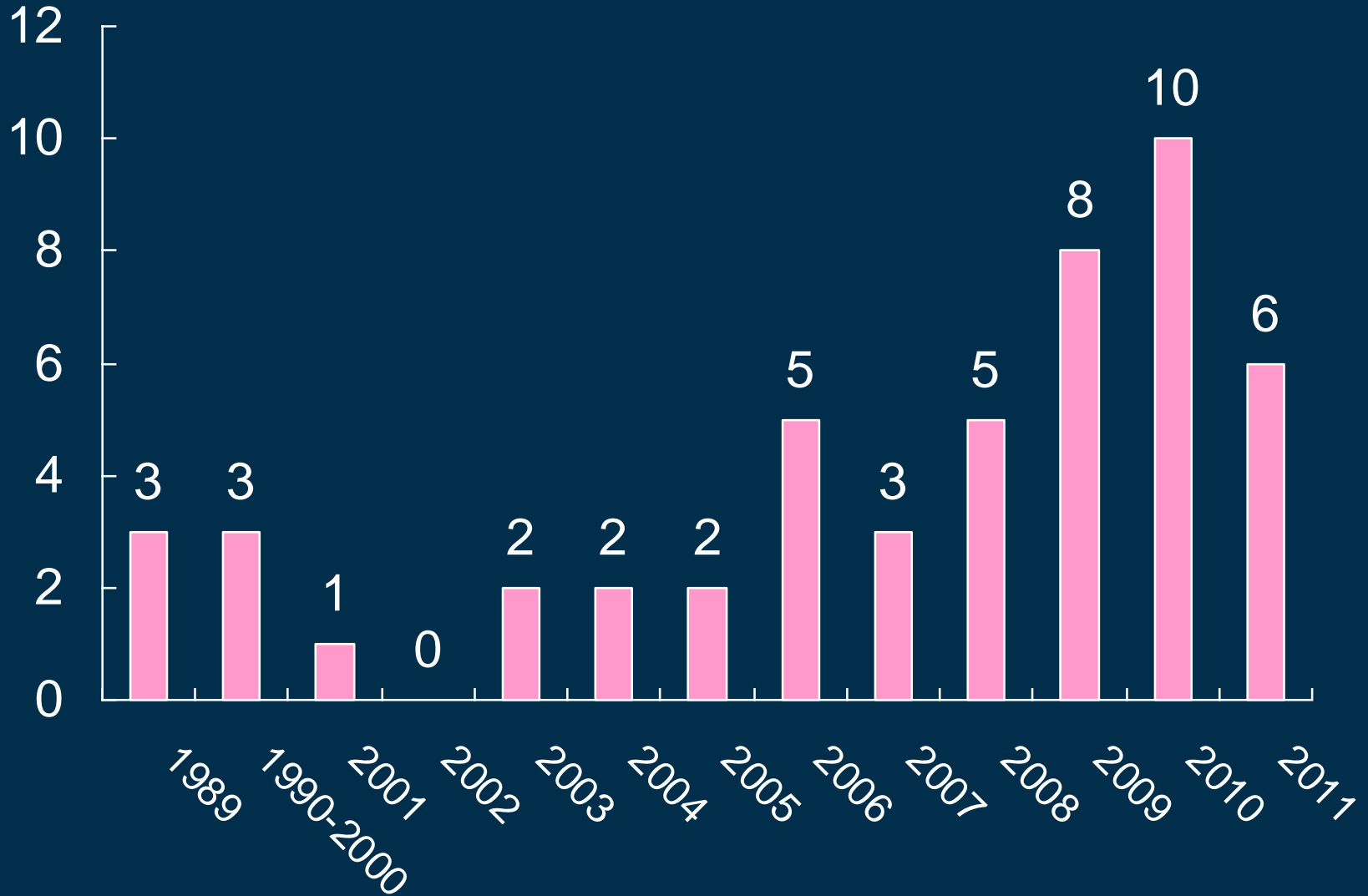
# Search Criterion

- Original article with corresponding author in mainland China
- Clinical research: conducted directly at the epidemiology diagnosis and treatment of CVD in pts
- Exclusion
  - Basic research in vitro
  - Animal experiments
  - Molecular and cell research although using pts specimen
- Search in pubmed

# Clinical Researches by Chinese Physicians Published on Leading CV Journals

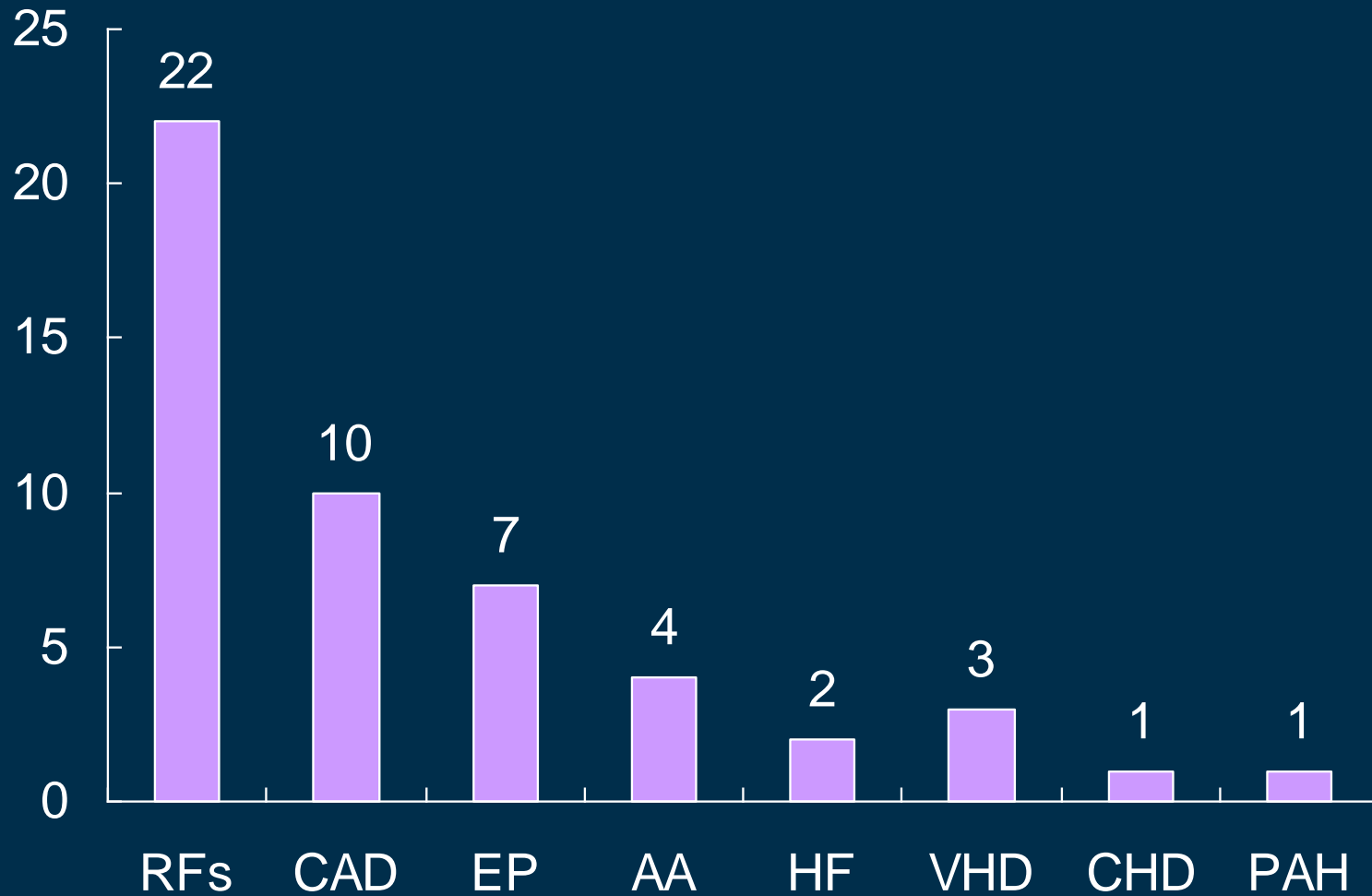


# Trend Over The Past Decade

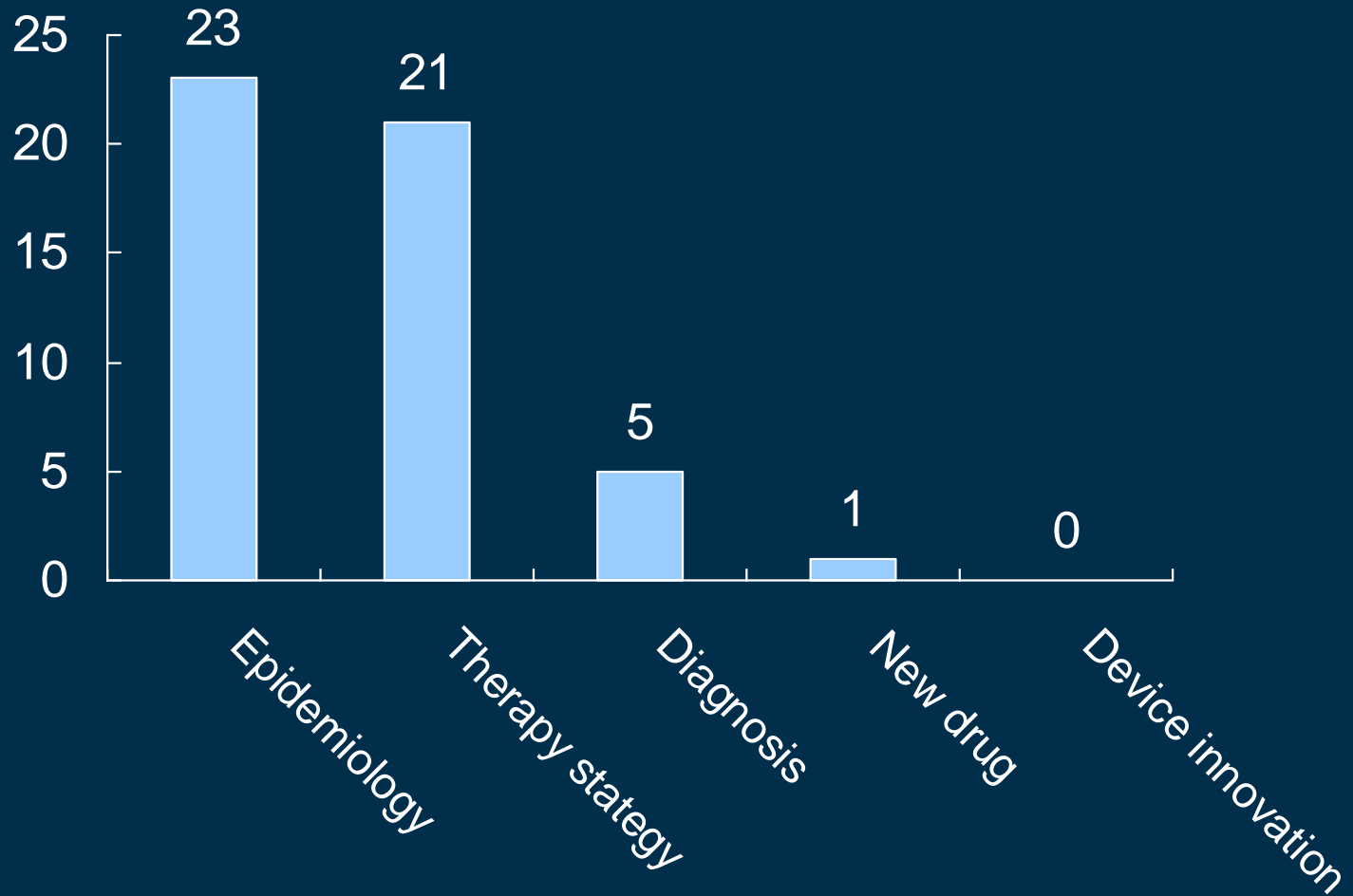




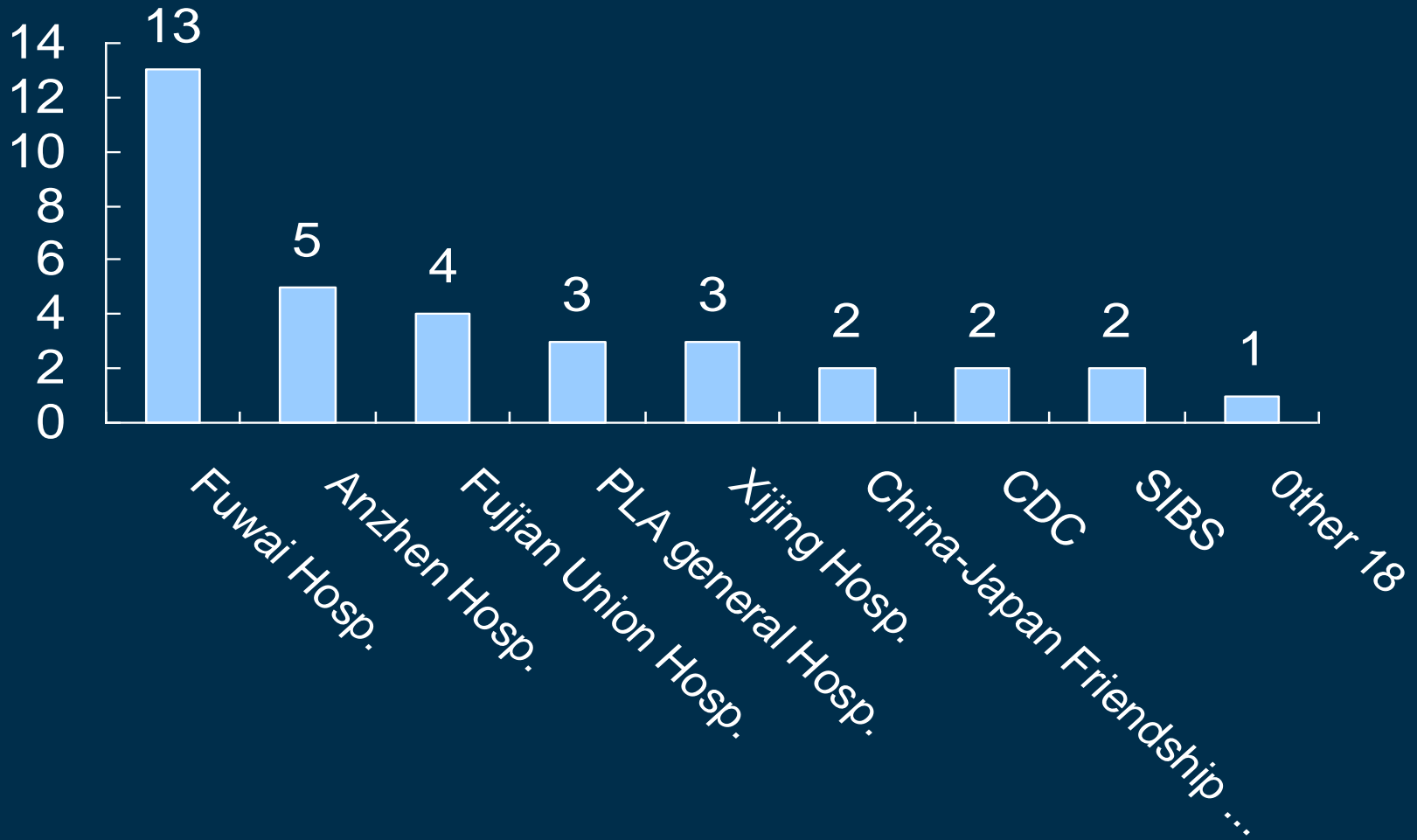
# Distribution of speciaties



# Distribution of Objectives



# Institutes of Corresponding Authors



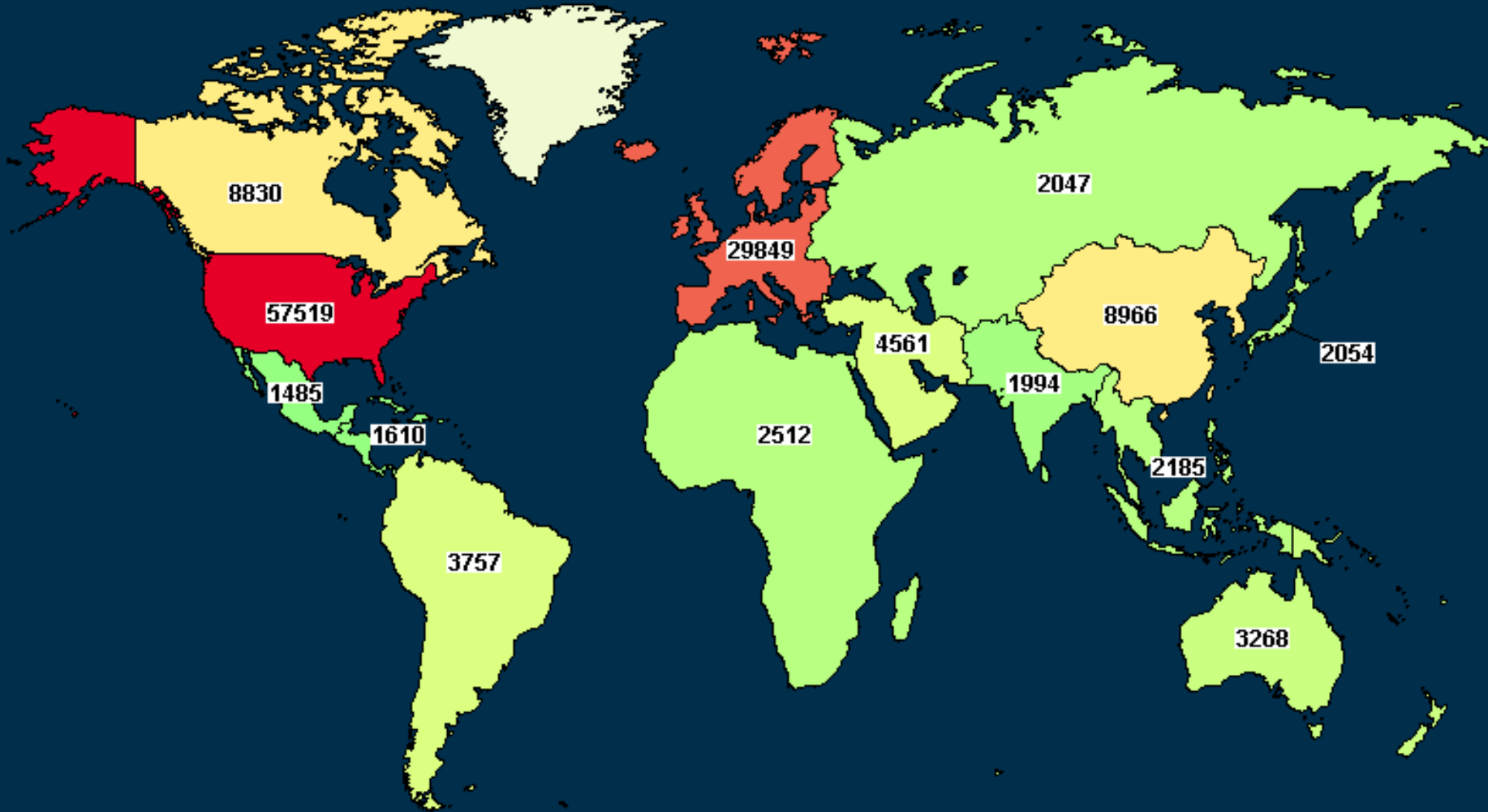
# Regional Distribution



# Summary

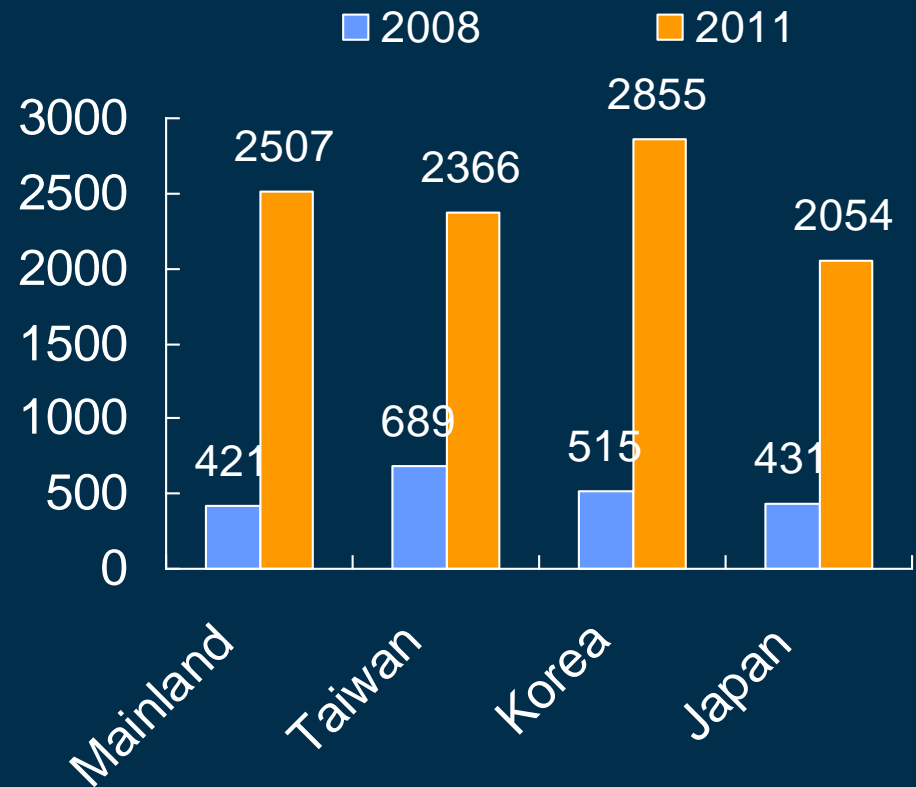
- A sharp increase of research work published on leading CV journals by Chinese physician in the past decade, especially in the last 5 years
- CV research in China remains in a data-accumulated phase, and more innovative work is relatively scarce
  - Epidemiological studies covered the largest proportion
  - Research into clinical therapeutic strategy starts to increase
  - Lack of drug & device innovation

# Number of Clinical Trials Registered: All over the world

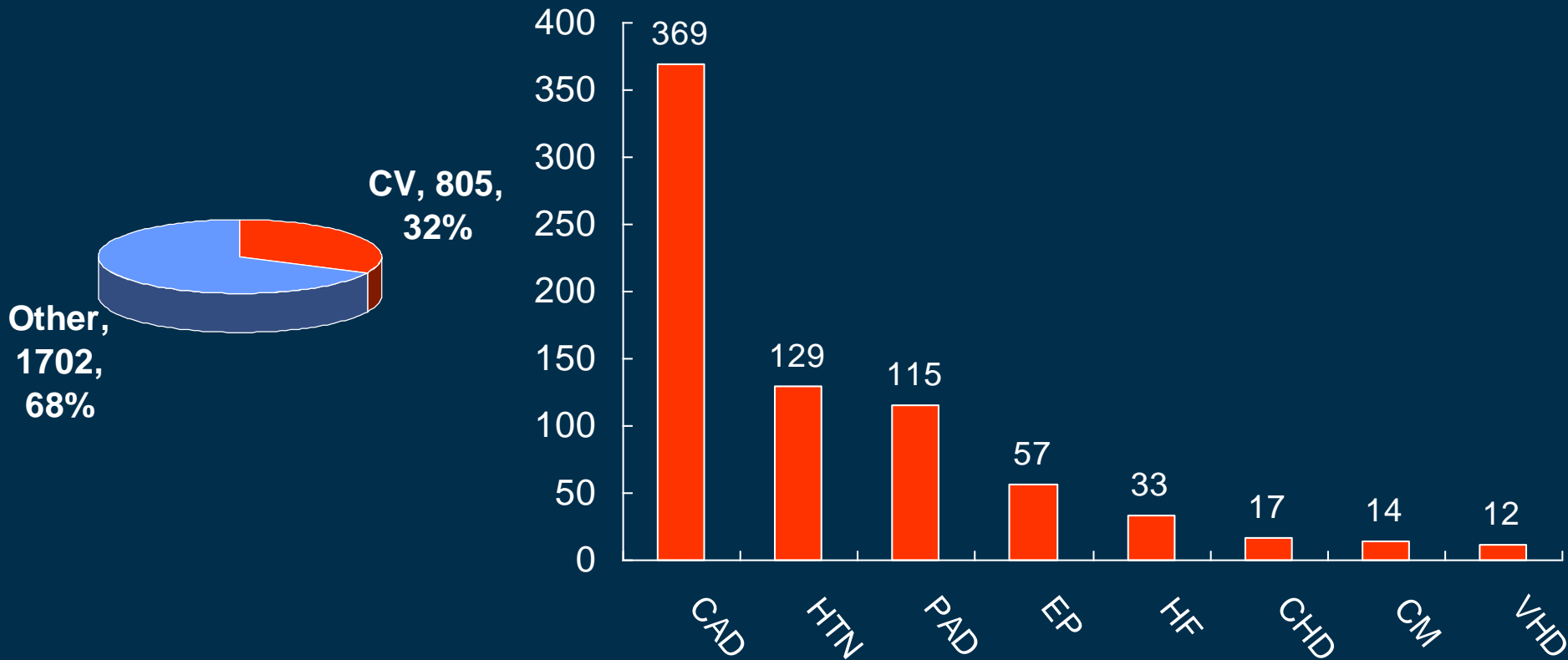


# Number of Clinical Trials Registered: East Asia

- Clinical trials are increasing rapidly in all regions
- China(mainland) ranks 2nd in 2011 compared with 4th in 2008



# Number of Clinical CV Trials Registered in China(Mainland)





# Unsolved Clinical Problems in Chinese Pts

- Epidemiological data of major CVDs and related conditions in China
- Drug safety and effectiveness in Chinese population
- Evidence of CVD management based on Chinese population
- Drug and device innovation with independent intellectual property rights
- CVD management model innovation

# Registry of Eldly AF Pts in Beijing

- Age  $\geq 65$ y, FU every 3 mon
- 2 cohorts matched by propensity scores
  - Ablation: Consecutively enrolled in Anzhen hospital
  - Conservatively treated: Convenience sampling in 6 hospitals
- Endpoints
  - Primary endpoints: Composite endpoint of total mortality, stroke and peripheral embolism
  - Secondary endpoints: Major bleeding and QoL

# Construction of AF cohort in Beijing

- Registry of 10,000 NVAF pts from 22 hospitals
- FU $\geq$ 6 mon
- Aims at unsolved problems in Chinese AF pts
  - Risk assessment scheme for thrombo-embolism
  - Optimal anticoagulant intensity
  - Safety and effectiveness of AADs
  - Comparison of AADs and catheter ablation
  - Strategy for CAF management

Thank you!

