

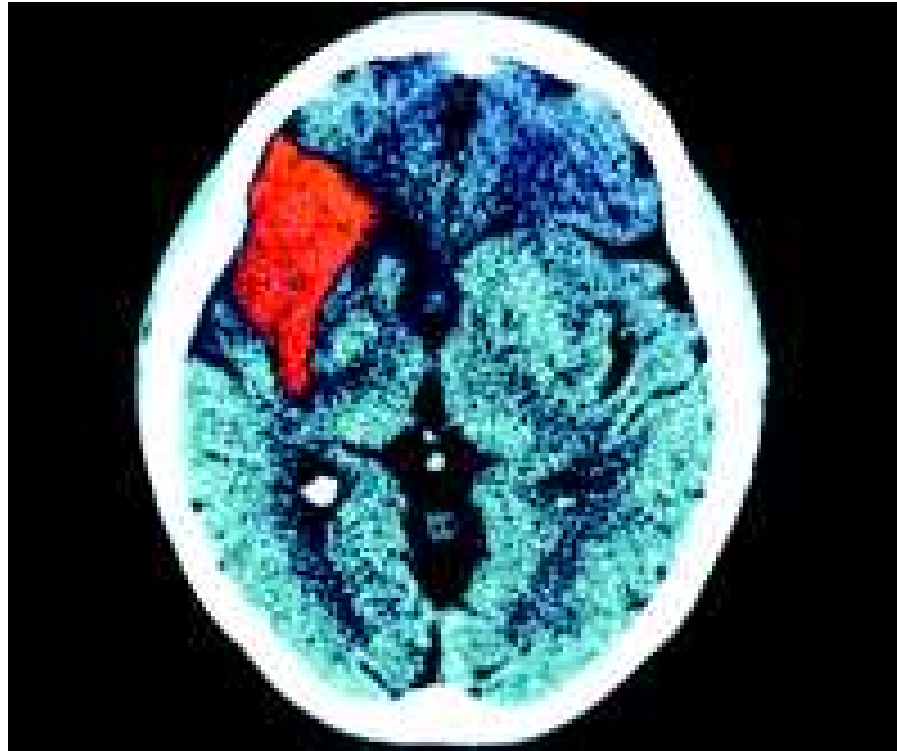
# **Determinants of Antithrombotic Treatment in Real Life Atrial Fibrillation Management**

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Euro Heart Survey on Atrial Fibrillation

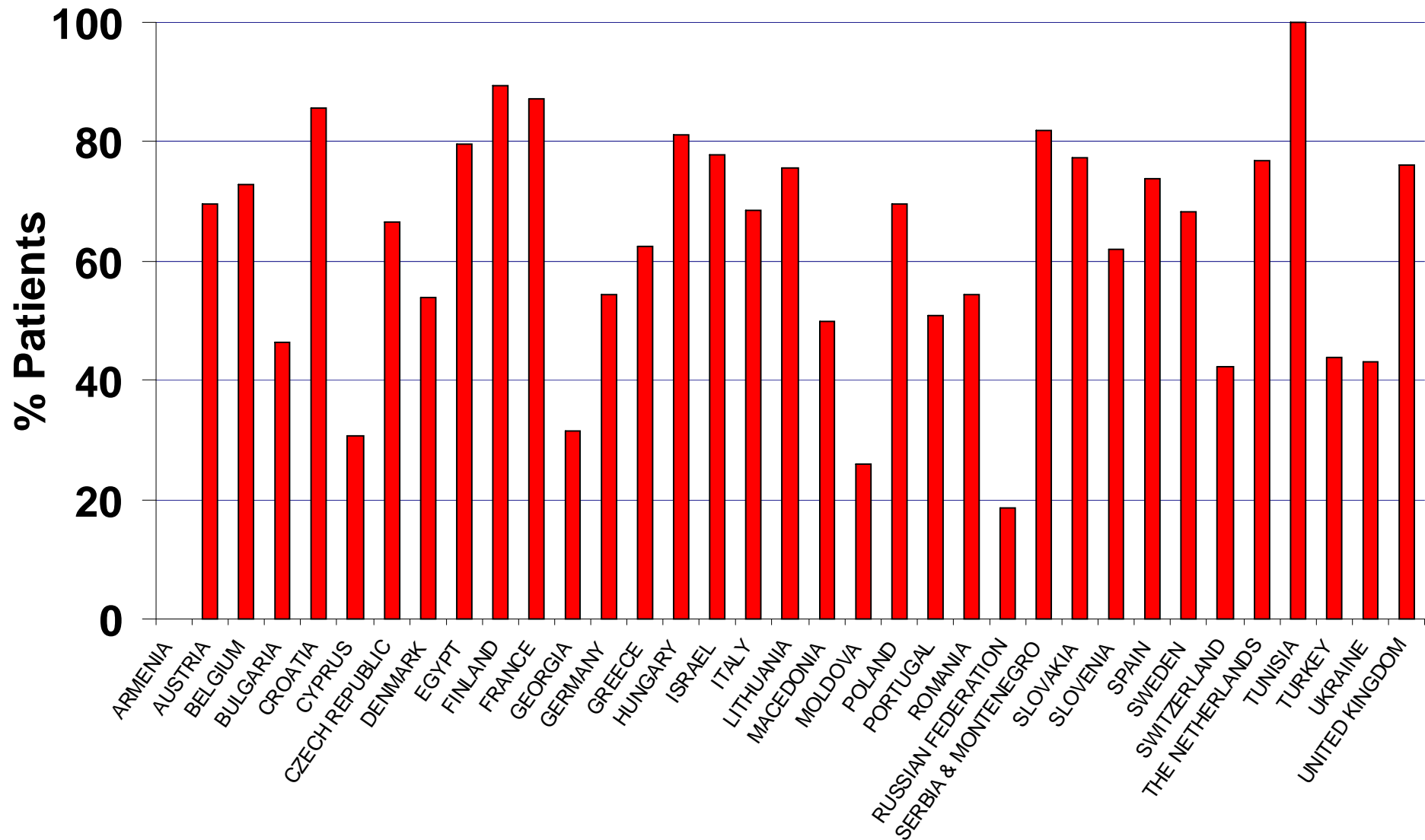


# Stroke in Atrial Fibrillation



- Stroke may be the first symptom of AF
- AF accounts for appr. 25% of all strokes
- Stroke in AF is much more lethal than other strokes

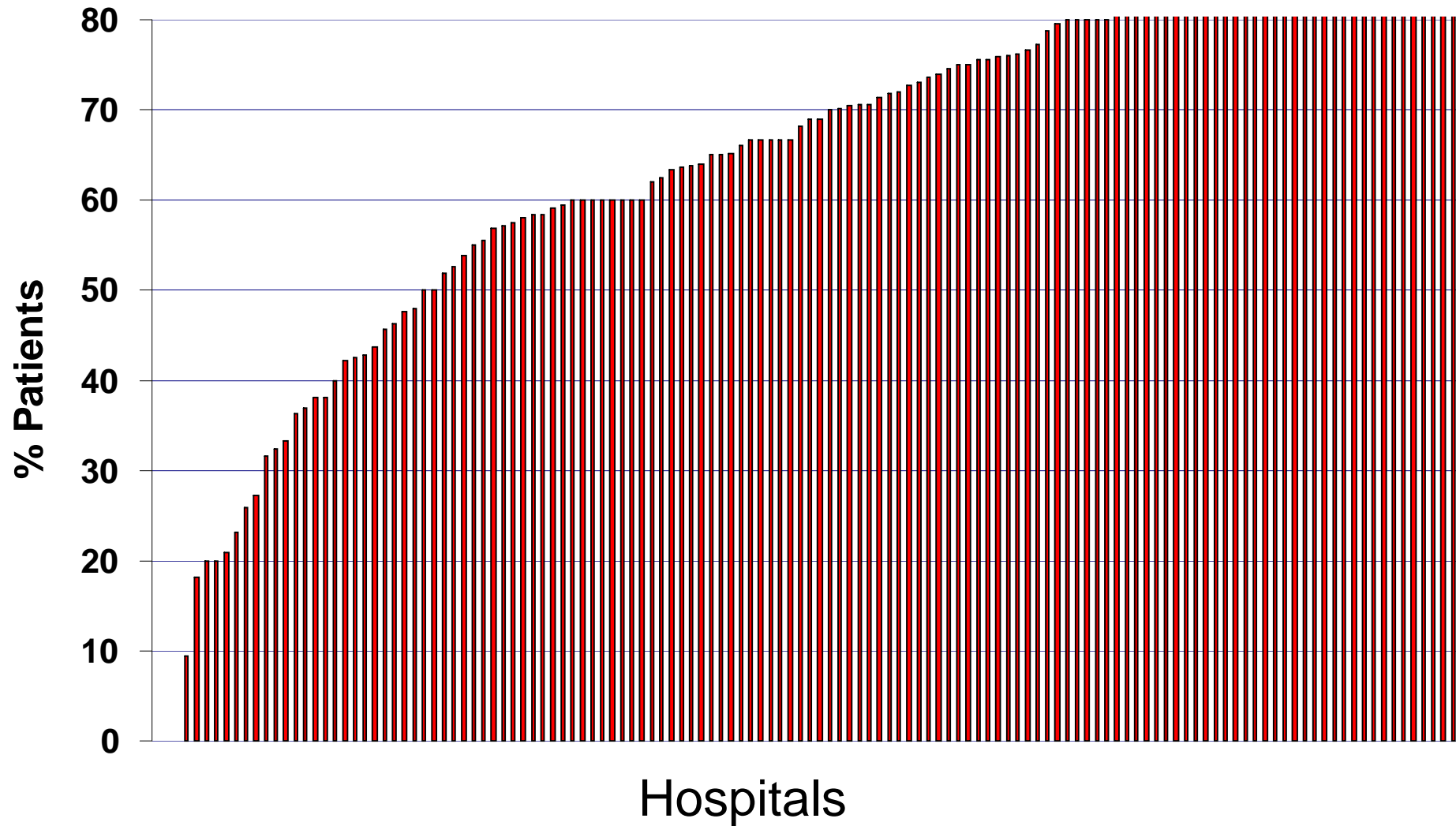
# VKA in High-Risk Patients by Country



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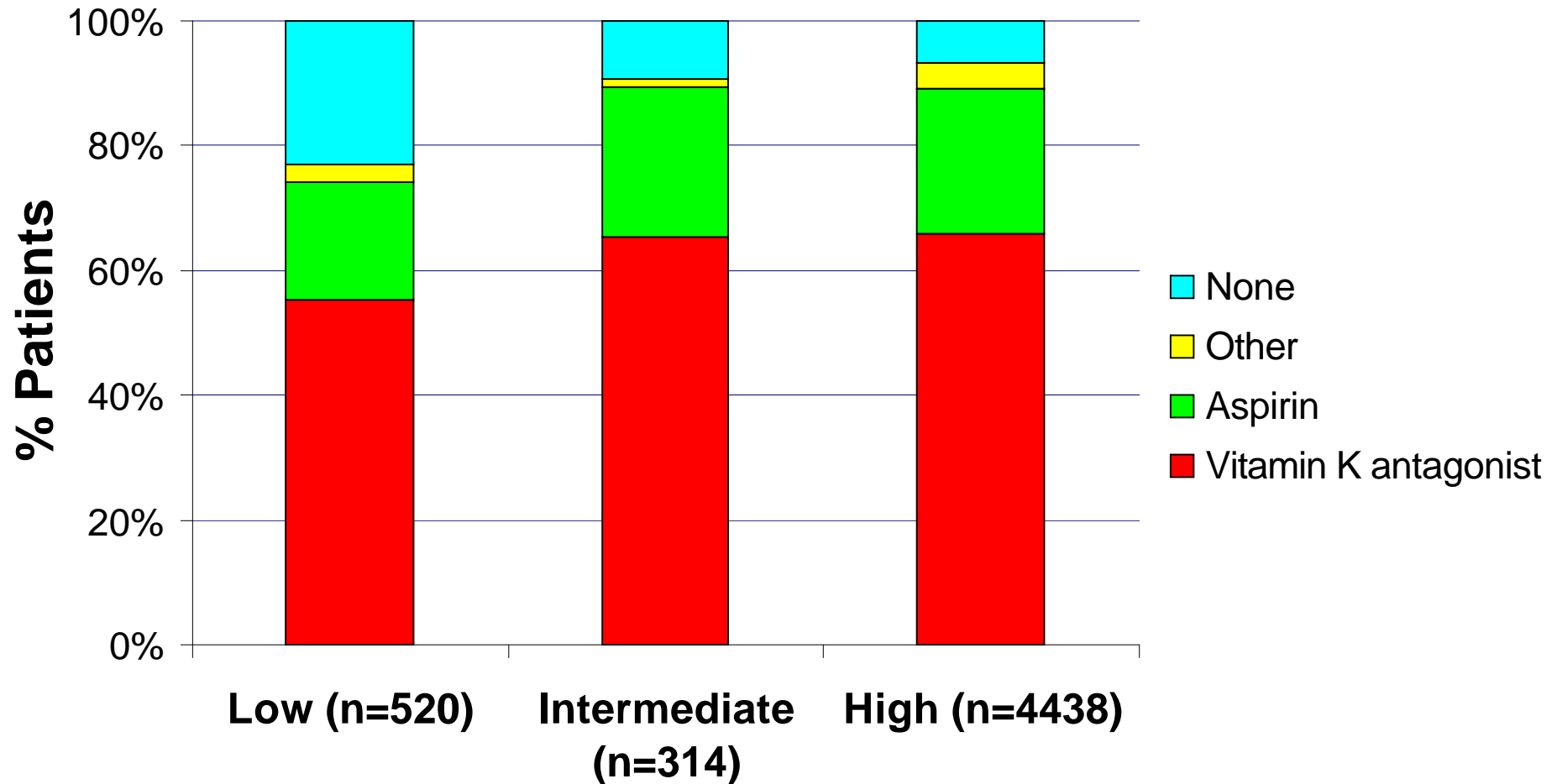
# VKA in High-Risk per Hospital



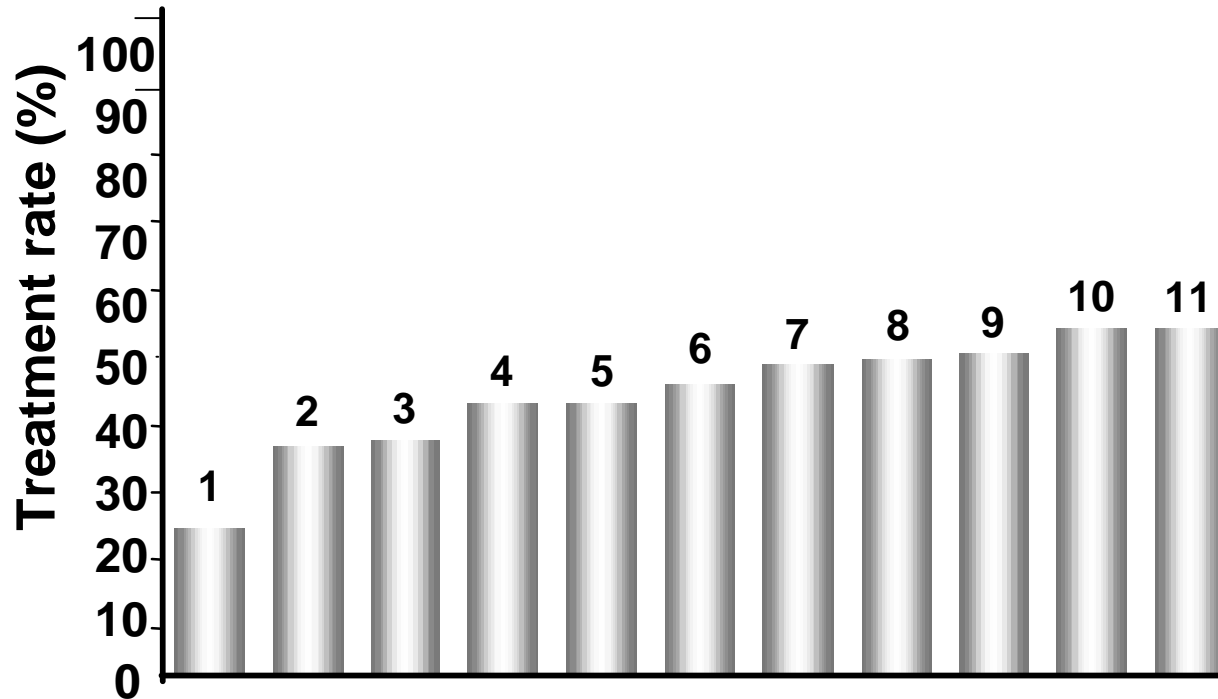
Euro Heart Survey on Atrial Fibrillation



# Stroke Risk and Treatment



# 55% or less of high-risk patients with no contraindications to therapy receive VKAs



1. *Fam Pract* 2000;17(4):337-9.

2. *Br J Cardiol* 2001;8(1):38+40-42.

3. *J Clin Pharm Ther* 1998;23(2):97-106.

4. *Heart* 2003;89:553-4. Italy.

5. *Arch Intern Med* 200;160(15):2402-3. Italy.

6. *Intern Med J* 2001;31(6):329-36. Australia

7 *J Am Geriatr Soc* 1998;46(11):1423-4. USA.

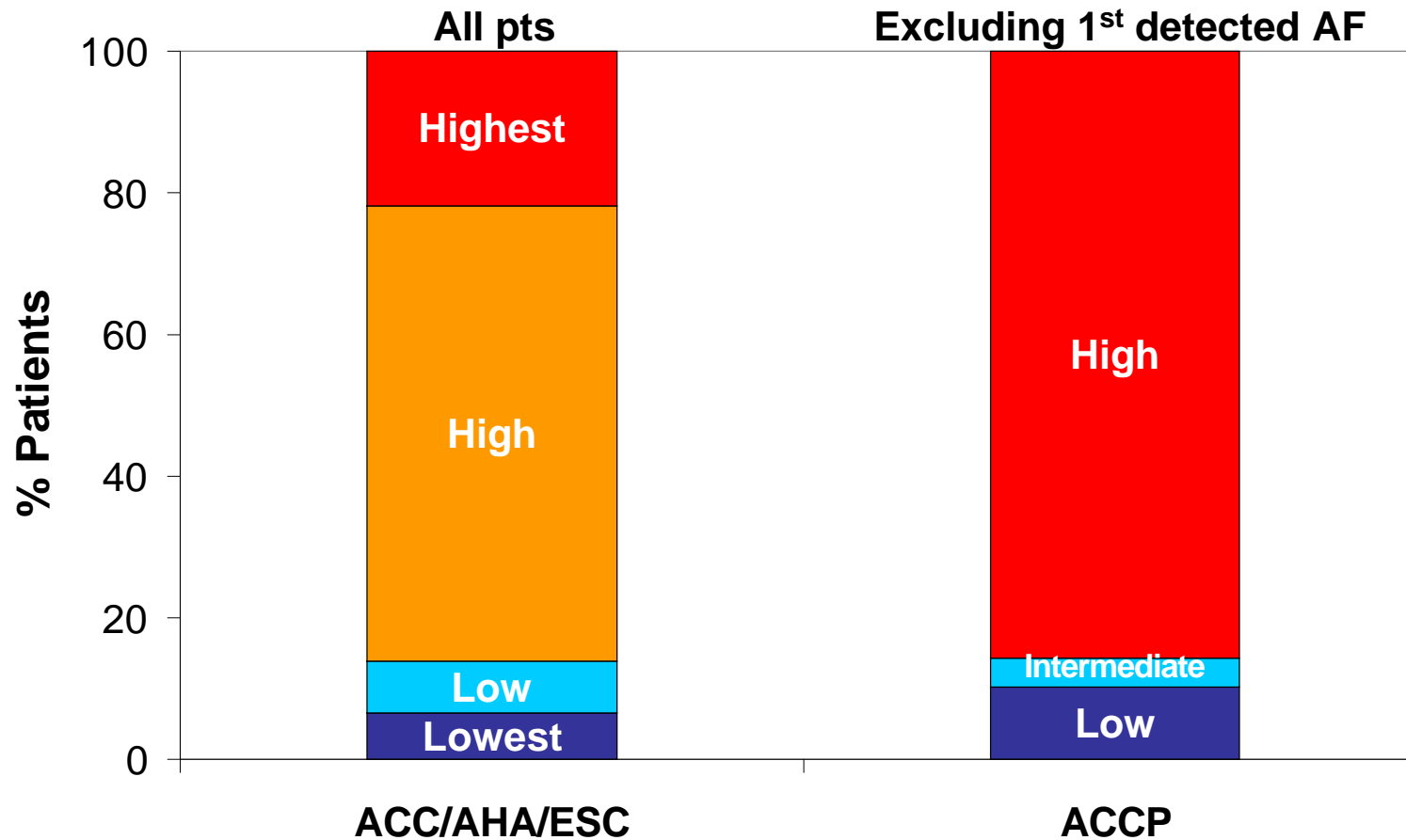
8. *Heart* 1999;82(5):570-4. UK.

9. *Am J Geriatr Cardiol* 2001;10(3):139-44. USA.

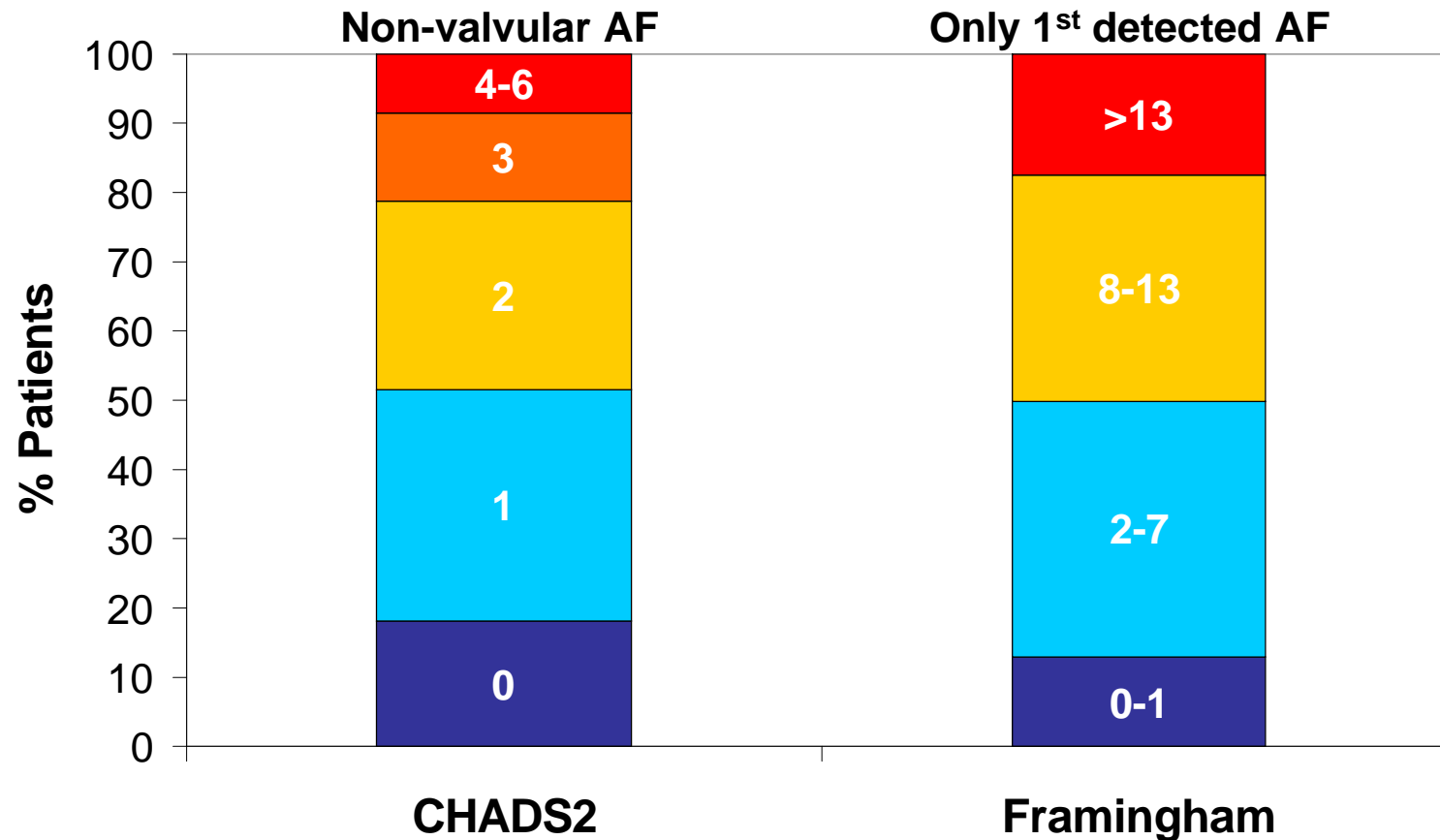
10. *Stroke* 2002;33(11):2664-9. USA.

11. *J R Soc Med* 2000;93(3):138-40. UK.

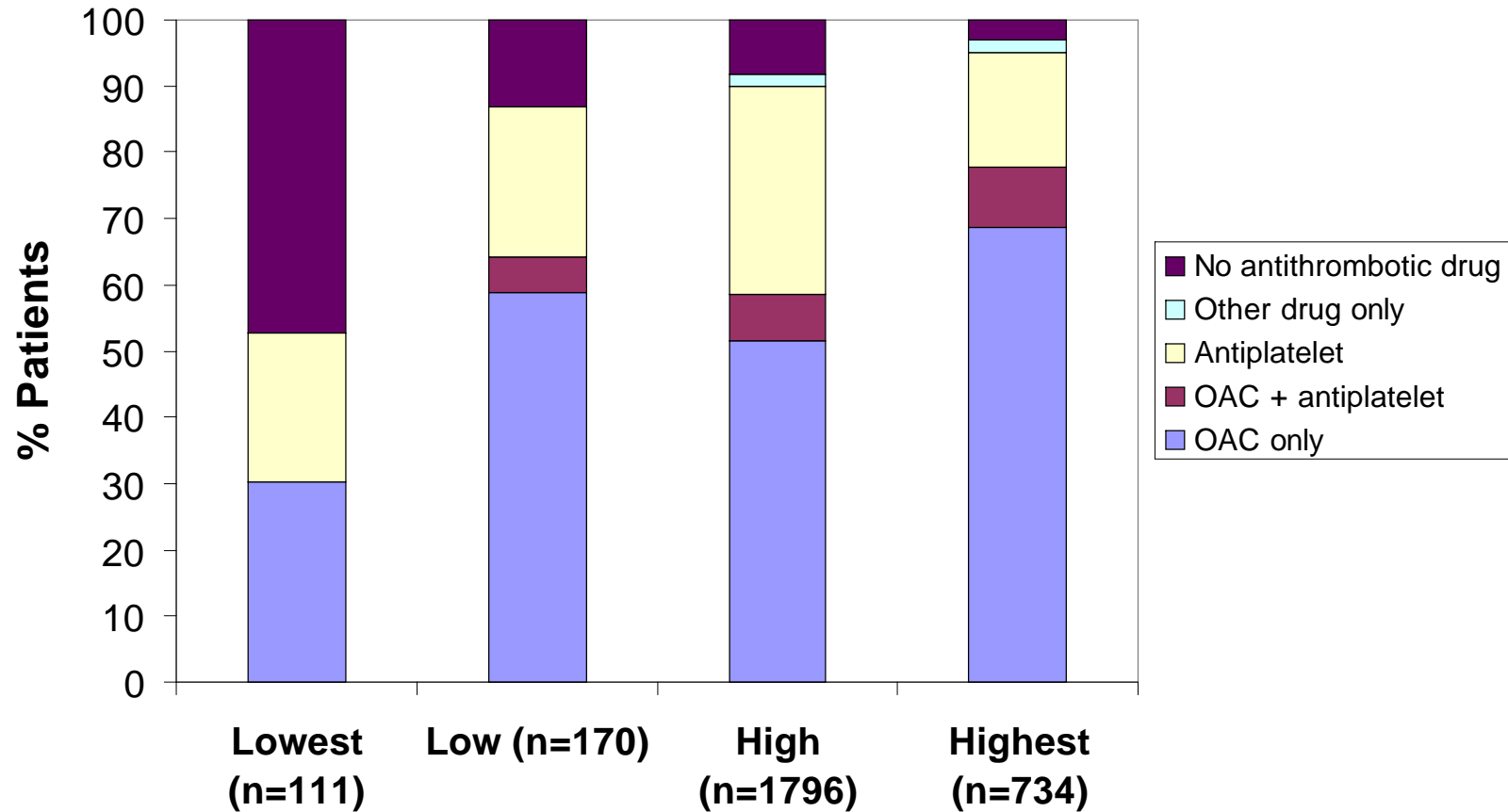
# Risk factor prevalence according to different guidelines



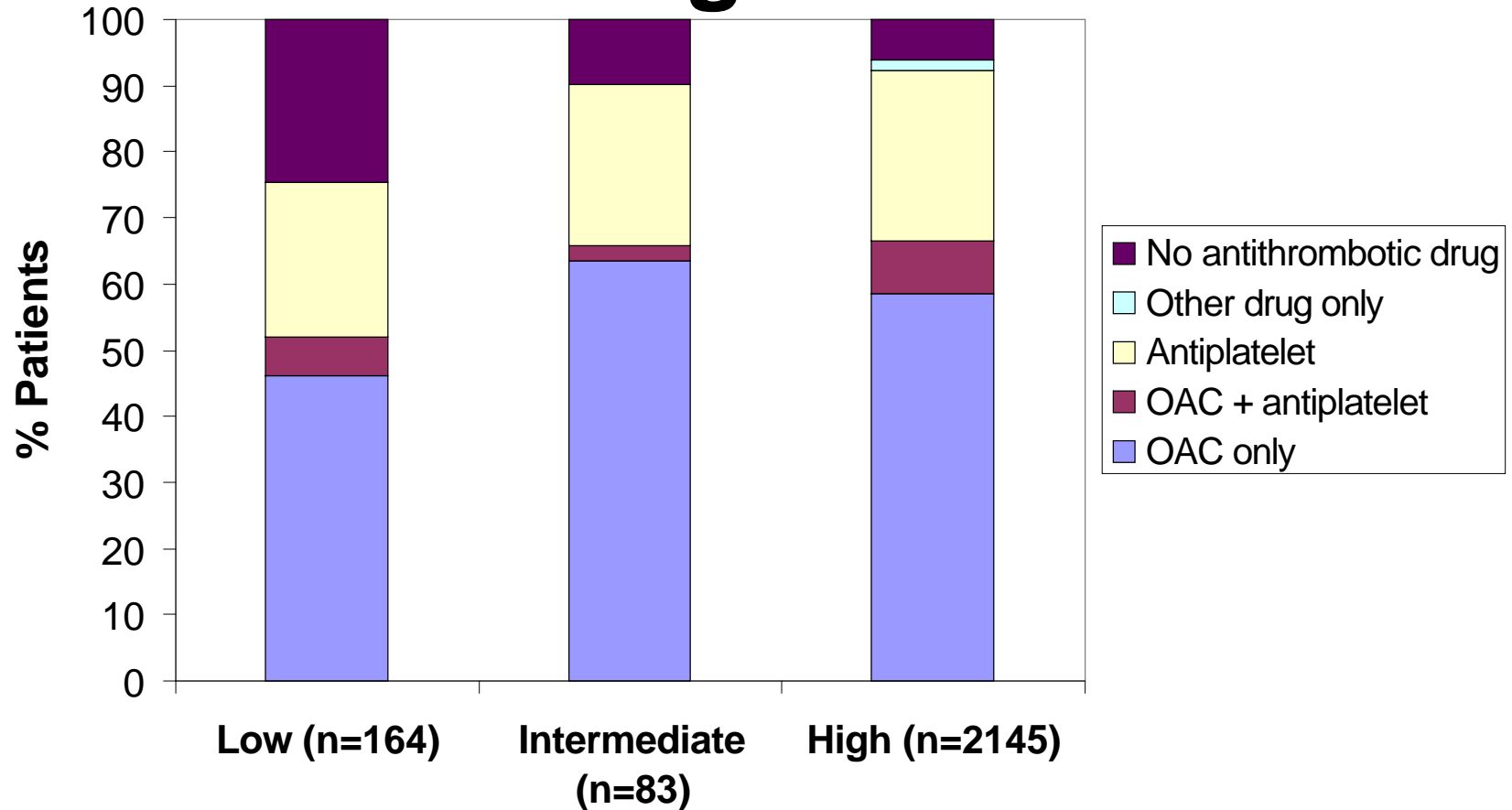
# Risk factor prevalence according to CHADS<sub>2</sub> en Framingham



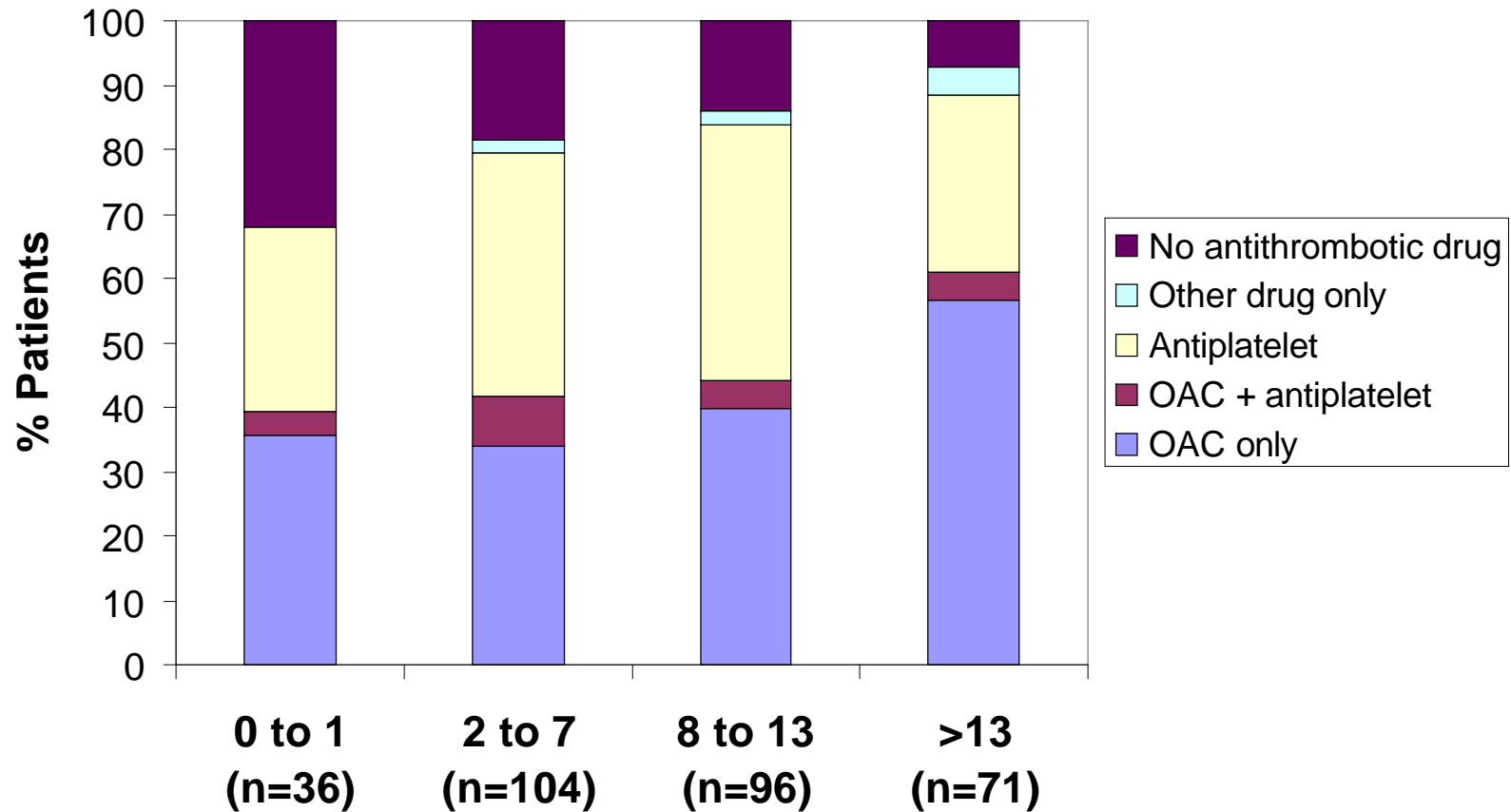
# Use of antithrombotics in the ACC/AHA/ESC risk categories



# Use of antithrombotics in ACCP risk categories



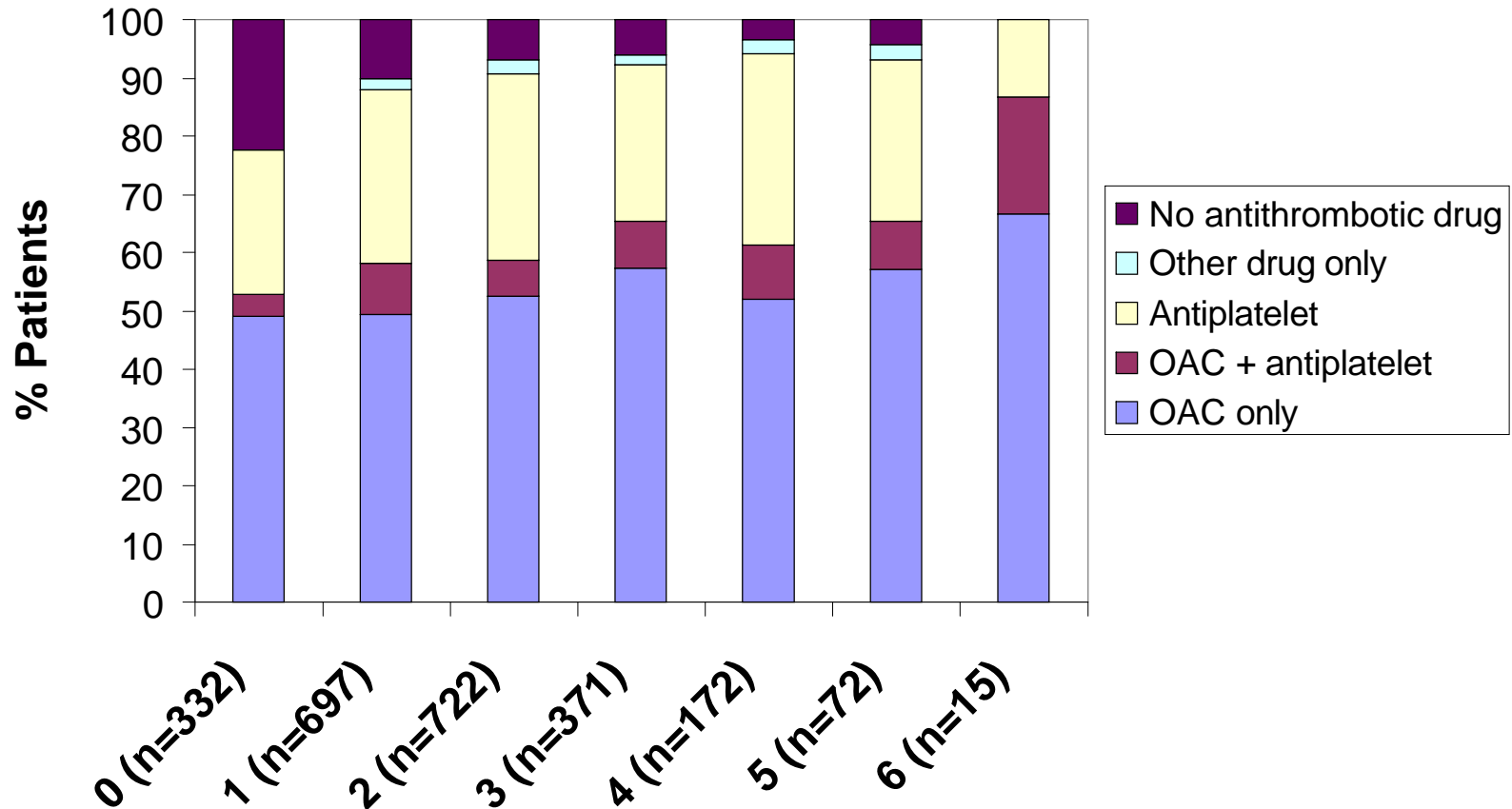
# Antithrombotics according to Framingham score



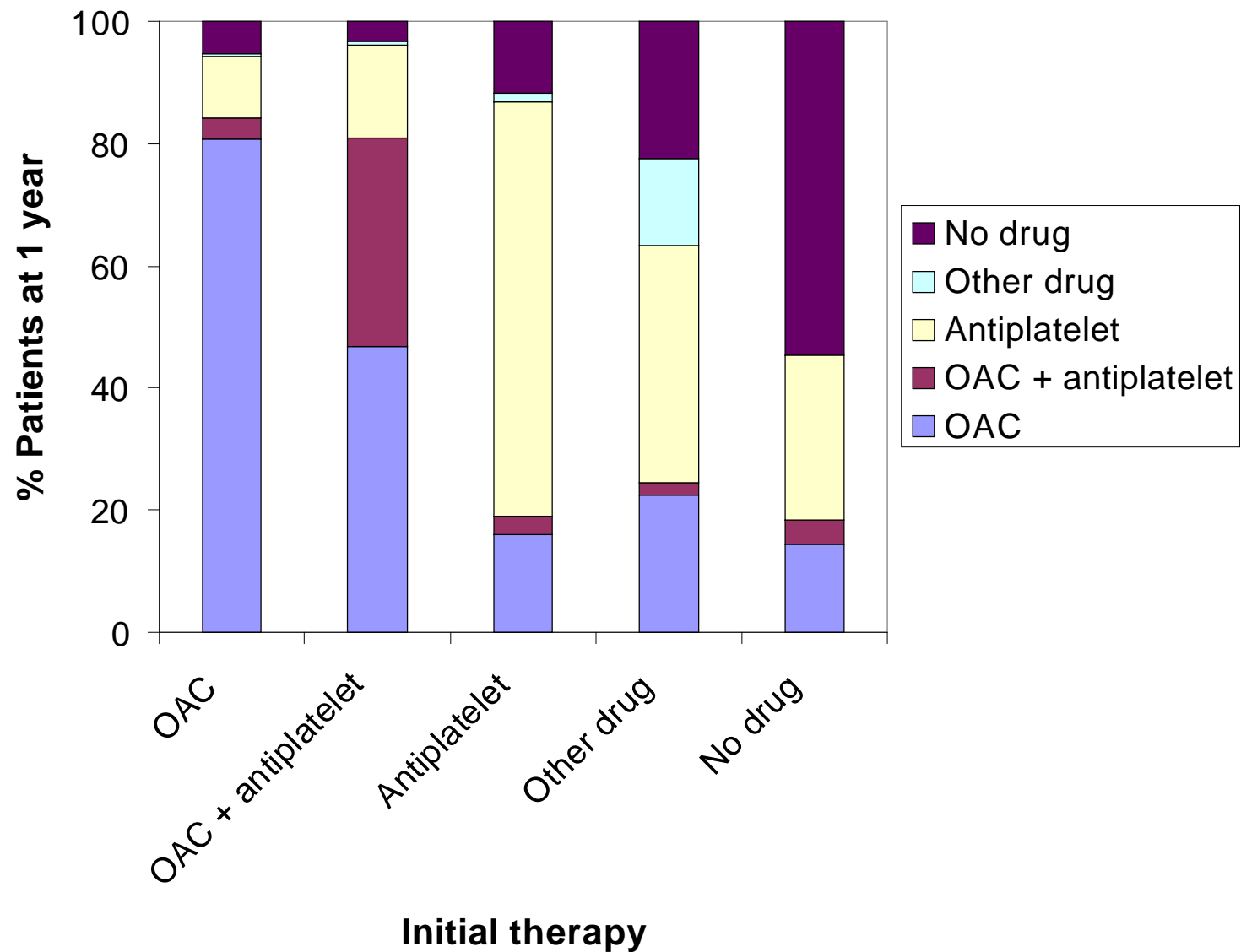
# Risk of stroke in the National Registry of AF (NRAF) participants stratified by CHADS<sub>2</sub> score. *Gage et al. JAMA 2001*

Chads <sub>2</sub> score	Expected stroke rate/yr
0	1.9
1	2.8
2	4.0
3	5.9
4	8.5
5	12.5
6	18.2

# Antithrombotics according to CHADS2 score



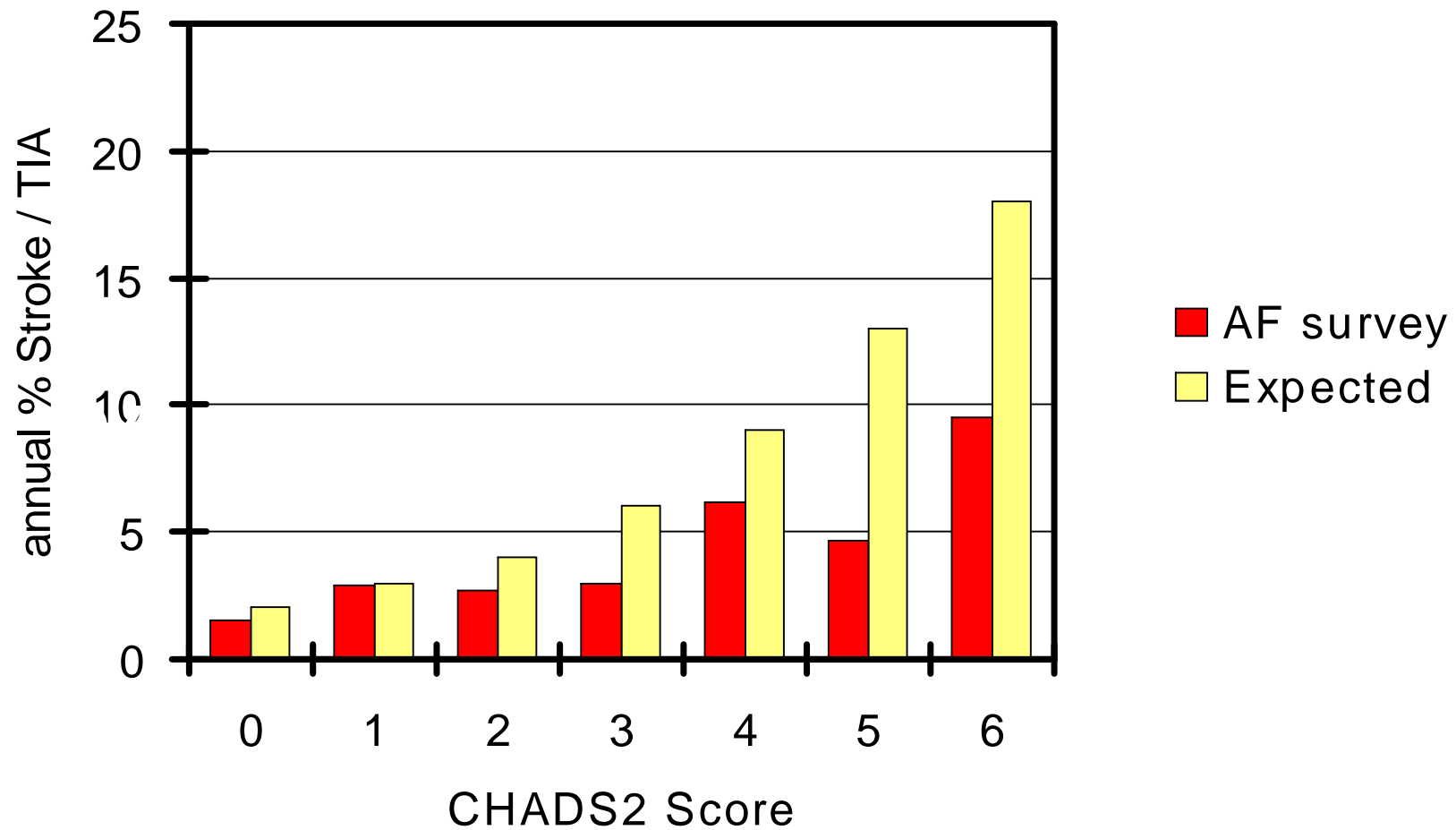
# Change in Antithrombotic Drug Use



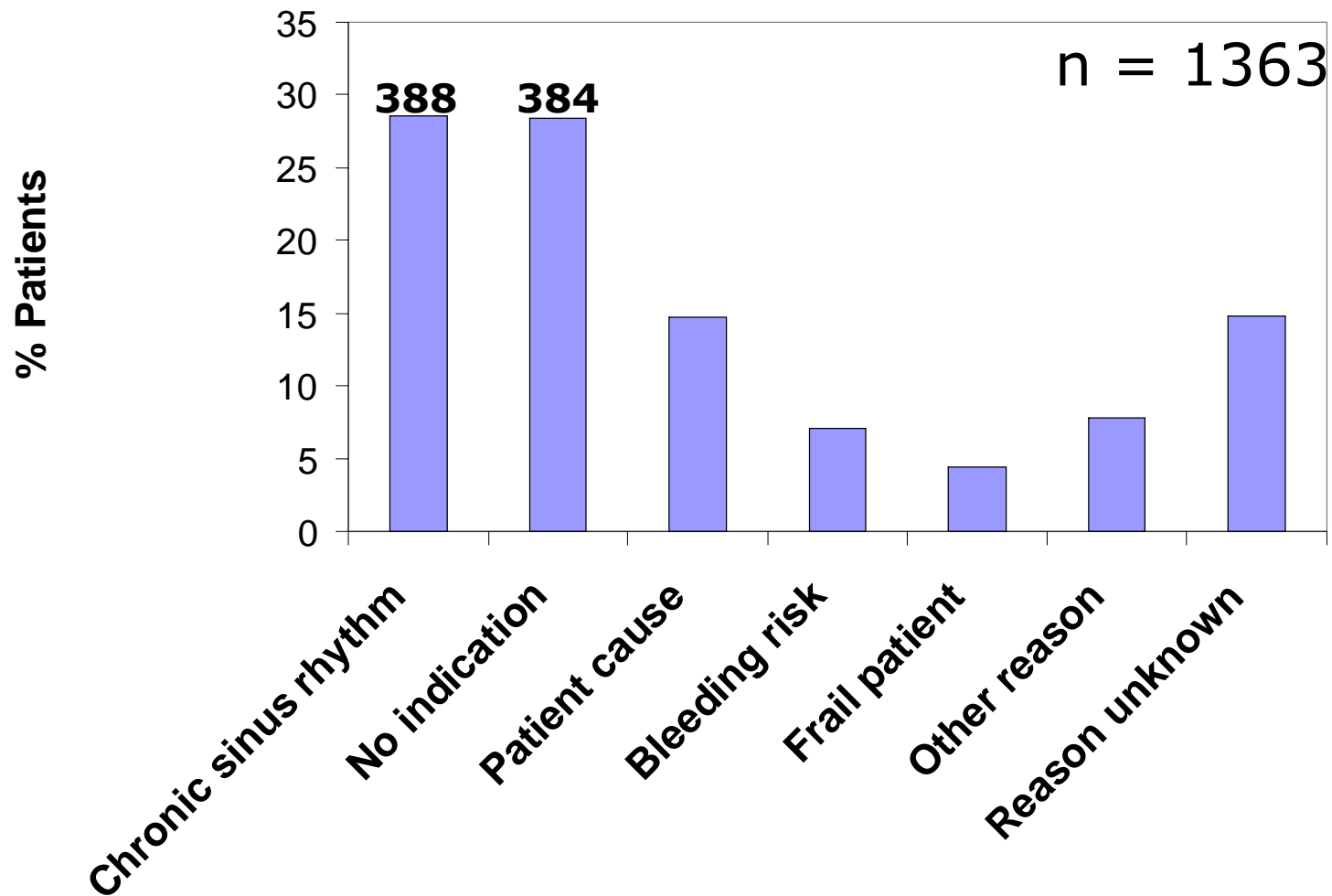
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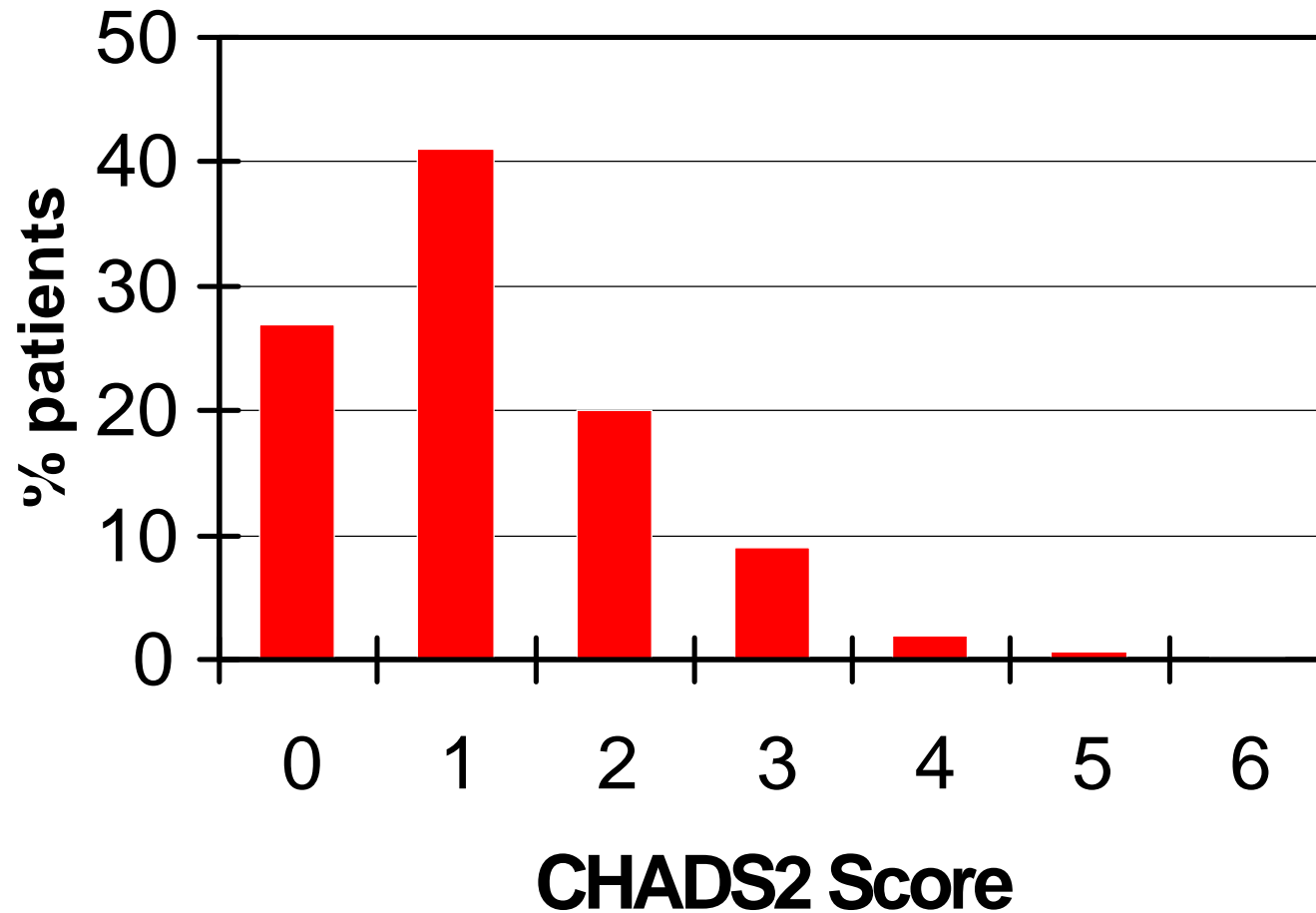
# 1 Year Incidence of Stroke/TIA in the Survey Compared to Expected Stroke Rate



# Reason for No VKA at 1 Year



# Distribution of CHADS<sub>2</sub> scores among patients 'believed to be in chronic SR' or 'to lack a VKA Indication'



# Determinants of oral anticoagulation prescription

Euro Heart Survey on Atrial Fibrillation



# Factors in multivariate analysis

Age >75 years

Gender

Heart failure

Coronary artery disease

Valvular heart disease

Hypertension

Diabetes mellitus

Prior stroke/TIA

Prior major bleeding

Prior malignancy

Type of AF

AF only reason for visit

Rate or rhythm control strategy

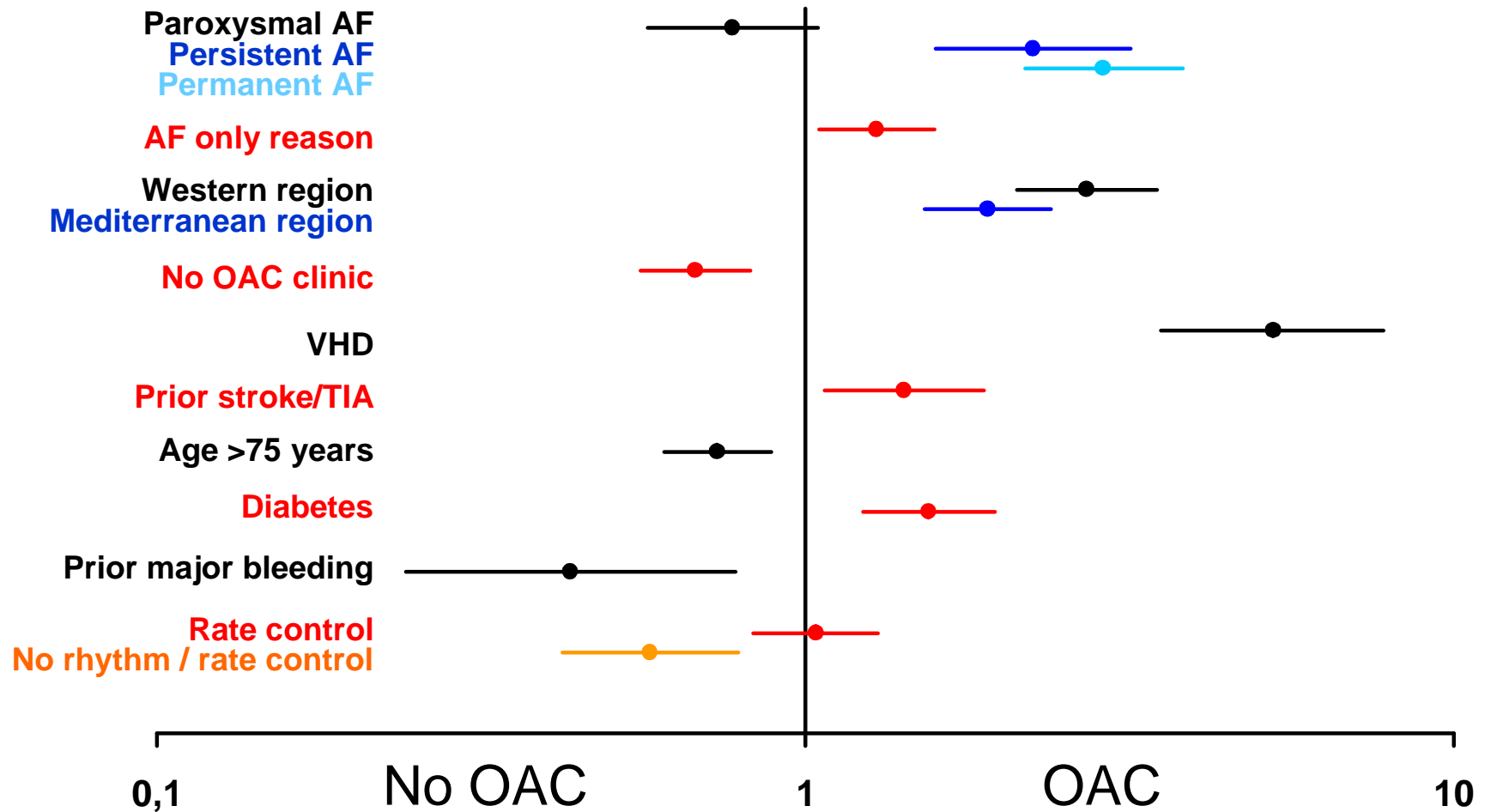
Participating in a clinical study

Region of enrolment

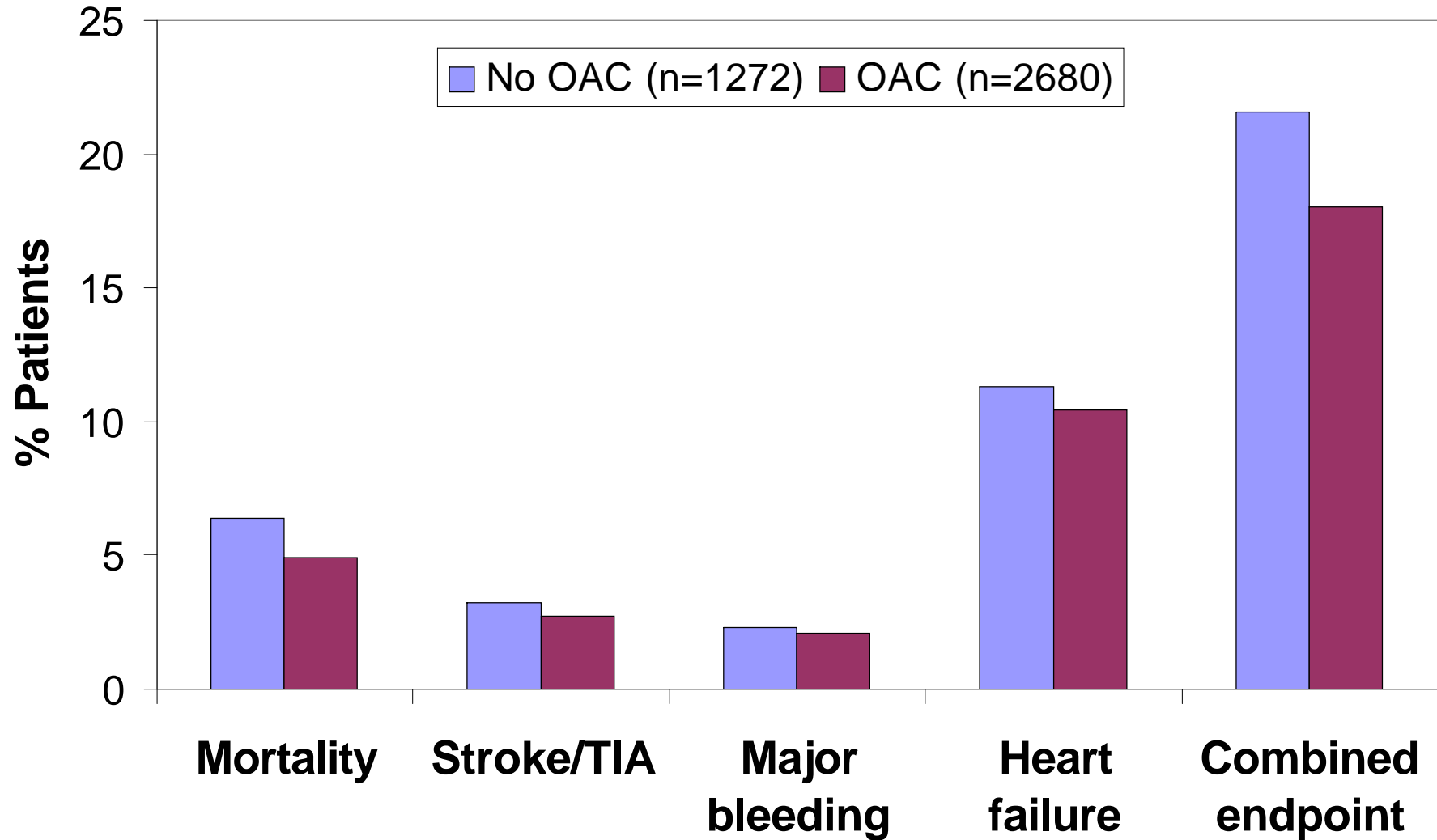
Type of hospital

OAC clinic available

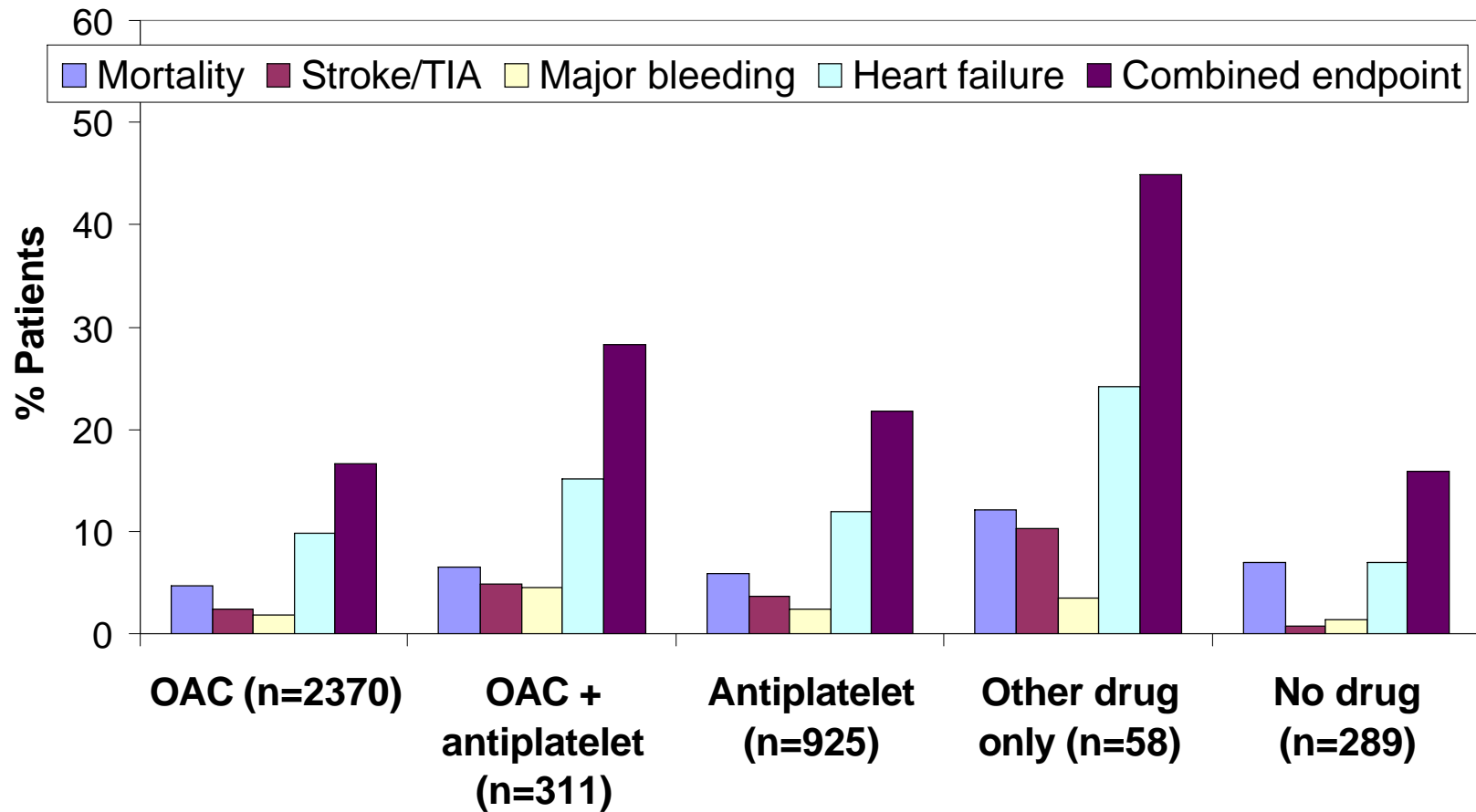
# Determinants of oral anticoagulation prescription



# 1 Year Outcome



# 1 Year Outcome (2)



# Multivariate Analysis of Outcome

Patients who initially left the hospital with OAC had a lower chance of reaching the combined endpoint (mortality, stroke/TIA, MI, new onset HF or worsening of existing HF) during 1 year follow-up, compared to patients not receiving OAC:

Odds Ratio (95% CI) = 0.70 (0.57-0.85); p=0.000

A major bleeding and/or a stroke/TIA prior to or during the initial visit increased the chance of reaching the combined endpoint during 1 year:

Major bleeding: Odds Ratio (95% CI) = 2.3 (1.4-3.8); p=0.001

Prior stroke/TIA: Odds Ratio (95% CI) = 1.6 (1.2-2.0); p=0.001

# Conclusions (1)

- Stroke risk schemes are not well applied in daily practice
- The choice for VKA treatment is significantly influenced by
  - availability of anticoagulation facilities
  - AF being the only reason for consultation factors
  - factors not mentioned by the guideline:
    - type of AF (persistent/permanent versus paroxysmal)
- Especially older (>75 yr) patients are undertreated

# Conclusions (2)

- Outcome is significantly better if the eligible patients are treated with VKAs
- Previous stroke/TIA begets CV endpoints, presumably recurrent stroke or VKA related bleeding
- Previous bleeding begets CV endpoints, presumably stroke or re-bleeding

# Thank you

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