



# EUROASPIRE II



European Action on Secondary and Primary  
Prevention through Intervention  
to Reduce Events

Euro Heart Survey Programme  
European Society of Cardiology-ESC

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## ***Task Force Report***

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Prevention of coronary heart disease in clinical practice

**Recommendations of the Second Joint Task Force of European and other Societies<sup>†</sup> on Coronary Prevention**

**†European Society of Cardiology, European Atherosclerosis Society, European Society of Hypertension, International Society of Behavioural Medicine, European Society of General Practice/Family Medicine, European Heart Network**

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# Priorities of Coronary Heart Disease Prevention in Clinical Practice



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1. Patients with established CHD or other atherosclerotic disease
2. Healthy individuals who are at high risk of developing CHD or other atherosclerotic disease, because of risk factors - including smoking, raised blood pressure, lipids (raised total cholesterol and LDL-cholesterol, low HDL-cholesterol and raised triglycerides) raised blood glucose, family history of premature coronary disease - or who have severe hypercholesterolaemia, or other forms of dyslipidaemia, hypertension or diabetes
3. Close relatives of
  - ♥ patients with early-onset CHD or atherosclerotic disease
  - ♥ healthy individuals at particularly high risk
4. Other individuals met in connection with ordinary clinical practice



# Goals for primary and secondary prevention of CHD (1)



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## Lifestyle

- \* Stop smoking
- \* Make healthy food choices
- \* Be physically active

## Other risk factors

- \* Blood pressure < 140/90 mmHg
- \* Total cholesterol < 5.0 mmol/l (190 mg/dl)
- \* LDL cholesterol < 3.0 mmol/l (115 mg/dl)
- \* Good glucose control in diabetes

**To be achieved by changes in lifestyle  
and, if needed, by drug treatment**

# Goals for secondary and primary prevention of CHD (2)



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## Other prophylactic drug therapies

### ➤ Secondary Prevention

- Aspirin in virtually all patients
- Beta-blockers after myocardial infarction
- ACE inhibitors in patients with heart failure/LV dysfunction
- Anticoagulants in patients at high risk of thromboembolic events

### ➤ Primary prevention

Aspirin (75 mg) in treated hypertensive patients and in men at particularly high CHD risk

# Goals for primary and secondary prevention of CHD (3)



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## Screen close relatives of

- \* Patients with premature CHD (men < 55 yr and women < 65 yr)
- \* Patients with suspected familial dyslipidaemias



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## *Principal Scientific Objective*

To determine in patients with CHD whether the major risk factors for recurrent CHD are being effectively managed by lifestyle and, when appropriate, drug therapy



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## *Study population*

Patients hospitalised because of

- 1) First elective or emergency **CABG**
- 2) First elective or emergency **PTCA**,  
no previous CABG
- 3) **AMI**, no previous CABG or PTCA
- 4) **Acute myocardial ischaemia**,  
no previous CABG, PTCA or AMI





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## *Study population*

- ❖ Consecutive patients, aged < 71 yrs, hospitalised in the period from 1st January 1997 to at least 6 months prior to the interview
- ❖ Interviews: September 1999 - February 2000
- ❖ Median time between index event and interview: 1.44 yrs (interquartile range 0.96 - 1.95 yrs)



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## *Participating centres*

BEL/GHE	Belgium - Ghent
CZE/PP	Czech Republic - Pilsen, Prague
FIN/KUO	Finland - Kuopio
FRA/LLRT	France - Lille, Lomme, Roubaix
GER/MUNS	Germany - Münster
GRE/ATCI	Greece - Athens, Thessaloniki, Crete, Ioannina
HUN/BUD	Hungary - Budapest
IRE/DUB	Ireland - Dublin
ITA/TV	Italy - Treviso, Verona
NET/ROT	the Netherlands - Rotterdam
POL/CRA	Poland - Cracow
SLO/LJU	Slovenia - Ljubljana
SPA/BAR	Spain - Barcelona
SWE/MAL	Sweden - Malmö
UK/HL	United Kingdom - Hull, London



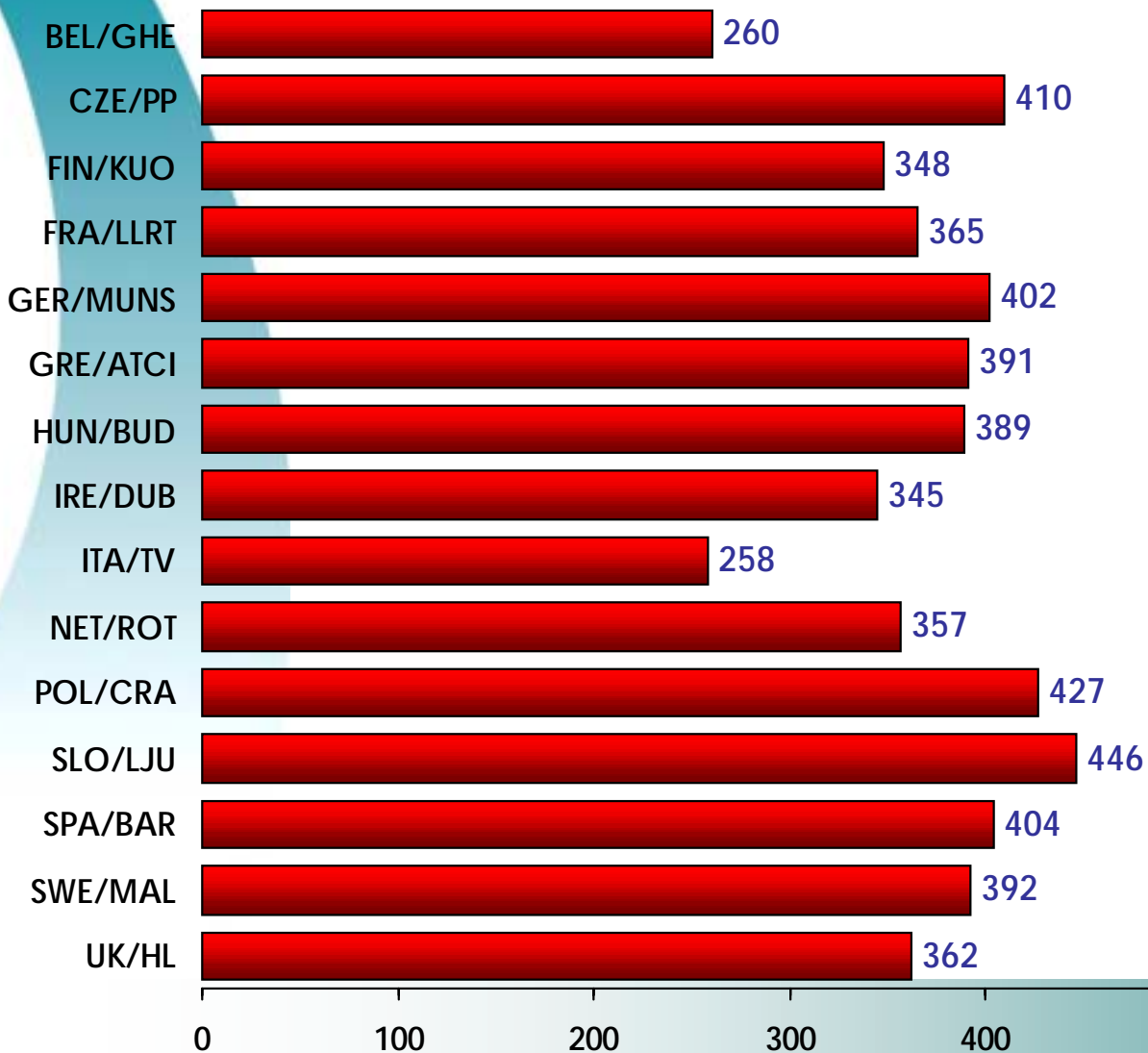
# Number of interviewed patients



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by center

Total = 5,556 patients



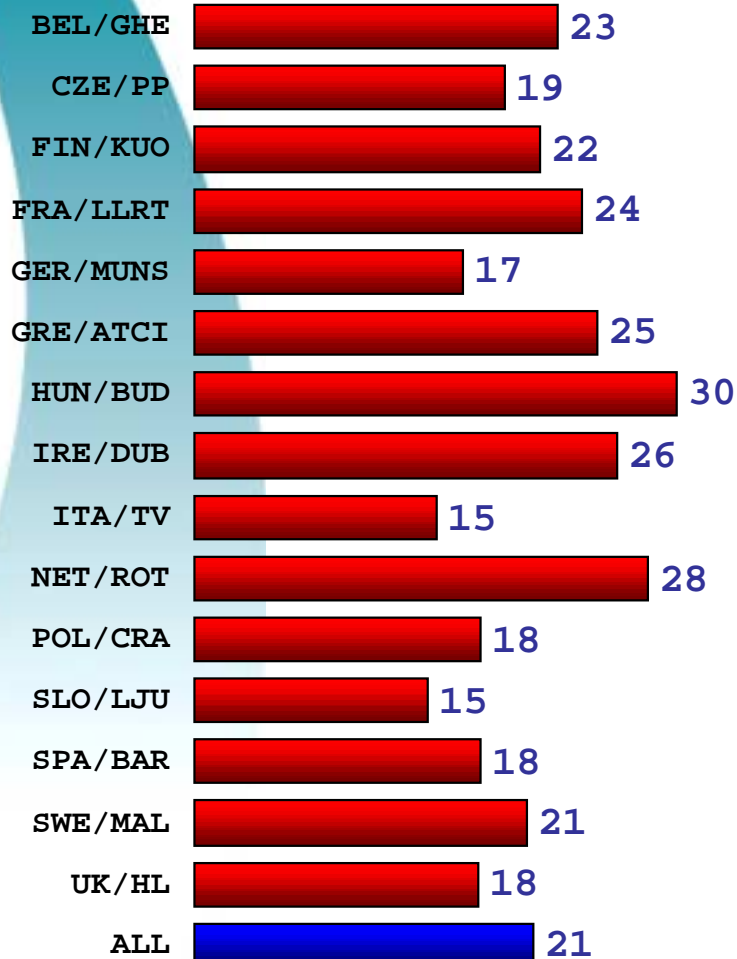


# % smoking\* at interview



*by center*

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\* self-reported and/or CO in breath > 10 ppm



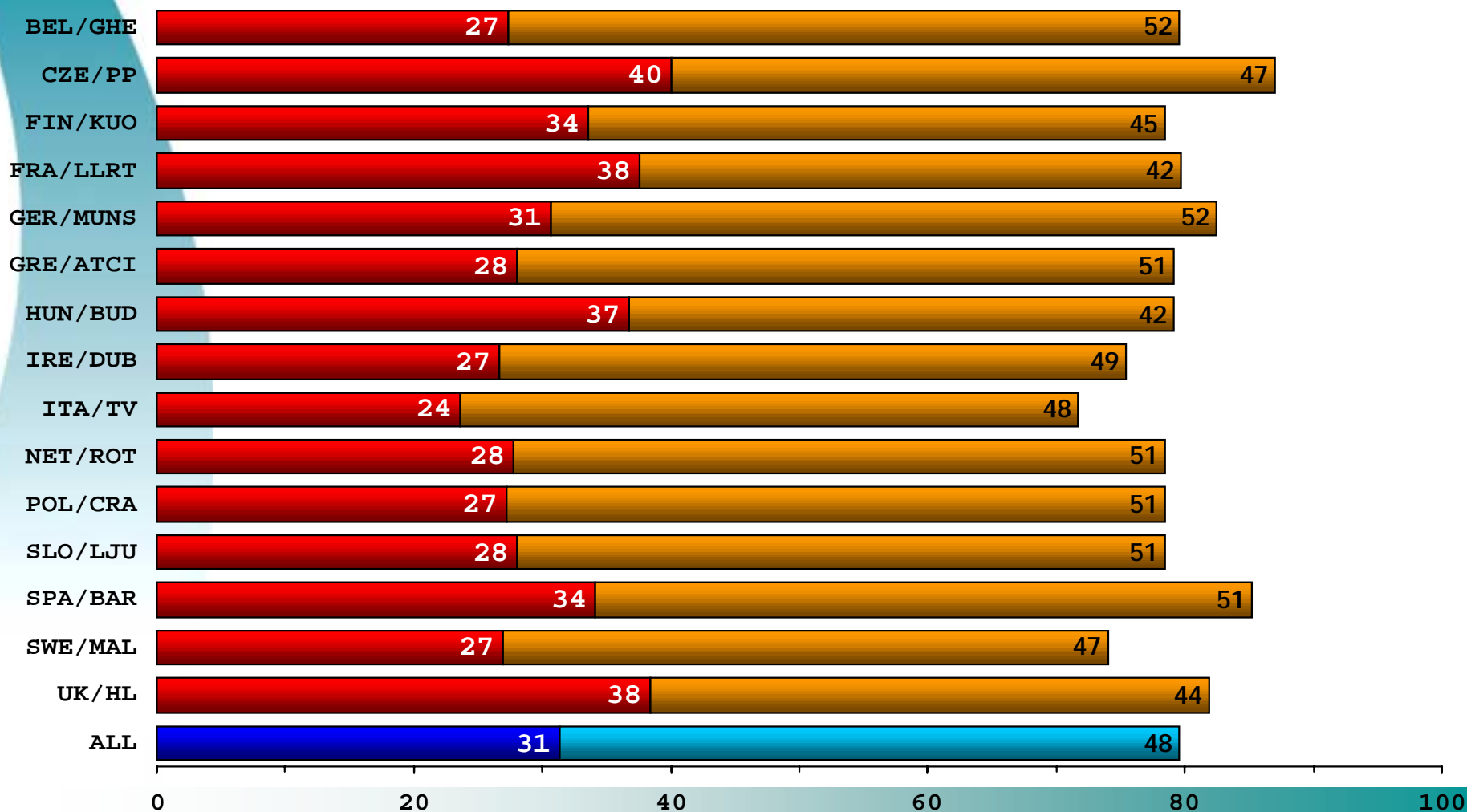
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# Distribution of BMI at interview



by center

■  $\geq 30 \text{ kg/m}^2$  ■ 25–30  $\text{kg/m}^2$



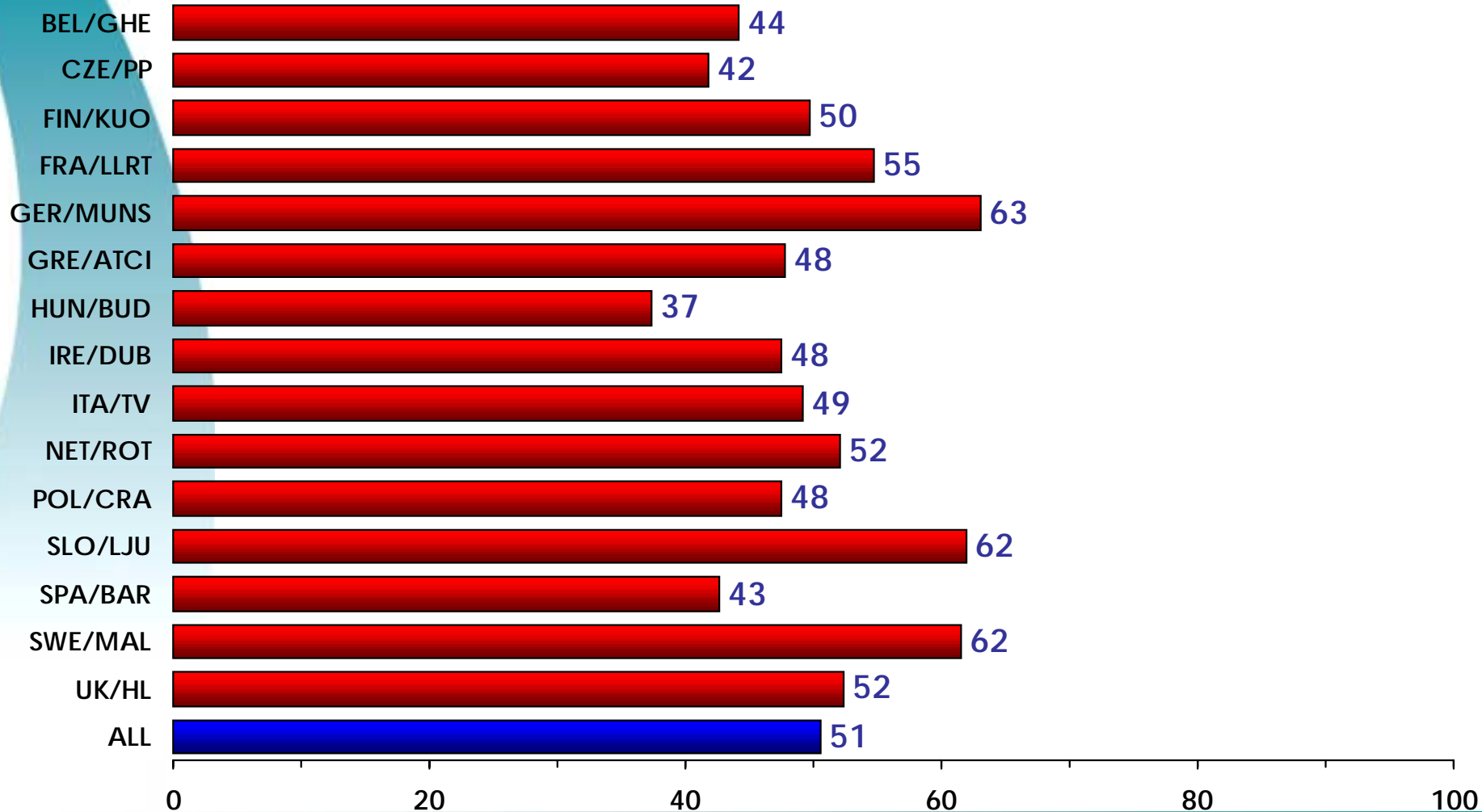


# % raised blood pressure\* at interview



*by center*

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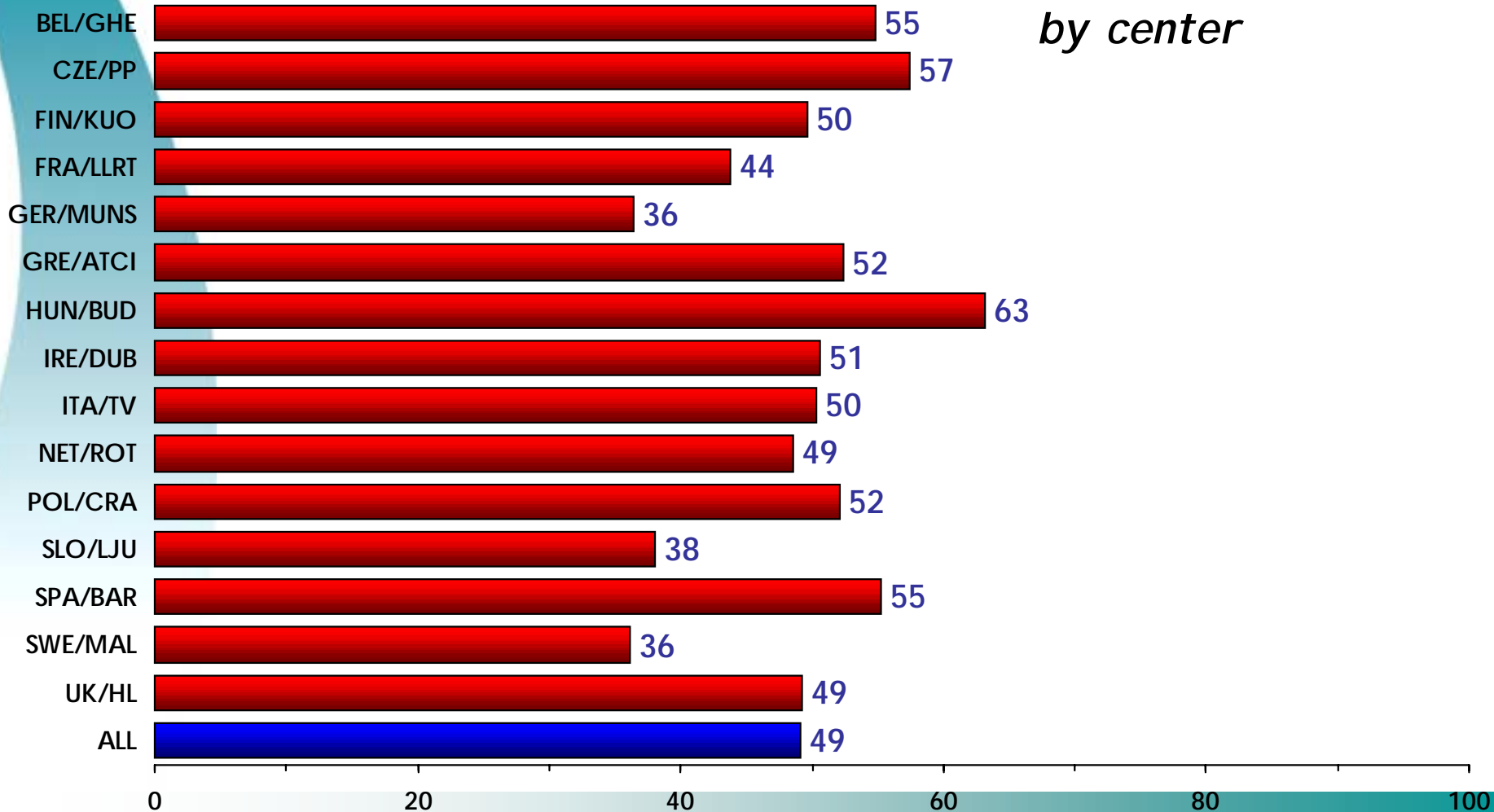


\* systolic BP  $\geq$  140 mmHg and/or diastolic BP  $\geq$  90 mmHg

# Therapeutic control of blood pressure at interview



EUROASPIRE % reaching goal\* at interview among those using BP lowering medication



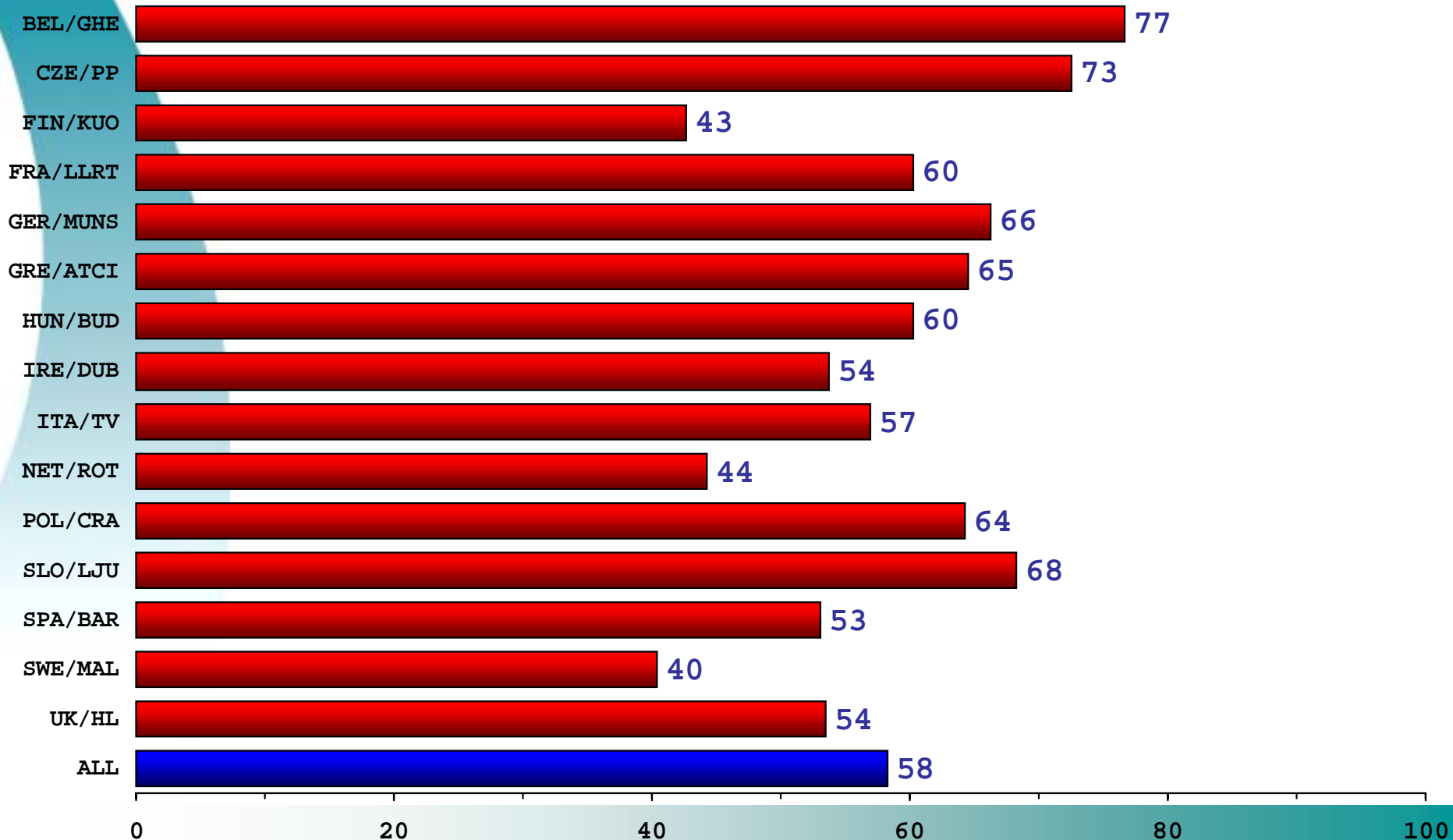
\* systolic BP < 140 mmHg and diastolic BP < 90 mmHg



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# % total cholesterol $\geq$ 5 mmol/l at interview

by center





# Therapeutic control of total cholesterol at interview

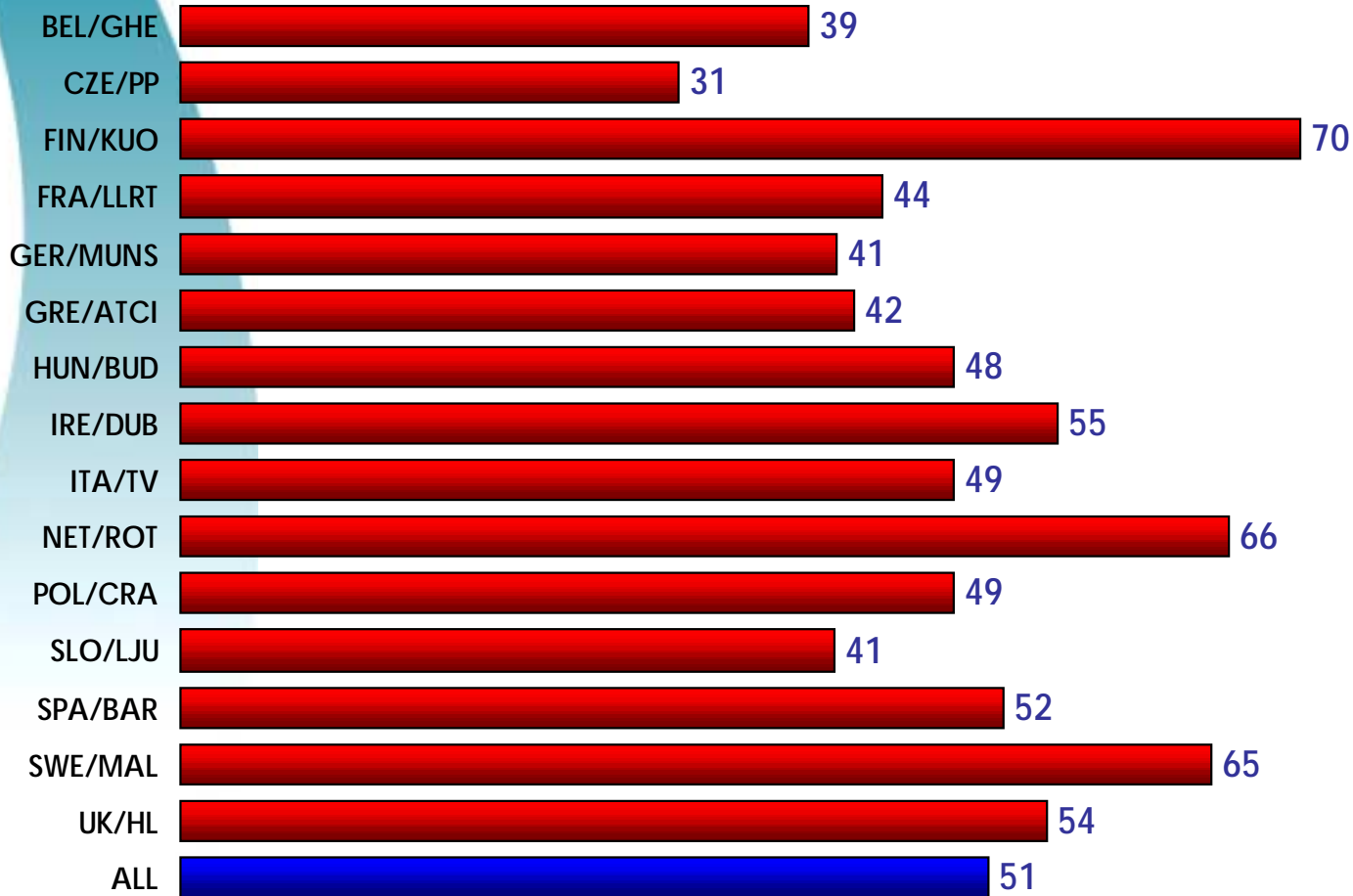


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% reaching goal\* at interview among those using lipid-lowering medication

*by center*



0

20

40

60

80

100

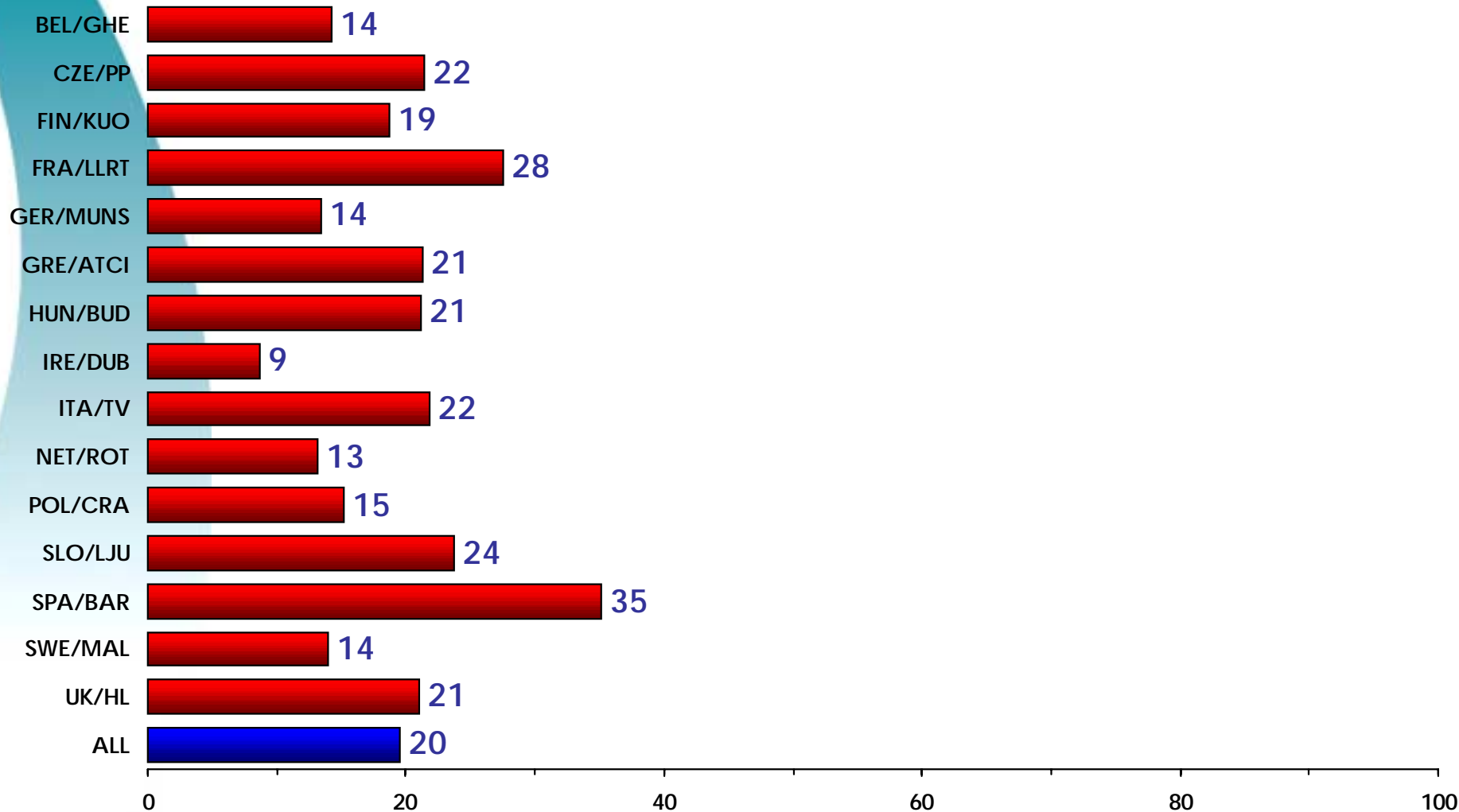
\* total cholesterol < 5 mmol/l



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# % self-reported diabetes at interview

*by center*



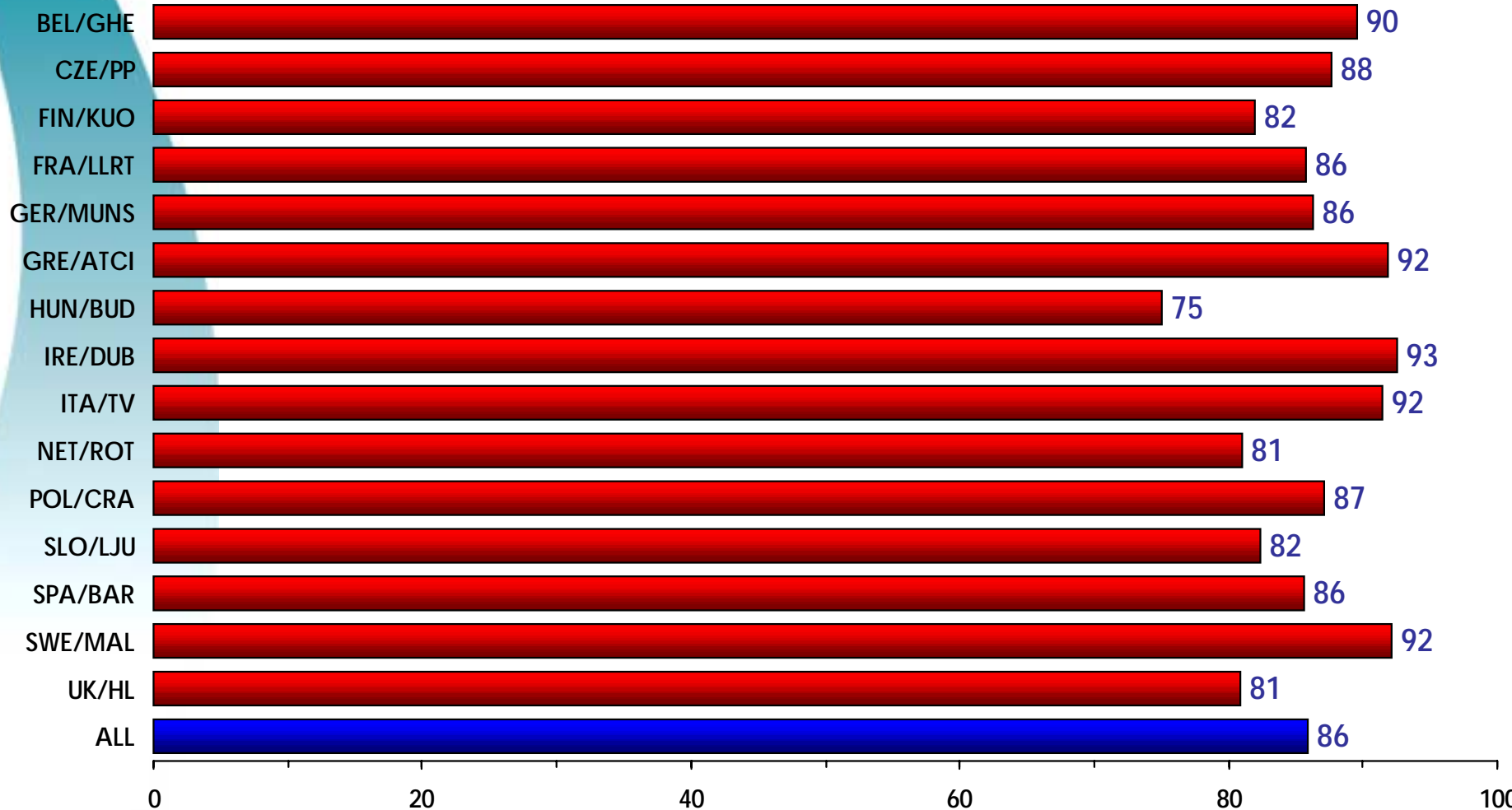


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# % aspirin/other anti-platelets at interview



*by center*



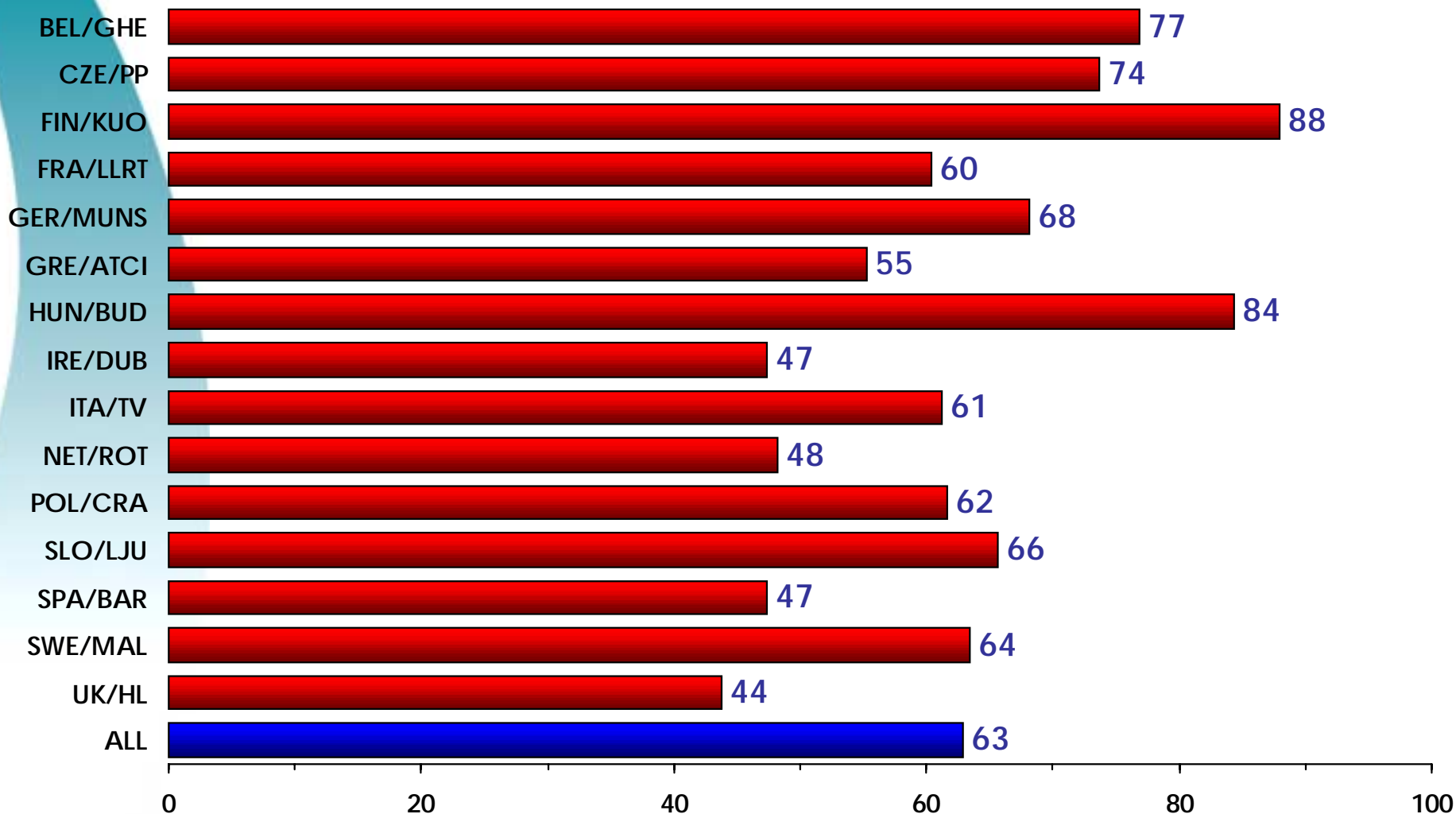


# % beta-blockers at interview



*by center*

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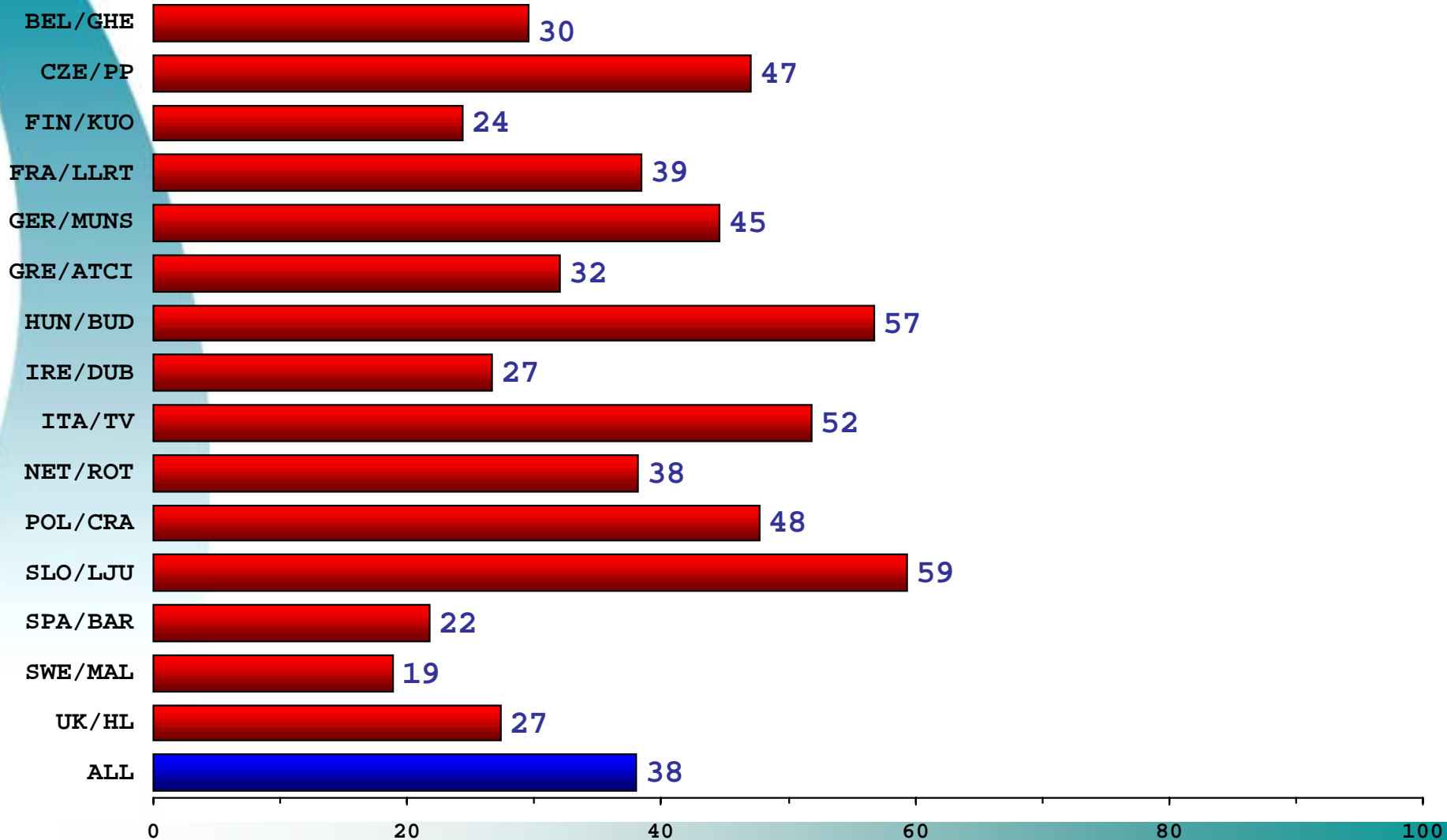


# % ACE inhibitors at interview



*by center*

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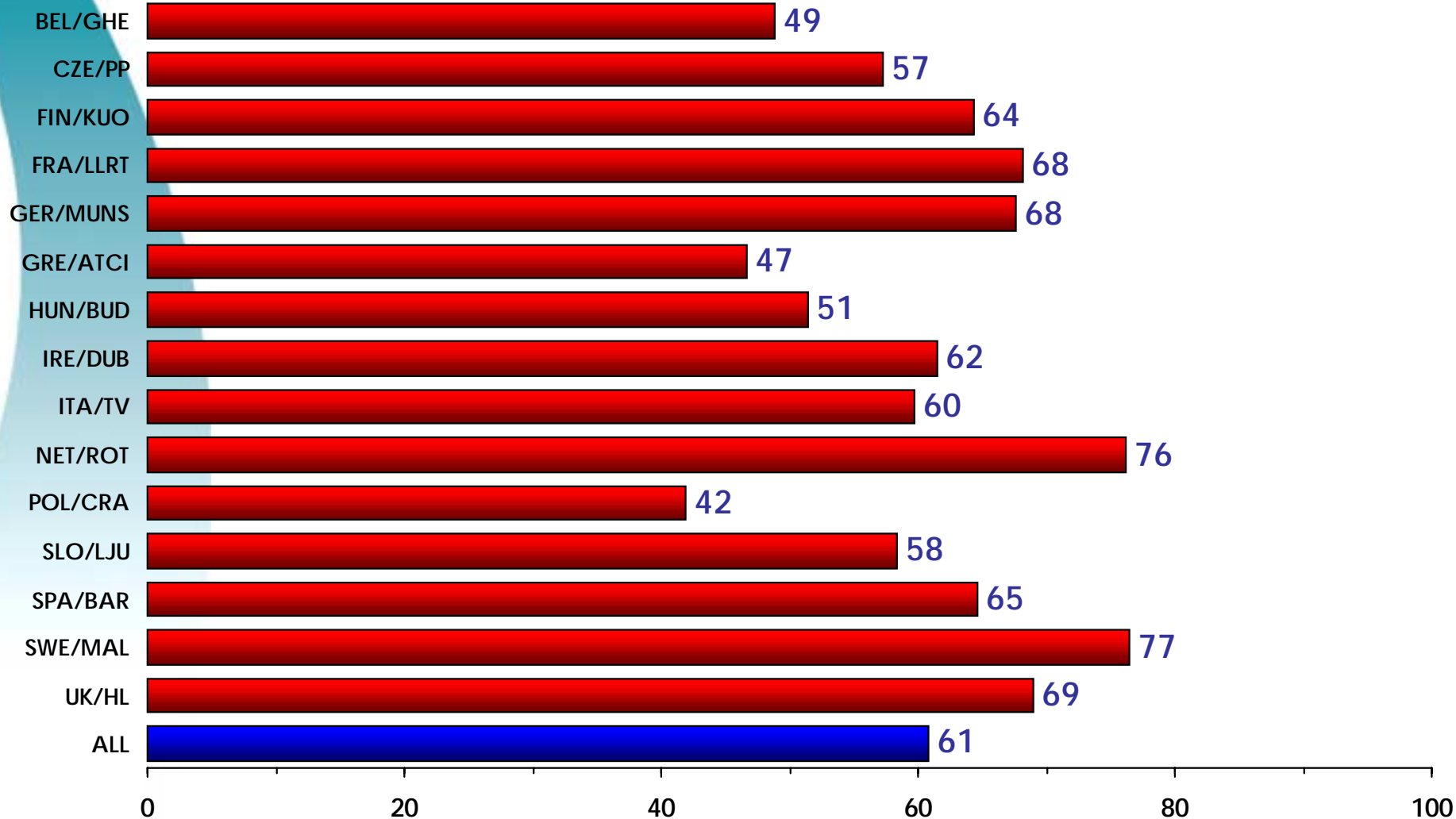


# % lipid-lowering drugs at interview



*by center*

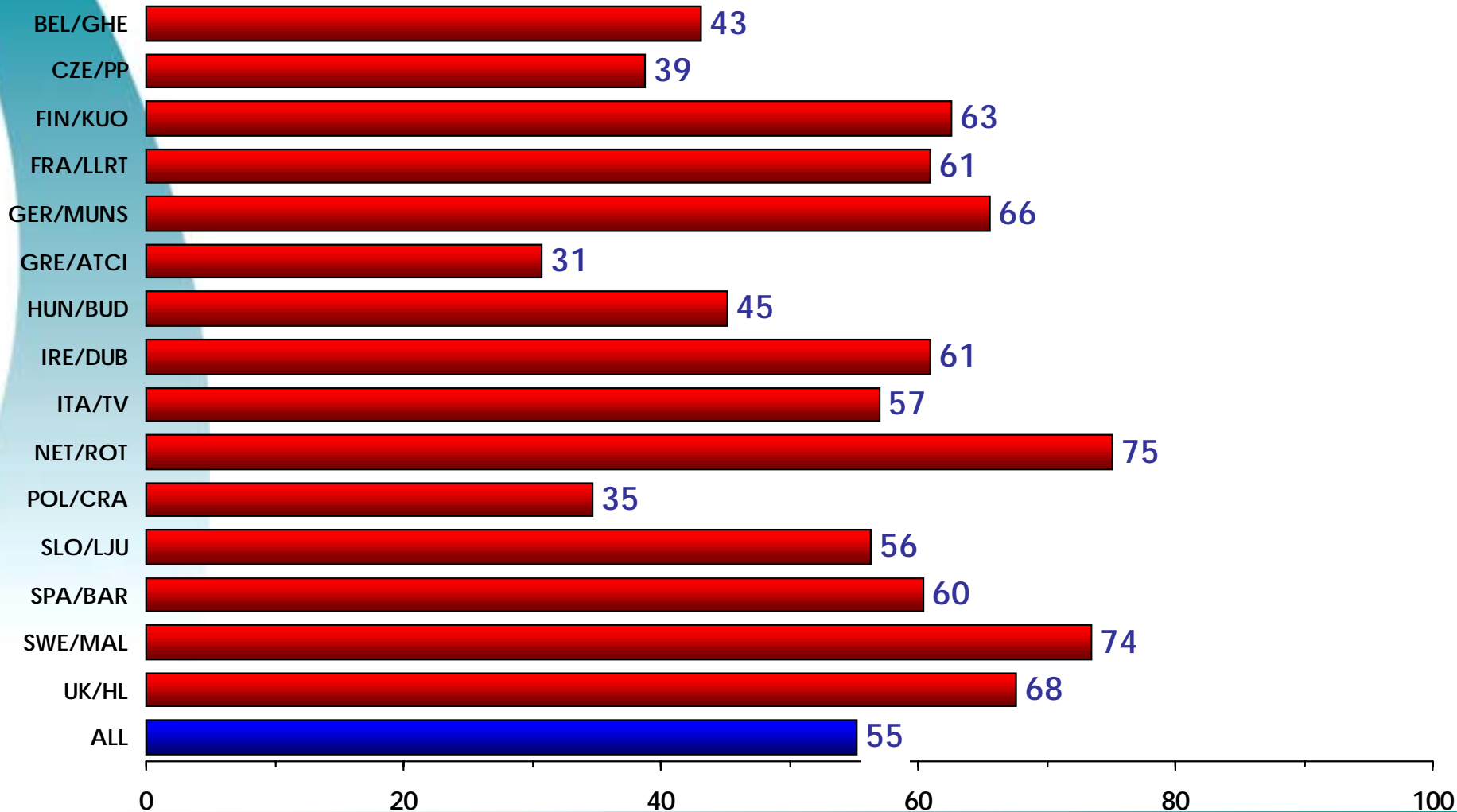
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# % statins at interview



*by center*



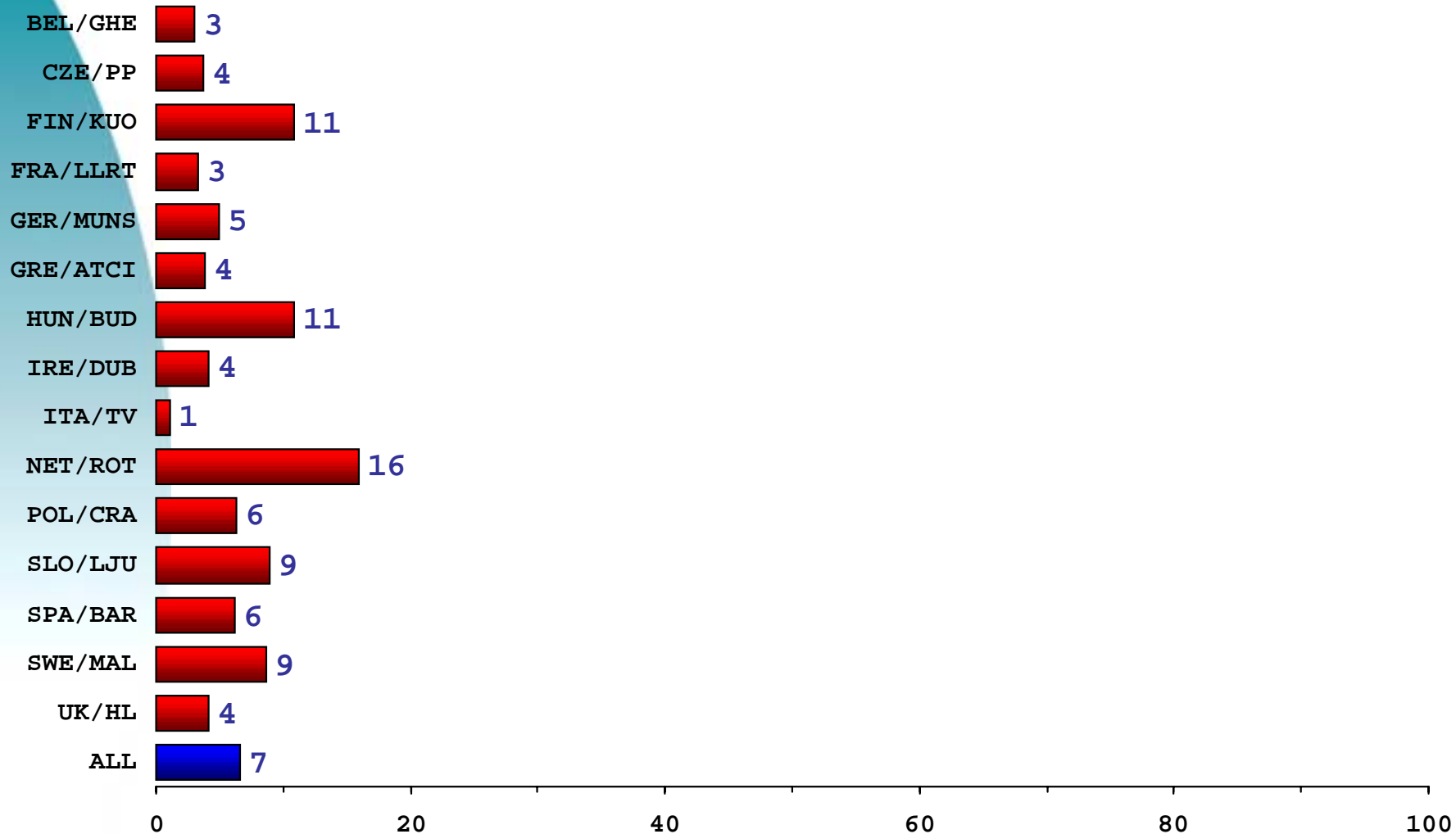


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# % anti-coagulants at interview



*by center*







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## *Conclusions*

- A high prevalence of unhealthy lifestyles, modifiable risk factors and inadequate use of prophylactic drug therapies is found in coronary patients across Europe
- Considerable potential to raise the standard of preventive cardiology exists throughout Europe in order to reduce coronary morbidity and mortality



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## *Steering Group*

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Pr Giovanni B Ambrosio

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Pr Leif Erhardt

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