

# Myocardial Infarction Registry Pilot Study

# Hungarian Myocardial Infarction Register

From research to quality assurance

Gottsegen National Institute of Cardiology

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# <https://ir.kardio.hu>

## A Web based study with quality assurance

The screenshot shows the homepage of the Infarktus Regiszter website. At the top left is the logo 'Infarktus Regiszter' with a stylized heart icon. To the right is a photograph of a modern hospital building. Below the logo is a group photo of five healthcare professionals (three men and two women) in medical scrubs. A timestamp '2012. április 30. hétfő, Katalin, Kitti [Verzió: 2.3.28]' and the Hungarian flag are in the top right corner.

**Belépés**

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Jelszó:  Új jelszó kérése BELÉPÉS

**EXAMINATION OF THE INCIDENCE AND TREATMENT OF MYOCARDIAL INFARCTION WITH EPIDEMIOLOGICAL METHODS (INFARCTION REGISTRY)**

**History**

The World Health Organization initiated Infarction Registries in many countries in the 1970's, some of these still function with minor changes. There was an Infarction Registry in Hungary in the South-Pest region until 1979. The assessment according to standardised diagnostic criteria made it possible to evaluate the data of prehospital, hospital and later periods and has led to many changes in healthcare management, which were important from a public health perspective, as well. In recent years there has been a change in the diagnostic criteria and optimal treatment strategy of the disease.

[Read more >](#)

**Adatok**

Adatlapok száma 11826

**Actuality of the subject**

The treatment of myocardial infarction has changed in the past few years. Primary percutaneous intervention (PCI) of patients with STEMI - according to data of randomized studies with a high number of patients - has further improved the early and late prognosis of available for STEMI patients in Hungary in many regions.

R 12006

# Myocardial Infarction Register Pilot Study

Study population in Budapest:

II. district: 88729

III. district: 123723

IX. district: 61576

X. district 79720

XVII. district: 78250

Population in Budapest: 1 712 210

431 998 inhabitants



POPULATION  
REGISTER

Szabolcs-Szatmár-Bereg  
county



HOSPITAL REGISTER

# Participating centers in the pilot study



# SOURCES OF DATA

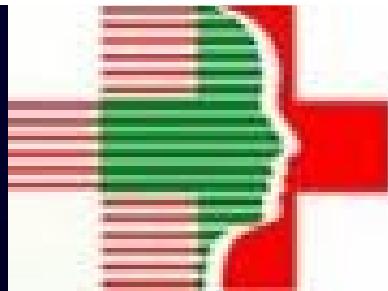
National Statistical Office



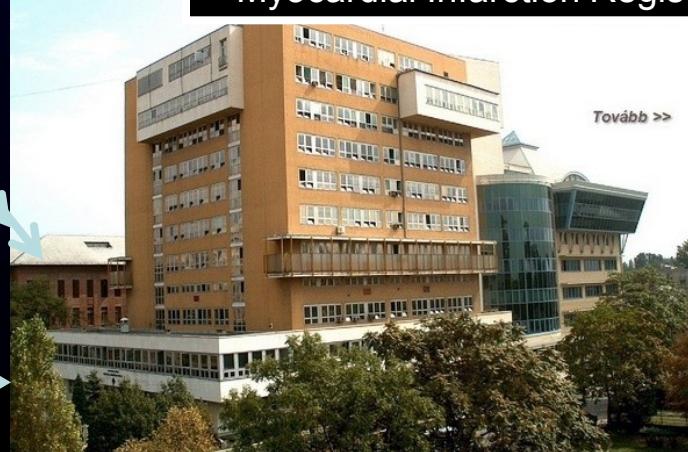
National Health Insurance Office



HOSPITALS



Myocardial Infarction Registry



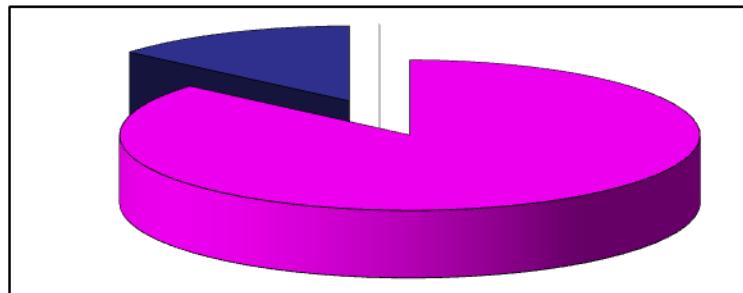
FOLLOW UP

# Myocardial Infarction Pilot Study

01.01.2010.-12.31.2011.

Number of patients: 8071

Coronarography in STEMI patients



CA was performed 86.3%-of STEMI pts

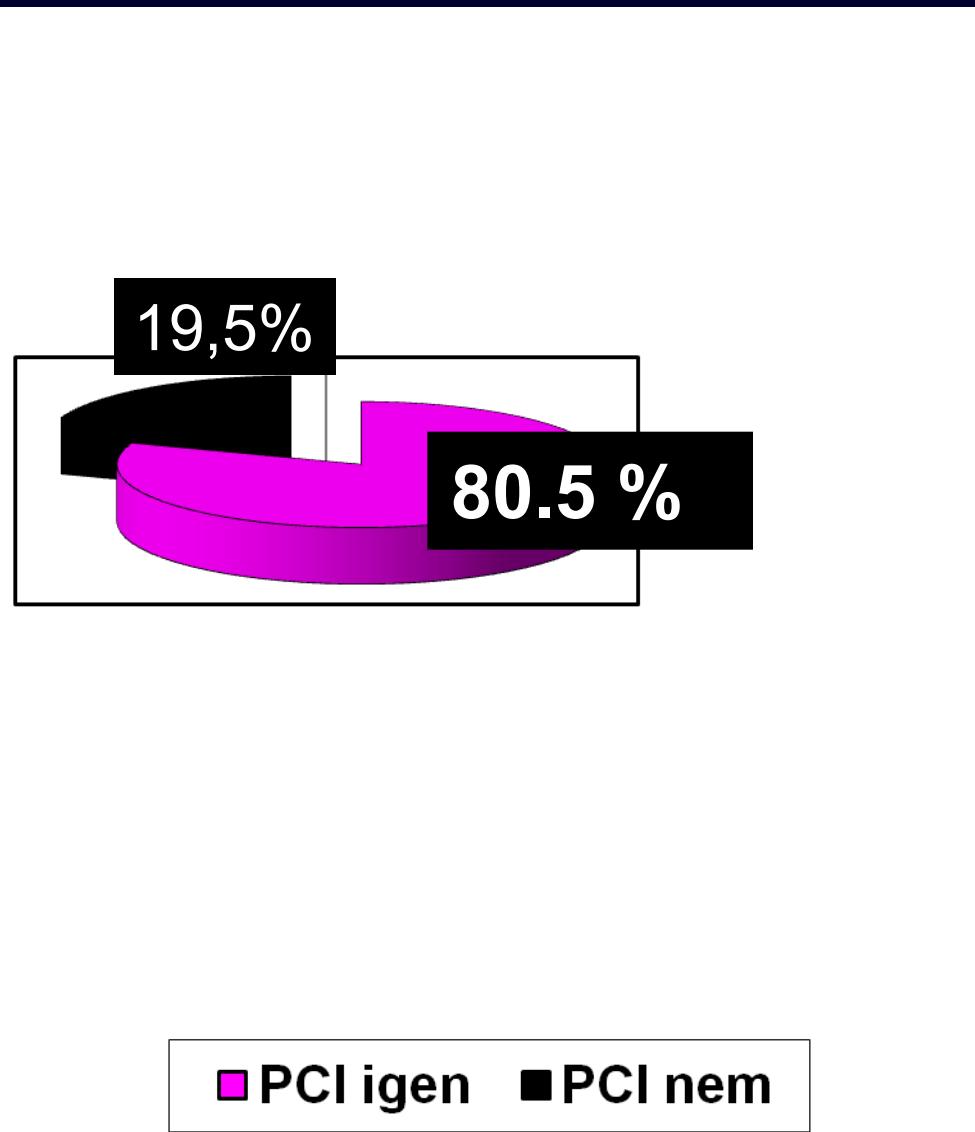


Hospital diagnosis

- STEMI: 53.9%
- NSTEMI: 41.8%

# Primary PCI in pts with STEMI

Dia



STEMI N= 4425

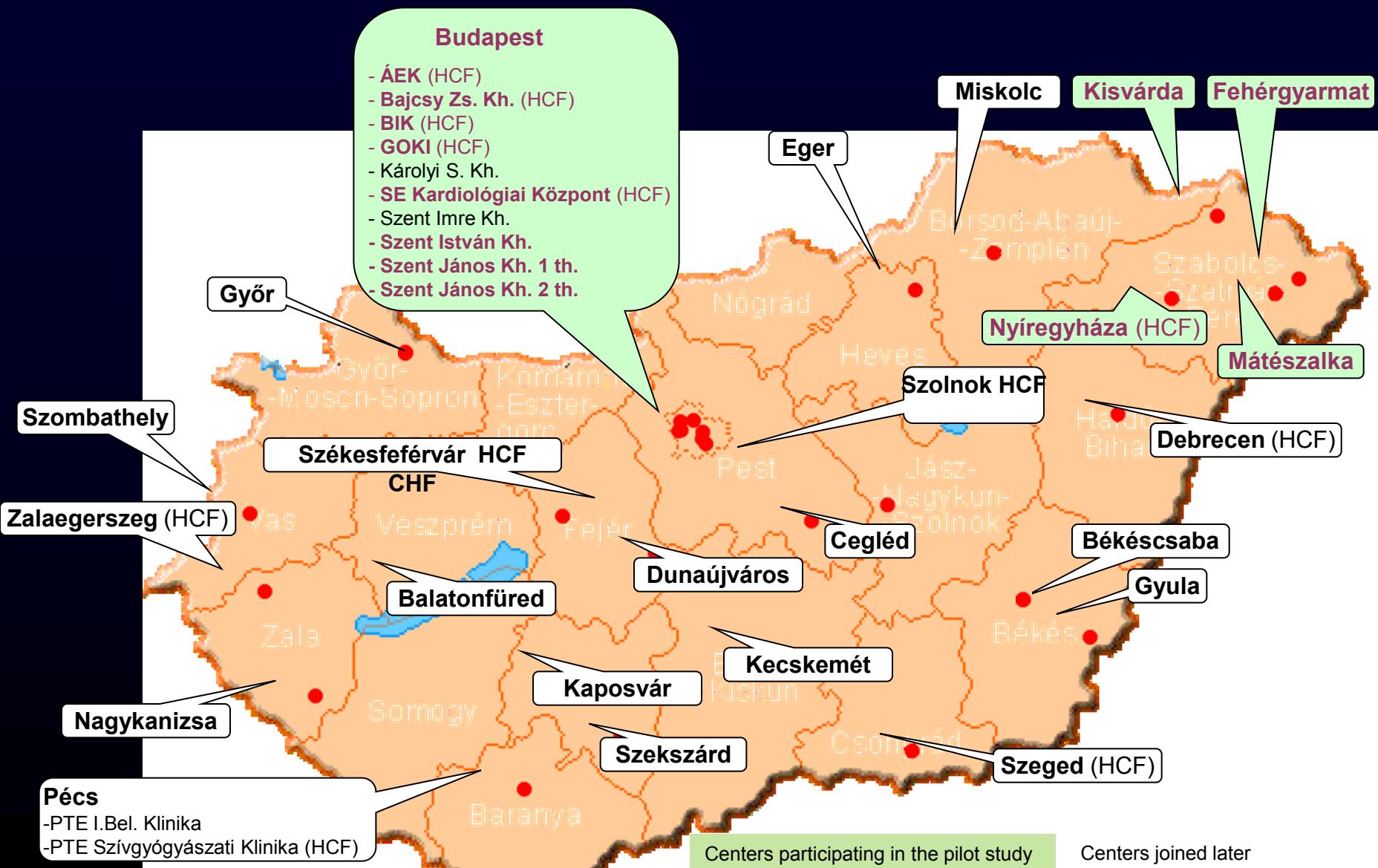
„Late comer“:9%

# Main results of the pilot study

1. The Web based Myocardial Infarction Register Pilot Study was found feasible and it is a valuable tool to have real picture on pts care and improve the quality of care
2. The number of participating centers increased from 12 to 36.

# Hungarian Myocardial Infarction Registry

## 01. 01. 2012.



# Primary PCI for ST segment elevation myocardial infarction- an analysis of registry data

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<sup>2</sup>Miskolci Megyei Kórház

<sup>3</sup>Szegedi Egyetem II. Belklinika - Kardiológiai Központ

<sup>4</sup>Jósá András Kórház Nyíregyháza

<sup>5</sup>DOTE Kardiológiai Intézet

<sup>6</sup>Markosovszky Kórház Szombathely

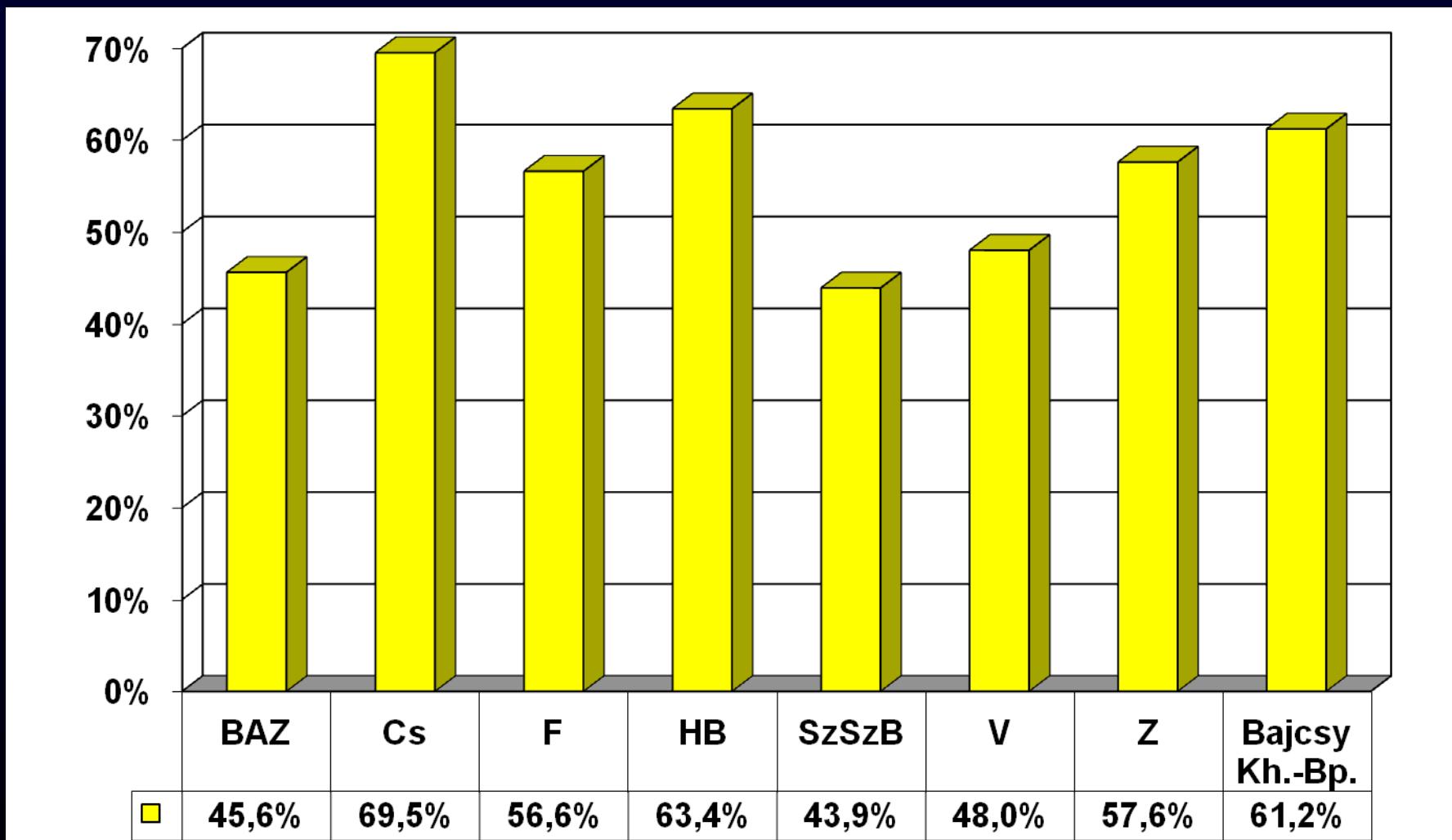
<sup>7</sup>Zala Megyei Kórház

<sup>8</sup>Bajcsy Kórház, Budapest

# Patients and methods

1. In the Myocardial Infarct Registry we identified rural centres which have registered at least 200 AMI pts during the period between 01/1/2011 and 31/12/2011 and have heart cath facility.
2. The rural centres were compared to a center in the capital, which has heart cath facility without heart surgery on site
3. Data from 2397 pts have been processed: 394 pts were registered in the capital, and 2003 cases came from the countryside.

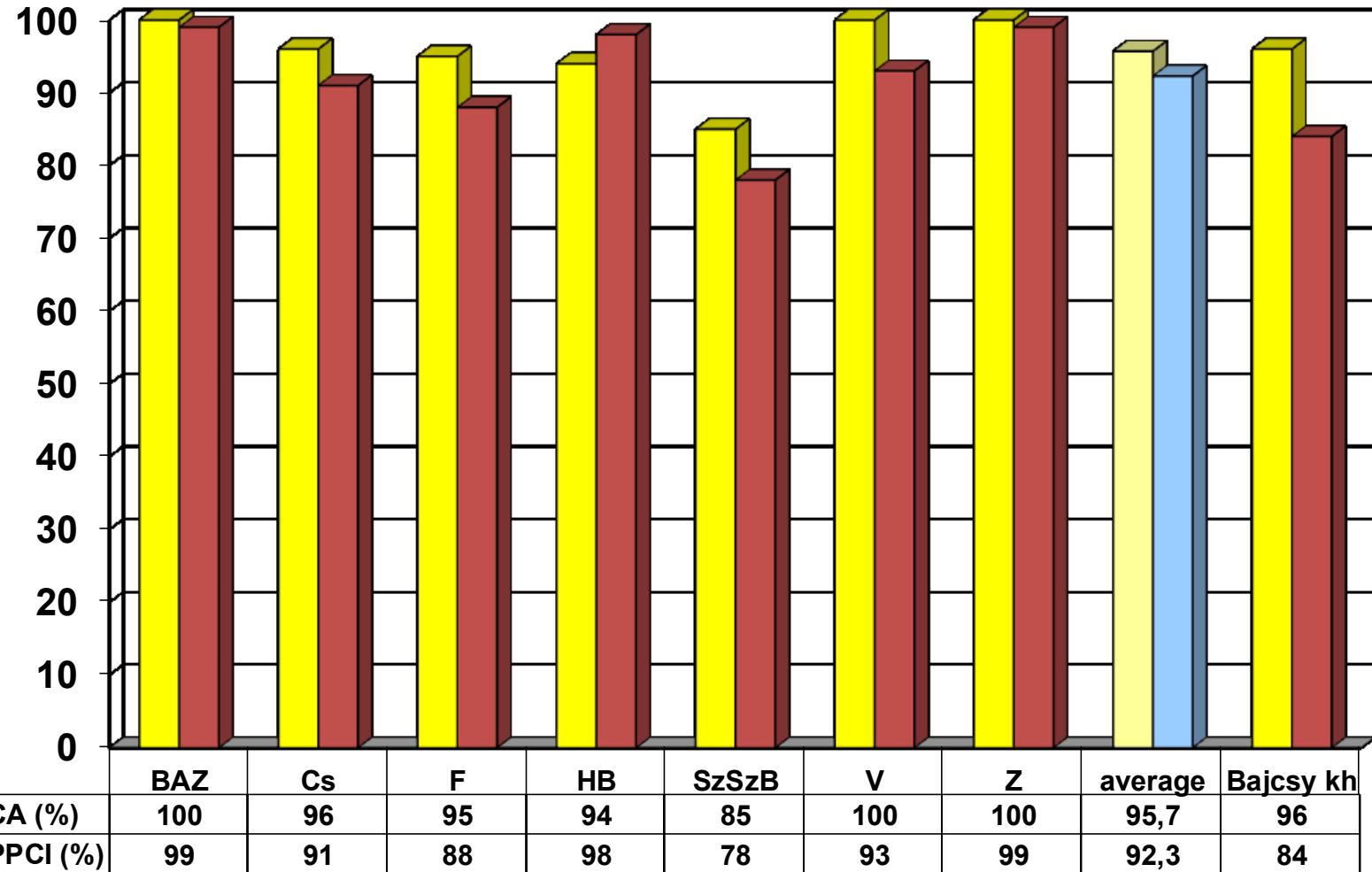
# STEMI/AMI (%) in different centres



BAZ= Borsod Abaúj Zemplén county; Cs= Csongrád county F= Fejér county;

HB= Hajdú-Bihar county; SzSzB= Szabolcs-Szatmár-Bereg county; V= Vas county; Z= Zala county

# Coronarography and PPCI in STEMI patients

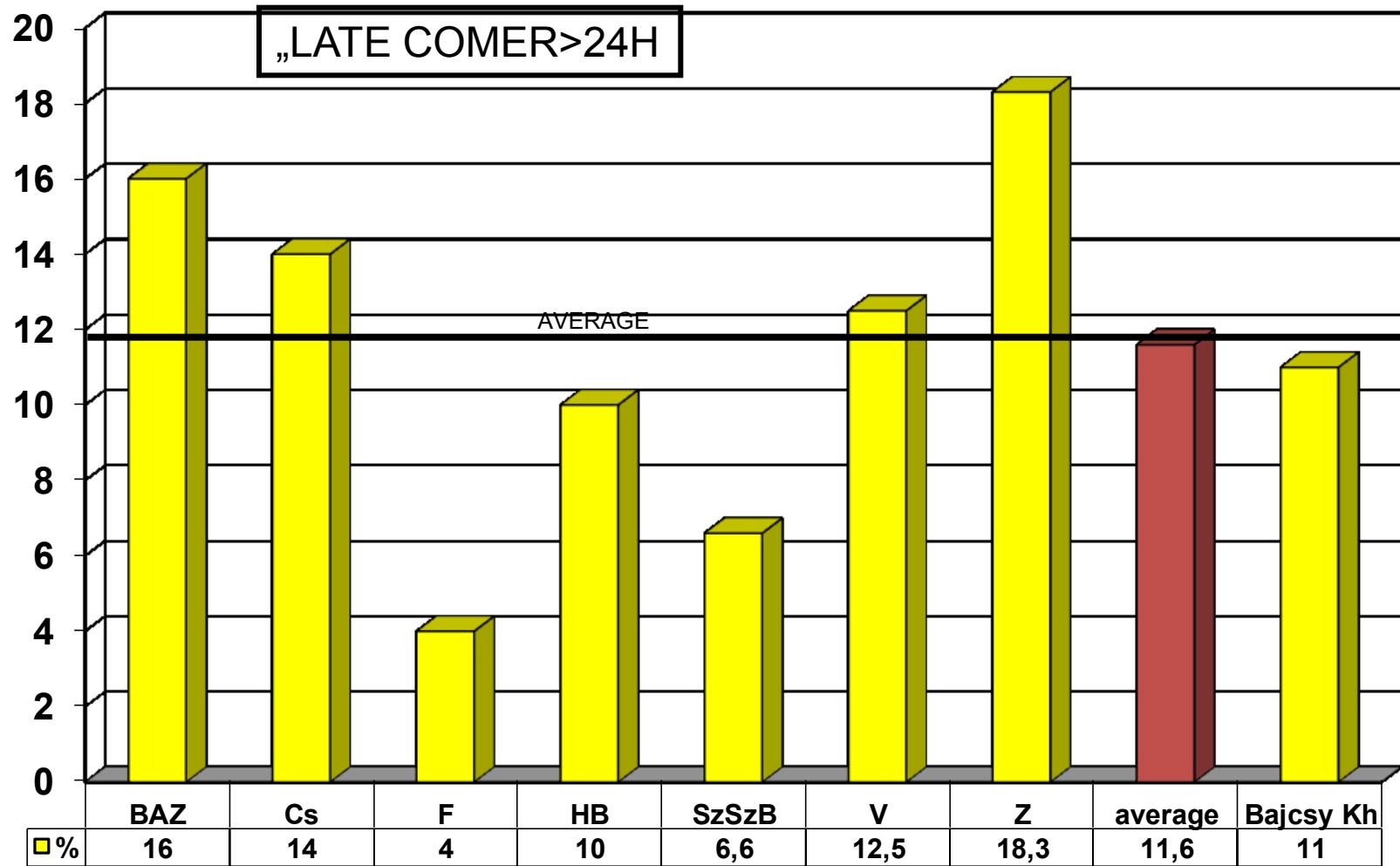


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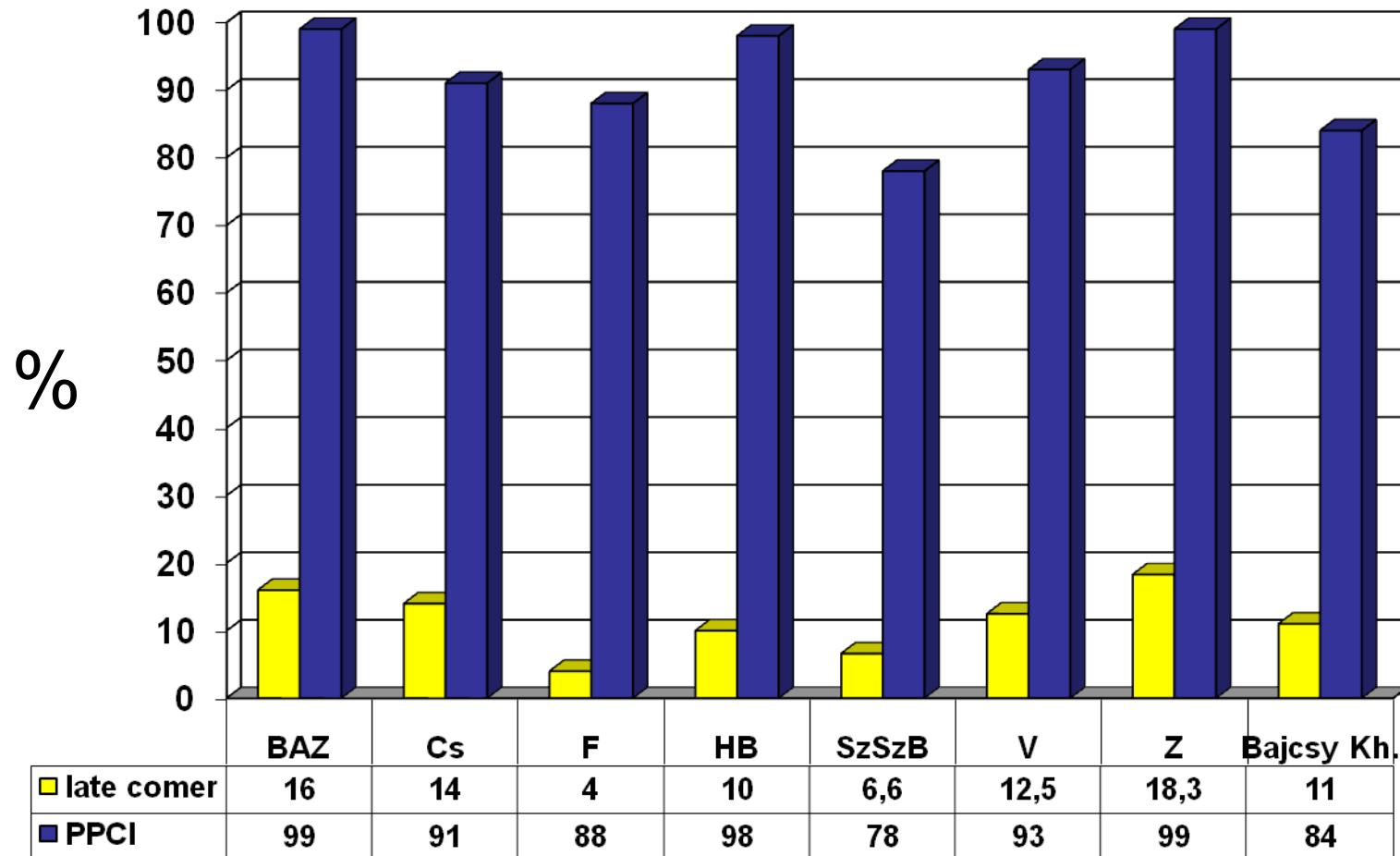
CA= coronary arteriography; PPCI= primer percutan coronary intervention

# „Late comer” STEMI patients



BAZ= Borsod Abaúj Zemplén county; Cs= Csongrád county F= Fejér county; HB= Hajdú-Bihar county; SzSzB= Szabolcs-Szatmár-Bereg county; V= Vas county; Z= Zala county;

# „Late comer” and PPCI



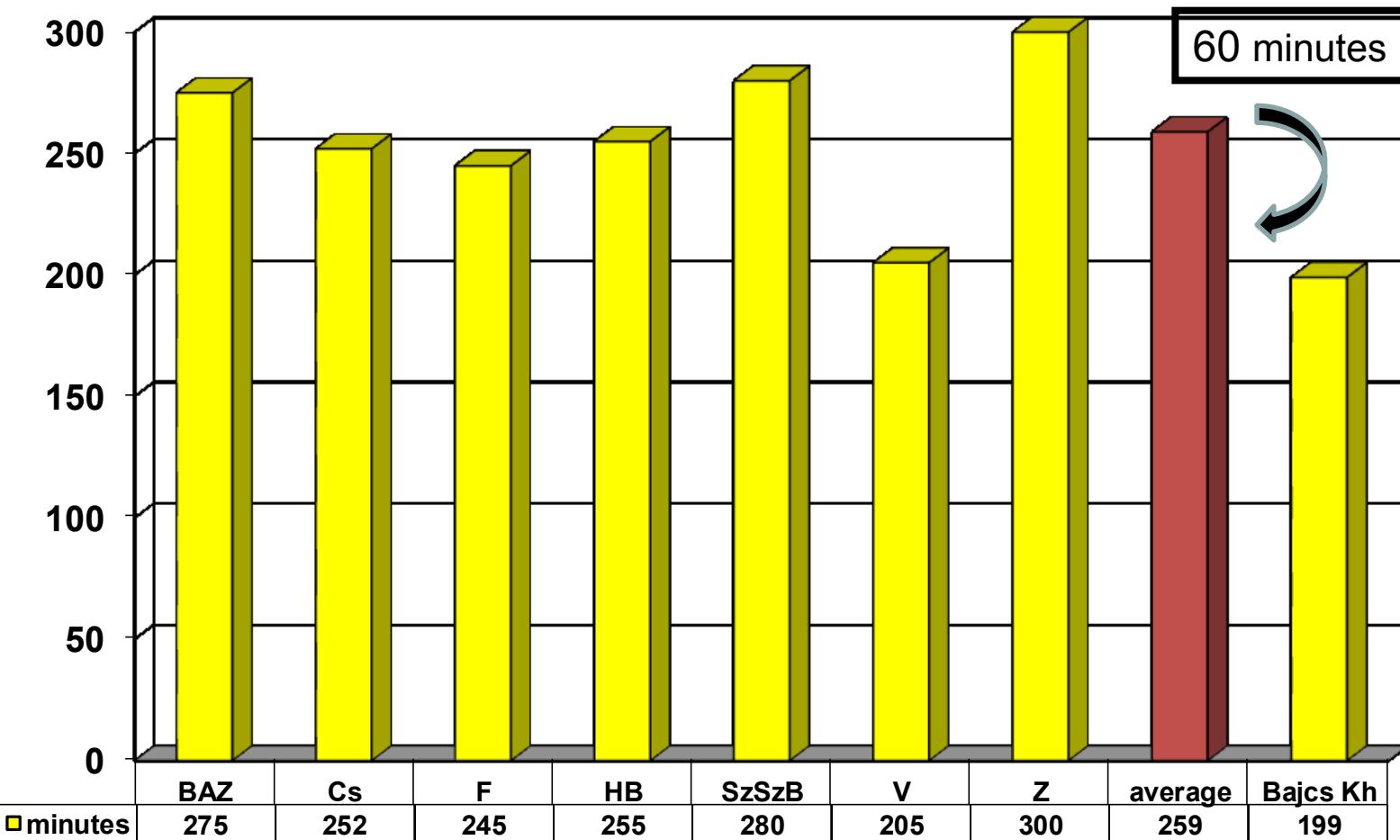
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# Door to balloon time

## Average 54 vs. 55 minutes



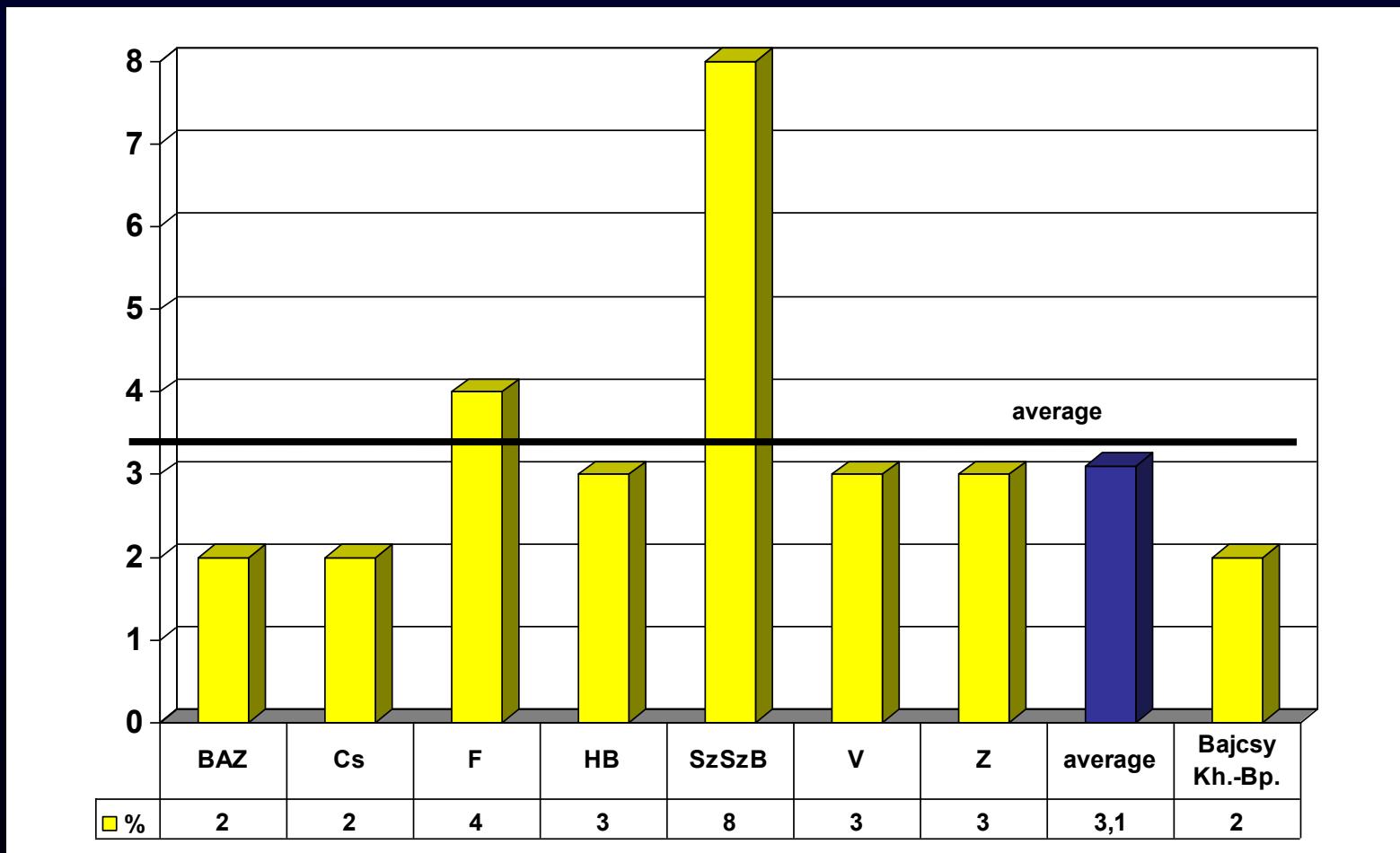
# Time from onset of symptoms to balloon inflation



BAZ= Borsod Abaúj Zemplén county; Cs= Csongrád county F= Fejér county;

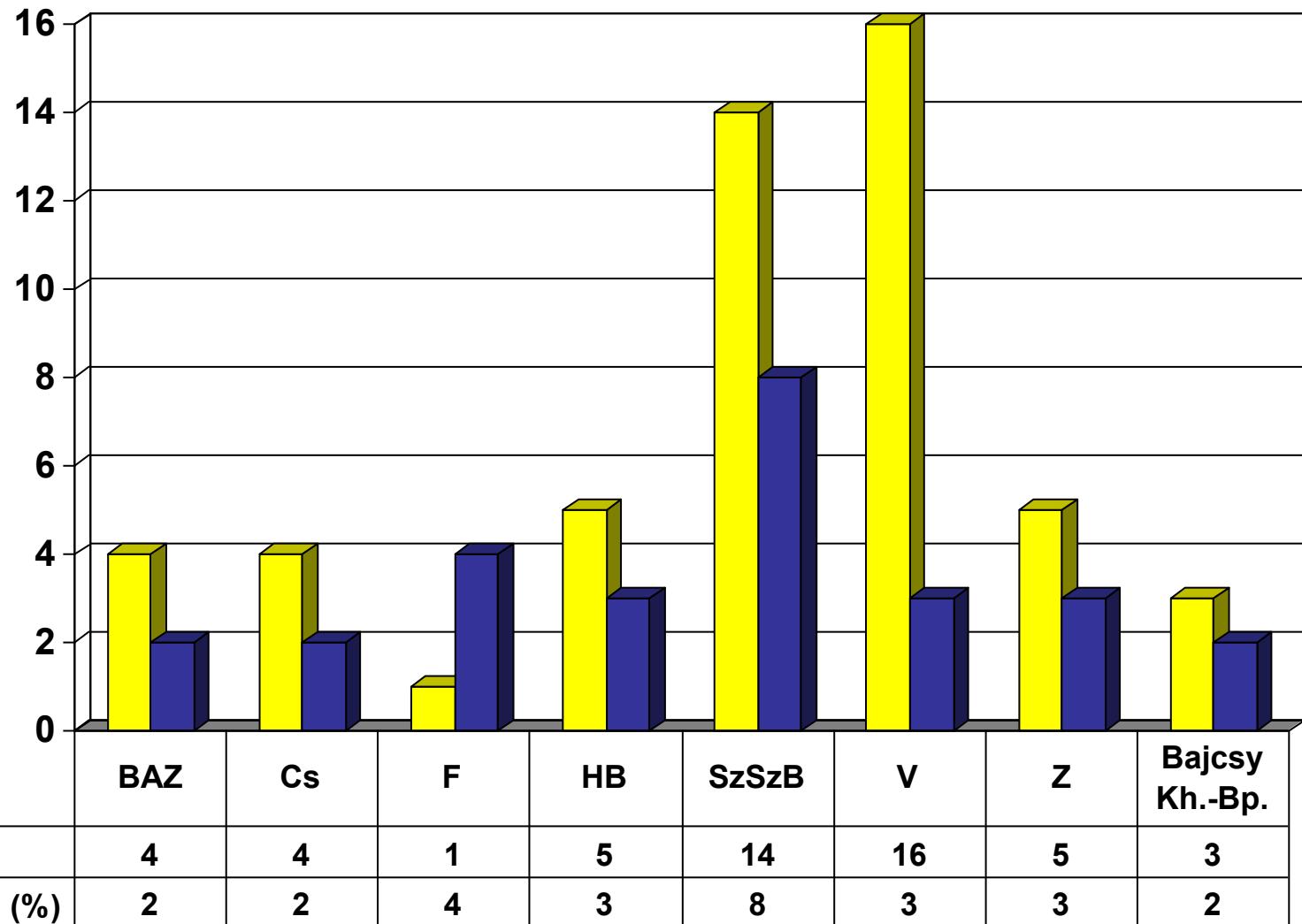
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# Hospital mortality



BAZ= Borsod Abaúj Zemplén county; Cs= Csongrád county F= Fejér county; HB= Hajdú-Bihar county; SzSzB= Szabolcs-Szatmár-Bereg county; V= Vas county; Z= Zala county

# Hospital mortality and use of IABP



BAZ= Borsod Abaúj Zemplén county; Cs= Csongrád county F= Fejér county; HB= Hajdú-Bihar county; SzSzB= Szabolcs-Szatmár-Bereg county; V= Vas county; Z= Zala county

# Conclusions

1. PPCI was significantly more frequent in rural centers than in the capital (92.3% vs.84%).
2. In the countryside the median time to the reopening of the culprit vessel was 60 minutes longer than in the capital
3. No correlations were found between frequency of the late comer patients and frequency of PPCI

# The program was founded

Health Scientific Council (ETT) 2009-2011)

MSD  
ASTRAZENECA  
EGIS, SERVIER, RICHTER

Research grants



SWEDEHEART



HUNGAROHEART

Yes, we can do it

Many thanks for all of you for your cooperation. Our common goal to have an effective cardiac care in Hungary. Different registries are badly needed for this, therefore we have to continue our work.