

# Mise českých intervenčních kardiologů v Bulharsku je u konce

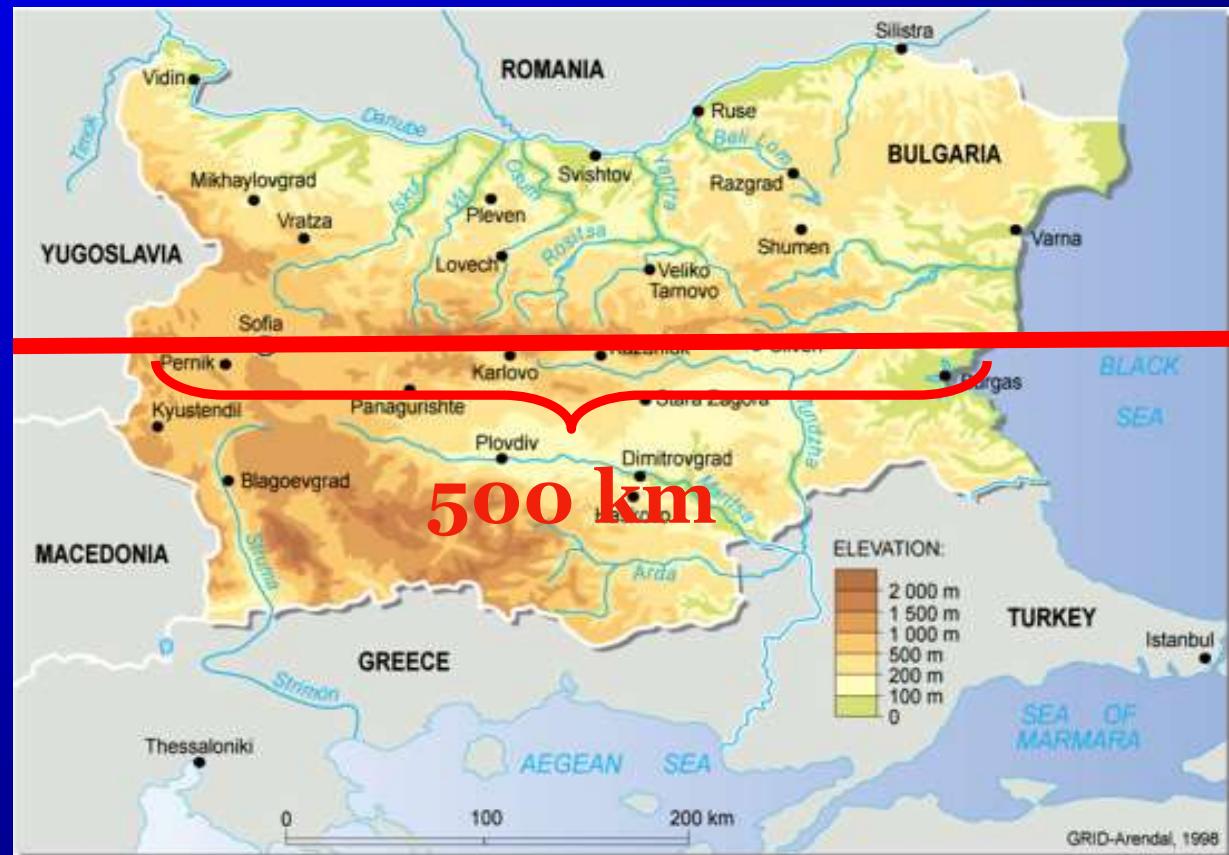
O. Hlinomaz, L. Groch, J. Horák,  
P. Widimský, T. Vekov

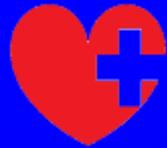




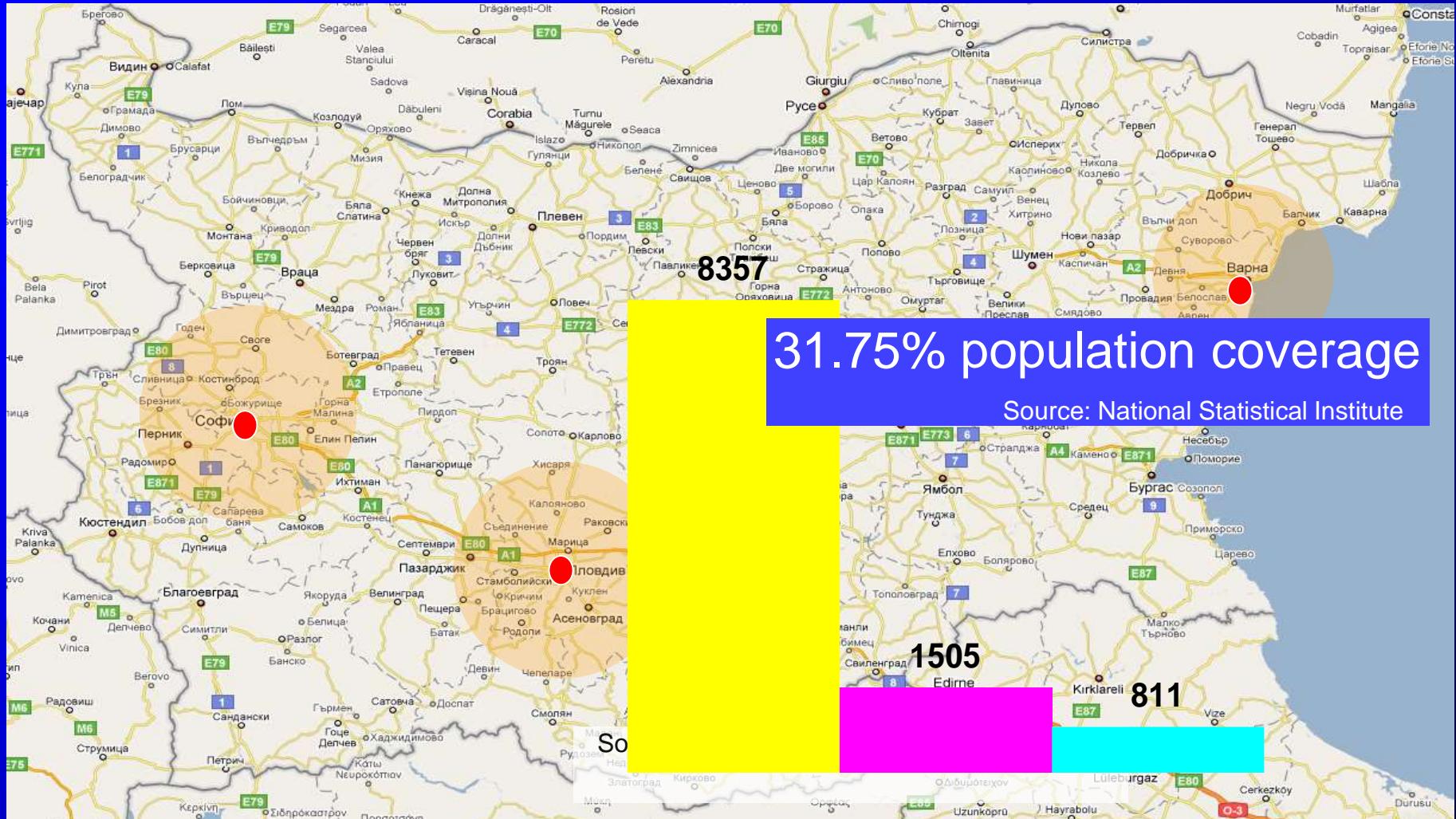
# Bulharsko

Rozloha – 110, 910 km<sup>2</sup>  
Obyvatelstvo - 7.047.010\*





# PPCI centra v Bulharsku v r. 2007

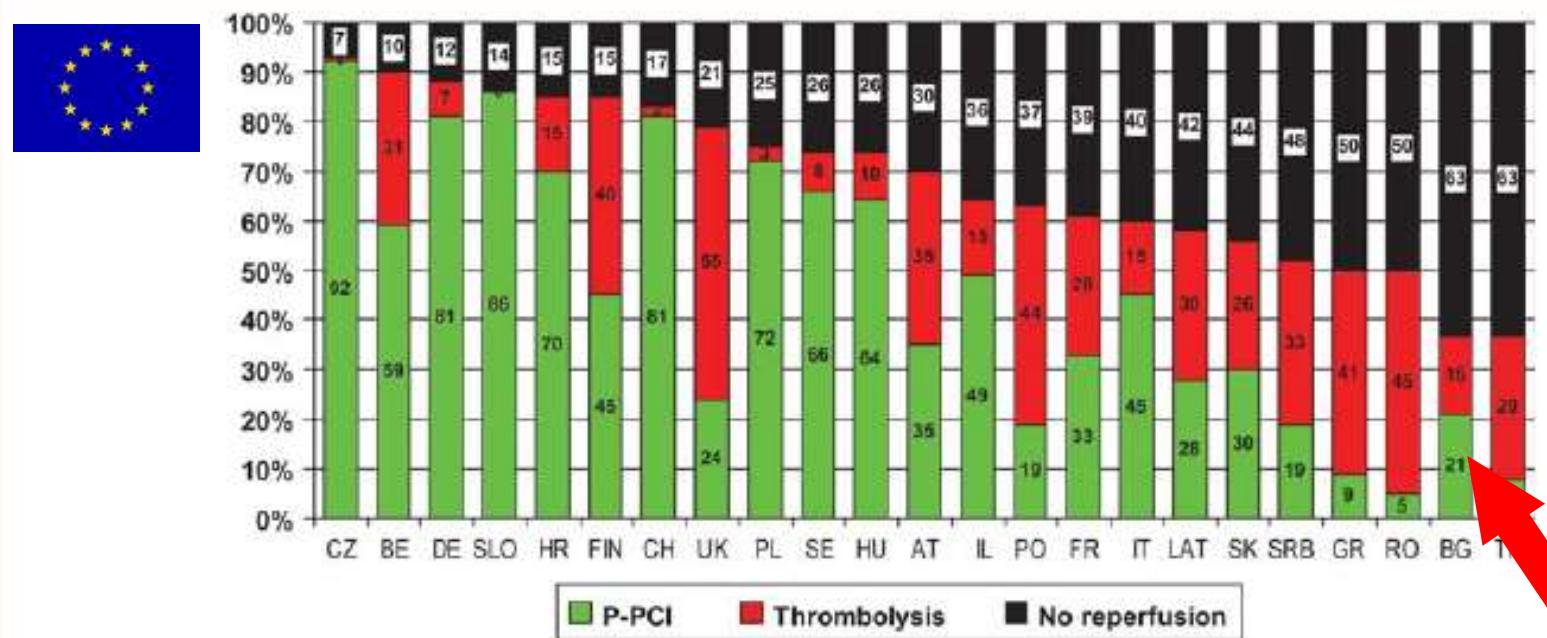


Heparin

TL

PPCI

# Reperfusion of hospitalized STEMI patients 2007



**Figure 1** Hospitalized STEMI treatment in Europe (data from national registries or surveys). 100%, all hospitalized STEMI patients in each given country; green colour, STEMI patients treated by primary PCI; red colour, STEMI patients treated by thrombolysis; black colour, STEMI patients not treated with any reperfusion. Countries abbreviations: CZ, Czech Republic; SLO, Slovenia; DE, Germany; CH, Switzerland; PL, Poland; HR, Croatia; SE, Sweden; HU, Hungary; BE, Belgium; IL, Israel; IT, Italy; FIN, Finland; AT, Austria; FR, France; SK, Slovakia; LAT, Latvia; UK, United Kingdom; BG, Bulgaria; PO, Portugal; SRB, Serbia; GR, Greece; TR, Turkey; RO, Romania.

# Dr. Tihomir Kamenov a prof. Mladen Grigorov





# UniCardio Clinic Pleven





Welcome  
in  
UniCardioClinic  
Pleven

29 9 2007



# Slavnostní otevření

Grigorov



Pleven



Veliko Tarnovo



# Češi v Bulharsku – začátek 21. století



20 int. kardiol.  
8 nem.



# Czech interventional cardiologists in BG - 20

- Brno team
  - Groch L, Hlinomaz O, Novák M, Rezek M, Semenka J, Sitar J
- Prague team
  - Horák J, Šimek S, Kovárník T, Řezníček V, Brtko M, Bělohlávek J, Surovčík R, Widimský P
- Zlín team
  - Coufal Z, Gřiva M, Náplava R, Fiala T, Blaško P, Štípal R



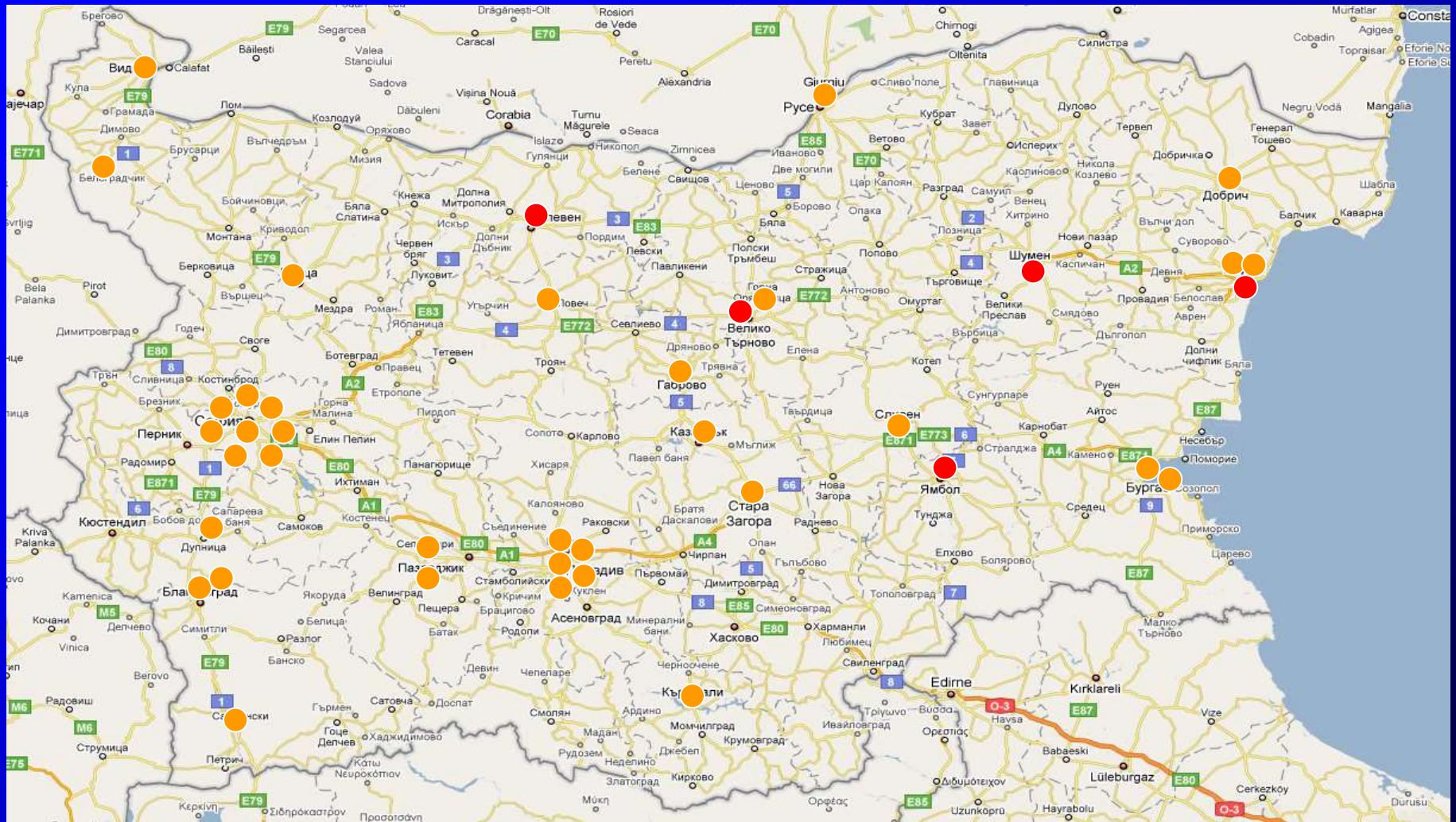
# **HEART AND BRAIN HOSPITAL, PLEVEN**





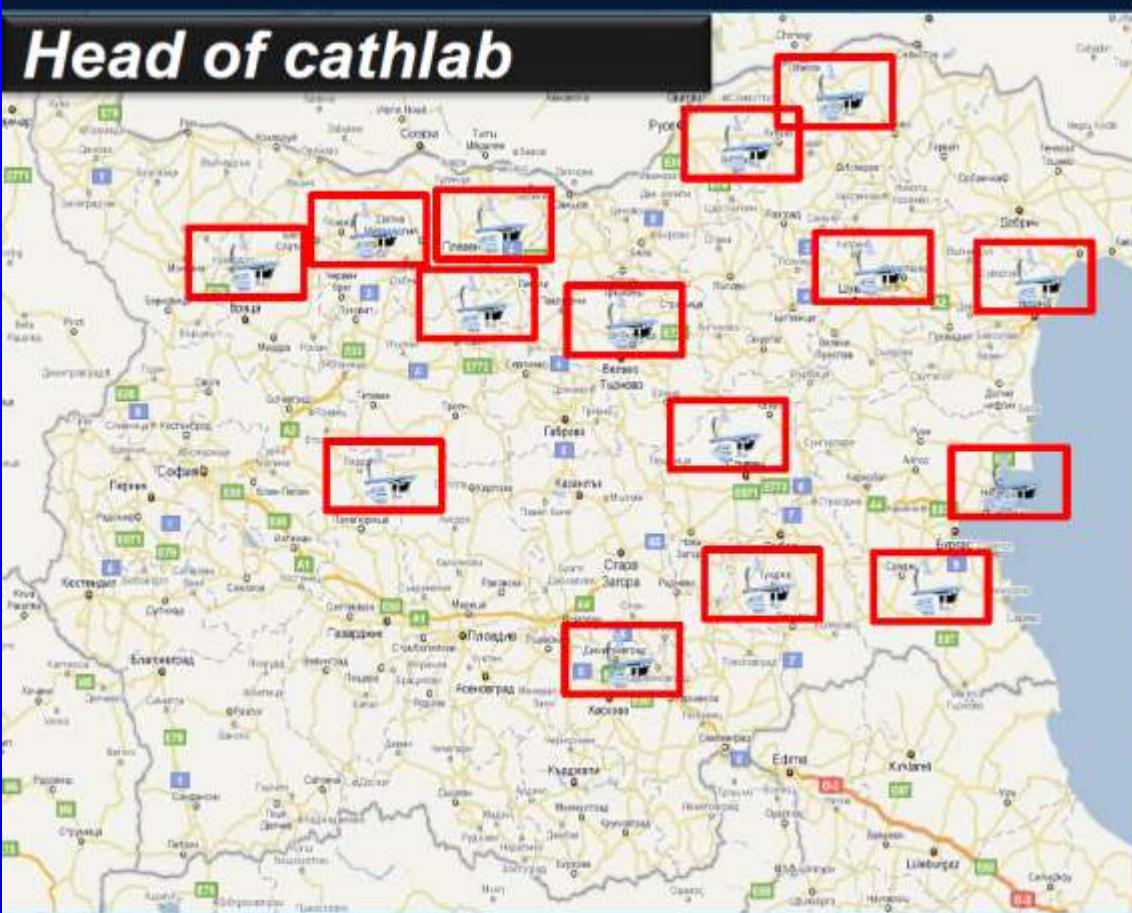
# 45 PCI center v Bulharsku v r. 2013

## 1 centrum na 178000 obuv.



# Výchova intervenčních kardiologů

*Head of cathlab*



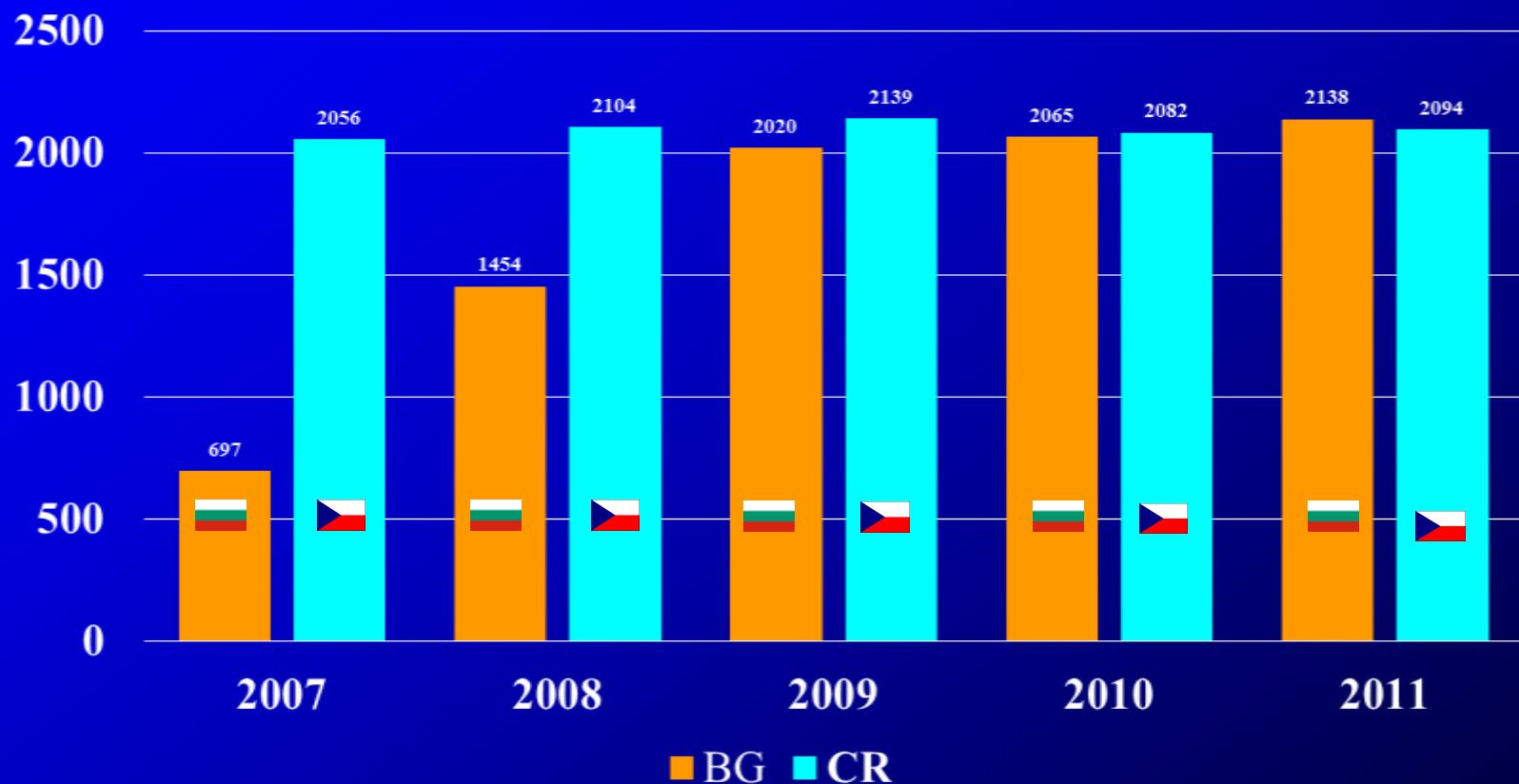
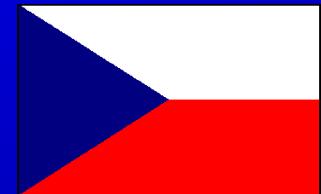
# BCI 4.9.2007-31.12.2017

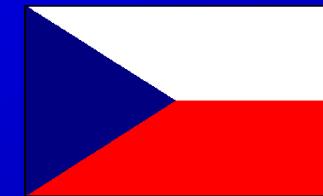
	koronaro	PCI	stent	
Pleven	28164	10529	12233	4.9.2007-31.12.2017
Veliko Tarnovo	20198	7019	8160	1.4.2009-31.12.2017
Varna	23757	7952	10500	1.3.2009-31.12.2017
Šumen	8263	2708	3927	1.3.2013-31.12.2017
Jambol	25297	10394	12099	1.1.2009-31.12.2017
	105679	38602	49919	



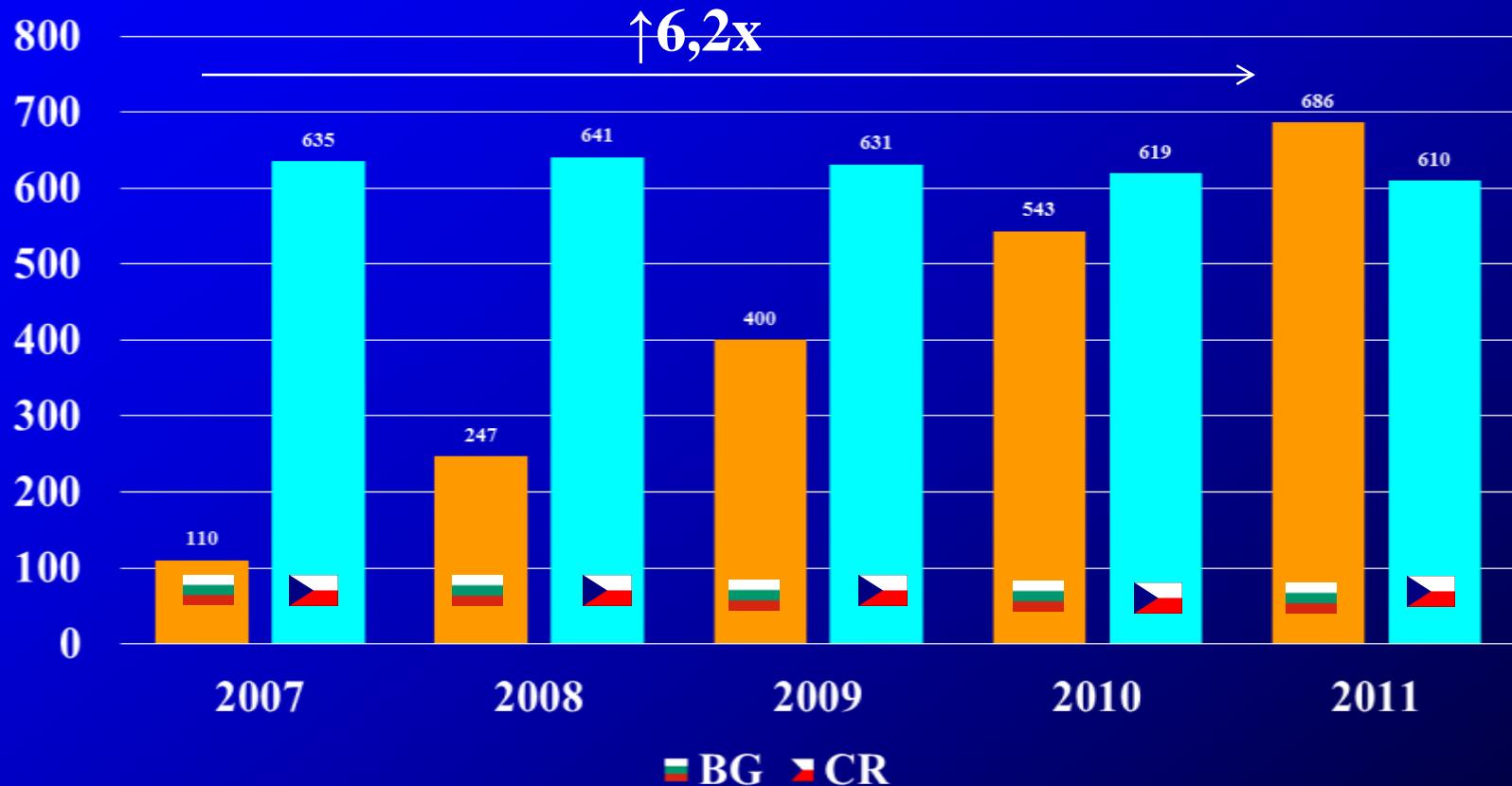
# Bulgarsko vs ČR

## PCIs/1 mil. obyv.





## Bulharsko vs ČR PPCI STEMI/1 mil. obyv.



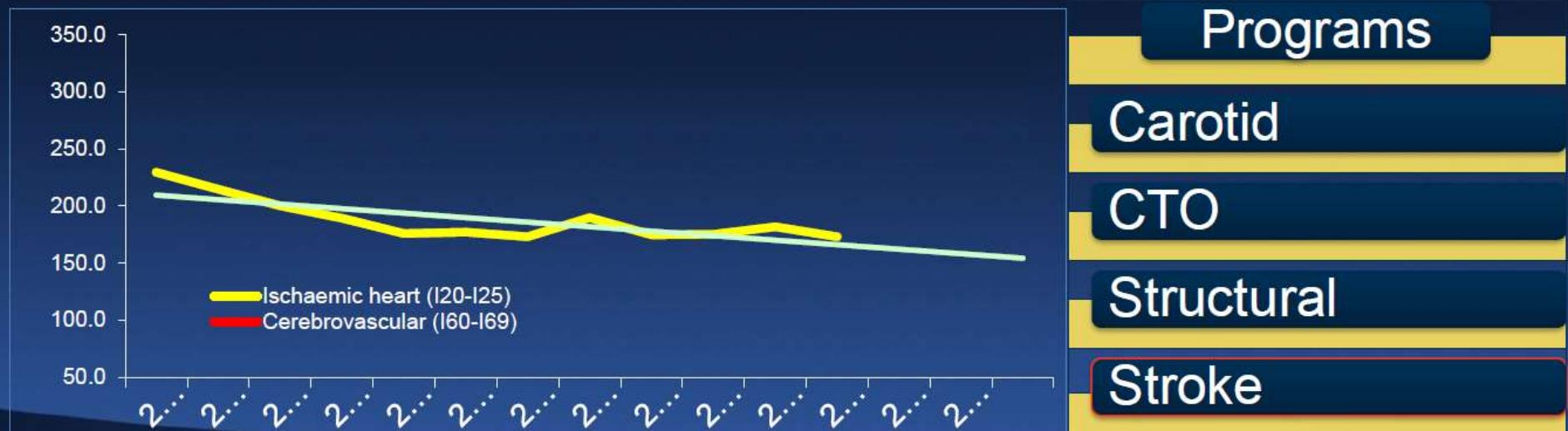
CZ: PPCI for STEMI (<24hrs)

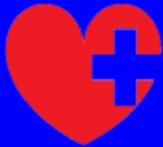


BG: PCI for acute STEMI

# Pokles mortality na ICHS

MORTALITY BY CAUSES, 2005 - 2016 <sup>1,2</sup>				Bulgaria Total for the country					 REPUBLIC OF BULGARIA National statistical institute			
No by 100000 persons	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Ischaemic heart (I20-I25)	229,4	214,5	200,0	189,2	175,7	176,9	172,9	189,6	174,5	175,1	181,8	172,9





# Závěr

- Velký pokrok v intervenční léčbě ICHS v BG v posledních 10-ti letech
- PCI je dostupná všem
- Ve špičkových centrech evropská kvalita
- Horší přednemocniční a ambulantní péče
- Velká zásluha českých kardiologů

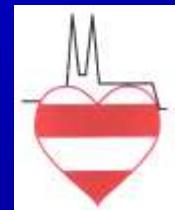




# Časové intervaly



200 pac. STEMI 2013



median

• Steno – PCI	6:35h	3:42h
• Steno – ECG	5:25h	2:12h
• EKG – PCI	1:10h	1:30h
• ECGout – PCI	1:50h	1:35h
• cathlab – PCI	0:35h	0:32h