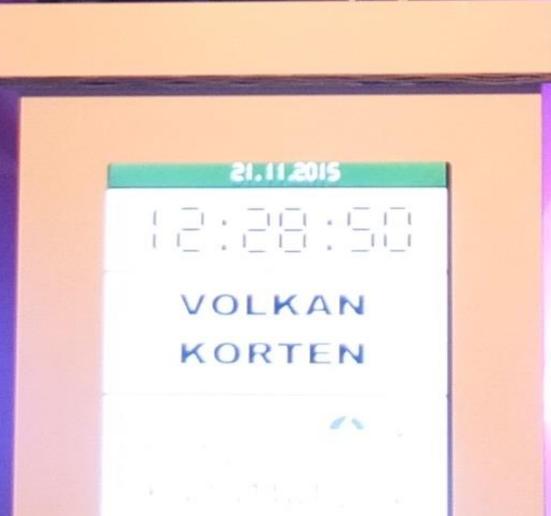


# 3. Ulusal Klinik Mikrobiyoloji Kongresi-2015

18-22 Kasım 2015



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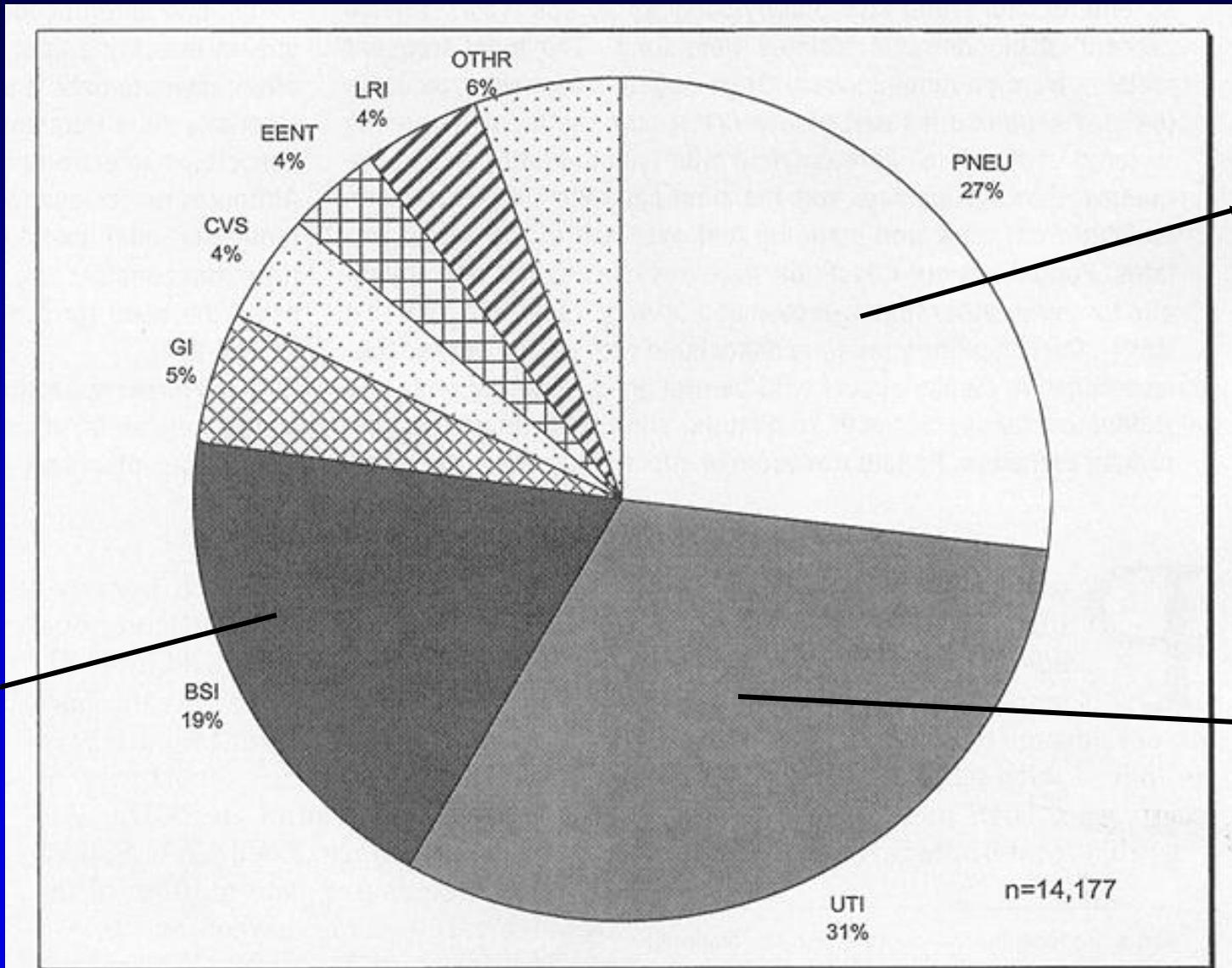
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# Yoğun bakım ünitesi nosokomiyal infeksiyonlar - çoklu direnç

Prof. Dr. Volkan Korten

Marmara Üniversitesi Tıp Fakültesi  
İnfeksiyon Hastalıkları ve Klinik Mikro. ABD.

# NNIS (1992-1997) - DYBÜ nosokomiyal infeksiyon dağılımı

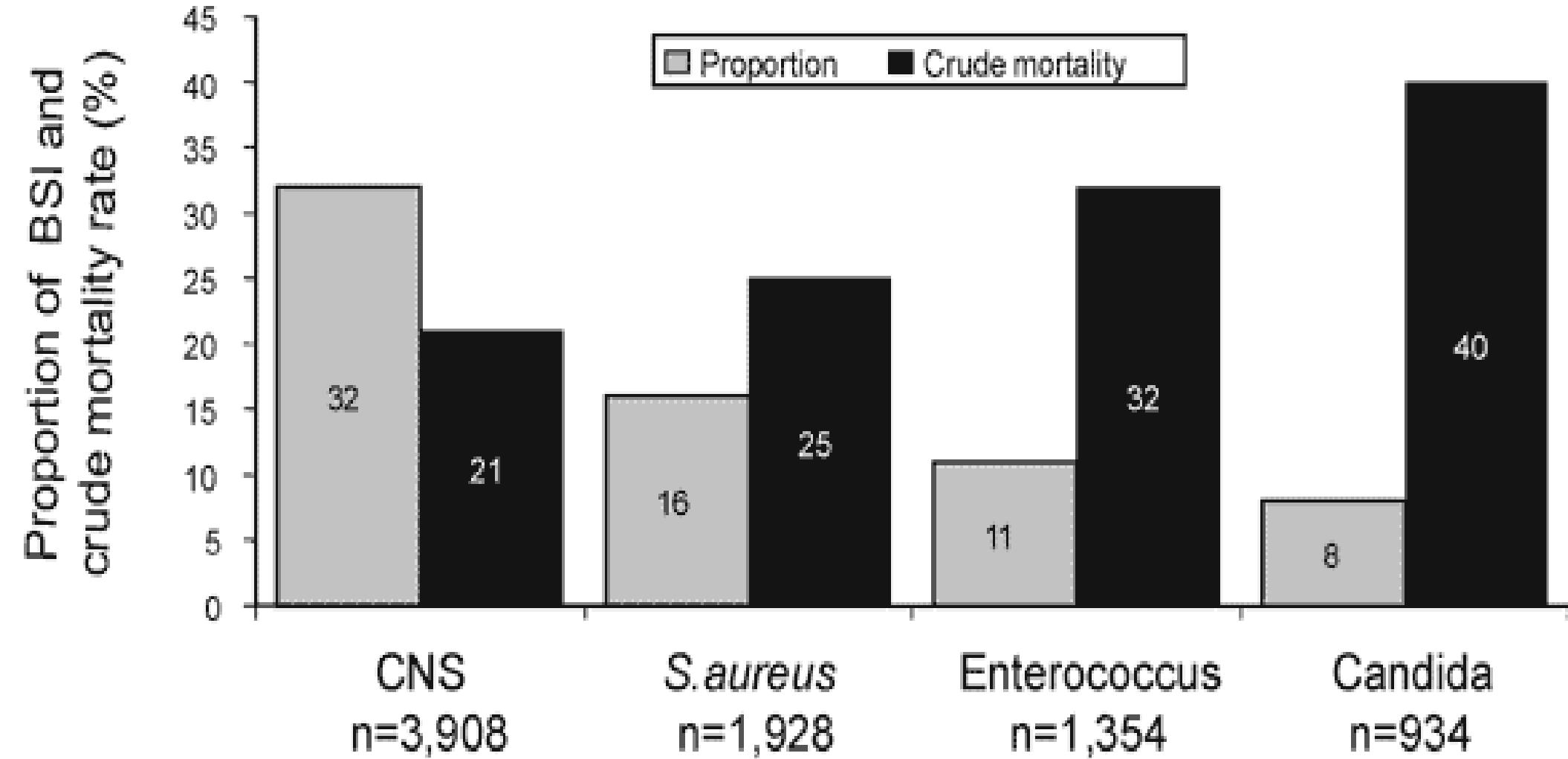


# Hastane infeksiyonları direnç problemi

- Metisilin dirençli *S. aureus* (MRSA) ve *S. epidermidis* (MRSE)
- Vankomisin dirençli enterokoklar (VRE)
- VISA (GISA)
- Çokul dirençli Gram-negatif basiller
  - *P. aeruginosa*
  - *Acinetobacter* spp.
  - *Enterobacter* spp
  - *Klebsiella* spp. (CRE)

# Bakterem - mortalite / SCOPE

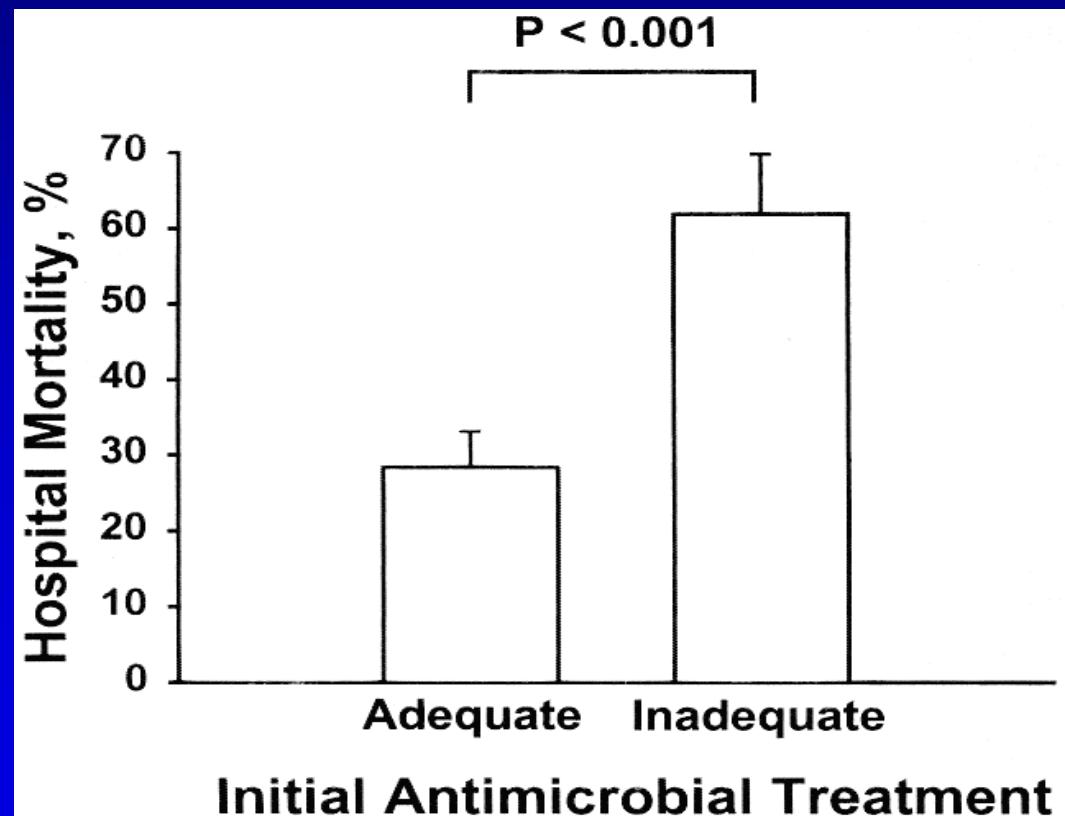
CID 1999;29:239-44.



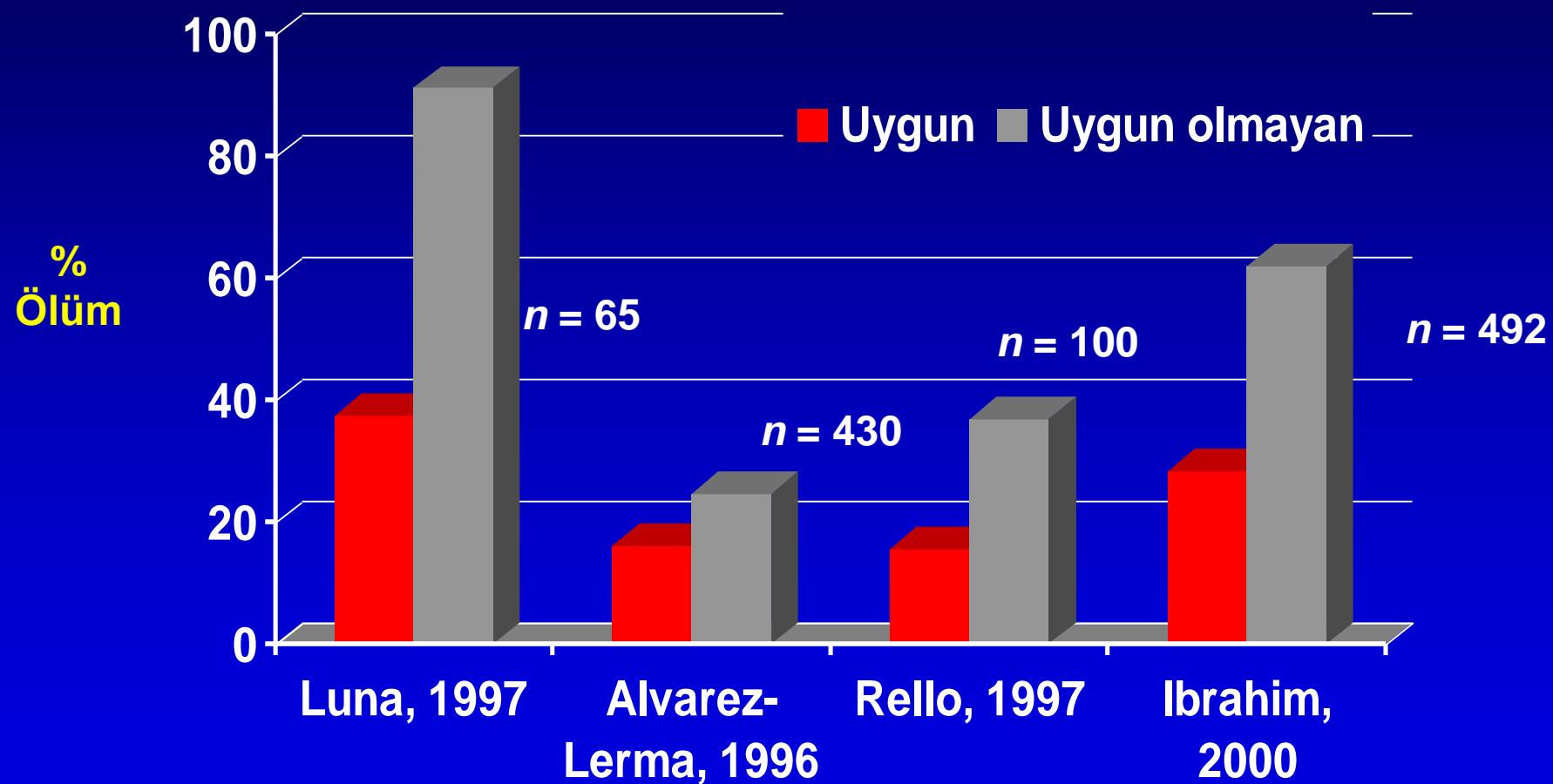
# Yoğun bakımda bakteremi - yetersiz antimikrobiyal tedavi

2 yılda 147/ 492 bakteremik hasta (%29.9) yetersiz antimikrobiyal tedavi almış (*Ibrahim, Chest 2000;118:146-55*)

- Mortalite
  - Yetersiz tedavi % 61.9
  - Yeterli tedavi % 28.4
- VRE
- Candida
- MRSA
- Koag (-) staph.
- P.aeruginosa



# Nosokomiyal pnömonide uygun antibiyotik tedavisinin önemi



# YBÜ - enfeksiyonlar

- SOAP (2002) <sup>1</sup> % 37.4 sepsis
- EPIC-II (2007) <sup>2,3</sup> % 50 enf.  
– yüksek Ab direnci olan ülkelerde % 53.9  
YBÜ'de mortalite % 20

1- *Vincent JL, Crit Care Med 2006; 34: 344-353*

2- *Vincent JL, JAMA 2009, 302: 2323–2329*

3- *Hanberger et al. BMC Infectious Diseases 2014, 14:513*



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British Infection Association

[www.elsevierhealth.com/journals/jinf](http://www.elsevierhealth.com/journals/jinf)

# Surveillance, control and management of infections in intensive care units in Southern Europe, Turkey and Iran – A prospective multicenter point prevalence study



**Table 3** Characteristics of 305 patients with infection in intensive care unit (ICU).

Variable	
Age (y), mean $\pm$ SD	56.6 $\pm$ 19.5
Female gender, n (%)	109 (35.7)
Severity of illness on the study day	
Absence of clinical sepsis, n (%)	197 (64.6)
Sepsis, n (%)	73 (23.9)
Severe sepsis, n (%)	15 (4.9)
Septic shock, n (%)	20 (6.6)
Glasgow coma scale, mean $\pm$ SD (n = 25) <sup>a</sup>	8.3 $\pm$ 3.9
Apache II, mean $\pm$ SD (n = 235)	16.18 $\pm$ 9.9

**Table 5** The distribution of resistance patterns of isolated microorganisms from clinical specimens, according to country groups.<sup>a</sup>

Microorganism	Overall	Southeast Europe	Turkey	p Value <sup>b</sup>	Iran
<b>Enteric Gram-negative bacilli (n = 62)</b>					
Multidrug resistant	39 (63%)	20/34 (58.8)	18/26 (69.2)	0.43	1/2 (50)
Extensively drug resistant	5 (8%)	4/34 (11.8)	1/26 (3.8)	0.38	0
Pandrug resistant	0	0	0	ND	0
<b><i>Acinetobacter</i> spp. (n = 47)</b>					
Multidrug resistant	31 (66%)	19/25 (80)	11/19 (57.9)	0.33	0
Extensively drug resistant	13 (28%)	4/25 (20)	8/19 (42.1)	0.09	0
Pandrug resistant	5 (11%)	2/25 (4)	0	ND	3/3 (100)
<b><i>Pseudomonas aeruginosa</i> (n = 29)</b>					
Multidrug resistant	16 (55%)	7/13 (53.8)	7/14 (50)	1.0	1/2 (50)
Extensively drug resistant	7 (14%)	4/13 (30.8)	3/14 (21.4)	0.82	0
Pandrug resistant	2 (7%)	2/13 (15.4)	0	ND	0
<b><i>Staphylococcus aureus</i> (n = 17)</b>					
Multidrug resistant	8 (47%)	7/16 (43.8)	0	ND	1/1 (100)
Extensively drug resistant	0	0	0	ND	0
Pandrug resistant	0	0	0	ND	0
<b><i>Enterococcus</i> spp. (n = 17)</b>					
Multidrug resistant	10 (59%)	6/9 (66.7)	3/7 (42.9)	1.0	1/1 (100)
Extensively drug resistant	1 (6%)	0	1/7 (14.3)	ND	0
Pandrug resistant	0	0	0	ND	0

<sup>a</sup> Data expressed as n/N (%), ND: Not determined.

<sup>b</sup> Comparisons were performed between Southeast Europe and Turkey.

# Mortalite

## Risk Ratio

### M-H, Random, 95% CI

#### Study or Subgroup

##### 1.1.1 PCR

- Alvarez et al 2012 [38]  
Bauer et al 2010 [15]  
Frye et al 2012 [39]

##### 1.1.2 MALDI-TOF

- Huang et al 2013 [35]  
Perez et al 2013 [33]  
Perez et al 2014 [32]

##### 1.1.3 PNA FISH

- Forrest et al 2008 [37]

##### 1.1.4 Other

- Sango et al 2013 [31]



# Mortalite

## Risk Ratio

M-H, Random, 95% CI

### Study or Subgroup

#### 1.2.1 Combined with ASP

Bauer et al 2010 [15]

Forrest et al 2008 [37]

Huang et al 2013 [35]

Perez et al 2013 [33]

Perez et al 2014 [32]

Sango et al 2013 [31]

#### 1.2.2 Rapid test alone

Alvarez et al 2012 [38]

Frye et al 2012 [39]

