Antibioticoterapia empirica in PS

Rimini, 18-21 ottobre 2012

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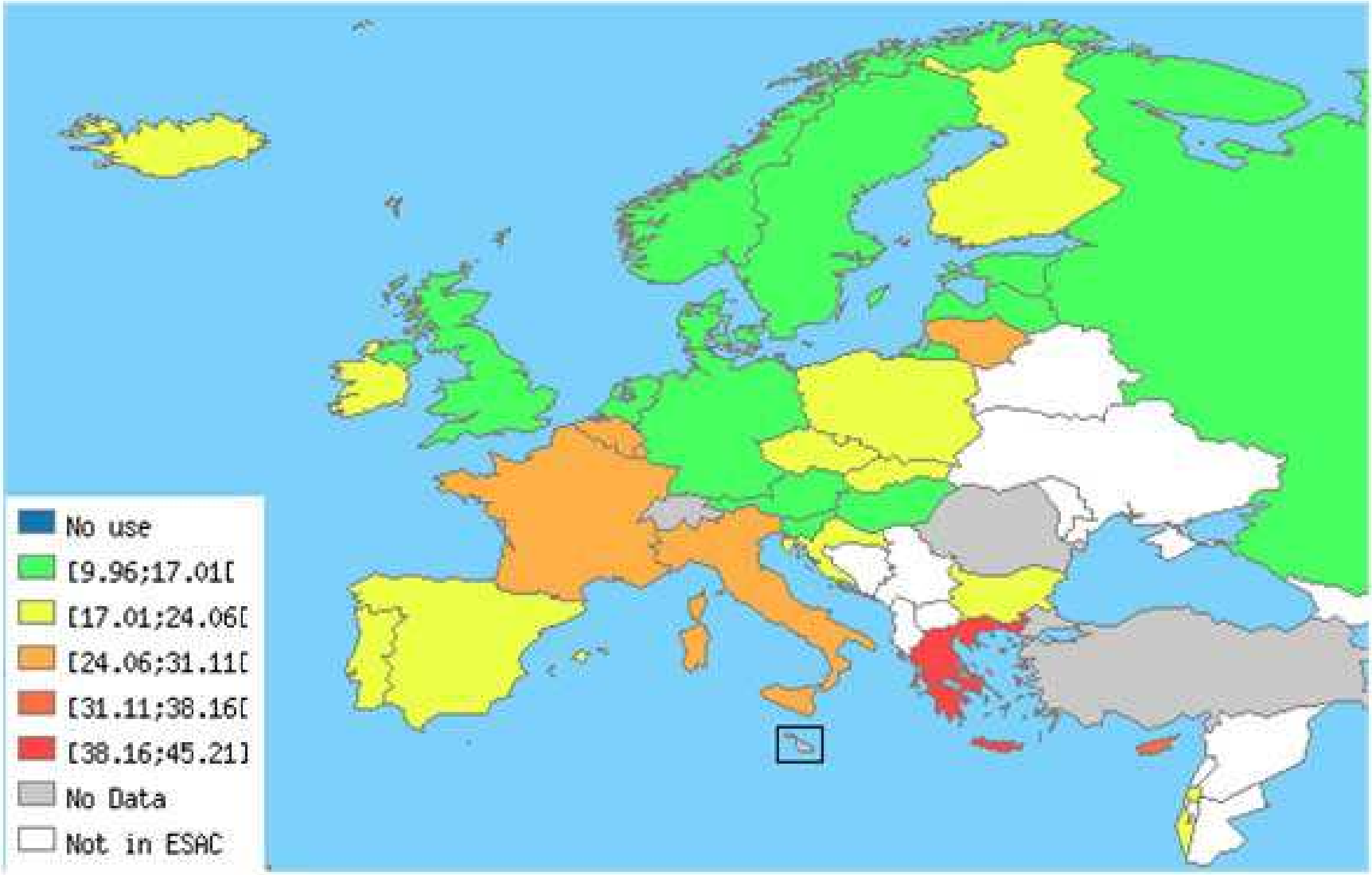
Antibioticoterapia empirica in PS

Αντι-βìοS: “ contro la vita”

Σήψις :“putrefazione”



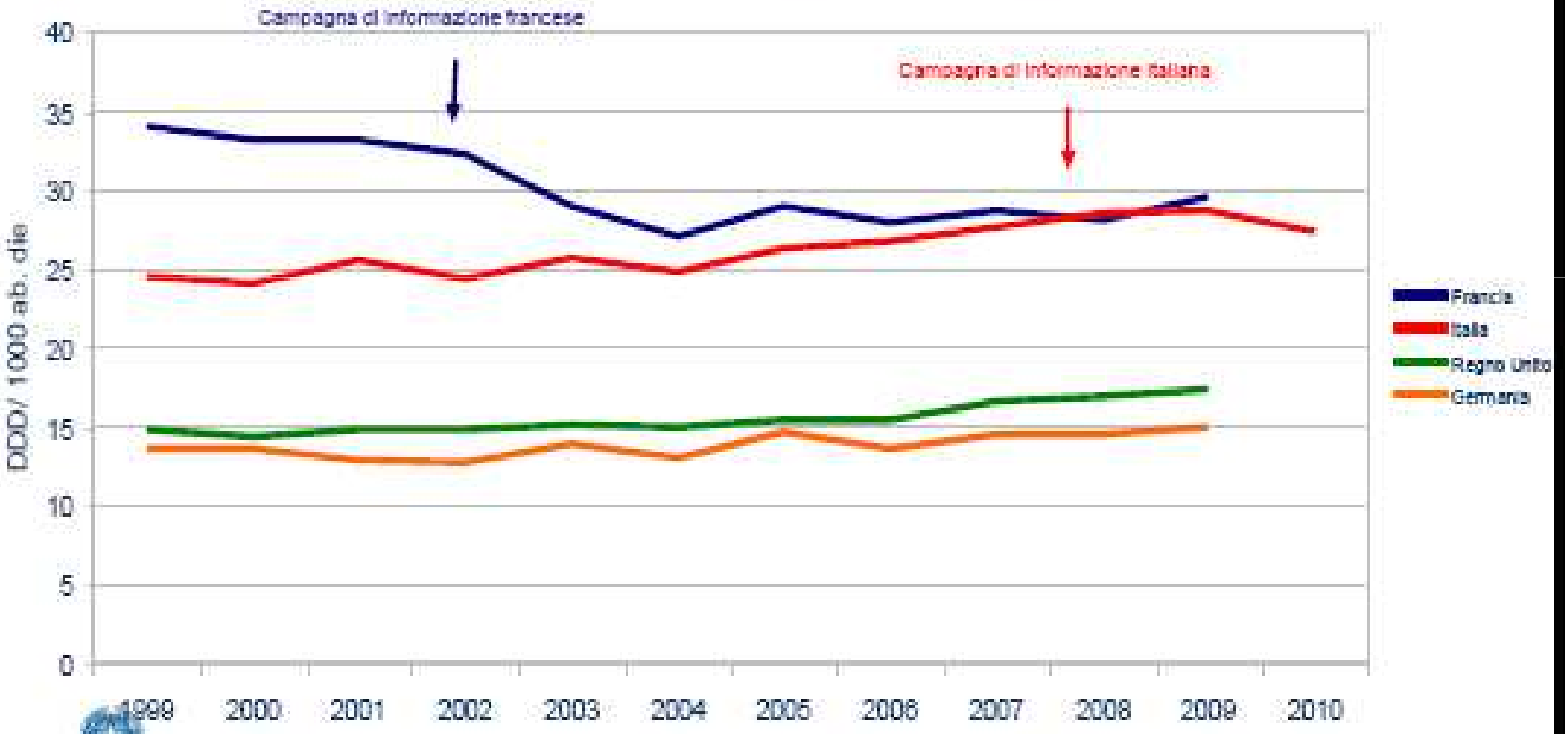
Fonte ESAC: Map of Europe showing total outpatient antibiotic use in 2008 in the participating countries

Convinzioni ricorrenti per una prescrizione inappropriata

- Fe
- O
- D
- U
- Ta

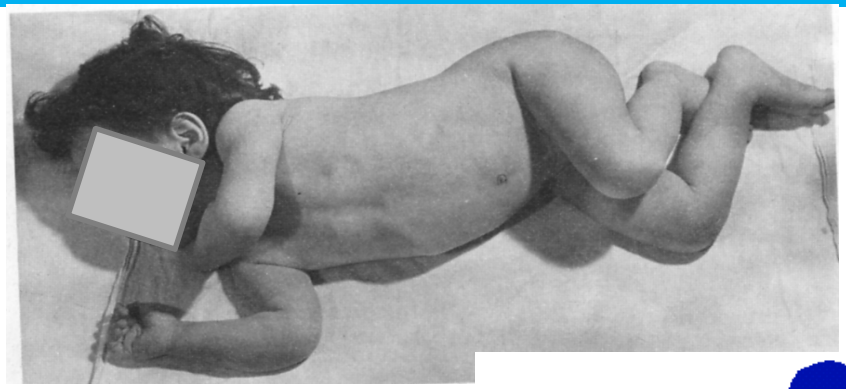
E se facessimo una copertura antibiotica?

Consumo territoriale (SSN + privato) di antibiotici in Francia, Italia, Regno Unito, Germania, anni 2010 - 1999

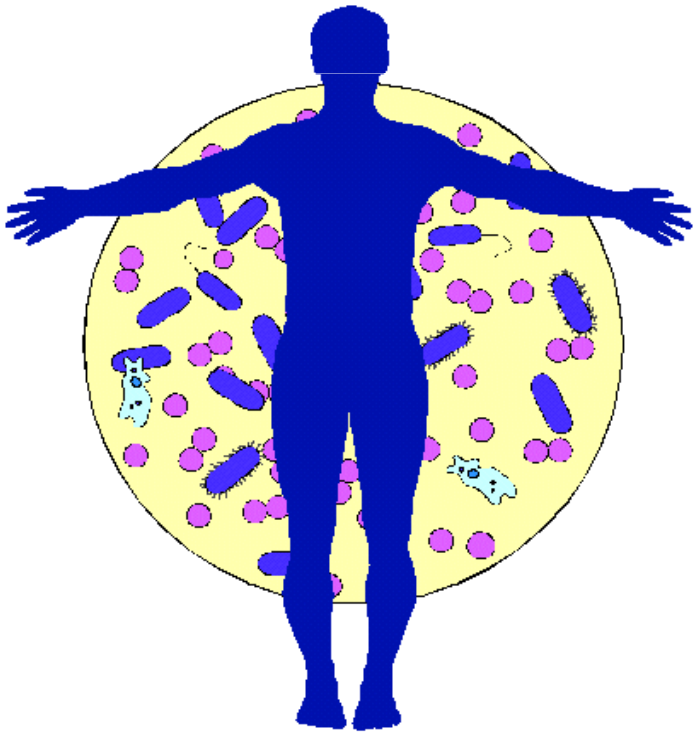


Rapidly Fatal Infections

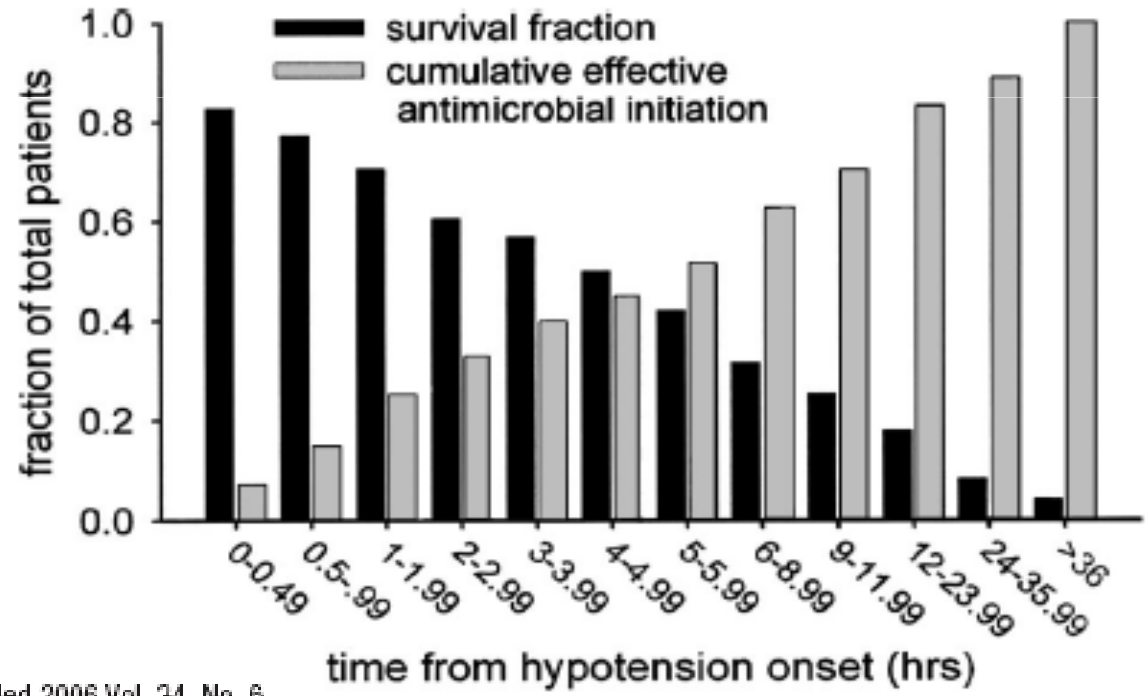
- Meningitis



- Severe sepsis e septic shock



Golden hour



Crit Care Med 2006 Vol. 34, No. 6

Meningite batterica

Importanza dell'inizio precoce della terapia antibiotica

123 casi di meningite batterica in adulti

Mortalità 13%

Fattori correlati:

Apiressia alla presentazione
Alterato stato di coscienza
Ritardo inizio terapia > 6 ore

Proulx et al QJ Med 2005;98:291-98

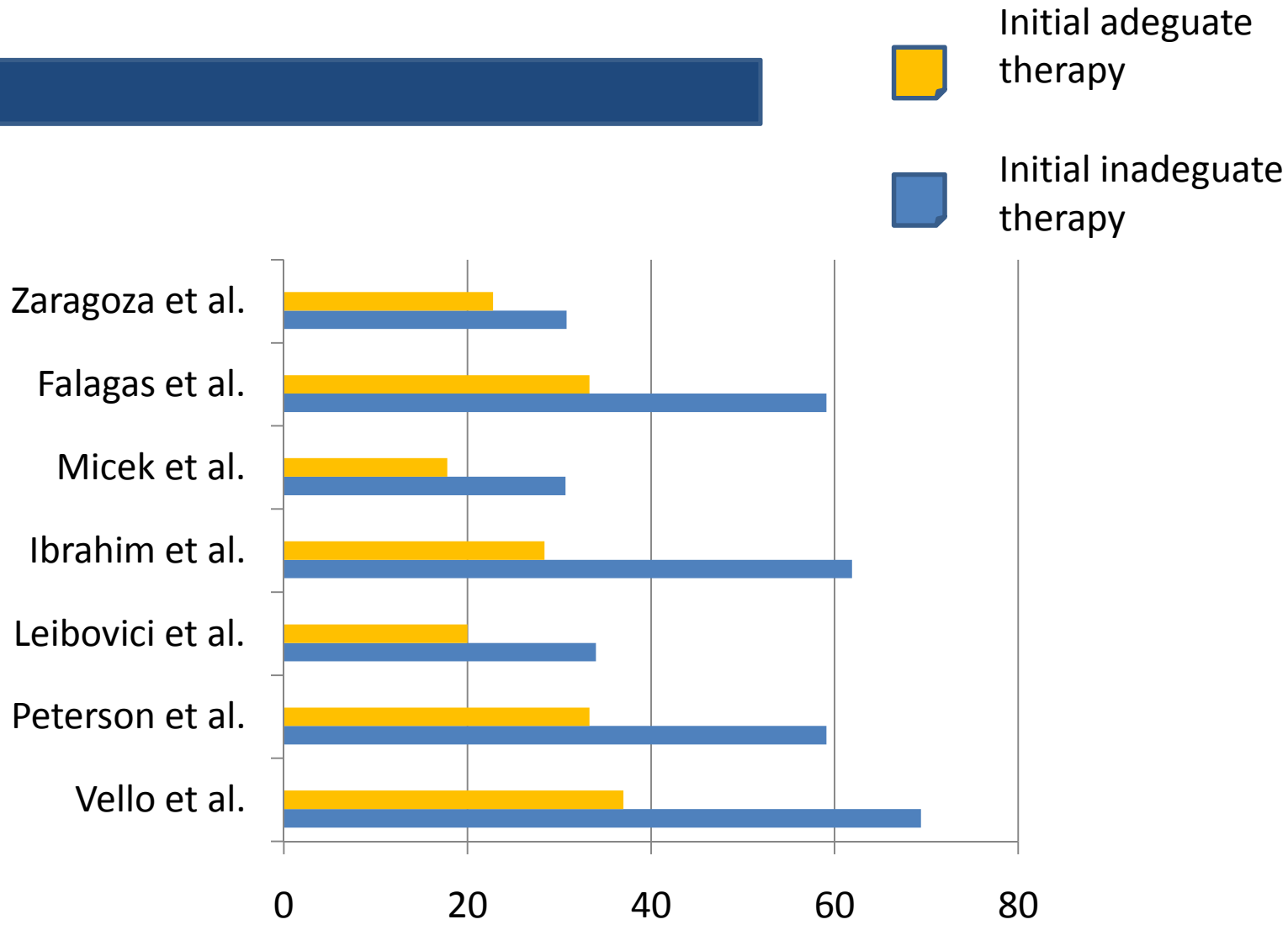
IDSA GUIDELINES

Practice Guidelines for the Management of Bacterial Meningitis

What evidence-based recommendations can be made with regard to the timing of antimicrobial administration in patients who present with suspected or proven bacterial meningitis?

The logical and intuitive approach is to administer antimicrobial therapy as soon as possible after the diagnosis of bacterial meningitis is suspected or proven.

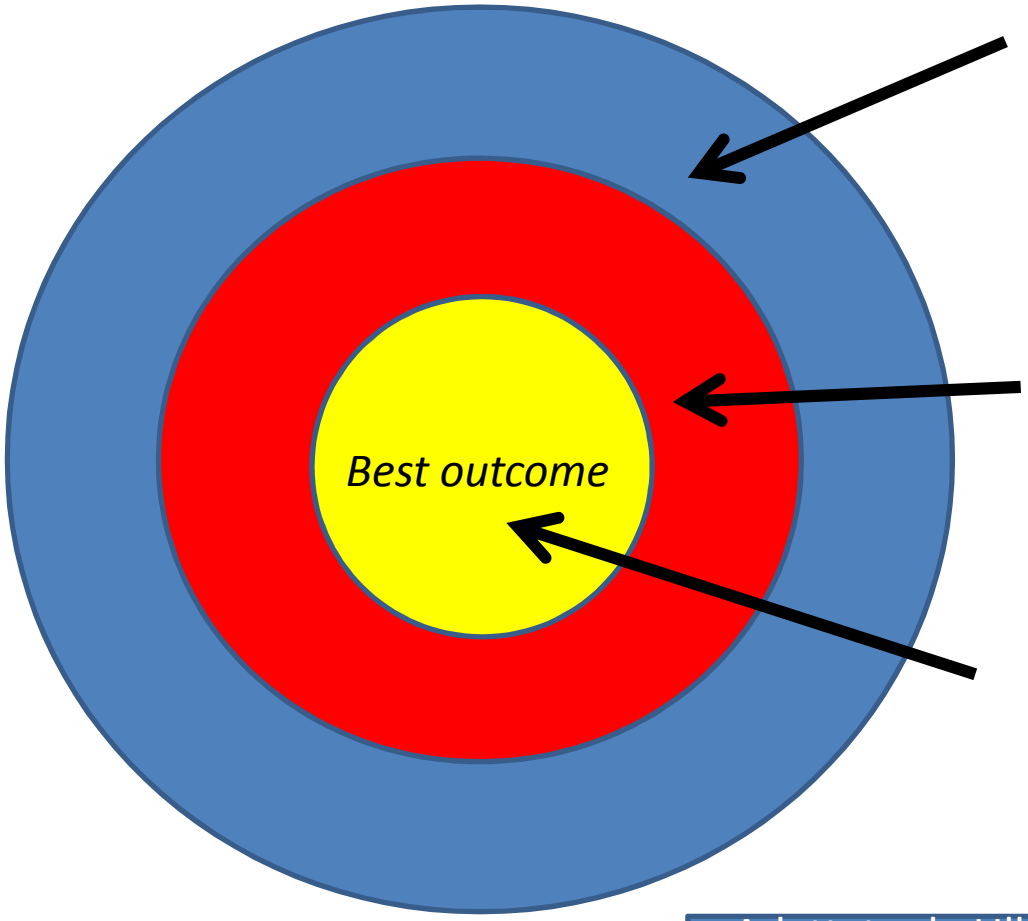
Speed is life



The mortality in appropriate vs inappropriate empirical antibiotic treatment of bloodstream infections

Ulldemolins et al. Crit Care Clin 2011, 27:35-51

Appropriateness is critical



Appropriate (Susceptibility e timing)

Adeguate (penetration)

Optimal (Pk/Pd, dosage)

Adattato da Ulldelmolins M et al.Crit Care Cln 2011;27: 35-51

Monoterapia o terapia di associazione?

Pro

- Ampliamento spettro
- Effetto sinergico o additivo
- Frequente genesi polimicrobica
- Ridotta selezione ceppi multiresistenti

Contro

- Aumentato rischio di tossicità
- Aumentato rischio di colonizzazione da germi multiresistenti
- Possibile antagonismo
- Aumento dei costi

ELSEVIER
SAUNDERS

Crit Care Clin 24 (2008) 313–334

CRITICAL
CARE
CLINICS

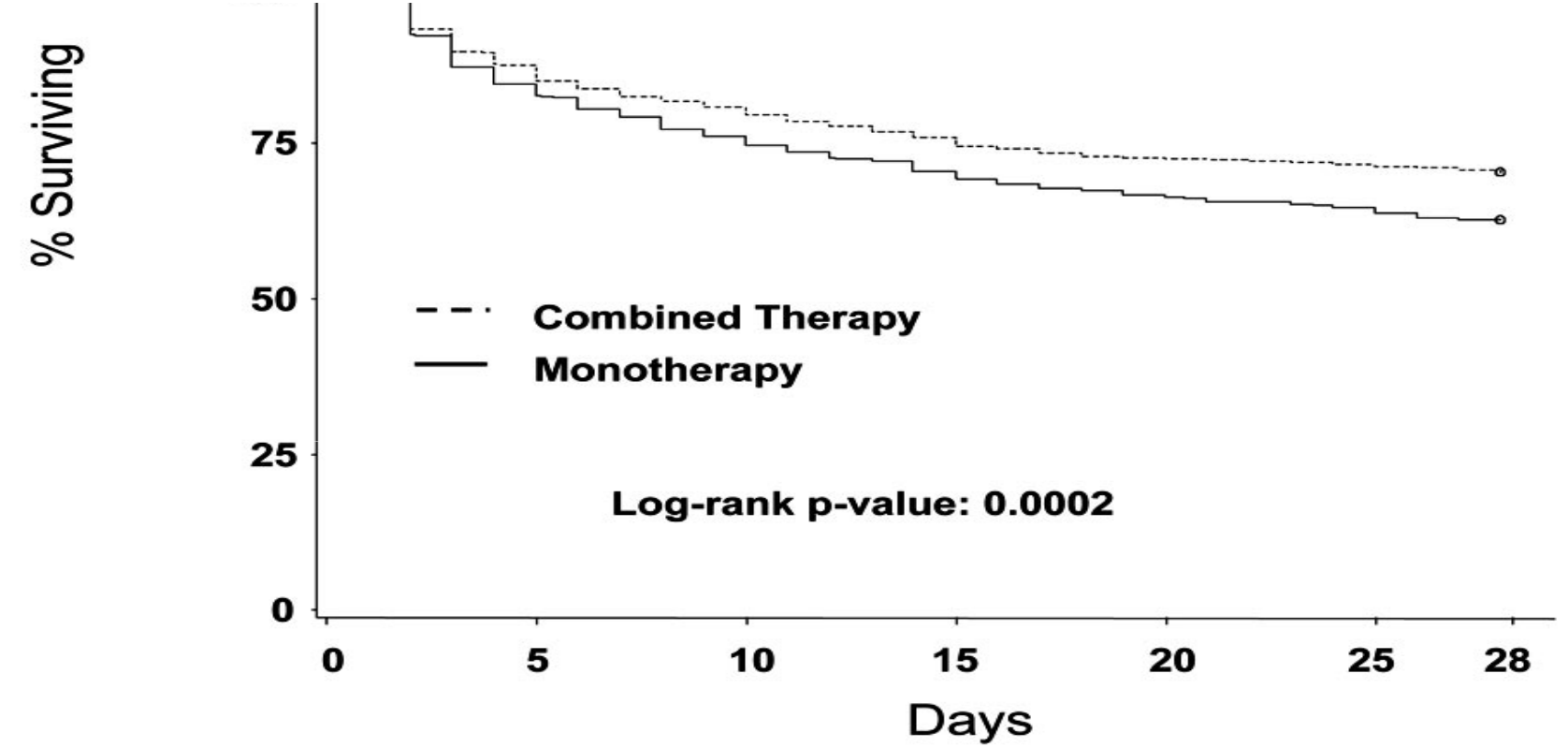
Sepsis and Septic Shock: Selection of Empiric Antimicrobial Therapy

Burke A. Cunha

The "shotgun approach" with multiple drugs to be discontinued one by one subsequently indicates that the prescriber does not understand the clinical pathologic concept that site of infection clearly determines organisms.

Polypharmacy increases potential drug side effects as well as drug–drug interactions. It is almost always possible to empirically treat sepsis with a single agent. Polypharmacy does not improve outcomes.

Early combination antibiotic therapy yields improved survival compared with monotherapy in septic shock: A propensity-matched analysis*



Combined Therapy	1223	1077	996	937	895	881	868
Monotherapy	1223	1046	939	867	826	801	779

Number at risk

Kumar et al Crit Care Med 2010, vol 38 N 9

Special Article

Surviving Sepsis Campaign: International guidelines for management of severe sepsis and septic shock: 2008

We suggest combination therapy for patients with known or suspected *Pseudomonas* infections as a cause of severe sepsis (grade 2D).

We suggest combination empirical therapy for neutropenic patients with severe sepsis (grade 2D).

……..Although no study or meta-analysis has convincingly demonstrated that combination therapy produces a superior clinical outcome for individual pathogens in a particular patient group…….

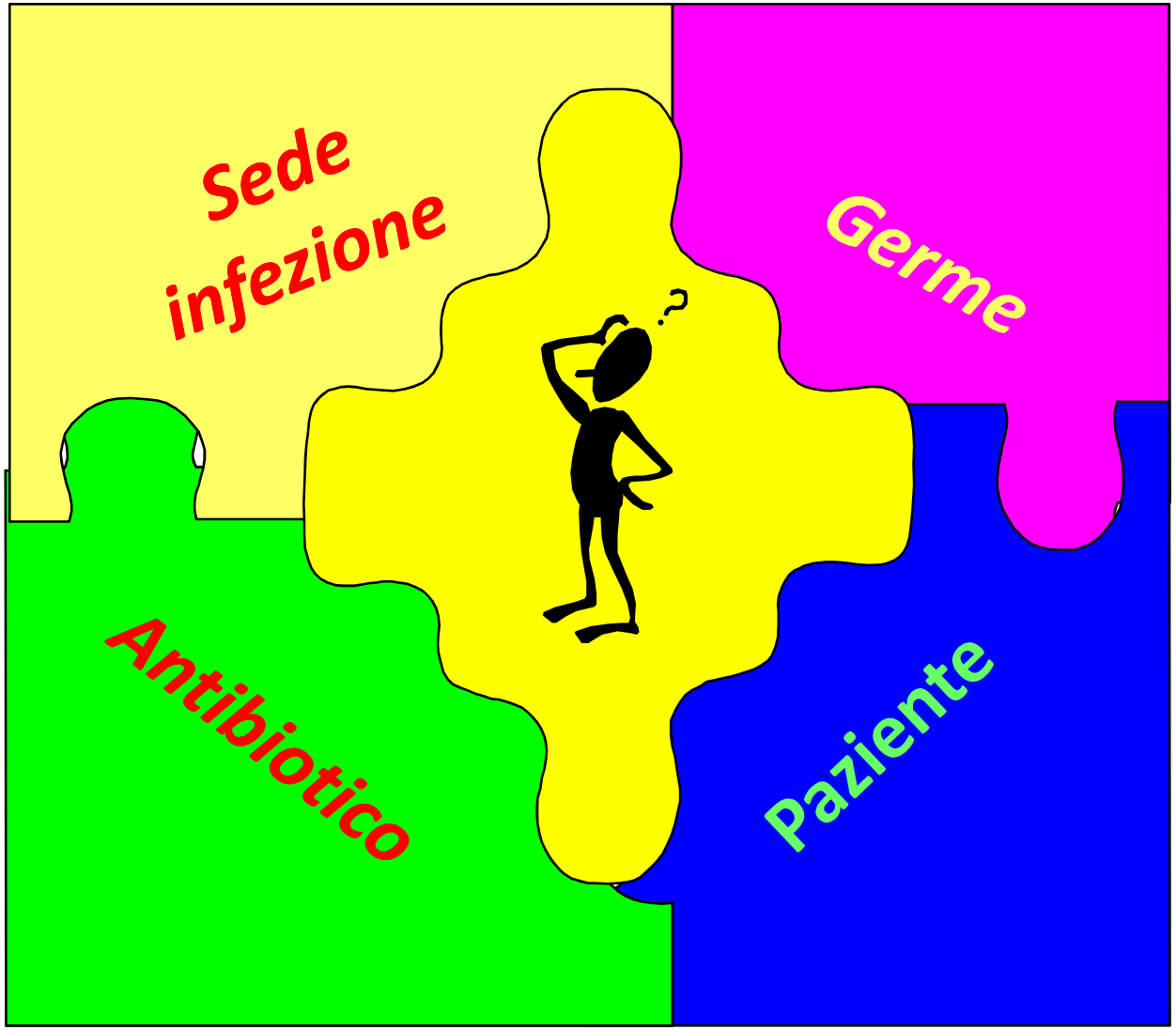
Crit Care Med 2008 Vol. 36, No. 1

Riconoscimento precoce del paziente settico grave

Pseudosepsi

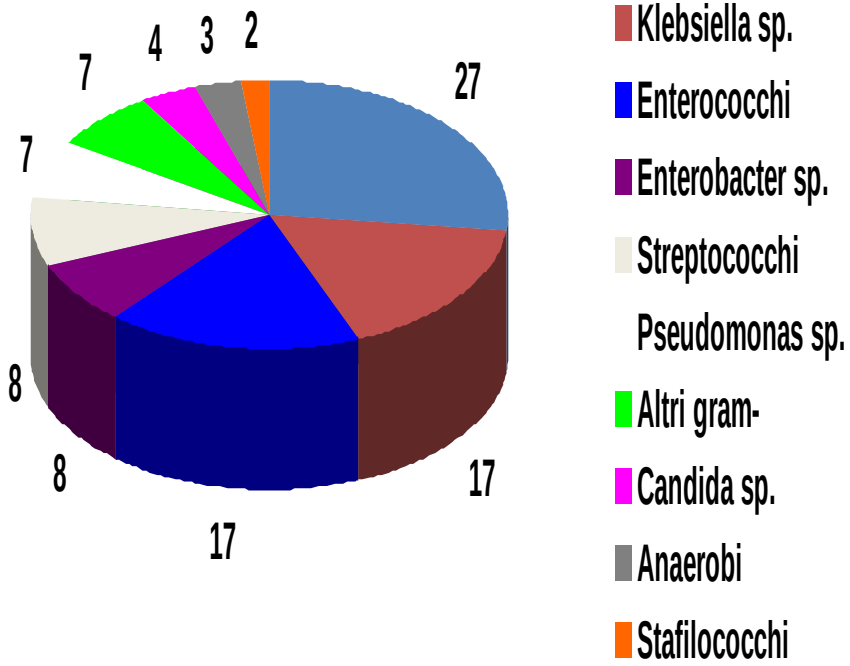
- Embolia polmonare
- Infarto del miocardio
- Emorragia digestiva
- Pancreatite acuta
- Ipovolemia indotta da diuretici
- Chetoacidosi diabetica

IL PUZZLE DELLA TERAPIA



Sepsi vie biliari

Batteri



- Ceftriaxone
- Cefuroxime
- Ampicillina
- Piperacillina
- Metronidazolo
- Ciprofloxacina
- Carbapenemici

Antibiotici

Terapia antibiotica delle infezioni biliari

MONOTERAPIA

1. Penicilline protette
   - ✓ Ampicillina/sulbactam, piperacillina/tazobactam, ticarcillina/clavulanato
2. Cefalosporine
   - ✓ Cefotetan, cefoxitin,cefuroxime
3. Carbapenemici
   - ✓ Ertapenem, imipenem, meropenem

ASSOCIAZIONE

1. Cefalosporina di III (cefotaxime, ceftazidime, ceftriaxone) o IV (cefepime) generazione + metronidazolo
2. Fluorochinolone (ciprofloxacina) o penicillina protetta + metronidazolo
3. Carbapenemico+ metronidazolo o aminoglicoside

…Ma di quali antibiotici abbiamo bisogno in ps?

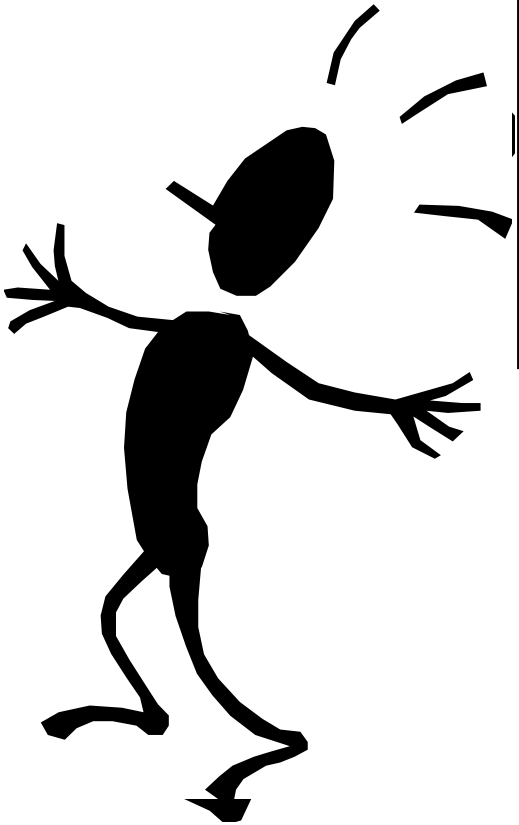
CEFTAZIDIME	**2 gr x 3/die**
CEFTRIAXONE	2 gr/die
AMOX/CLAVULANATO	2 gr x 3-4/die
AMPICILLINA	2 gr x 4-6/die
PIPERACILLINA/TAZOBACTAM	4,5 gr x 4/die
MEROPENEM	500 g x 4 o 1 gr x 3
AMIKACINA	15-20 mg/Kg/die
VANCOMICINA	30 mg/Kg/die: 1 gr x 2 o 500 mg x 4
CIPROFLOXACINA	400 mg x 3/die
LEVOFLOXACINA	750 mg/die

PZ. NEUTROPENICO

CEFTAZIDIME/ O CARBAPENEMICO O
PIPERACILLNA/TAZOBACTAM
+
FLUOROCHINOLONICO/AMINOGLICOSIDE
+/-
GLICOPEPTIDE

FASCITE NECROTIZZANTE

PIPERACILLINA-TAZOBACTAM
+
CLINDAMICINA
+/-
LEVOFLOXACINA
oppure
CARBAPENEMICO
+/-
METRONIDAZOLO/CLINDAMICINA



Sepsi comunitaria a origine ignota

CEFALOSPORINA DI III O IV GENERAZIONE O
CEFEPIME O AMOXICILLINA/CLAVULANATO
+/-
CIPROFLOXACINA O AMINPOGLICOSIDE

SEPSI
VIE URINARIE

CHINOLONICO DA SOLO O IN ASSOCIZIONE A
CEFALOSPORINA DI III GENERAZIONE O
PIPERACILLINA/TAZOBACTAM
o
CARBAPENEMICO DA SOLO

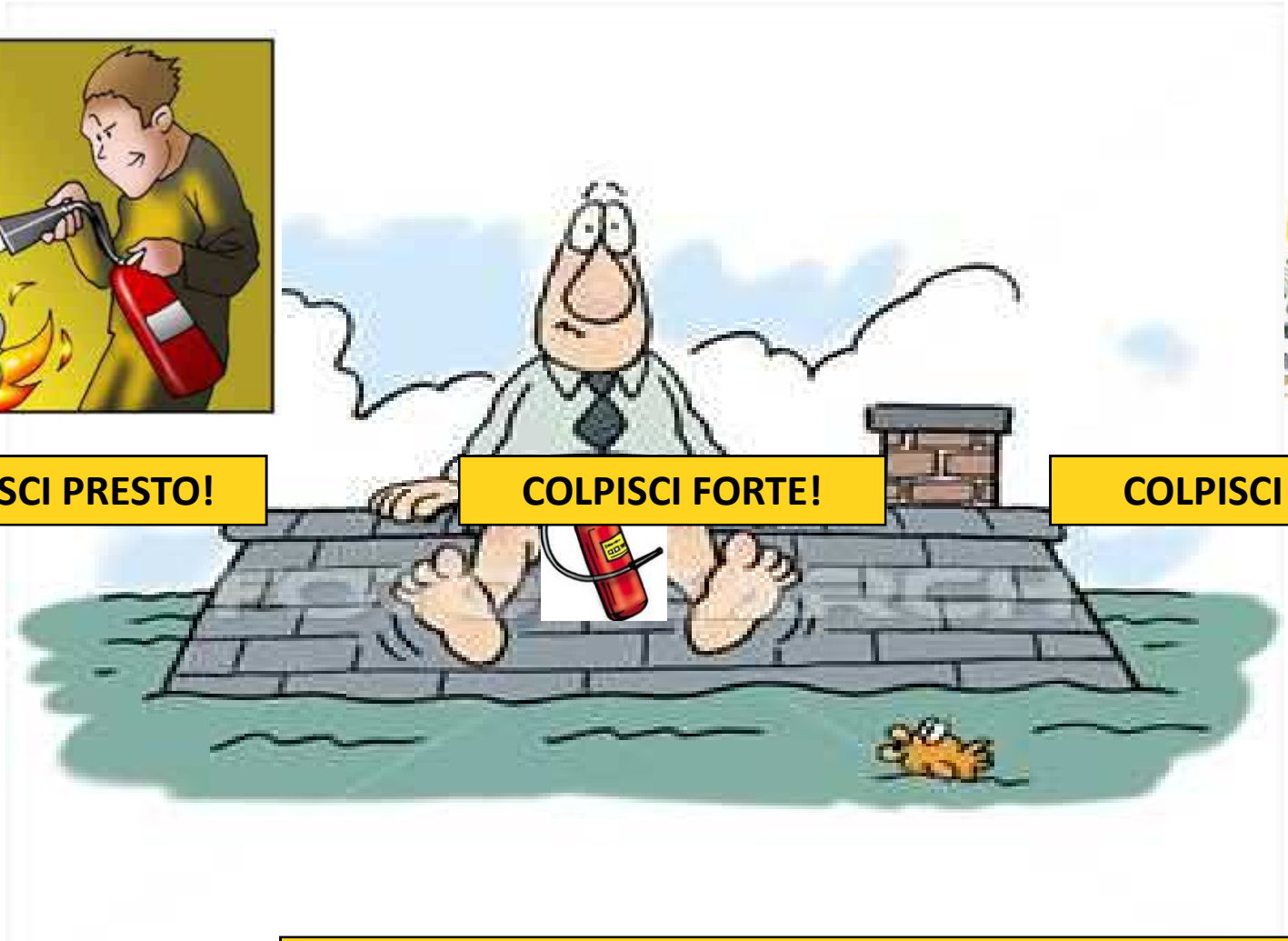
PZ.portatore di CVC

VANCOMICINA
+
PIPERACILLINA-TAZOBACTAM O
CARBAPENEMICO

INFEZIONI ADDOMINALI

PIPERACILLINA-TAZOBACTAM
+
METRONIDAZOLO O
CIPROFLOXACINA

KEY POINTS:



COLPISCI PRESTO!

COLPISCI FORTE!

COLPISCI BENE!

..MA SMETTI APPENA PUOI..!