

# **TRATAMENTO DE INFECÇÕES POR GRAM POSITIVOS:**



## **VANCOMICINA X OUTRAS DROGAS**

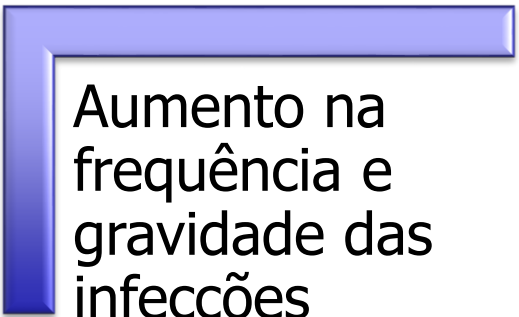
COMO BASEAR A ESCOLHA EM DIVERSOS SÍTIOS  
- pele e partes moles

**Nanci Silva**

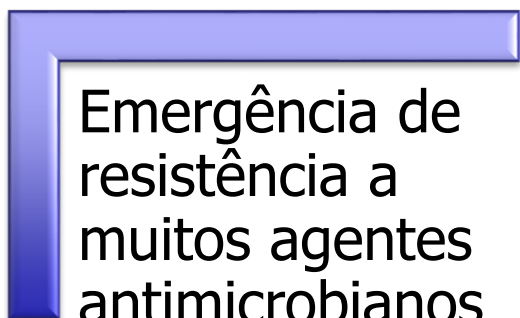


# Atualidade

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Aumento na  
frequência e  
gravidade das  
infecções



Emergência de  
resistência a  
muitos agentes  
antimicrobianos



MRSA em  
comunidade



# Escolha do antimicrobiano

## **Opções :**

- **Via oral**
- **Via endovenosa**

**Presença de comorbidades**

**Comunitária x hospitalar**

**Localização da infecção**

**Conhecimento local do padrão de resistência**

**Monomicrobiana x polimicrobiana**

**Infecção pós-trauma**



# Drogas disponíveis

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Penicilinas e penicilinas semi-sintéticas

Tetraciclinas

Clindamicina

Sulfametoxazol-trimetoprim



# Novas drogas

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## Disponíveis

- Linezolida
- Daptomicina
- Tigeciclina
- Ceftarolina

## Não disponíveis no Brasil

- Telavancina
- Tedzolide
- Oritavancina
- Dalbavancina
- ceftobiprole

## **Guidelines (2008) for the prophylaxis and treatment of methicillin-resistant *Staphylococcus aureus* (MRSA) infections in the United Kingdom**

**Clinical Infectious Diseases Advance Access published June 18, 2014**

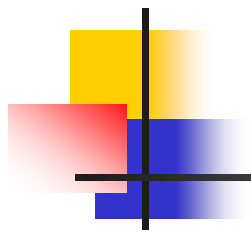
**IDSA GUIDELINE**

### **Practice Guidelines for the Diagnosis and Management of Skin and Soft Tissue Infections: 2014 Update by the Infectious Diseases Society of America**

**Clinical Infectious Diseases Advance Access published January 4, 2011**

**IDSA GUIDELINES**

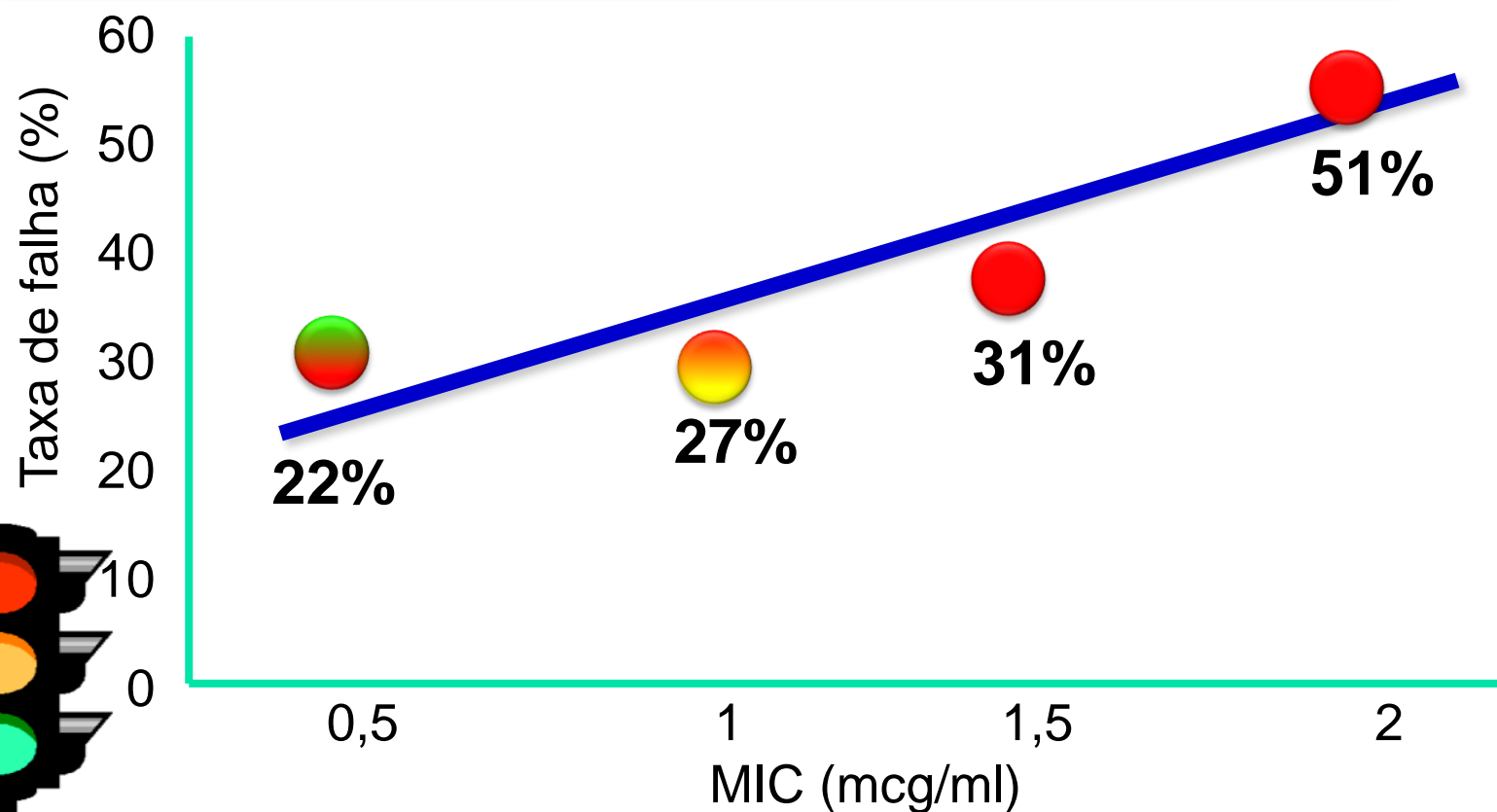
### **Clinical Practice Guidelines by the Infectious Diseases Society of America for the Treatment of Methicillin-Resistant *Staphylococcus Aureus* Infections in Adults and Children**



Após mais de 50 anos de uso clínico, Guidelines de tratamentos indicam que vancomicina permanece o “Workhorse” de agente antiifectivo parenteral para MRSA

# Questões de vancomicina

Falha terapêutica com  $MIC < 2$







# Questões de vancomicina

Terapia alternativa MIC >1

International Journal of Antimicrobial Agents 39 (2012) 64–68



Contents lists available at SciVerse ScienceDirect

International Journal of Antimicrobial Agents

journal homepage: <http://www.elsevier.com/locate/ijantimicag>



Retrospective case–control analysis of patients with staphylococcal infections receiving daptomycin or glycopeptide therapy



# Questões de vancomicina

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Estudos de vigilância : aumento gradual do MIC de vancomicina

Valores do MIC são metodo específico

Resultado clinico com vancomicina sao uma função da carga bacteriana no sitio da infecção

Alcançar maiores concentrações de vancomicina (15-20 mcg/ml) é associado com melhor resultado clínico



# Questões de vancomicina

O alcance do alvo trough (15-20mcg/ml) nem sempre é correlacionado com  $AUC/MIC \geq 400$  quando a MIC é 2.

- CID 2011; 52:969-74

Maior taxa de nefrotoxicidade (20-30%) está associado com maior dose de vancomicina.

# BMJ Open The safety and efficacy of daptomycin versus other antibiotics for skin and soft-tissue infections: a meta-analysis of randomised controlled trials

Wang SZ, Hu JT, Zhang C, *et al.* *BMJ Open* 2014;**4**:e004744. doi:10.1136/bmjopen-2013-004744

Ensaio controlado randomizado aberto

06 multicêntricos

1710 pacientes.

Conclusão: Daptomicina não tem eficácia inferior e tem segurança equivalente aos comparadores especialmente VANCOMINICINA.

Sucessos microbiológico similar.

Sucesso clínico melhor para Daptomicina com diferença não significativa

**Table 1.** Antibiotics currently or soon to be clinically available which are active in ABSSSI cause by MDR bacteria

Class	Agent	Dose	Route	Spectrum	Indications	Comments
Glycopeptides	Vancomycin	1–1.5 g bd; 15 mg/kg	i.v.	Gm+	MDR-Gm+ infections	Concern over MIC creep and resistance. Avoid rapid infusion. Renal toxicity and levels
	Teicoplanin	400 mg bd, od; 6–10 mg/kg	i.v.	Gm+	MDR-Gm+ infections	By injection or infusion. Similar issues as with vancomycin
	Oritavancin	1200 mg od	i.v.	Gm+ inc VRE	ABSSSI	Similar safety profile to vanc, excreted unchanged in urine & faeces. Dose change not necessary in renal impairment
	Dalbavancin		i.v.	Gm+		Once weekly dosing
Oxazolidinones	Linezolid	600 mg bd	i.v./p.o.	Gm+	ABSSSI, CAP	Dose change not necessary in renal impairment. Marrow toxicity and nephropathy. Useful for IV oral switch
	Tedizolid	200 mg og	i.v./p.o.	Gm+	ABSSSI	Possibly fewer adverse events than linezolid
Glycylcycline	Tigecycline	100 mg, then 50 mg bd	i.v.	Gm+, Gm–	ABSSSI, IAI	Does not cover <i>Pseudomonas</i> and some <i>Proteus</i> spp
Lipopeptide	Daptomycin	4–6 mg/kg	i.v.	Gm+	ABSSSI, right endocarditis	Check creatinine kinase (and INR if required) before treatment
Fluoroquinolones	Moxifloxacin	400 mg od	i.v./p.o.	Gm+, Gm–	ABSSSI, CAP, PID, DFI	Will not cover quinolone-resistant MRSA
Beta-lactams	Ceftaroline	600 mg bd	i.v.	Gm+, Gm–	ABSSSI, CAP	First $\beta$ -lactam with anti-MRSA activity, possible more rapid early clinical response. No ESBL, <i>Pseudomonas</i> spp. cover

ABSSSI, acute bacterial skin and skin structure infection; bd, 12 hourly; CAP, community-acquired pneumonia; DFI, diabetic foot infection; ESBL, extended-spectrum  $\beta$ -lactamase; Gm–, Gram-negative bacteria; Gm+, Gram-positive bacteria; IAI, intra-abdominal infection; i.v., intravenous; INR, measurement of clotting; MDR, multidrug resistant; MIC, minimum inhibitory concentration; od, once daily; p.o., orally; PID, pelvic inflammatory disease.

### Novel antibiotic treatment for skin and soft tissue infection

# Linezolid versus glycopeptide or $\beta$ -lactam for treatment of Gram-positive bacterial infections: meta-analysis of randomised controlled trials

<http://infection.thelancet.com> Vol 8 January 2008

Linezolid foi mais efetivo do que vancomicina em pacientes com infecções de pele e tecido celular subcutâneo

# **Linezolid versus vancomycin for skin and soft tissue infections**

## **(Review)**

Linezolid versus vancomycin for skin and soft tissue infections (Review)

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Yue J, Dong BR, Yang M, Chen X, Wu T, Liu GJ

# **Current management of patients hospitalized with complicated skin and soft tissue infections across Europe (2010–2011): assessment of clinical practice patterns and real-life effectiveness of antibiotics from the REACH study**

*Clinical Microbiology and Infection*, Volume 19 Number 9, September 2013

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