LİNEZOLİDLE ERKEN TABURCU

Prof. Dr. Neşe Saltoğlu

İstanbul Üniversitesi-Cerrahpaşa

Cerrahpaşa Tıp Fakültesi

Enfeksiyon Hastalıkları ve Klinik Mikrobiyoloji AD

Linezolid

Oksazolidinon sınıfında sentetik antibiyotik

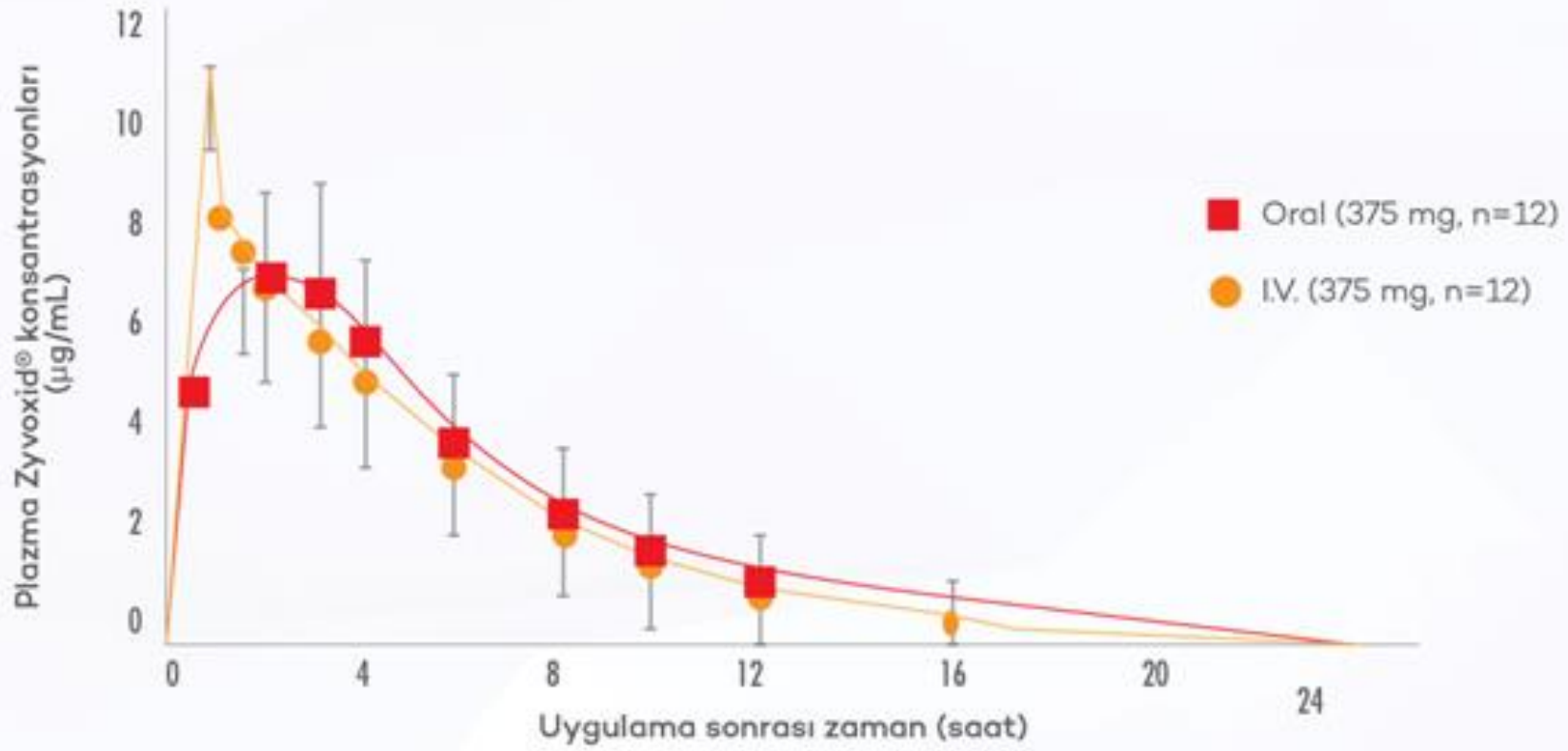
Absorbsiyonu hızlı,

Biyoyararlanımı %100

1-2 saatte pik yapmakta

Biyoyararlanım

Linezolid tablet %100 biyoyararlanıma sahiptir



2 numaralı referanstan uyarlanmıştır.

Doku penetrasyonu

Dokulara ve sıvılara penetrasyonu mükemmel

Tissue/Fluid	Dosage	Concentration (mg/L)		Penetration (%)
		Plasma/Serum	Tissue/Fluid	
Epithelial lining fluid[1,2]	600 mg q12h PO (5 doses)	15.5	64.3	415
Inflammatory blister fluid[3]	600 mg q12h PO (5 doses)	18.3	16.4	104
Bone[4]	600 mg q12h IV (2 doses)	15.8	8.6	60
Muscle[4]	600 mg q12h IV (2 doses)	15.8	13.4	94
Cerebrospinal fluid[1]	10 mg/kg (≤ 600 mg) IV (4-5 doses)	10.3	7.5	71
Peritoneal dialysate[5]	600 mg PO (1 dose)	11.2	6.9	61

Pharmacokinetics in healthy volunteers and in vitro activity do not necessarily imply a correlation with clinical effectiveness.

Adapted from 1. Pfizer Inc, data on file. 2. Conte JE Jr, et al. ICAAC 2000, Abstract 659. 3. Gee T, et al. *Antimicrob Agents Chemother*. 2001;45:1843-1846. 4. Lovering AC, et al. *J Antimicrob Chemother*. 2002;50:73-77. 5. Gendjar SR, et al. ASN/ISN WCN 2001, Abstract 2205.

ANTIMICROBIAL AGENTS AND CHEMOTHERAPY, Sept. 2011, p. 4170–4175

Determination of Tissue Penetration and Pharmacokinetics of Linezolid in Patients with Diabetic Foot Infections Using *In Vivo* Microdialysis[▽]

Dora E. Wiskirchen,[1] Ashley Shepard,[2] Joseph L. Kuti,[1] and David P. Nicolau[1,3]*

	Linezolid[1,2,9]	Teikoplanin[3,6,10]	Vankomisin[4,7,10,11]	Daptomisin[5,8]
Molekül yapısı ve ağırlığı[2-5]	 337.35 g/mol[2]	 1564.26 g/mol[3]	 1449.26 g/mol[4]	 1620.69 g/mol[5]
Deri yumuşak doku penetrasyonu	%104*[1]	%77**[6]	%10-30***[7]	%68#[8]
Kas dokusu penetrasyonu	%94[9] (20 dakikada)	-	%11[11] (2 saat)	-
Kemik dokusu penetrasyonu	%60[9] (20 dakikada)	%12[10] (7 saat, kortikal kemik)	%21[10] (4 saat, kortikal kemik)	-

Mİkroorganizmalara Etkinlik

*Metisiline duyarlı-dirençli S. aureus,

*Duyarlı-dirençli KNS,

*Vankomisin duyarlı-dirençli E. faecium ve E. faecalis,

*Streptokoklar,

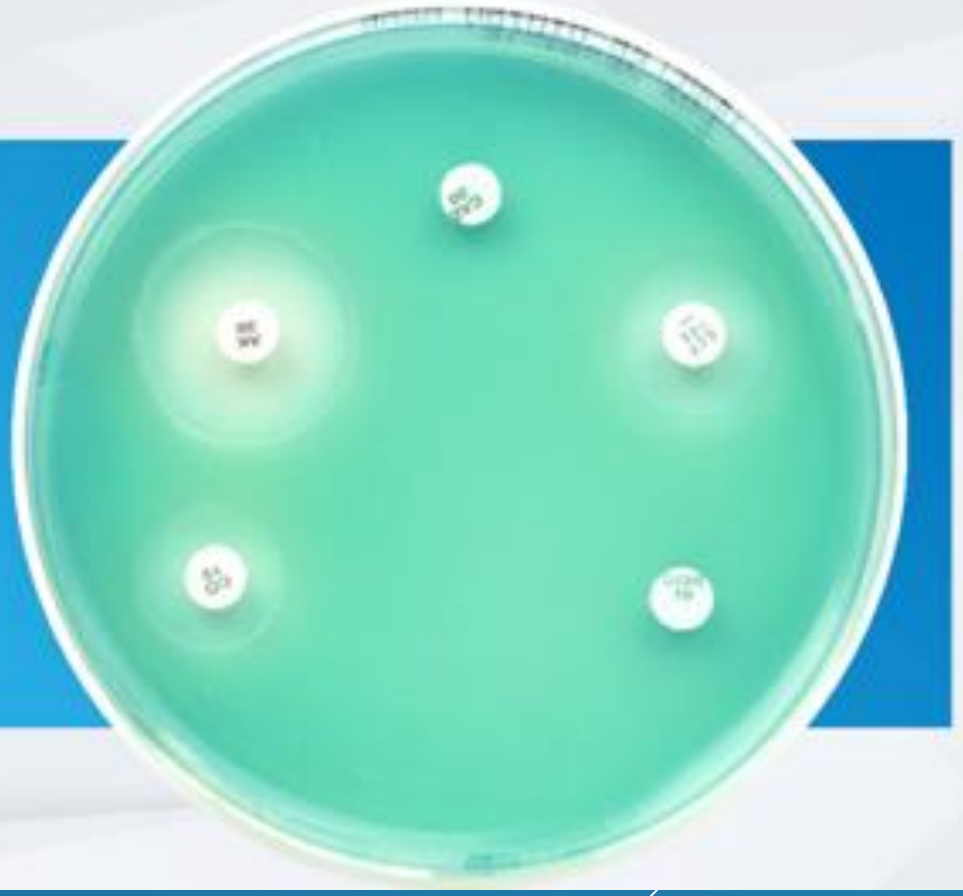
*Penisiline dirençli dahil S. pneumoniae

Antibiyotik	Staphylococcus aureus	Enterococcus spp.	Staphylococcus (koagülaz negatif)	Streptococcus spp.
Linezolid	**100**	**100**	**100**	**100**
Vankomisin	100	89,2	100	100
Teikoplanin	100	76,7	100	100
Metisilin	42,9	-	22,2	38,5
Siprofloksasin	71,5	77,9	63,9	88,6
Levofloksasin	48	-	-	100
Trimethoprim-sulfametoksazol	84,2	37,9	44,7	76,2
Rifampisin	64,4	72,7	93,1	92,9
Ampisilin/sulbaktam	67,1	91,4	87,9	77,3
Tetrasiklin	53,8	32,5	96,6	75
Eritromisin	59,6	24,2	71,4	63,4
Klindamisin	74,1	48,7	94,3	87,9

DİĞER ETKİ ETTİĞİ BİLDİRİLEN PATOJENLER

- Corynebacterium,
- Listeria monocytogenes ,
- Bacillus ,
- Micrococcus ,
- Erysipelothrix ,
- Leuconostoc,
- Rhodococcus,
- Neisseria ,
- B. fragilis, Clostridium, Fusobacterium
- anaerobik kok,
- S pneumoniae,
- M. hominis , Ureoplasma ureolyticum,
- Nocardia,
- M. tuberculosis,
- MAC, M. marinum

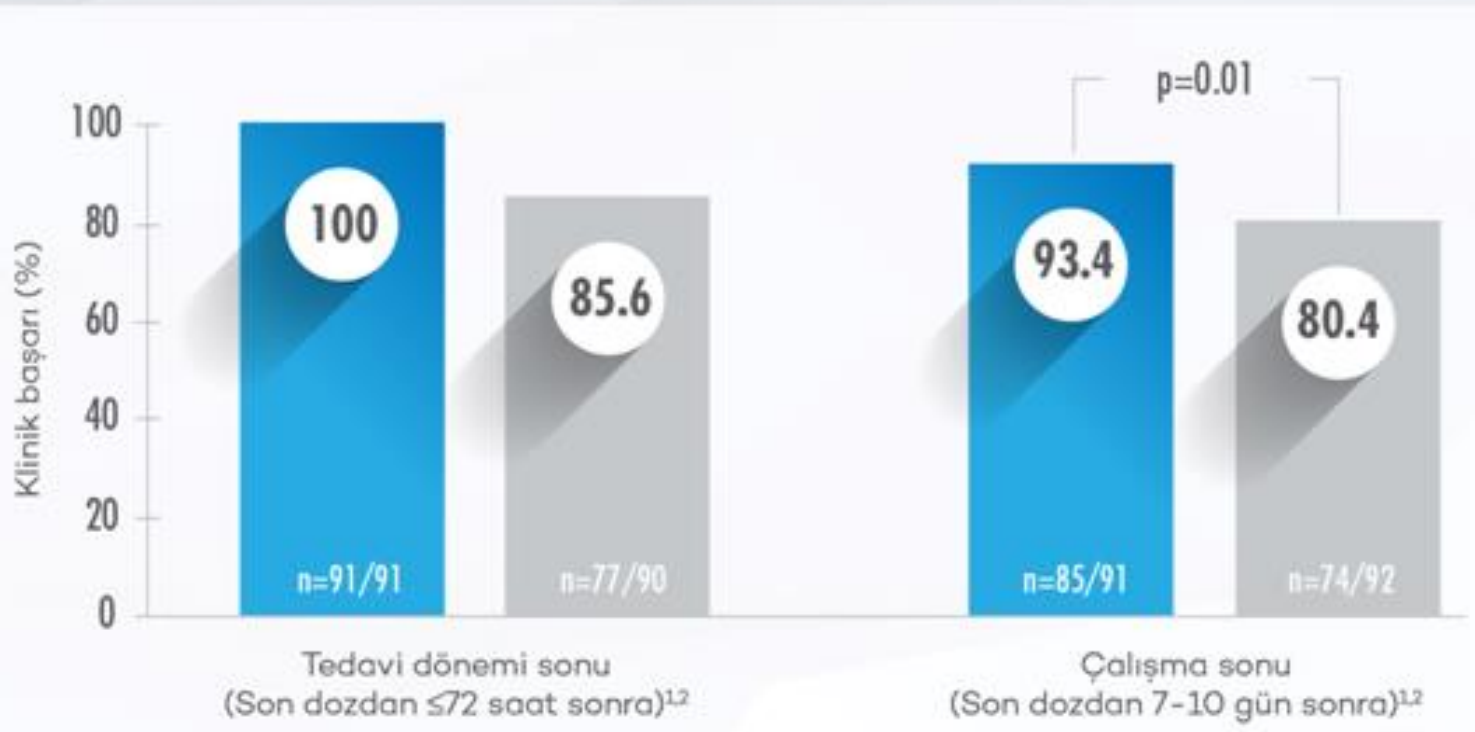
Linezolid farklı etki mekanizması* sayesinde diğer gram pozitif ilaçlarla çapraz direnç gelişimine yol açmaz.[1]



Clinical Efficacy of Oral Linezolid Compared With Intravenous Vancomycin for the Treatment of Methicillin-Resistant *Staphylococcus aureus*–Complicated Skin and Soft Tissue Infections: A Retrospective, Propensity Score–Matched, Case-Control Analysis

Kamal M.F. Itani [a], John Weigelt [b], Jim Z. Li [c], Sandeep Duttagupta [d]

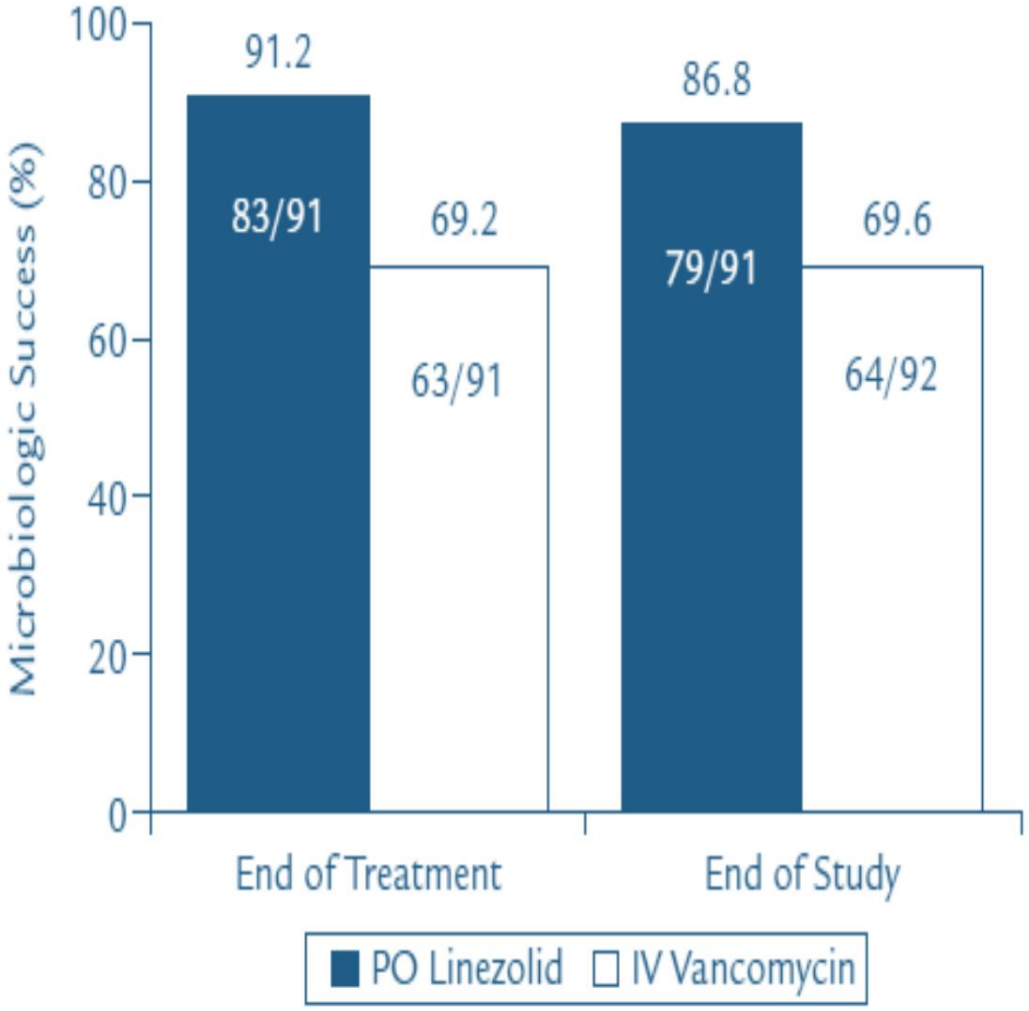
kDYDİ'de Linezolid tablet ve I.V. vankomisin ile tedavi ve çalışma sonundaki klinik başarı oranları[1]



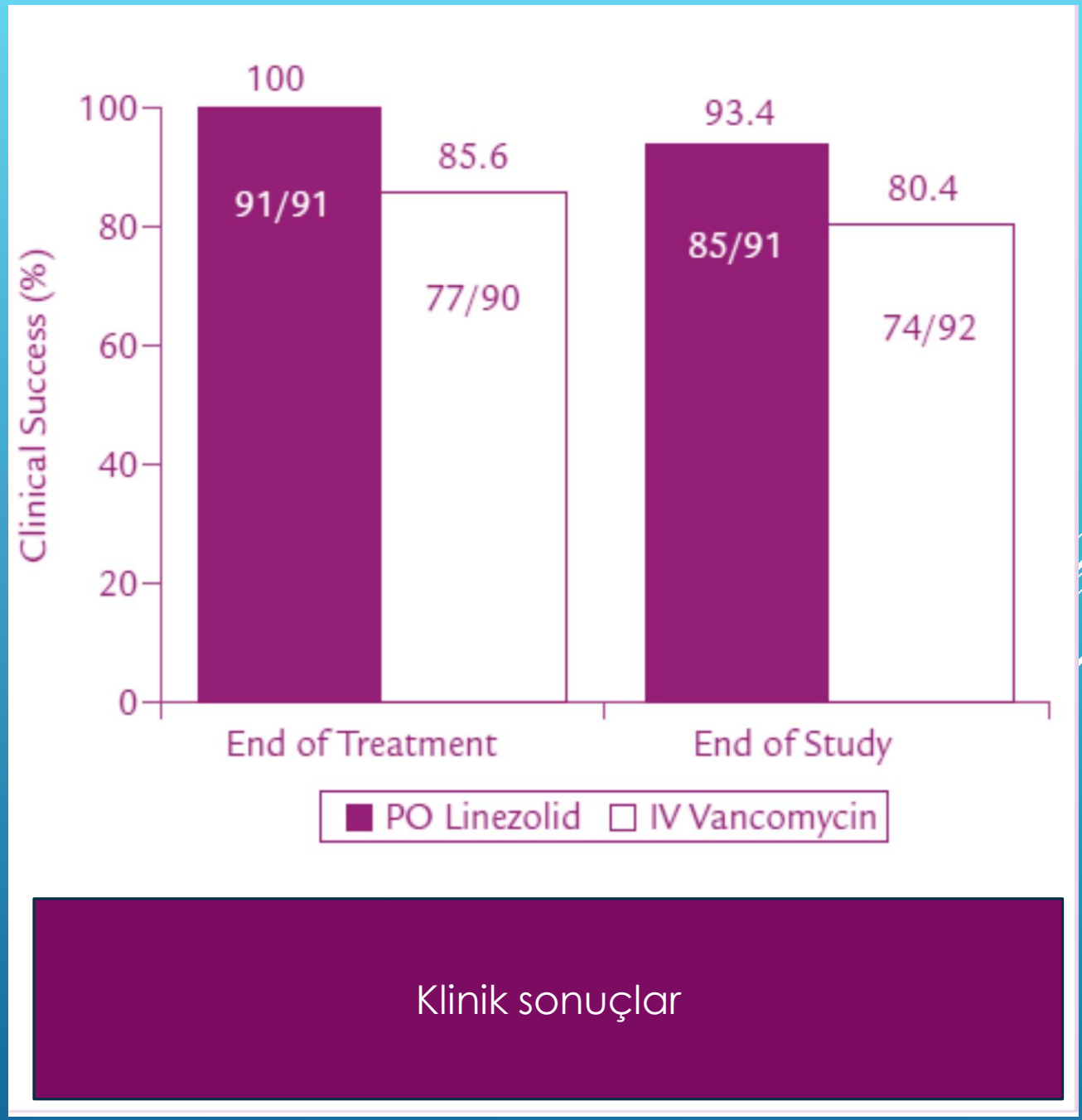
Linezolid Tablet

Vankomisin I.V.

Linezolid tablet (600 mg oral, 2x1, n=92) ile vankomisin I.V.'nin (15 mg/kg 2x1, n=92) karşılaştırıldığı faz IV, randomize, açık etiketli, aktif karşılaştırmalı, çok merkezli çalışmanın post-hoc analizi. Tedavi süresi medyan (aralık) linezolid 11 (7-17) gün vankomisin 10 (4-21) gün.



Mikrobiyolojik sonuçlar



Klinik sonuçlar


Vankomisinden anlamlı üstün etkinlik[4]

Hastanede kalış süresinde azalma

İ.v antibiyotik ihtiyacında azalma

ELSEVIER

International Journal of Antimicrobial Agents 26 (2005) 442–448

INTERNATIONAL JOURNAL OF
Antimicrobial
Agents

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Linezolid reduces length of stay and duration of intravenous treatment compared with vancomycin for complicated skin and soft tissue infections due to suspected or proven methicillin-resistant *Staphylococcus aureus* (MRSA)

Kamal M.F. Itani [a], John Weigelt [b], Jim Z. Li [c], Sandeep Duttagupta [d,*]

[a] *Boston VA Health Care System and Boston University, Boston, MA, USA*

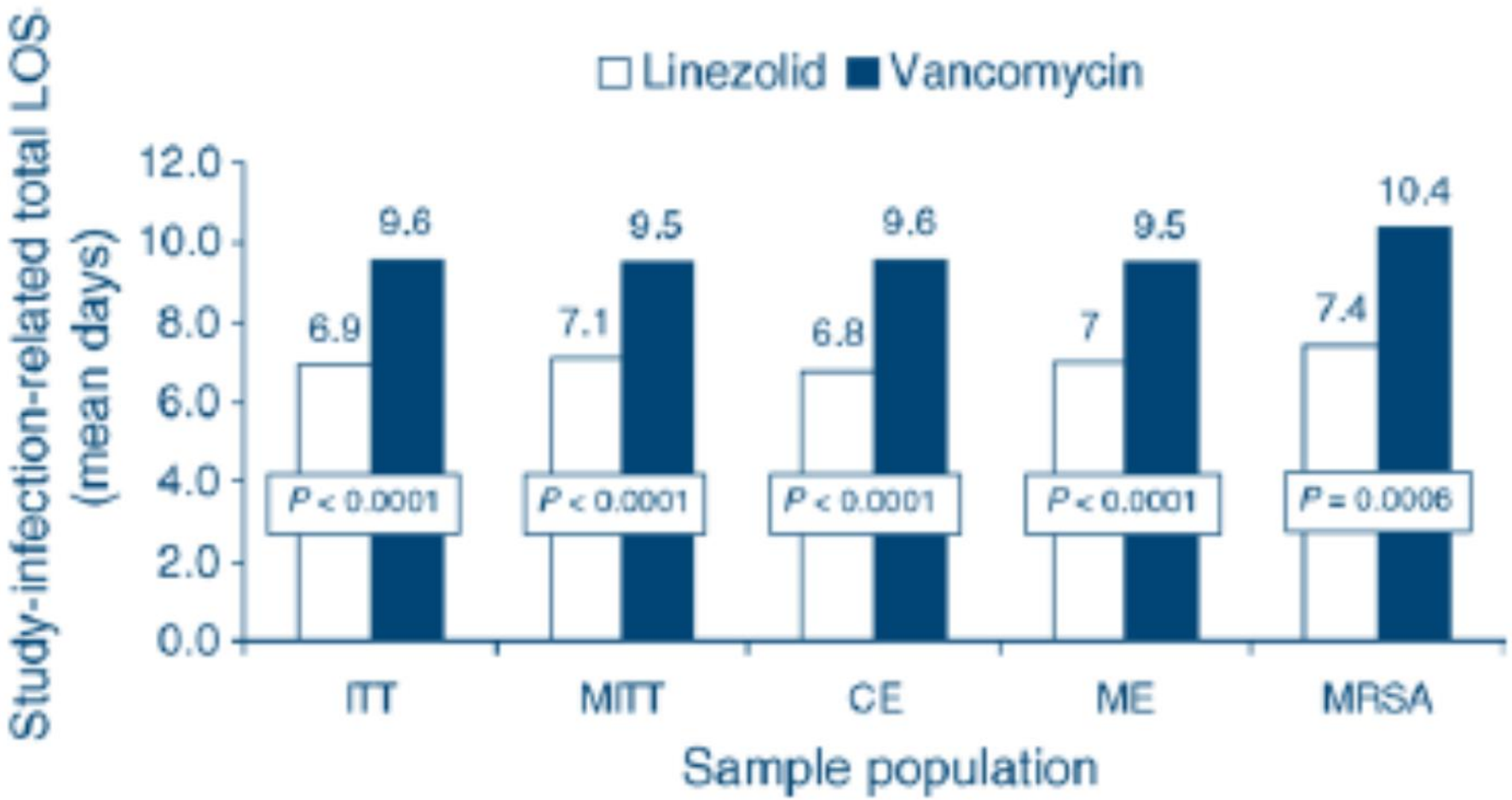


Fig. 3. Study-infection-related total length of stay (LOS). Sample popu-

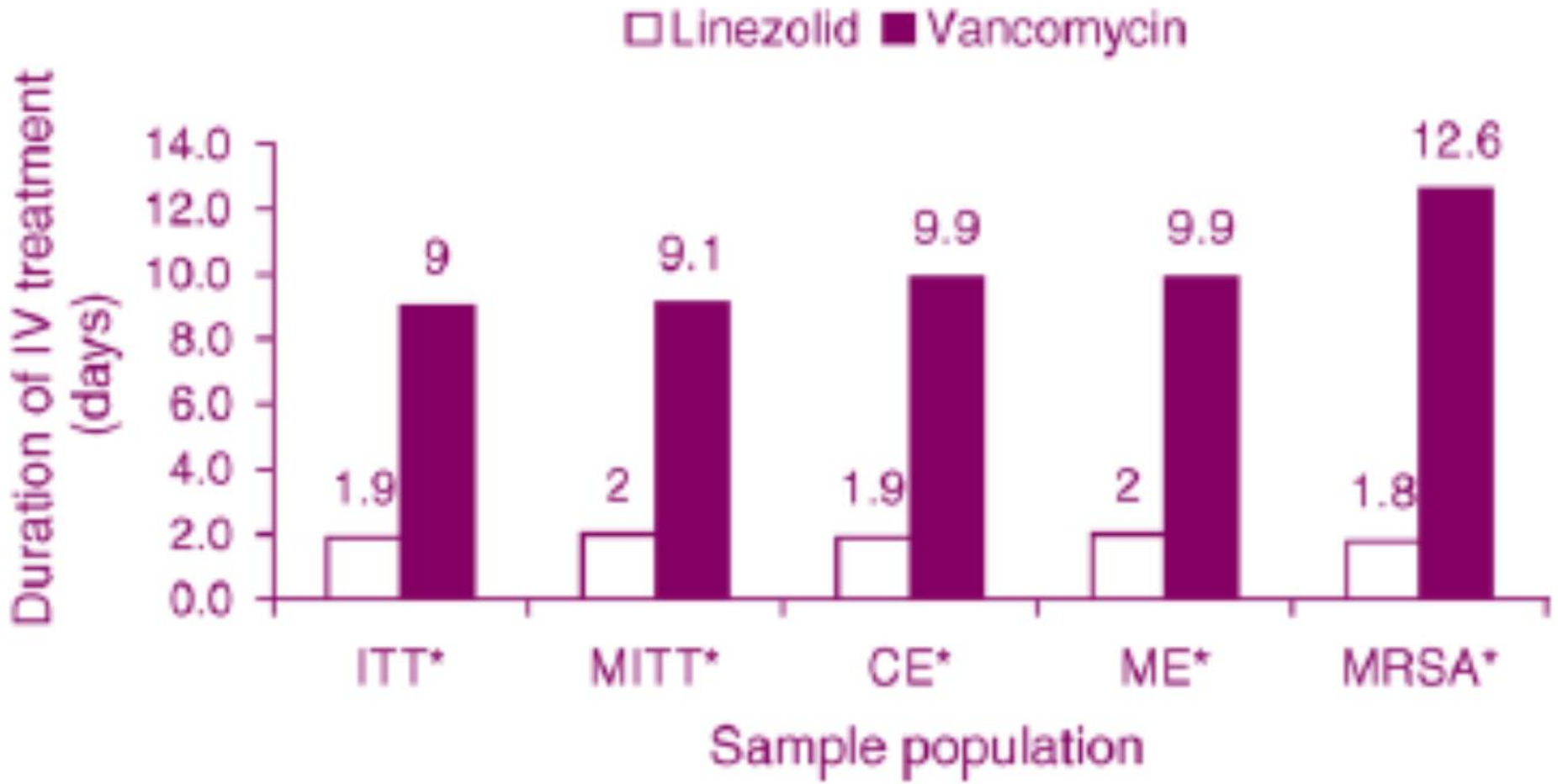


Fig. 4. Intravenous (i.v.) antibiotic treatment days. Sample population: ITT,

Randomize multinasyonel open-label çalışma

Linezolidle hastanede kalış süresinde azalma $p<0,01$

*i.v antibiyotik tedavi süresinde kısalma $p<0.05$

maliyette azalma

Excerpta Medica

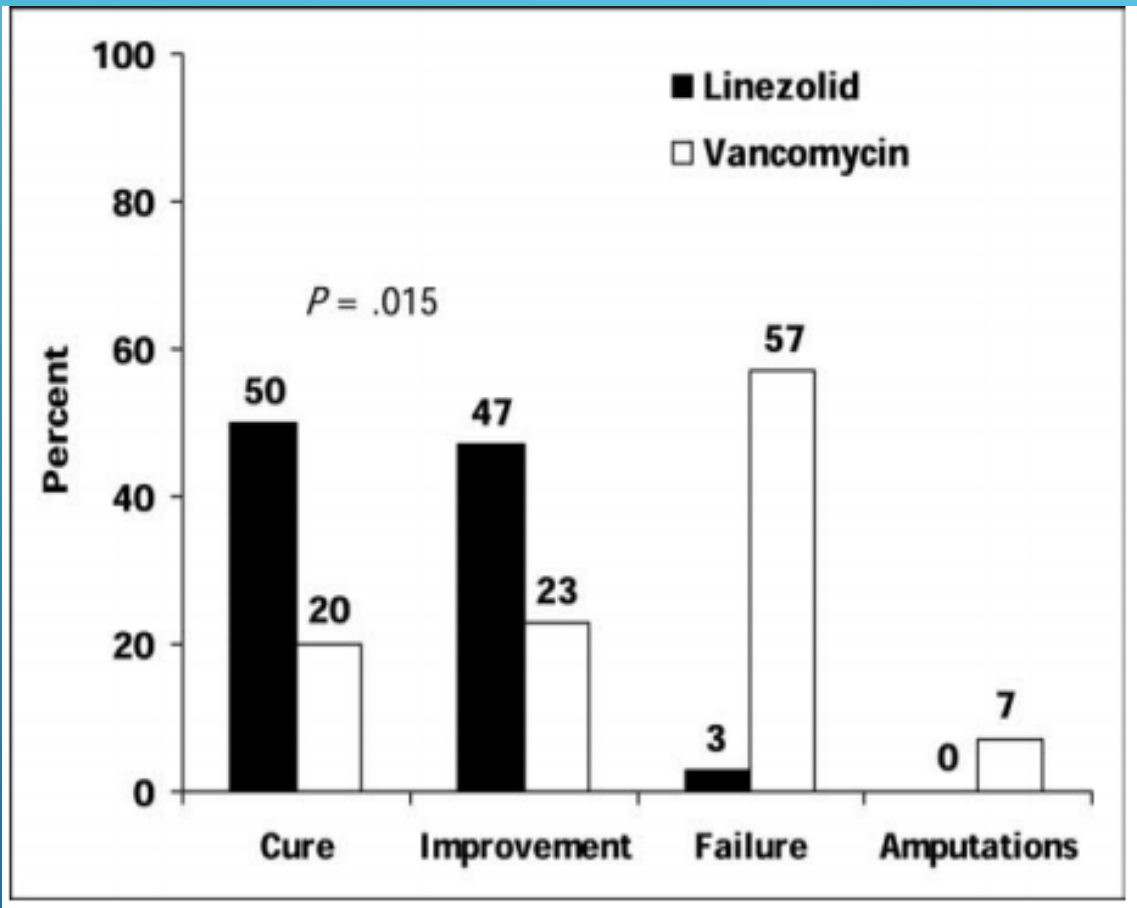
The American Journal of Surgery

The American Journal of Surgery 189 (2005) 425–428

Brief report

Clinical and economic outcomes of oral linezolid versus intravenous vancomycin in the treatment of MRSA-complicated, lower-extremity skin and soft-tissue infections caused by methicillin-resistant *Staphylococcus aureus*

J. Neal Sharpe, M.D.[a,*], Eugene H. Shively, M.D.[b], Hiram C. Polk Jr., M.D.[b]



ig. 1. Clinical outcomes with oral linezolid versus intravenous vancomy-
in therapy.

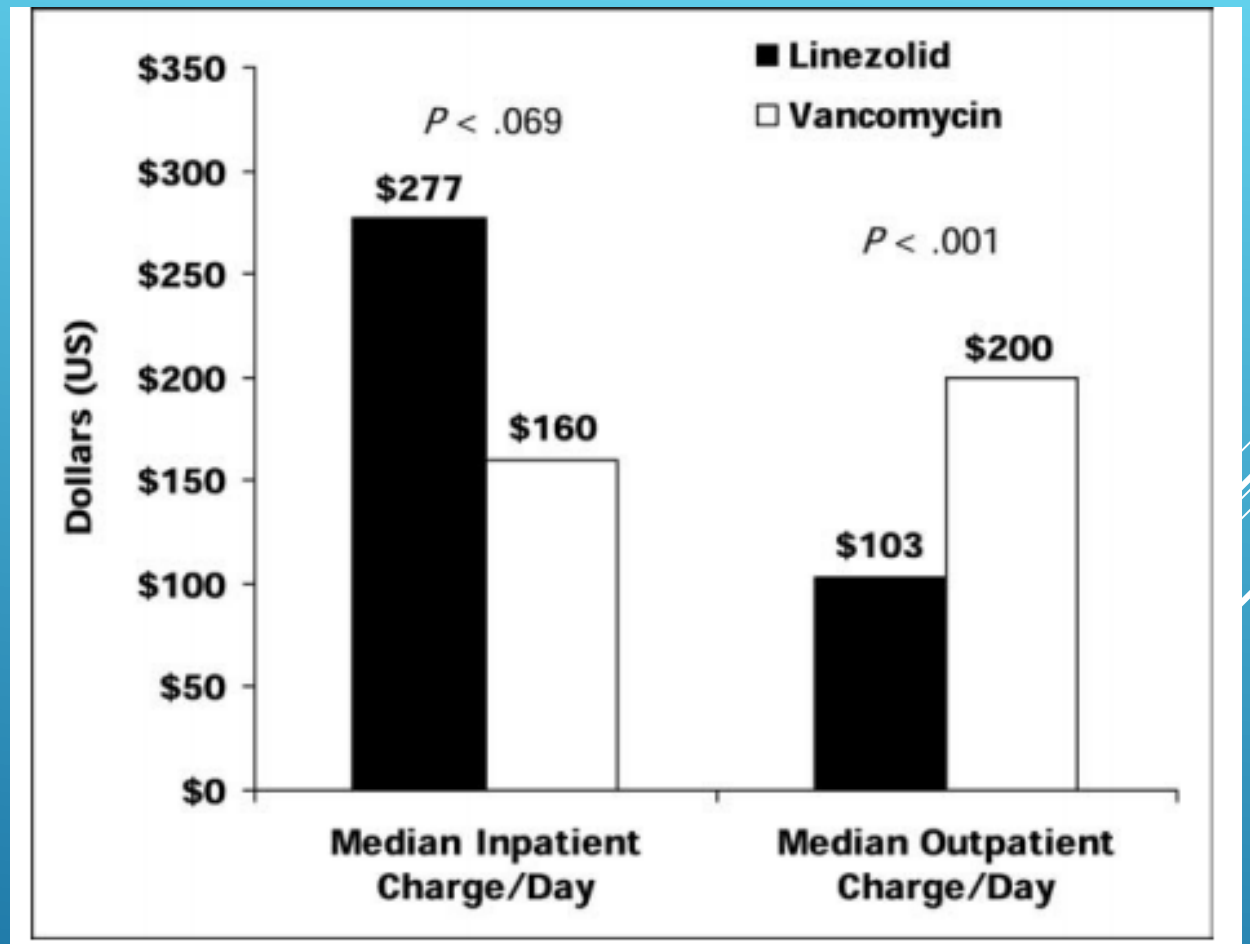
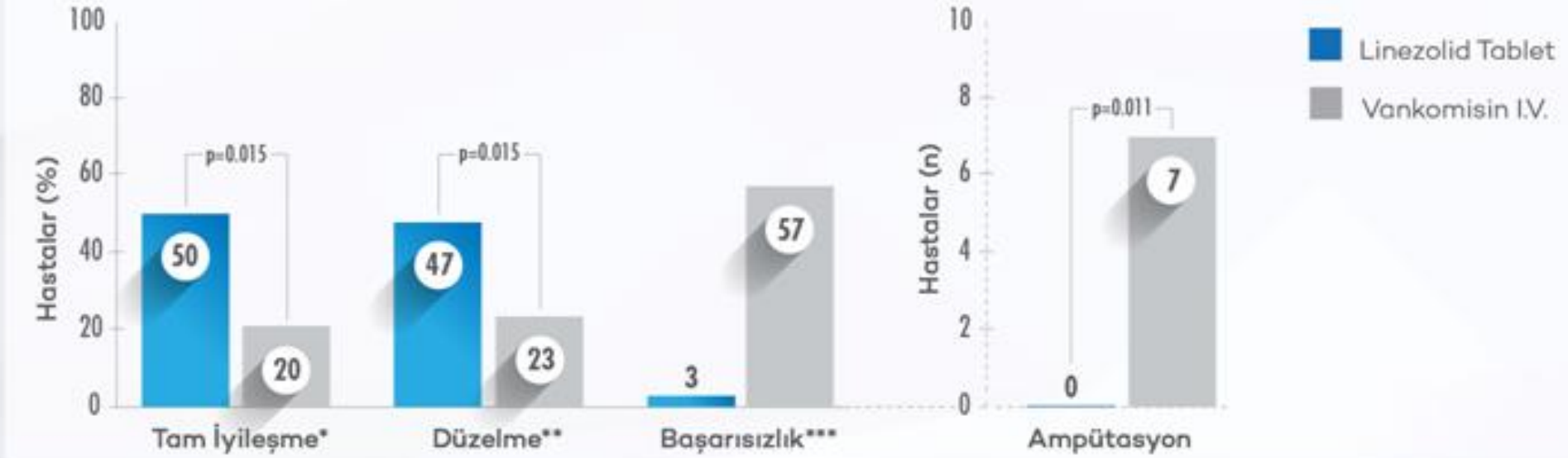


Fig. 3. Median inpatient and outpatient charges per day with oral linezolid
versus intravenous vancomycin therapy.

Linezolid tablet, alt ekstremitede görülen DYDİ'de I.V. vankomisine kıyasla yüksek klinik başarı sağlamış ve amputasyonu anlamlı olarak azaltmıştır.[1]

Linezolid tablet ve I.V. vankomisinin etkililiğinin karşılaştırılması[1]



Diyabetik Ayak İnfeksiyonlarında Etkinlik

Treating Foot Infections in Diabetic Patients: A Randomized, Multicenter, Open-Label Trial of Linezolid versus Ampicillin-Sulbactam/ Amoxicillin-Clavulanate

Benjamin A. Lipsky, Kamal Itani, Carl Norden, and the Linezolid Diabetic Foot Infections Study Group

CLİNİCAL INFECTİOUS DİSEASES, VOLUME 38, ISSUE 1, 01 JANUARY 2004, PAGES 17–24,

Parameter	No. of patients cured/ no. of patients assessed (%)[a]		95% CI	Duration of therapy, mean days ± SD
	Linezolid arm (n = 241)	Aminopenicillin/ β-lactamase inhibitor arms (n = 120)		
Overall	165/203 (81)	77/108 (71)	−0.1 to 20.1	17.0 ± 7.6
Type of infection[b]				
Infected ulcer	131/161 (81)	57/84 (68)	1.9–25.2	17.0 ± 7.5
Cellulitis	68/86 (79)	40/54 (74)	−9.5 to 19.5	17.1 ± 7.9
Deep soft-tissue infection	20/32 (63)	8/14 (57)	−25.5 to 36.2	20.2 ± 7.5
Paronychia	11/12 (92)	9/11 (82)	−17.8 to 37.5	15.1 ± 6.5
Abscess	5/5 (100)	1/1 (100)	…	14.3 ± 6.2
Osteomyelitis[c]	27/44 (61)	11/16 (69)	−34.3 to 19.5	19.0 ± 9.0
Status during initial treatment				
Outpatient	110/134 (82)	57/79 (72)	−1.9 to 21.8	16.0 ± 7.3
Inpatient	55/69 (80)	20/29 (69)	−8.6 to 30.1	19.2 ± 7.8
Route of initial treatment				
Intravenous	41/53 (77)	15/22 (68)	−13.3 to 31.7	20.7 ± 7.6
Oral	124/150 (83)	62/86 (72)	−0.7 to 21.8	15.8 ± 7.2
Presence of ischemia[c]				
Yes	64/79 (81)	29/44 (66)	−1.4 to 31.6	18.2 ± 7.8
No	101/124 (81)	48/64 (75)	−6.2 to 19.1	16.2 ± 7.4

[a] Excludes patients with indeterminate and missing outcomes.
[b] Patients could have had >1 baseline diagnosis.
[c] See text for definitions.

Clinical Infectious Diseases, Volume 38, Issue 1, 01 January 2004, Pages 17–24, https://doi.org/10.1086/380449

- 12 saatte bir 600mg linezolid tedavisi

Diyabetik hastalarda iyi tolere edildi.

Enfeksiyon alanına geçişi yeterli

DAİ'nda sık gözlenen **Duyarlı ve Dirençli Gram pozitif patojenleri** etkili bir şekilde tedavi etti.

FULL TEXT ARTICLE

Influence of multidrug resistant organisms on the outcome of diabetic foot infection

Nese Saltoglu, Onder Ergonul, Necla Tulek, Mucahit Yemisen, Ayten Kadanali, Gul Karagoz, Ayse Batirel, Oznur Ak, Cagla Sonmezer, Haluk Eraksoy, Atahan Cagatay, Serkan Surme, Salih A. Nemli, Tuna Demirdal, Omer Coskun, Derya Ozturk, Nurgul Ceran, Filiz Pehlivanoglu, Gonul Sengoz, Turan Aslan, Yasemin Akkoyunlu, Oral Oncul, Hakan Ay, Lutfiye Mulazımoglu, Buket Erturk, Fatma Yilmaz, Gulsen Yoruk, Nuray Uzun, Funda Simsek, Taner Yildirmak, Kadriye Kart Yaşar, Meral Sonmezoglu, Yasar Küçükardali, Nazan Tuna, Oguz Karabay, Nail Ozgunes and Fatma Sargın

International Journal of Infectious Diseases, 2018-05-01, Volume 70, Pages 10-14, Copyright © 2018 The Authors

Results: In total, **791 patients** with DFI were included,
Severe infection was diagnosed in 85 (11%) patients.
536 microorganisms were isolated,
the most common microorganism was **S. aureus (20%)**,
Methicillin resistance rate 31%.

MRSA ne zaman düşünülmeli?

[1] Şiddetli infeksiyon,

[2] altı haftanın üzerinde yara varlığı,

[3] son bir yıl içerisinde hastaneye yatış,

[4] uzun süreli antibiyotik (kinolon gibi) kullanımı öyküsü,

[5] osteomyelit,

[6] Önceki MRSA kolonizasyonu ya da infeksiyonu,

[7] yüksek yerel MRSA oranları (orta derece infeksiyon için %30; hafif infeksiyon için %50),

[8] kronik böbrek yetmezliği nedeniyle diyalize girmek ya da bakım merkezinde kalmak

KLİMİK DİYABETİK AYAK UZLAŞI RAPORU 2015

LİPSKY BA. DİAGNOSİNG AND TREATİNG DİABETİC FOOT İNFECTİON. KLİMİK DERG. 2009; 22(1): 2-13.
LİU C,. CLİN INFECT DİS. 2011; 52(3): 285-92.
STANAWAY S, JOHNSON D, MOULİK P, GİLL G.DİABETES RES CLİN PRACT. 2007; 75(1): 47-50.

Int J Clin Pract. 2018 Mar;72(3):e13060. doi: 10.1111/ijcp.13060. Epub 2018 Jan 30.

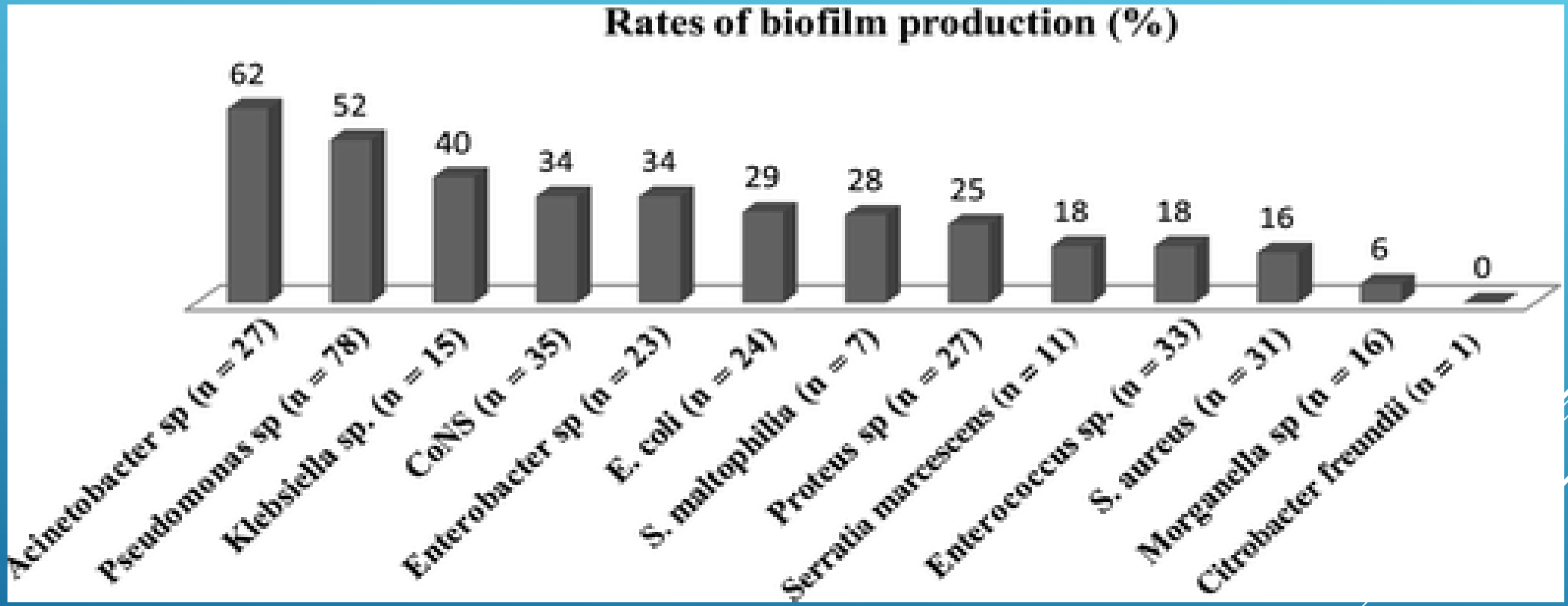
Association between biofilm and multi/extensive drug resistance in diabetic foot infection

Aslı Vatan[1] | Nese Saltoglu[1] | Mucahit Yemisen[1] | Ilker Inanc Balkan[1] | Serkan Surme[1] | Tayfur Demiray[3] | Birgul Mete[1] | Fehmi Tabak[1] | Study Group, Cerrahpasa Diabetic Foot[2]

The overall rate of biofilm production among 339 wound isolates was 34%.
The biofilm production rate Gram-negative micro-organisms (39%) Gram positives (21%)

- significant factors associated with biofilm:
- **antibiotic use within last 3 months** (OR:2.94, CI: 1.5-5.75, P = .002),
- **recurrent DFI within last 6 months** (OR:2.35, CI: 1.23-4.53, P = .01),
- **hospitalisation within last 3 months due to ipsilateral recurrent DFI** (OR:2.44, CI: 1.06-5.58, P = .03),
- **presence of amputation history** (OR: 2.20, CI: 1.14-4.24, P = .01),
- **multidrug-resistant (MDR) micro-organism** (OR: 7.76, CI: 4.53-13.35, P<.001)
- **extensively drug-resistant (XDR) micro-organism** (OR:11.33, CI:4.97-26.55, P<.001).

Association between biofilm and multi/extensive drug resistance in diabetic foot infection



International Journal of Clinical Practice, Volume: 72, Issue: 3, First published: 30 January 2018, DOI: (10.1111/ijcp.13060)

Biyofilme etkinlik

Linezolid MRSA biyofilmlerine karşı etkilidir.

Journal of Medical Microbiology (2013), **62**, 394–399 DOI 10.1099/jmm.0.048678-0

Inhibition of biofilm maturation by linezolid in meticillin-resistant *Staphylococcus epidermidis* clinical isolates: comparison with other drugs

Keli Cristine Reiter,[1,2] Bárbara Villa,[2] Thiago Galvão da Silva Paim,[1,2] Caio Fernando de Oliveira[1,2] and Pedro Alves d'Azevedo[1,2]

[1]Health Sciences Post-graduate Program, Universidade Federal de Ciências da Saúde de Porto Alegre, Porto Alegre, Brazil

[2]Laboratory of Gram-positive Cocci, Universidade Federal de Ciências da Saúde de Porto Alegre, Porto Alegre, Brazil

Correspondence
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or pedroaze@ufcspa.edu.br

Table 1. MIC, MBIC and MBEC results of planktonic and adherent MRSE isolates

Antimicrobial agent	Planktonic bacteria			Adherent bacteria*					
	MIC range	MIC_{50}	MIC_{90}	MBIC range†	$MBIC_{50}$	$MBIC_{90}$	MBEC range‡	$MBEC_{50}$	$MBEC_{90}$
Gentamicin	<0.125–>16	<0.125	>16	8–256	32	128	64–256	64	256
Linezolid	0.125–1	0.5	1	2–128	4	64	4–256	32	128
Rifampicin	<0.03–32	0.06	32	2–128	32	64	16–256	64	256
Tigecycline	0.06–2	1	2	2–256	8	64	4–256	16	128
Vancomycin	0.5–4	1	2	4–256	16	128	32–256	128	256

Klinik Endikasyon

- Linezolid Nisan 2000 FDA onaylı,
- Gram pozitif duyarlı ve dirençli mikroorganizmalar için
  - bakteriyemi,
  - çeşitli lokalize enfeksiyonlar
- Komplike deri ve yumuşak doku enfeksiyonu,
- diyabetik ayak enfeksiyonu,
- renal allograftin enfeksiyonu
- ventrikülit, menenjit, epidural apse,

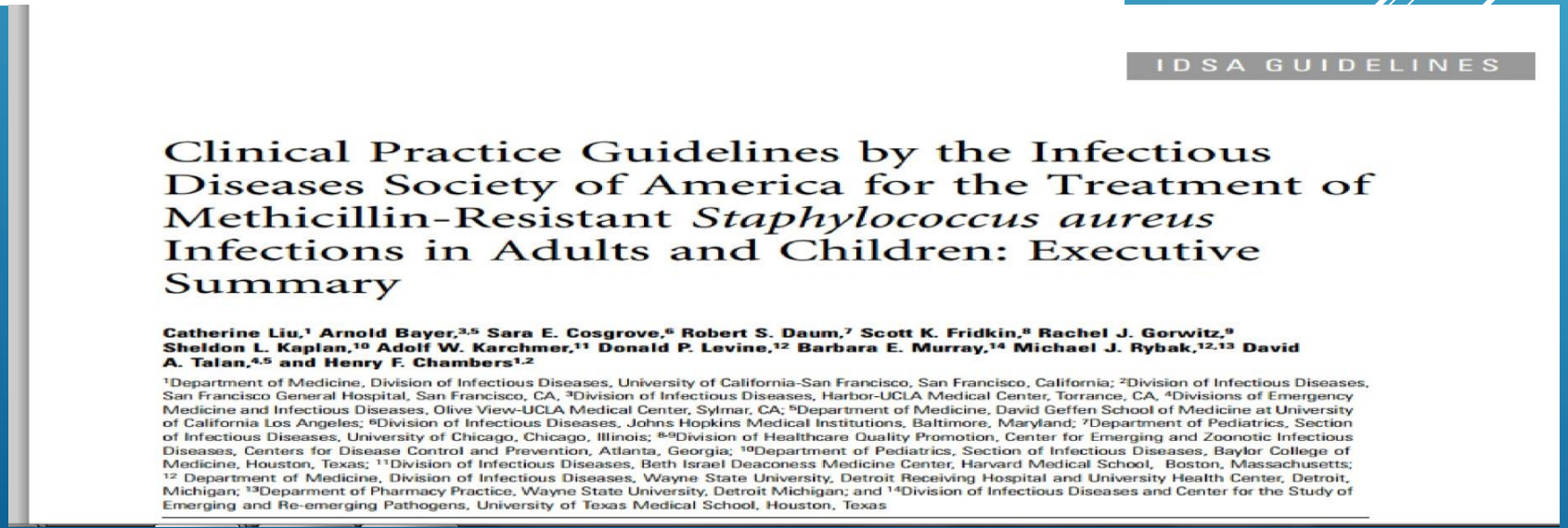
IDSA Guideline Komplike deri yumuşak doku enfeksiyonu

.

Vankomisin 15-20mg/kg, 8-12 saatte bir (IV) (A-I),

- **Daptomisin 4 mg/kg/gün IV günde bir (A-I),**
- **Linezolid (PO veya IV) 600 mg x2 /gün** (A-I),

- **Telavansin 10 mg/kg/gün IV günde bir kez (A-I)**
- Klindamisin 600 mg IV x3 /gün (A-III).



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: Executive Summary

Catherine Liu,[1] Arnold Bayer,[3,5] Sara E. Cosgrove,[6] Robert S. Daum,[7] Scott K. Fridkin,[8] Rachel J. Gorwitz,[9] Sheldon L. Kaplan,[10] Adolf W. Karchmer,[11] Donald P. Levine,[12] Barbara E. Murray,[14] Michael J. Rybak,[12,13] David A. Talan,[4,5] and Henry F. Chambers[1,2]

[1]Department of Medicine, Division of Infectious Diseases, University of California-San Francisco, San Francisco, California; [2]Division of Infectious Diseases, San Francisco General Hospital, San Francisco, CA, [3]Division of Infectious Diseases, Harbor-UCLA Medical Center, Torrance, CA, [4]Divisions of Emergency Medicine and Infectious Diseases, Olive View-UCLA Medical Center, Sylmar, CA; [5]Department of Medicine, David Geffen School of Medicine at University of California Los Angeles; [6]Division of Infectious Diseases, Johns Hopkins Medical Institutions, Baltimore, Maryland; [7]Department of Pediatrics, Section of Infectious Diseases, University of Chicago, Chicago, Illinois; [8-9]Division of Healthcare Quality Promotion, Center for Emerging and Zoonotic Infectious Diseases, Centers for Disease Control and Prevention, Atlanta, Georgia; [10]Department of Pediatrics, Section of Infectious Diseases, Baylor College of Medicine, Houston, Texas; [11]Division of Infectious Diseases, Beth Israel Deaconess Medicine Center, Harvard Medical School, Boston, Massachusetts; [12] Department of Medicine, Division of Infectious Diseases, Wayne State University, Detroit Receiving Hospital and University Health Center, Detroit, Michigan; [13]Deparment of Pharmacy Practice, Wayne State University, Detroit Michigan; and [14]Division of Infectious Diseases and Center for the Study of Emerging and Re-emerging Pathogens, University of Texas Medical School, Houston, Texas

Diyabetik Ayak Yarası ve İnfeksiyonunun Tanısı, Tedavisi ve Önlenmesi: Ulusal Uzlaşı Raporu

Diagnosis, Treatment and Prevention of Diabetic Foot Wounds and Infections: Turkish Consensus Report

Neşe Saltoğlu[1], Önder Kılıçoğlu[2], Selçuk Baktıroğlu[3], Zeynep Oşar-Siva[4], Şamil Aktaş[3,5], Muzaffer Altındaş[6], Caner Arslan[7], Turan Aslan[1], Selda Çelik[8], Aynur Engin[1], Haluk Eraksoy[1], Önder Ergönül[1], Bülent Ertuğrul[1], Serdar Güler[9], Ayten Kadanalı[1], Lütfiye Mülazımoğlu[1], Nermin Olgun[8], Oral Öncül[1], Ali Öznur[2], İlhan Satman[10], İrfan Şencan[11], Özlem Tanrıöver[12], Özge Turhan[1], Abdullah Kemal Tuygun[7], Hasan Tüzün[7], Ahmet Çınar Yastı[13], Temel Yılmaz[14]

[1] Türk Klinik Mikrobiyoloji ve İnfeksiyon Hastalıkları Derneği, Diyabetik Ayak İnfeksiyonları Çalışma Grubu (İstanbul Üniversitesi,

Hafif infeksiyon

Antibiyotikler	Oral
Hafif infeksiyon *(Oral tedavi)*	
Amoksisilin-klavulanat (2×1 gr)	X
Klindamisin (3×600 mg)	X
Kotrimoksazol (2×80/400 mg)	X
Levofloksasin (1×750 mg)	X
Sefazolin (3×2 gr)	X
Doksisiklin (2×100 mg)	X
MRSA varlığında:	
Linezolid (2×600 mg)	X
Klindamisin (3×300 mg)*	X
Kotrimoksazol (2×80/400 mg)	X
Fusidik asid (3×500 mg)	X

Orta derece infeksiyon *(Başlangıçta parenteral olmalı)*		
Ampisilin-sulbaktam (3-4×3 gr)		X
Seftriakson (1×2 gr)	X	
Ertapenem (1×1 gr)	X	
Tigesiklin (yükleme dozu 100 mg; 2×50 mg)		X
Moksifloksasin (1×400 mg)		X
Levofloksasin (1×750 mg) veya Siprofloksasin (2×400 mg) + Klindamisin (3×600 mg)		X
Siprofloksasin (2×400 mg) + Metronidazol (3×500 mg)		X
Seftazidim (3×2 gr)†	X	
Piperasilin-tazobaktam (3×4.5 gr)†		X
Sefoperazon-sulbaktam (3×2 gr)†		X
Linezolid (2×600 mg)‡		X
Daptomisin (6 mg/kg)‡		X
Vankomisin (2×1 gr)‡	X	
Teikoplanin (yükleme dozu 400 mg; 12 saat sonra 1×400 mg)‡		X

MRSA söz konusu ise

Şiddetli infeksiyon *(Parenteral olmalı)*	
Piperasilin-tazobaktam (3x4.5 gr) / İmipenem-silastatin (4x0.5 gr) / Meropenem (3x1 gr) / Sefepim (3x1 gr)	
+ anti-MRSA ajanlar	
Vankomisin (2x1 gr) / Daptomisin (6 mg/kg) / Linezolid (2x600 mg) /	X
Teikoplanin (yükleme dozu 400 mg; 12 saat sonra 1x400 mg)	
Çoğul dirençli *Acinetobacter* infeksiyonu *(Parenteral tedavi)*	
Kolistin + Aminoglikozid / Sulbaktam (4x1 gr) / Tigesiklin (yükleme dozu 100 mg; 2x50 mg)	X

Linezolid Oral ve İ.v biyoyararlanım benzer

- İntravenöz uygulamadan oral uygulamaya geçildiğinde doz ayarlaması gerekmez.
- Linezolid tablet, oral olarak yemeklerle birlikte veya yemeklerden bağımsız alınabilir.

Yaş
Böbrek Yetmezliği
Karaciğer yetmezliği

Özel hasta gruplarında doz ayarlama gerekmez[2]

Özel Hasta Grupları	Linezolid[*1]	Vankomisin[2]	Teikoplanin[3]	Daptomisin[4]
	Doz ayarlaması gerekli midir?			
Yaşlı Hastalar	Hayır	Evet	Evet*	Evet**
Böbrek Yetmezliği	Hayır	Evet	Evet[§]	Evet**
Hafif- Orta Düzeyde Karaciğer Yetmezliği	Hayır	Hayır	Bilgi Yok	Hayır

*Böbrek fonksiyonu bozuk yaşlılar
**KrKl<30 mL/dl; §Orta ve şiddetli

Hastanede yatış süresinin uzaması

1. Morbidite- Mortalite
2. İstenmeyen Komplikasyonlar

Hastane İlişkili Enfeksiyon

(HE- İ.V ilaç kullanımına bağlı komplikasyonlar)

3. Yaşam kalitesinin azalması

Antimikrobiyal direnç artışı

Sağlık sistemine ek maliyet

- Hedeflenen sağlık Hizmeti İle İlişki Enfeksiyonların Azaltılması
- Maliyeti Azaltmak
- Yaşam Kalitesini İyileştirmek

ANTİMİKROBİYAL YÖNETİM PROGRAMLARI ÖNERİLERİ

I.V. tedaviden oral tedaviye daha erken geçmek

Tedavi süresini kısaltmak

Daha dar spektrumlu ajanlar tercih etmek

KLİMİK 2019

Osteomyelitte endikasyonu yok !

Journal of Medical Microbiology (2013), **62**, 394–399 DOI 10.1099/jmm.0.048678-0

Inhibition of biofilm maturation by linezolid in meticillin-resistant *Staphylococcus epidermidis* clinical isolates: comparison with other drugs

Keli Cristine Reiter,[1,2] Bárbara Villa,[2] Thiago Galvão da Silva Paim,[1,2] Caio Fernando de Oliveira[1,2] and Pedro Alves d'Azevedo[1,2]

After the combination therapy, we could maintain Cmin within an optimal range of 3.7e7.2 mg/mL (Fig. 2). The patient's fever subsided quickly, and her inflammatory response diminished as the leukocyte count decreased to 5000/mL. The redness of and pus discharge from the wound disappeared, and we discontinued the combination therapy on day 75.

, a **79-year-old woman** with **recurrent methicillin-resistant S. aureus osteomyelitis** that was successfully treated via surgery and combination therapy using linezolid and rifampicin under therapeutic drug monitoring for maintaining an appropriate serum linezolid concentration.
. TDM could be useful in avoiding treatment failure due to linezolid

Results: Forty-five adults with chronic osteomyelitis received 600 mg linezolid intravenously twice daily for 7 days, and then orally, for a mean total duration of 15.9 weeks (range, 6–36). Anaemia episodes requiring blood transfusion occurred in 13/45 patients (28.9%). Median time from treatment initiation to anaemia onset was 7.4 weeks (range, 4–16). Anaemia was significantly associated with premature linezolid therapy cessation ($P = 0.0012$). No linezolid-related thrombocytopenia was observed. By univariate analysis, four variables were associated with the occurrence of anaemia: age >58 years, alcohol abuse, diabetes mellitus and low haemoglobin before linezolid treatment. Logistic regression analysis revealed two independent risk factors for anaemia: age >58 years (OR = 20.5, 95% CI 0.69–599; $P = 0.0001$) and pre-treatment haemoglobin <10.5 g/dL (OR = 16.49, 95% CI 1.06–255; $P = 0.04$).

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JAC

Risk factors for anaemia in patients on prolonged linezolid therapy for chronic osteomyelitis: a case–control study

Eric Senneville[1]*, Laurence Legout[1], Michel Valette[1], Yazdan Yazdanpanah[1], François Giraud[2], Eric Beltrand[3], Guillaume Obert[4], Luc Dubreuil[4], Henri Migaud[2] and Yves Mouton[1]