Febril Nötropeni Antibakteriyel Tedavi Yönetimi: Nereden Nereye?

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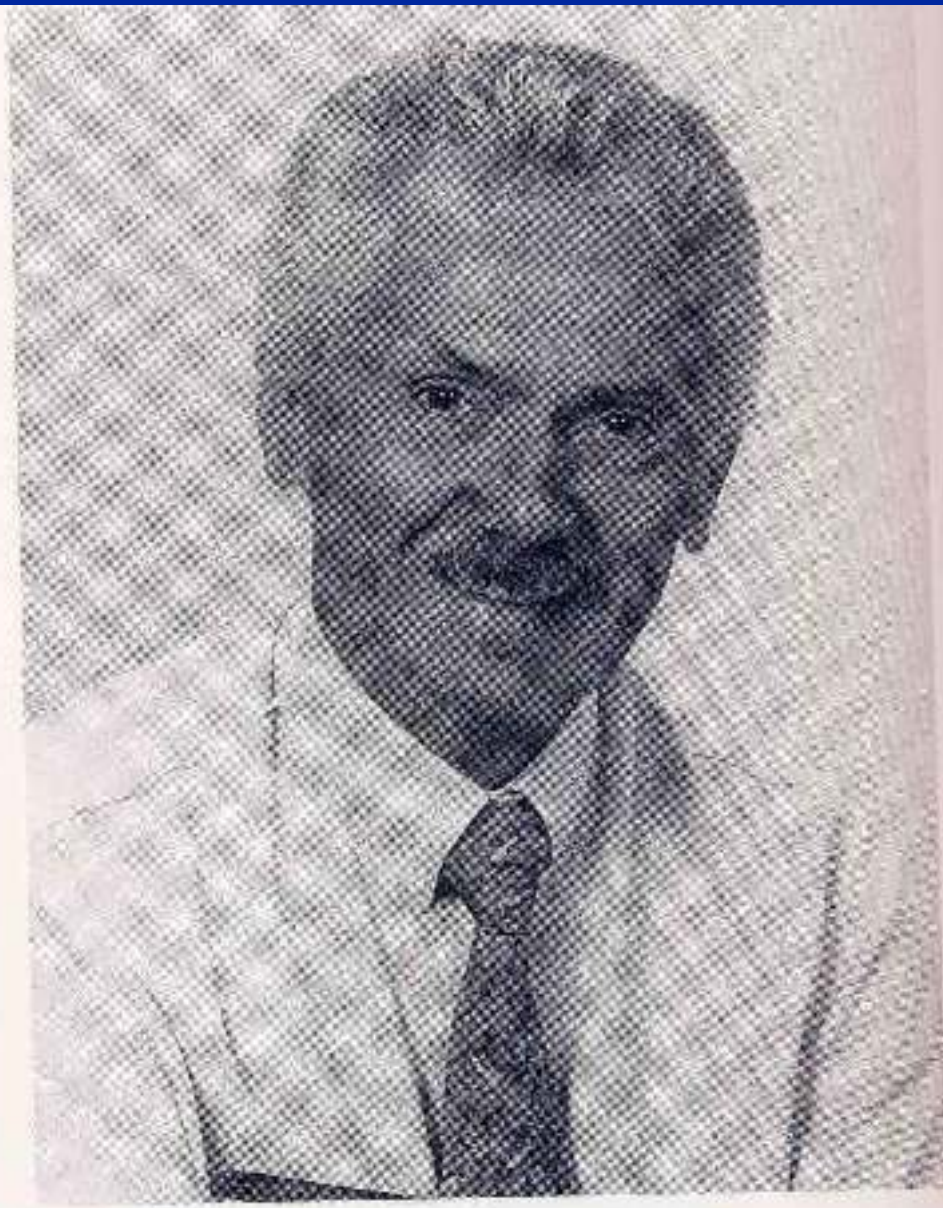
Gerald P Bodey, MD



Jean Klastersky, MD

Annals of Internal Medicine
Established in 1927 by the American College of Physicians

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Article

Quantitative Relationships Between Circulating Leukocytes and Infection in Patients with Acute Leukemia

GERALD P. BODEY, M.D.; MONICA BUCKLEY, B.A.; Y. S. SATHE, PH.D.; and EMIL J FREIREICH, M.D.

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This Article

February 1, 1966
vol. 64 no. 2 328-340

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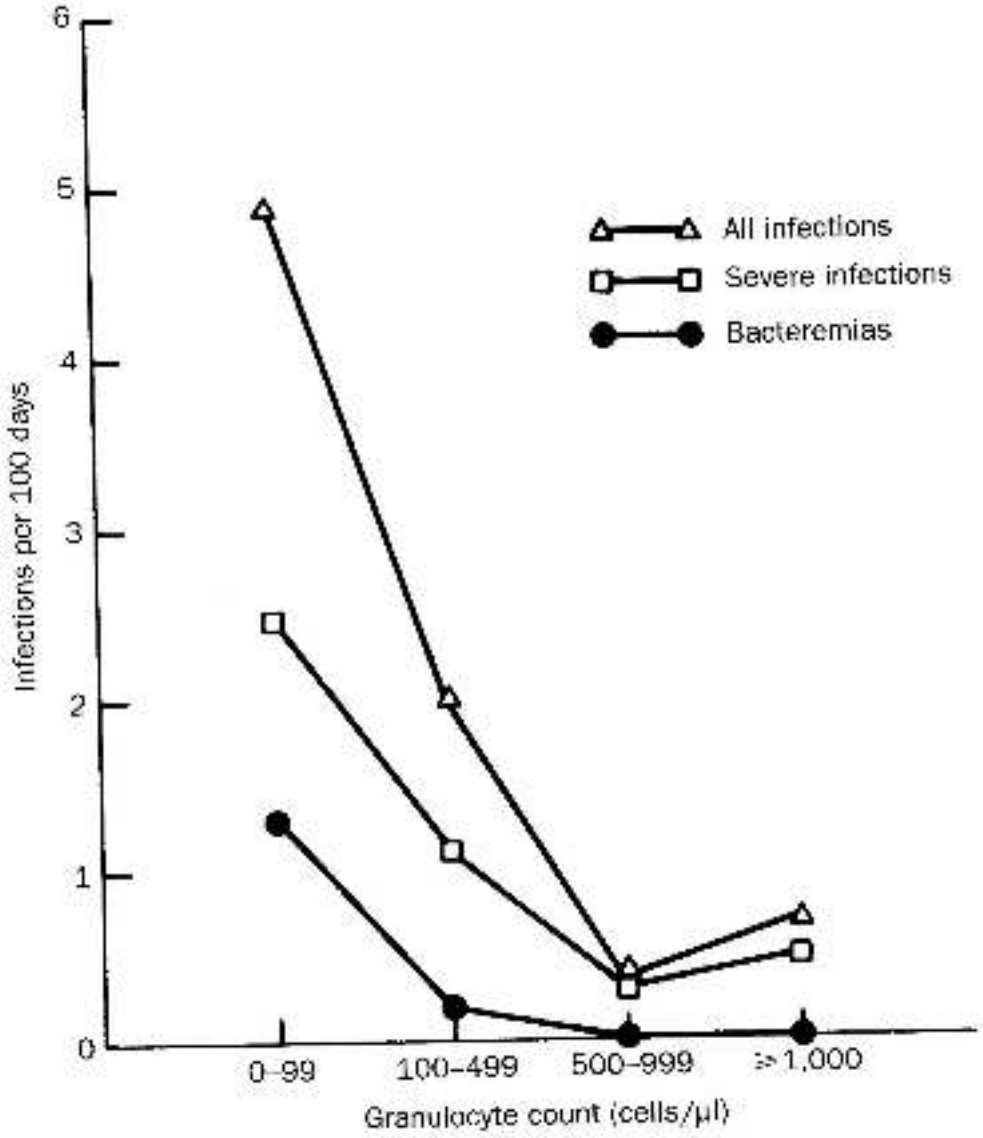

Bodey GP, et al. Ann Intern Med 1966;328-340

ORIGINAL ARTICLE ARCHIVE

Empiric Therapy with Carbenicillin and Gentamicin for Febrile Patients with Cancer and Granulocytopenia

Stephen Schimpff, M.D., Winston Satterlee, M.D., Viola Mae Young, Ph.D., and Arthur Serpick, M.D.

N Engl J Med 1971; 284:1061-1065 | May 13, 1971

Abstract

Seventy-five acutely ill, febrile patients with cancer and granulocytopenia were treated empirically with a combination of carbenicillin and gentamicin for presumed bacterial infection. Cultures taken before the initiation of antibiotics subsequently documented the presence of infection in 48 of these patients, of whom 21 were shown to have *Pseudomonas aeruginosa* infections. Fourteen of these patients with pseudomonas infections had complete improvement,

J Infect Dis. 1974 Nov;130 Suppl(0):S24-31.

Significance of Pseudomonas aeruginosa in the patient with leukemia or lymphoma.

Schimpff SC, Greene WH, Young VM, Wiernik PH.

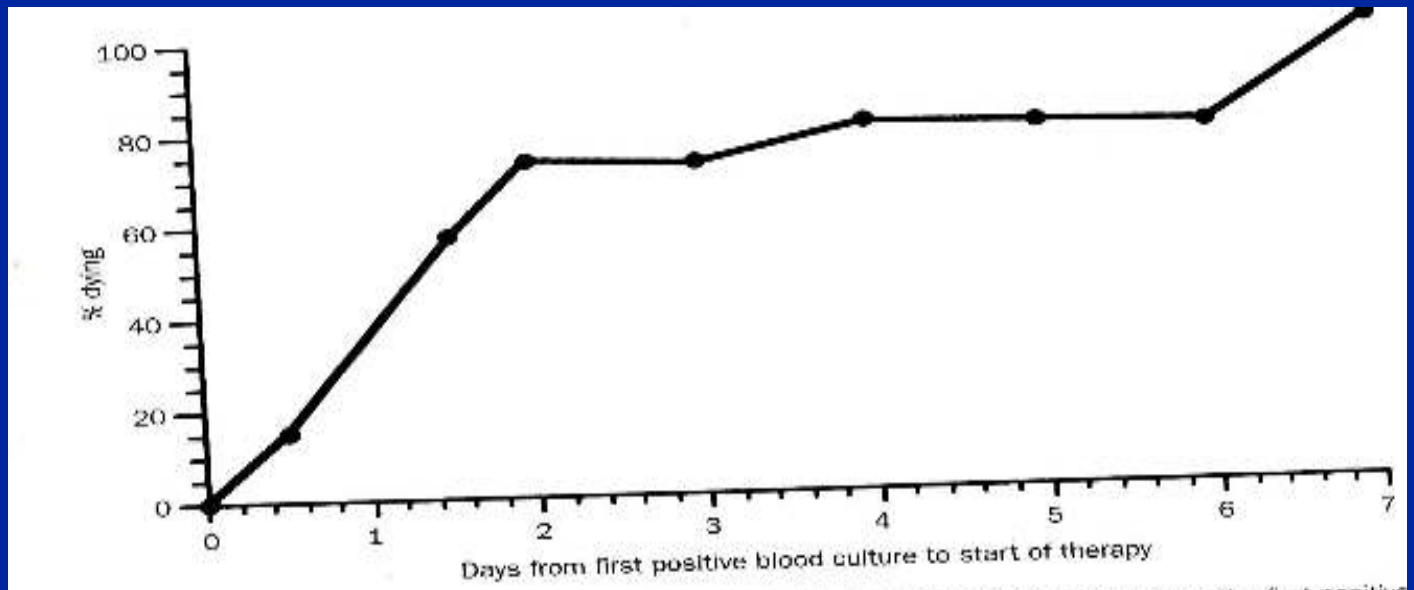

Figure 1.4 *Ps. aeruginosa* bacteremia. Mortality is related to time of onset of therapy after the first positive blood culture. Reprinted with permission from Bodey GP, Jadeja L, Elting L, *Pseudomonas* bacteremia: retrospective analysis of 410 episodes. *Arch Intern Med* 1985; **145**: 1621–9. Copyright 1985, American Medical Association.

EORTC

- *The International Antimicrobial Therapy Cooperative Group* (IATCG), 1973
- *The Invasive Fungal Infection Group* (IFIG), 1995
- İki Grup 2004 yılında birleşti: Infectious Disease Group (IDG)
- Grup içinde Avrupa, Kuzey Amerika ve Orta Doğu'dan, >30 ülkeden uzmanlar

J.M. Andrien & R. Paulus, Centre Hospitalier Peltzer-La Tourelle, Verviers, Belgium – M. Aoun, F. Crockaert, J. Gérain, J. Klastersky & F. Meunier, Institut Jules Bordet, Bruxelles, Belgium – F. Jacobs, A. Kentos & J.-P. Thys, Hôpital Universitaire Erasme, Bruxelles, Belgium – Z. Berneman, Universitair Ziekenhuis, Edegem, Belgium – R. De Bock, Algemeen Ziekenhuis Middelheim, Antwerpen, Belgium – A. Ferster, Hude, Bruxelles, Belgium – V. Grek, CHU Liège, Liège, Belgium – J.C. Legrand, Hôpital Civil de Charleroi, Charleroi, Belgium – A. Van Hoof & H. Van Landuyt, AZ Sint Jan Brugge, Bruges, Belgium – G. Bodek, Ottawa Civic Hospital, Ottawa, Canada – R. Feld & H. Messner, Princess Margaret Hospital, Toronto, Canada – G. Garber, Ottawa General Hospital, Ottawa, Canada – P. Hazell, Victoria General Hospital, Winnipeg, Canada – R. Horn, Royal Victoria Hospital, Montréal, Canada – M. Laverdière & D. Phaneuf, Hôtel Dieu Montréal, Montréal, Canada – T. Louie, Health Sc. Center of Winnipeg, Winnipeg, Canada – L. Mandell, Hamilton Civil Hospital Henderson, Hamilton, Canada – G. Evans & J. Pater, Kingston General Hospital, Kingston, Canada – G. Taylor, Cross Cancer Insitute, Edmonto, Canada – A. Rachlis, Sunnybrock Medical Center, Toronto, Canada – S.D. Shafran, University of Saskatchewan, Saskatoon, Canada – H. Kubesova & A. Oborilova, Masaryk University Hospital, Brno, Czech Republic – J. Nikoskelainen, Turku University Central Hospital, Turku, Finland – J. Beytout, Hôtel Dieu Clermont-Ferrand / St. Vincent, Clermont-Ferrand, France – J.M. Estavoyer, CHU Besançon, Besançon, France – O. Lortholary & C. Laroche, Hôpital Universitaire Avicenne, Bobigny, France – W. Kern, University Hospital, Ulm, Germany – D. Nadal, Kinderspital Zürich, Zürich, Switerland – B. Sievers, Zentralkrankenhaus St.-Juergen, Bremen, Germany – C. Alexopoulos, Evangelismos Hospital, Athens, Greece – H. P. Bassaris & A. Skoutelis, Patras University Hospital, Patras, Greece – A. 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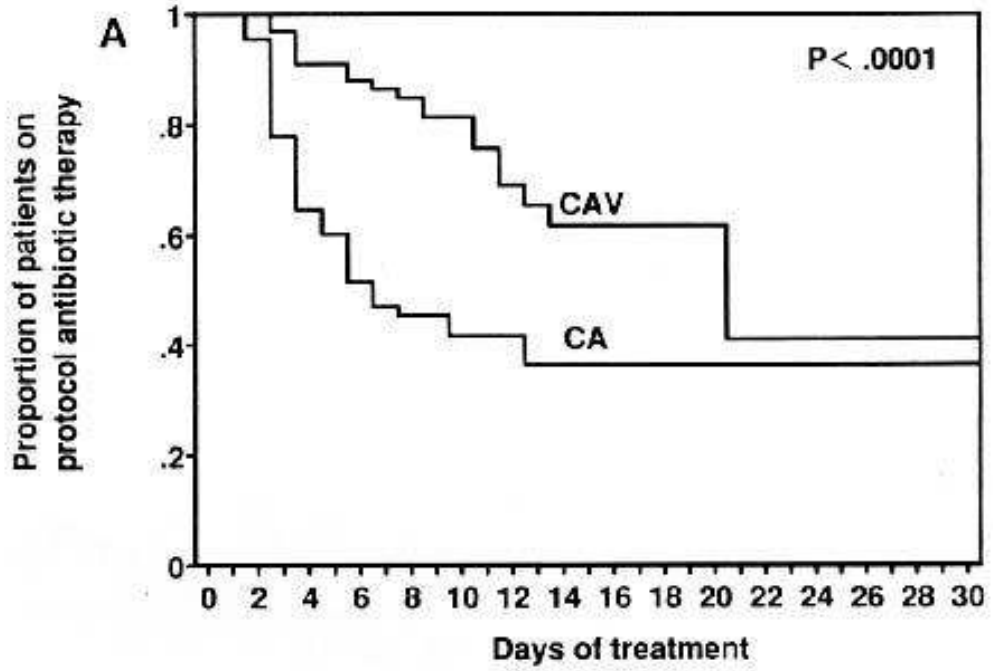
Zinner, Brown Univ. R. Williams Med. Center, Providence, USA

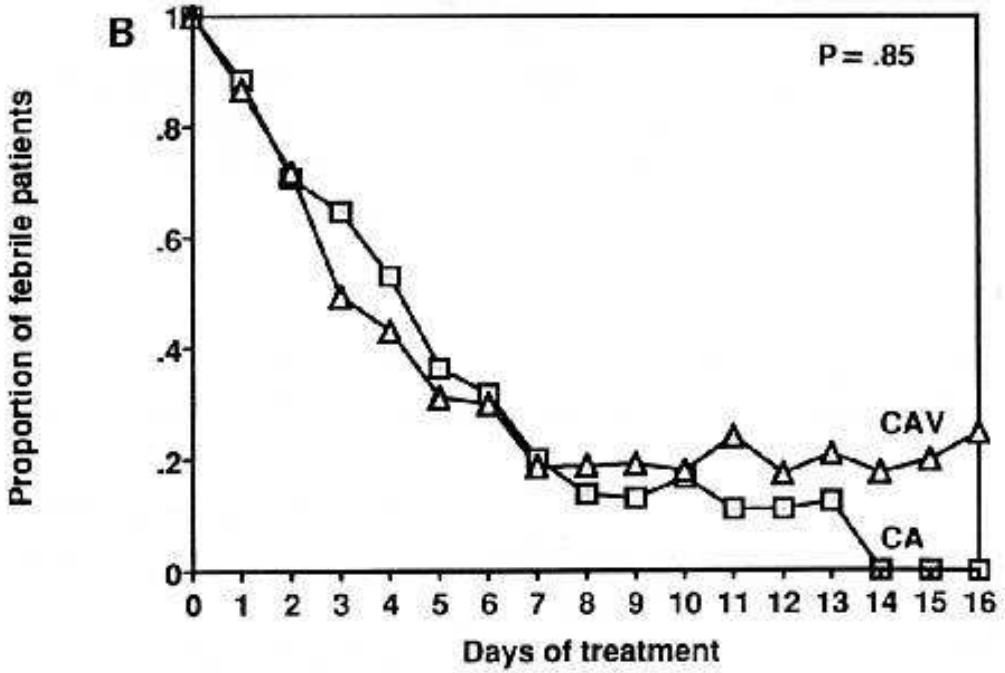
Başlangıç empirik tedavisine vankomisin eklenmesinin etkinliği

EORTC-IATG Çalışma V

Protocol 46851 (1985-1988)

J Infect Dis 1991,163: 951-958





CAV= seftazidim amikasin vankomisin

CA= seftazidim amikasin

J Infect Dis 1991; 163; 951-958

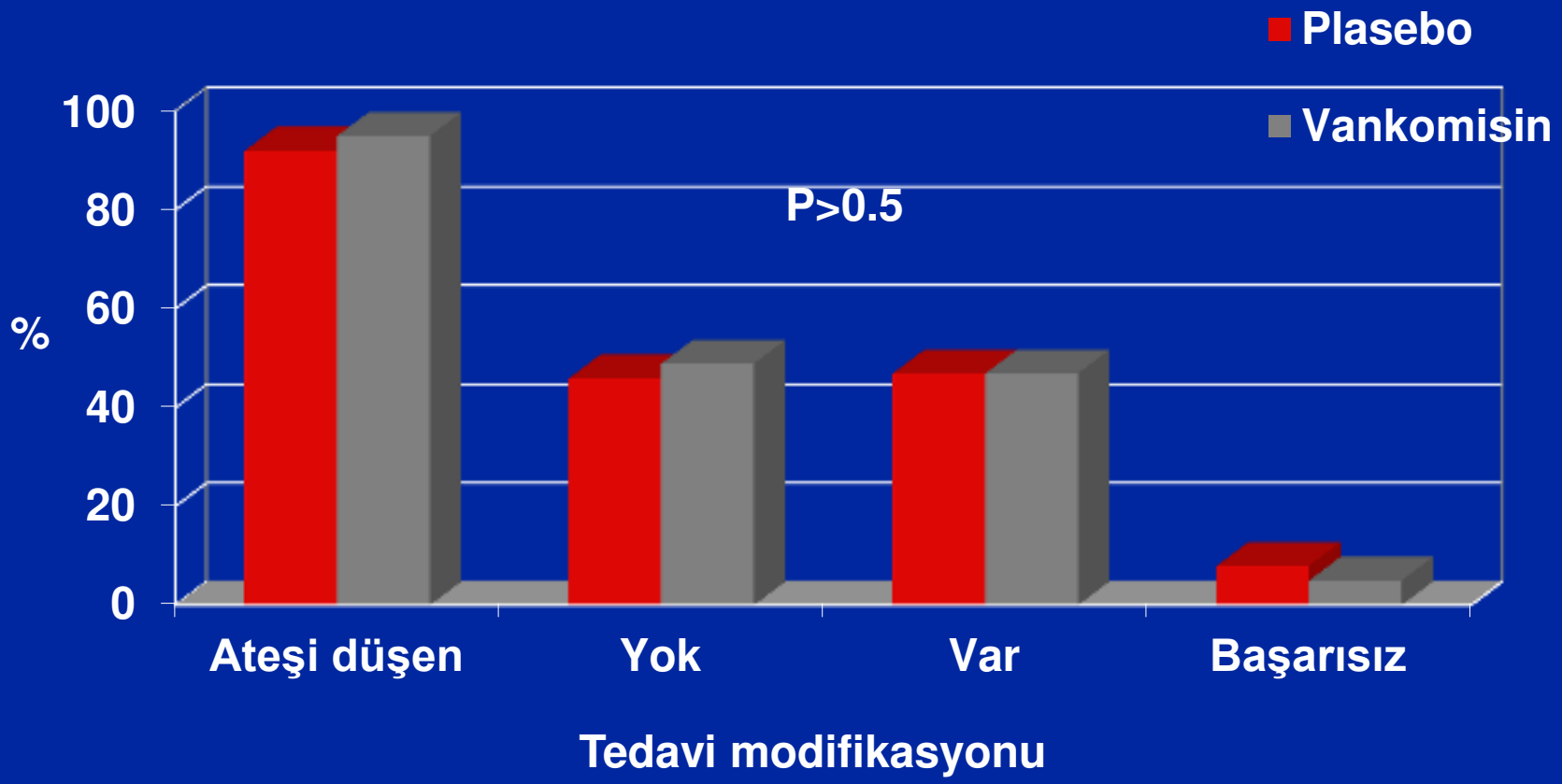
Başlangıçtaki empirik tedaviye 48-60. saatte empirik vankomisin eklenmesinin tedavi başarısına etkisi

EORTC-IATG Çalışma XIV

Protokol 46971 (1998-2000)

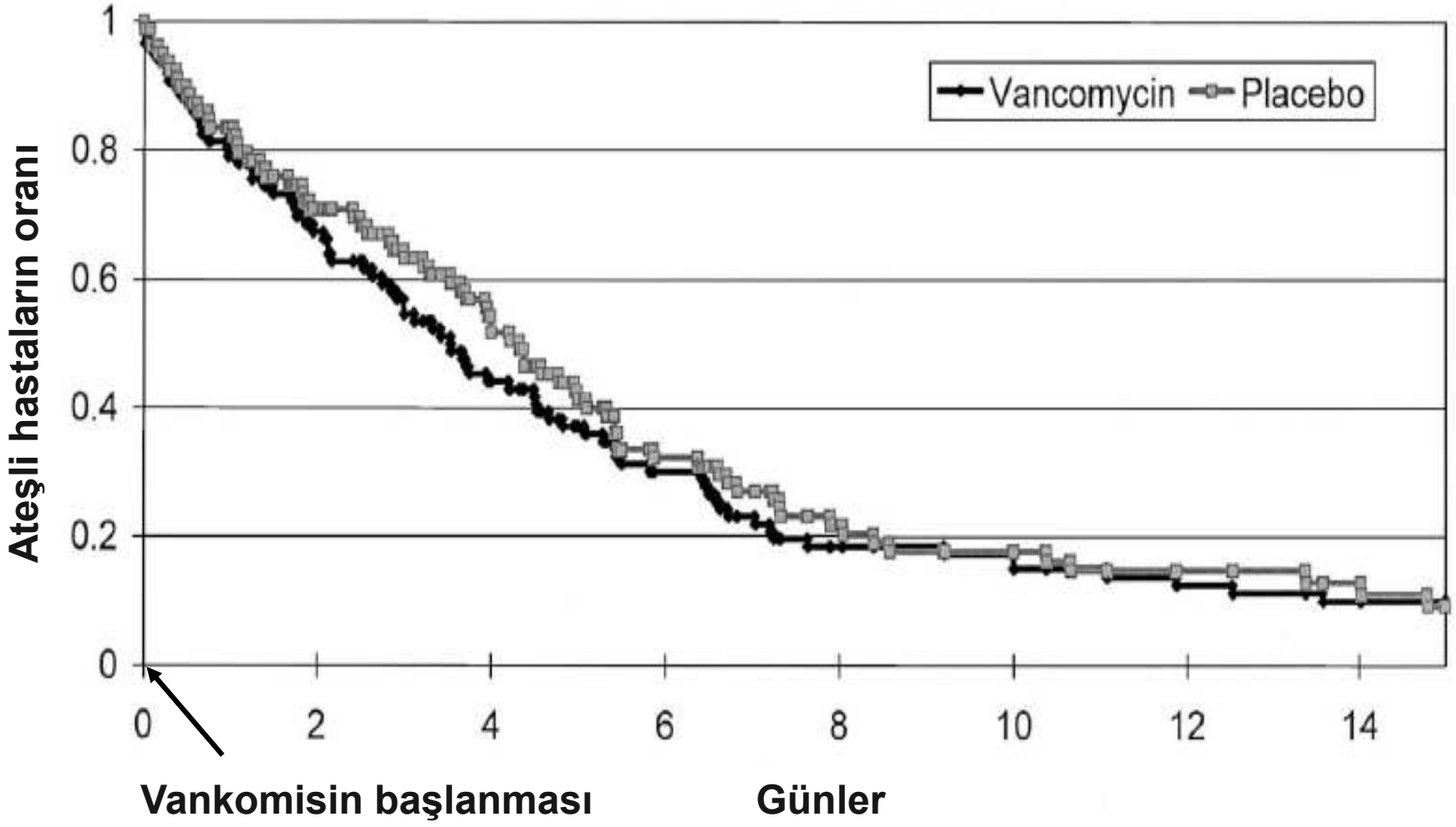
Clin Infect Dis 2003;37:382

Ateşi Süren Hastalarda Vankomisin ve Plasebo Kıyaslaması



Cometta A, et al. Clin Infect Dis 2003;37:382

Ateşin düşme zamanı



Cometta A, et al. Clin Infect Dis 2003;37:382

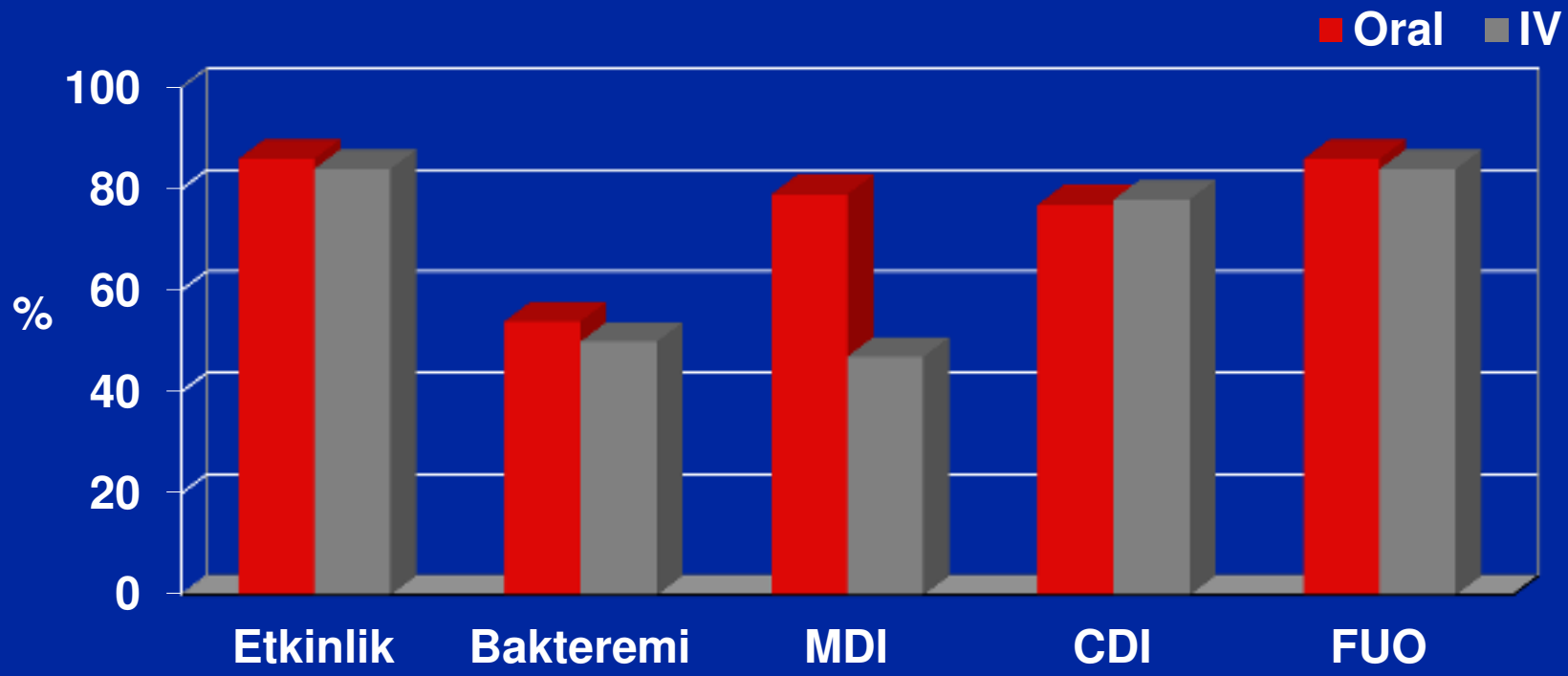
Düşük riskli hastalarda oral amoksisilin/klavulanat ve siprofloksasin kombinasyonunun iv seftriakson-amikasin ile kıyaslanması

EORTC-IATG Çalışma XII

Protocol 46951 (1995-1997)

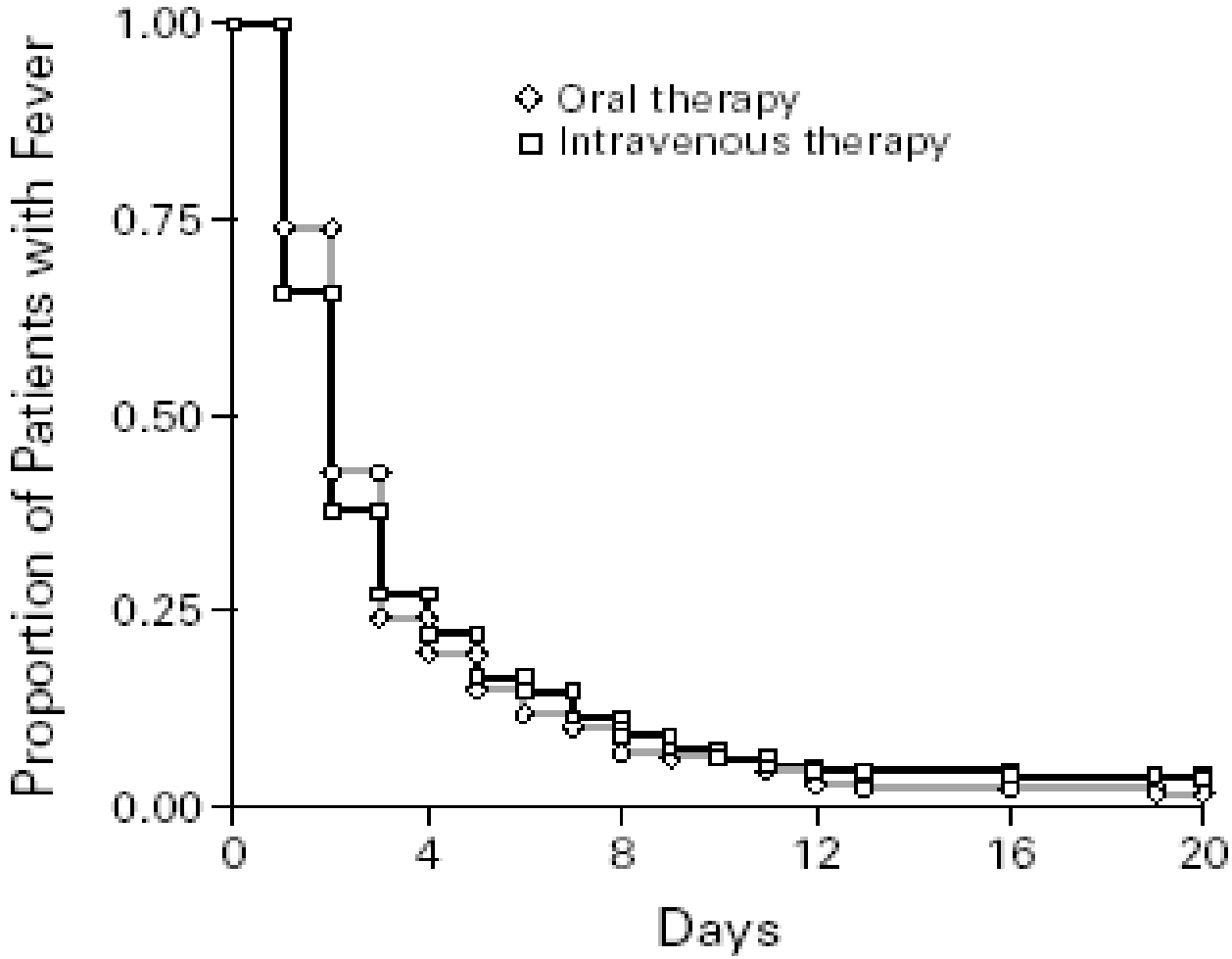
N Engl J Med 1999;341:312

Düşük Riskli Hastalarda Oral Tedavi ile Iv Tedavinin Kıyaslanması



Kern WV, et al. N Engl J Med 1999;341:312

Ateşin Düşme Zamanı



No. at Risk						
Oral therapy	177	43	18	8	4	3
Intravenous therapy	176	48	20	9	8	7

Kern WV, et al. N Engl J Med 1999;341:312


26 2 61

Hacettepe Tıp Dergisi
Cilt: 23 / Sayı: 1 / Ocak 1993 / ss. 71 – 87

Nötropenik Hastalarda Ateş

Dr. Murat Akova* / Dr. Erdal Akalın**

Nötropeni, değişik klinik tablolar sonucunda ortaya çıkabilen ve altta yatan hastalığın prognozunu önemli ölçüde etkileyen bir bulgudur. Akiz granülositopeni geçici olarak, kanserler veya bunların kemoterapileri sonucunda, değişik nedenlerle uygulanan immun-baskılayıcı tedaviler sırasında, çeşitli ilaç reaksiyonları ve bazı infeksiyonlara bağlı olarak, otoimmun reaksiyonlar ya da splenomegali varlığında oluşurken, yine akiz fakat irreversibl biçimde aplastik anemili hastalarda görülebilir. Aynı tablo Fanconi anemisinde görüldüğü gibi konjenital olarak da ortaya çıkabilir. Bütün bu nedenler içinde günümüzde klinisyenin nötropeni ile en sık karşılaştığı durum kanser veya kanser kemoterapisi sonucunda gelişenidir. Öte yandan mutlak nötrofil sayısının 1000/mm³'ün altında olduğu bu hastalarda ateş klinik tabloya sıklıkla eşlik etmekte[1-5] ve çoğu zaman tanısal açıdan önemli sorunlara yol açmaktadır.[5-9] Ateşli nötropenik hastalarda ateş nedenleri beş ana başlık altında toplanabilir: Bakteremik infeksiyon; bakteremisiz, fakat mikrobiyolojik olarak kanıtlanmış infeksiyon; klinik olarak tanınan infeksiyon; muhtemel, fakat kanıtlanmamış infeksiyon; infeksiyon dışı nedenler (Şekil 1).[10] Şekilde de görüldüğü üzere yaklaşık % 60 vakada ateşin nedeni, ya mikrobiyolojik ya da klinik olarak kanıtlanan infeksiyondur.

Nötropeni ve İnfeksiyon

Nötropeni, infeksiyona neden olan en önemli risk faktörüdür.[1, 4, 8, 11-14] İnfeksiyon sıklığı ve ciddiyeti mutlak granülosit sayısıyla ters orantılıdır.[13] Granülosit sayısı 500/mm³'ün altına düştüğünde infeksiyonlar belirgin biçimde artmakta, bu sayı 0-100/mm³ olduğunda ise ciddi infeksiyonlar ve bakteriyemi görülme oranı çok yükselmektedir.[10, 13-20] Şekil 2'de akut non-lenfoblastik lösemili (ANLL) 64 hastada gelişen infeksiyonlarla granülosit sayısı arasındaki ilişki gösterilmiştir.[16]

* Hacettepe Üniversitesi Tıp Fakültesi İç Hastalıkları Anabilim Dalı Araştırma Görevlisi.
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Hacettepe Tıp Dergisi
Cilt: 22 / Sayı: 3 / Temmuz 1991 / ss. 227-240

Ateşli Nötropenik Hastalarda İnfeksiyonların Dağılımı

218 Ateşli Atağın İncelenmesi

Dr. Murat Akova * / Dr. H. Erdal Akalın* / Dr. Necati Çatakoğlu / Dr. Alper Ak*** / Dr. Emin Kansu**** / Dr. Gülten Tekuzman**** / Dr. Ayşe Kars******

Özet

Hacettepe Üniversitesi Tıp Fakültesi Hastanesinde son iki yıl içinde yatarak izlenen 153 kanserli hastadaki 218 nötropeni atağında ateşe yol açan nedenler incelenmiştir. Vakaların % 83'ünde ateş infeksiyona bağlı bulunmuştur. İnfeksiyona en sık neden olan mikroorganizmalar gram-negatif bakteriler olup (% 84), bunlar içinde E. coli ve Enterobacter sp. başta gelmektedir. Saptanan gram-pozitif bakteriyemilerin hepsi intravasküler kateter kullanımıyla ilişkilidir. İnvaziv fungal infeksiyonlar da hastalarda önemli infeksiyon nedeni olup, tüm vakaların % 16'sında saptanmışlardır.

Nötropeni derecesiyle, infeksiyonların görülme sıklığı ve ağırlığı arasında yakın bir ilişki gözlenmiş olup, ağır nötropeni halinde bakteriyemi ve invaziv fungal infeksiyonlar, nötrofillerin başlangıçta 101-500/mm³ arasında bulunduğu hastalarda ise klinik olarak belirti veren infeksiyonlara daha sık rastlanmıştır.

Anahtar Kelimeler: Ateş, Nötropeni, Bakteriyemi, invaziv fungal infeksiyon.

Giriş

Kanserli nötropenik hastalarda ateşin en önemli nedeni infeksiyondur.[1-3] Primer hastalığa yönelik olarak uygulanan yoğun kemoterapi

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** İç Hastalıkları Uzmanı, Devlet Hastanesi, Seben, Bolu.
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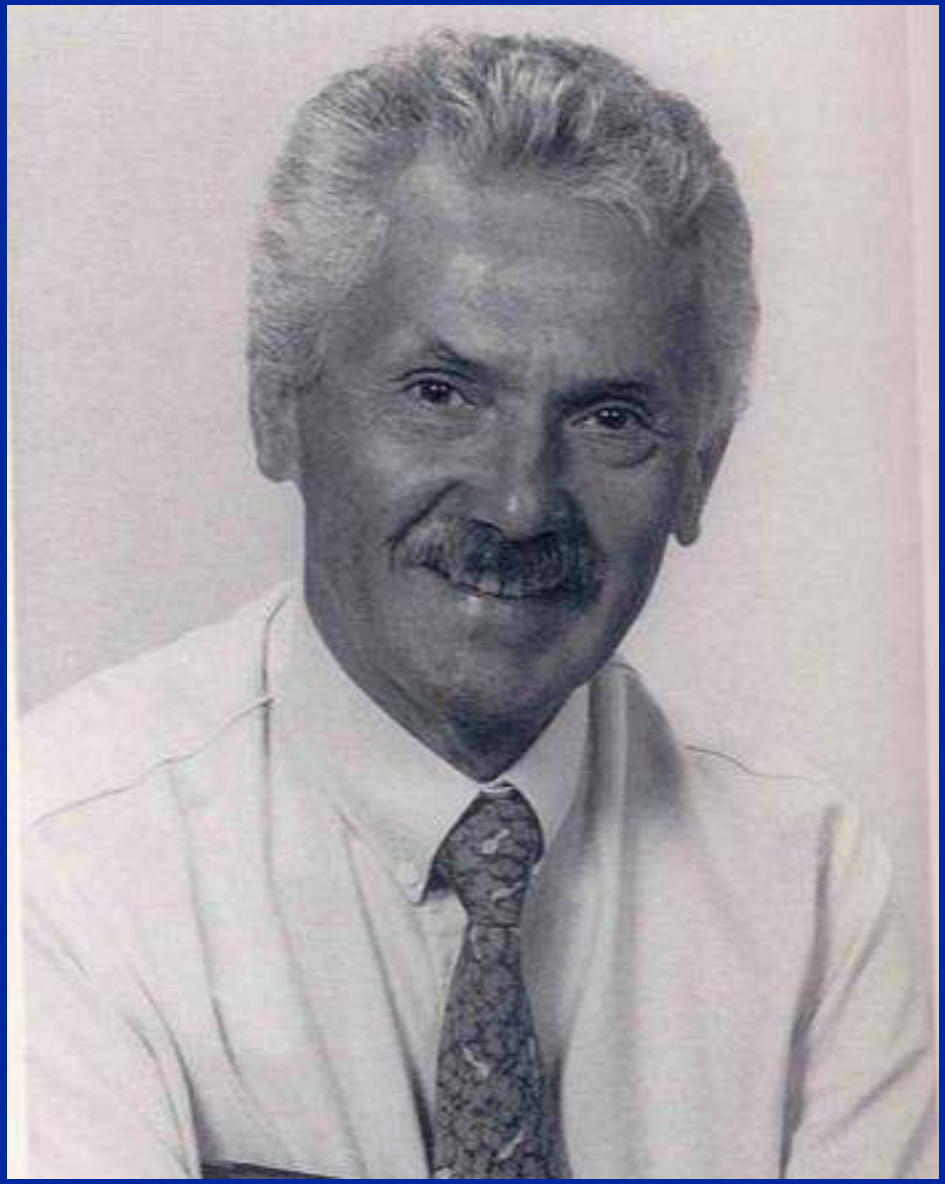

The Multinational Association for Supportive Care in Cancer Risk Index: A Multinational Scoring System for Identifying Low-Risk Febrile Neutropenic Cancer Patients

By Jean Klastersky, Marianne Paesmans, Edward B. Rubenstein, Michael Boyer, Linda Elting, Ronald Feld, James Gallagher, Jorn Herrstedt, Bernardo Rapoport, Kenneth Rolston, and James Talcott for the Study Section on Infections of Multinational Association for Supportive Care in Cancer

J Clin Oncol 2000;18:3038-3051

MASCC Skoru

Karakteristik	Puan
Hastalığın ciddiyeti	
Semptom yok	5
Orta şidette	5
Ciddi	3
Hipotansiyon yok	5
KOAH yok	4
Solid tümör veya fungal inf. yok	4
Dehidrasyon yok	3
Hastane dışından başvuru	3
<60 yaş hasta	2

Klastersky J, et al. J Clin Oncol 2000;18:3038

Published Ahead of Print on January 28, 2013 as 10.1200/JCO.2012.45.8109
The latest version is at http://jco.ascopubs.org/cgi/doi/10.1200/JCO.2012.45.8109

JOURNAL OF CLINICAL ONCOLOGY

ORIGINAL REPORT

Oral Antibiotics for Fever in Low-Risk Neutropenic Patients With Cancer: A Double-Blind, Randomized, Multicenter Trial Comparing Single Daily Moxifloxacin With Twice Daily Ciprofloxacin Plus Amoxicillin/Clavulanic Acid Combination Therapy—EORTC Infectious Diseases Group Trial XV

Winfried V. Kern, Oscar Marchetti, Lubos Drgona, Hamdi Akan, Michel Aoun, Murat Akova, Robrecht de Bock, Marianne Paesmans, Claudio Viscoli, and Thierry Calandra

See accompanying editorial doi: 10.1200/JCO.2012.47.5905; listen to the podcast by Dr Slavin at www.jco.org/podcasts

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Published online ahead of print at www.jco.org on January 28, 2013.

Written on behalf of the European Organisation for Research and Treatment of Cancer Infectious Diseases Group Trial XV investigators.

Supported by Grant No. [illegible] from Bayer Healthcare AG, Germany.

Presented in part at the 18th European Congress of Clinical Microbiology and Infectious Diseases, Barcelona, Spain, April 19-22, 2008, and the 48th Annual Interscience Conference on Antimicrobial Agents and Chemotherapy/Infectious Disease Society of America Joint Meeting, Washington, DC, October 25-28, 2008.

Authors' disclosures of potential conflicts of interest and author contributions are found at the end of this article.

Clinical trial information: NCT[illegible].

Corresponding author: Winfried V. Kern, MD, Department of Medicine, Division of Infectious Diseases and Center for Chronic Immunodeficiency, University Hospital, Hugstetter Strasse 55, D-79106 Freiburg i.Br., Germany; e-mail: [illegible]

[illegible]

DOI: 10.1200/JCO.2012.45.8109

ABSTRACT

Purpose
This double-blind, multicenter trial compared the efficacy and safety of a single daily oral dose of moxifloxacin with oral combination therapy in low-risk febrile neutropenic patients with cancer.

Patients and Methods
Inclusion criteria were cancer, febrile neutropenia, low risk of complications as predicted by a Multinational Association for Supportive Care in Cancer (MASCC) score > 20, ability to swallow, and ≤ one single intravenous dose of empiric antibiotic therapy before study drug treatment initiation. Early discharge was encouraged when a set of predefined criteria was met. Patients received either moxifloxacin (400 mg once daily) monotherapy or oral ciprofloxacin (750 mg twice daily) plus amoxicillin/clavulanic acid (1,000 mg twice daily). The trial was designed to show equivalence of the two drug regimens in terms of therapy success, defined as defervescence and improvement in clinical status during study drug treatment (< 10% difference).

Results
Among the 333 patients evaluated in an intention-to-treat analysis, therapy success was observed in 80% of the patients administered moxifloxacin and in 82% of the patients administered combination therapy (95% CI for the difference, −10% to 8%, consistent with equivalence). Minor differences in tolerability, safety, and reasons for failure were observed. More than 50% of the patients in the two arms were discharged on protocol therapy, with 5% readmissions among those in either arm. Survival was similar (99%) in both arms.

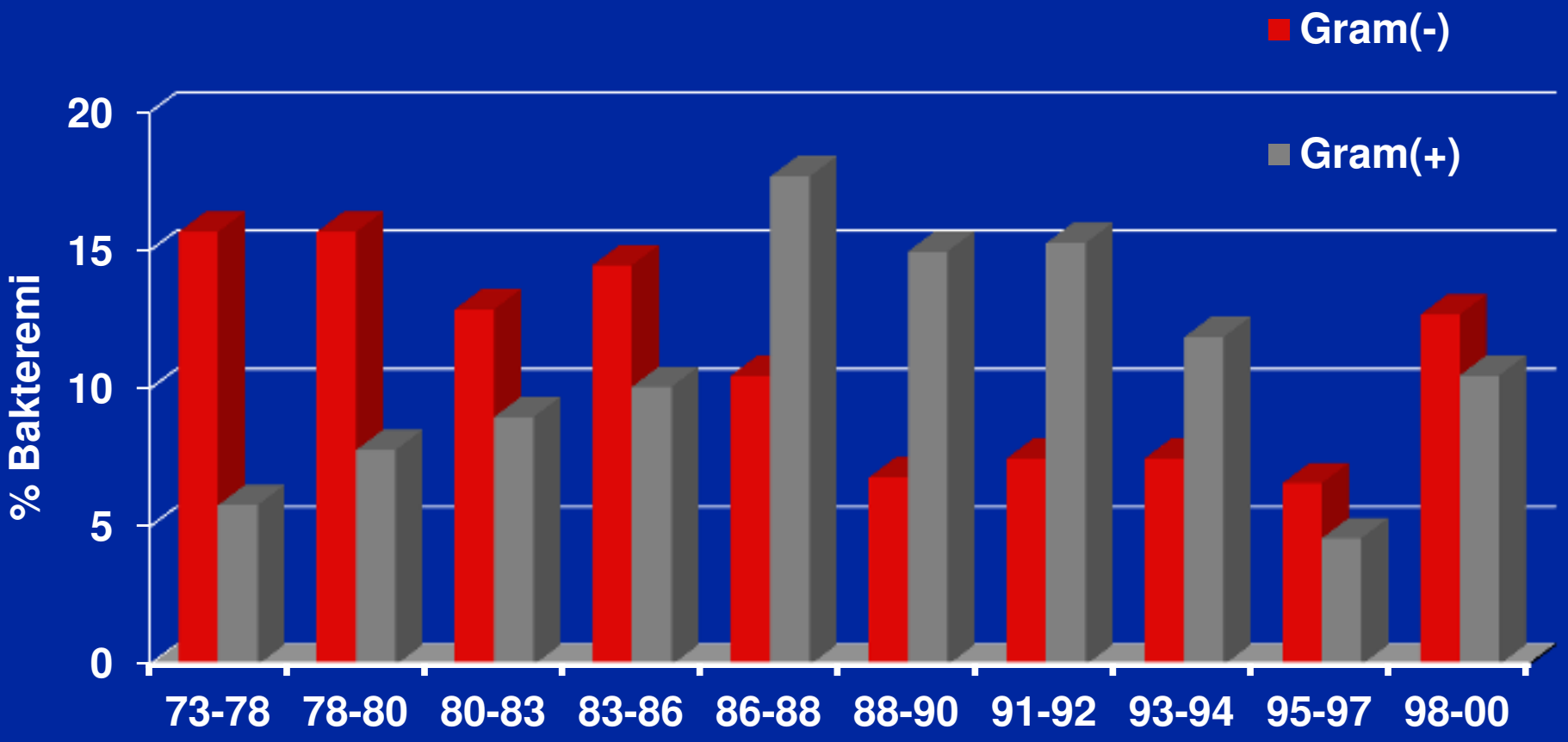
Conclusion
Monotherapy with once daily oral moxifloxacin is efficacious and safe in low-risk febrile neutropenic patients identified with the help of the MASCC scoring system, discharged early, and observed as outpatients.

J Clin Oncol 31. © 2013 by American Society of Clinical Oncology

INTRODUCTION

Prompt empirical antibiotic therapy of fever in patients with neutropenia has become the standard of care.[1-4] The response to empirical antibiotics differs according to underlying disease, type and aggressiveness of cytotoxic chemotherapy, and other factors.[5-12] The Multinational Association for Supportive Care in Cancer (MASCC) has developed a relatively simple algorithm for the prediction of a low risk of complications in adult patients with febrile neutropenia,[13] which has been validated in a few settings.[14-20] With the help of clinical information available at presentation, the MASCC algorithm defines a score that at a certain threshold predicts a < 10% complication rate, which should allow safe therapy for such low-risk febrile neutropenia in an outpatient setting. This approach has been found feasible and seems economically attractive because of reduced length of

EORTC-IATG Çalışmalarında Bakteremi Etkenleri



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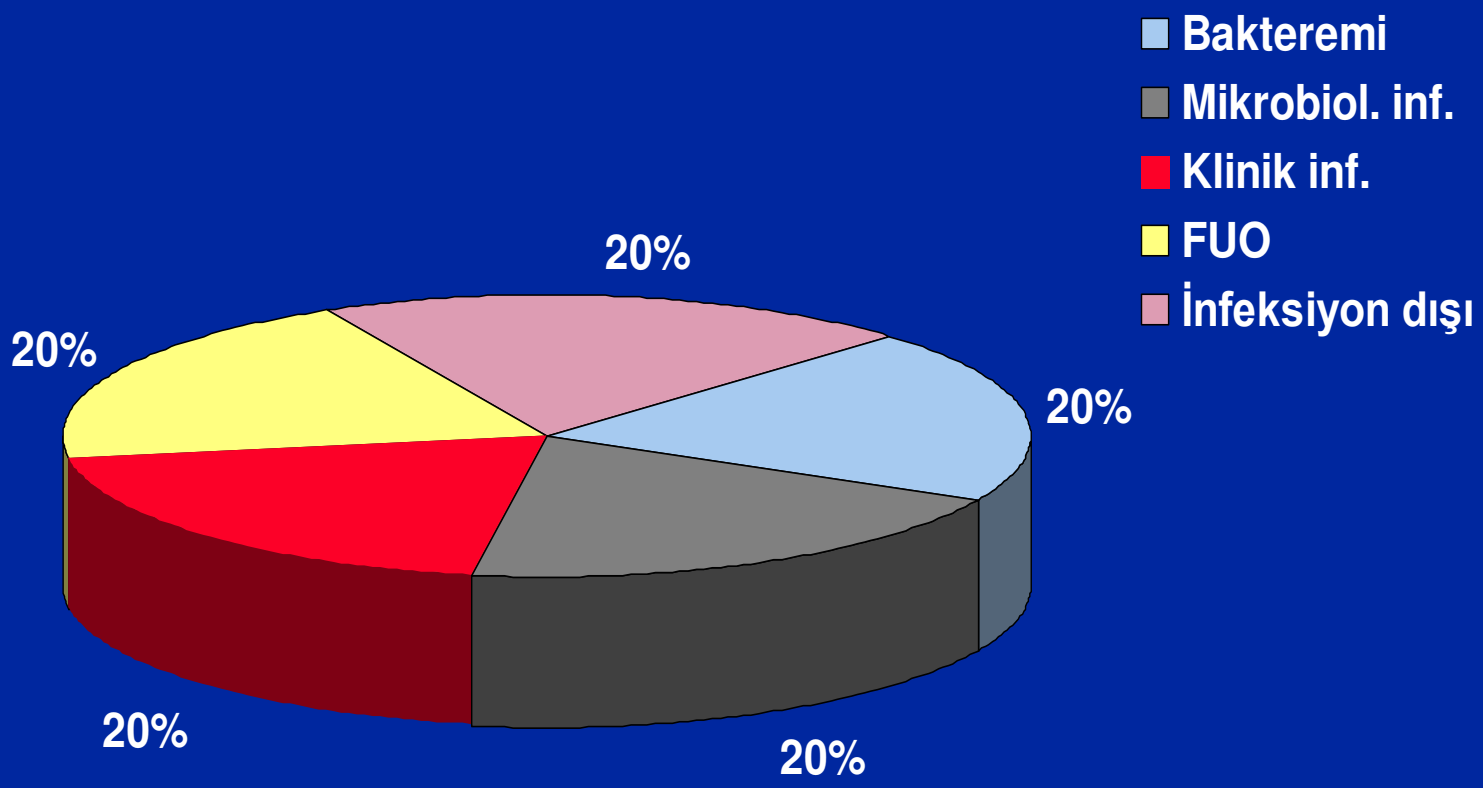
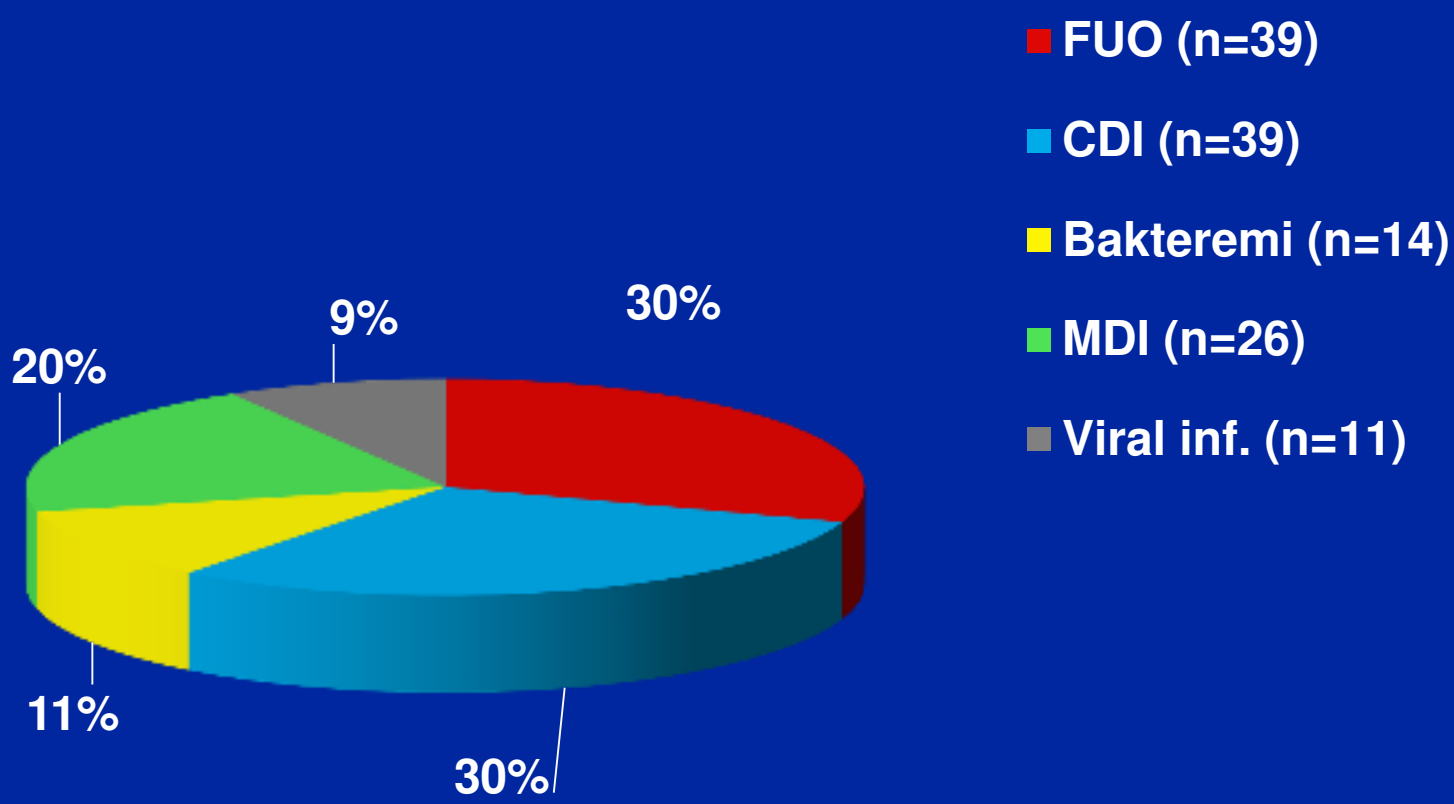


Sekonder İnfeksiyonlar IATG-EORTC

- **Çalışma popülasyonu**
  - IX ve XI no.lu çalışmalar
  - Randomize hasta sayısı 1971
  - İlk FEN atağı 1720
  - **Empirik tedaviye yanıt 836**
  - Sekonder infeksiyon 129 (%15)
  - FUO dışı sekonder inf. 90 (%11)

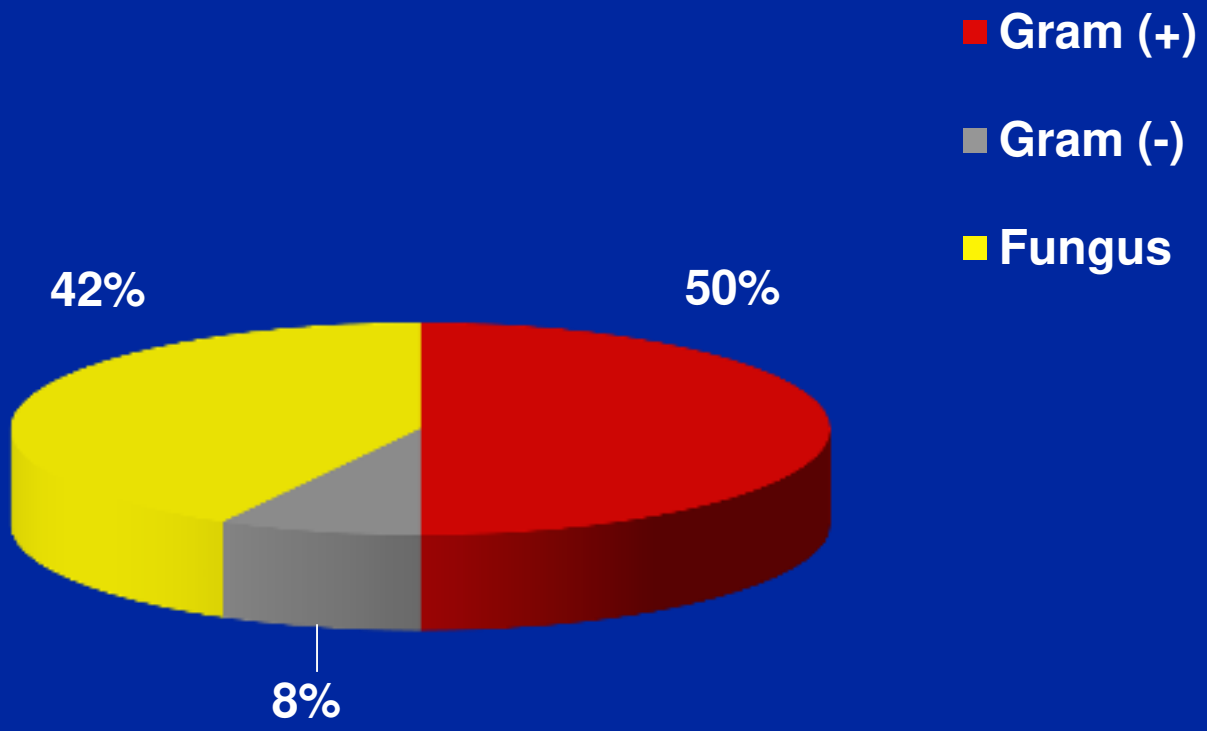
Akova M, et al. Clin Infect Dis 2005;40:239

Sekonder İnfeksiyonların Dağılımı



Akova M, et al. Clin Infect Dis 2005;40:239

İzole Edilen Mikroorganizmalar (n=50)



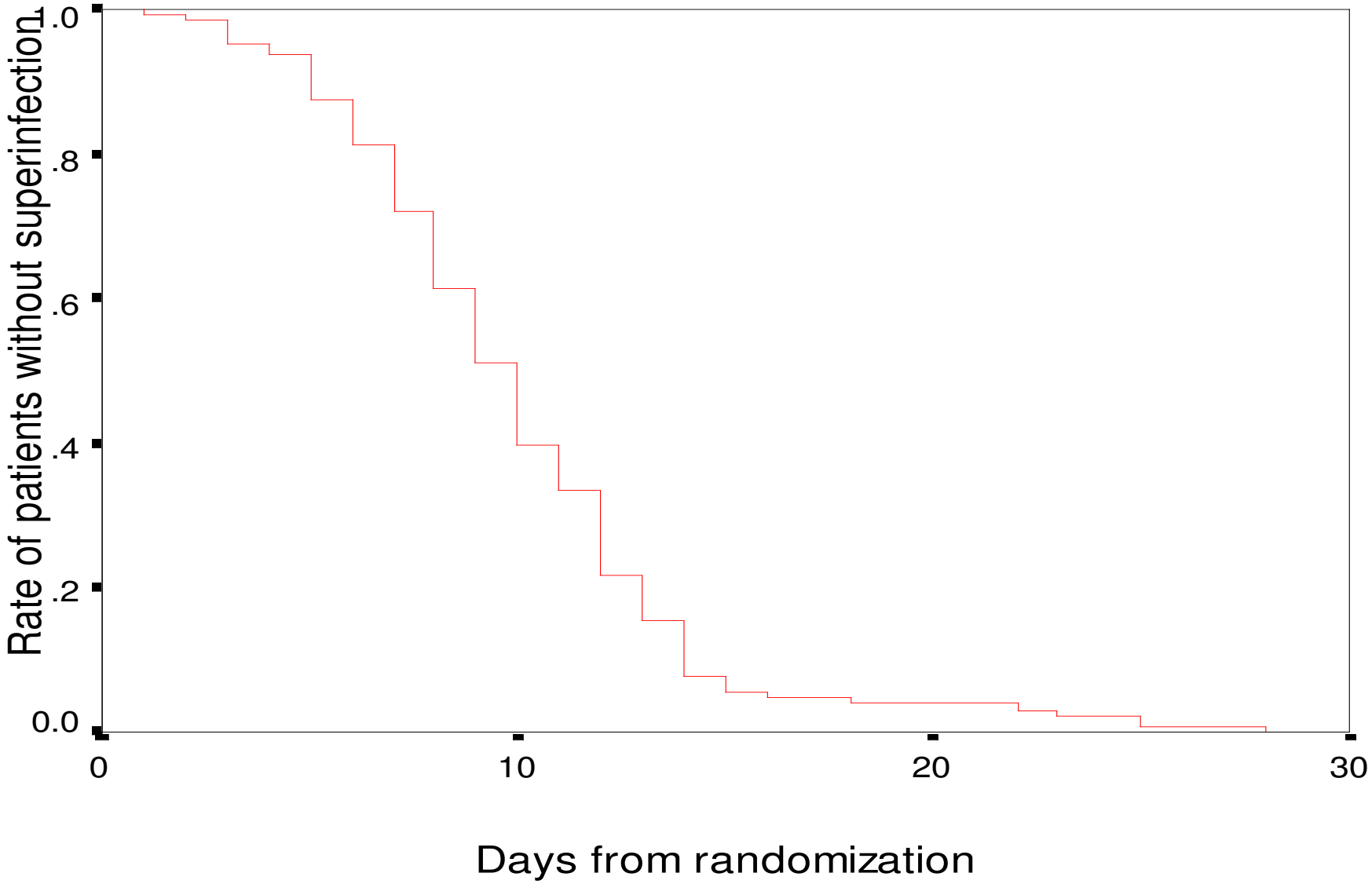
Akova M, et al. Clin Infect Dis 2005;40:239

“Multivariate” Risk Faktörleri

Değişken	OR	p
Randomizasyonda (n=836)		
>16 yaş	3.13	<.001
Akut lösemi, 1. indüksiyon	3.62	<.001
İ.v. kateter	2.38	.003
4. günde (n=822)		
>16 yaş	3.46	<.001
Akut lösemi, 1. indüksiyon	3.62	<.001
İ.v. kateter	2.38	.04
Nötrofil <100 mm^3	2.72	<.001
MDI veya FUO tanısı	2.56	.001

Akova M, et al. Clin Infect Dis 2005;40:239

Sekonder İnfeksiyon Gelişme Zamanı



Akova M, et al. Clin Infect Dis 2005;40:239

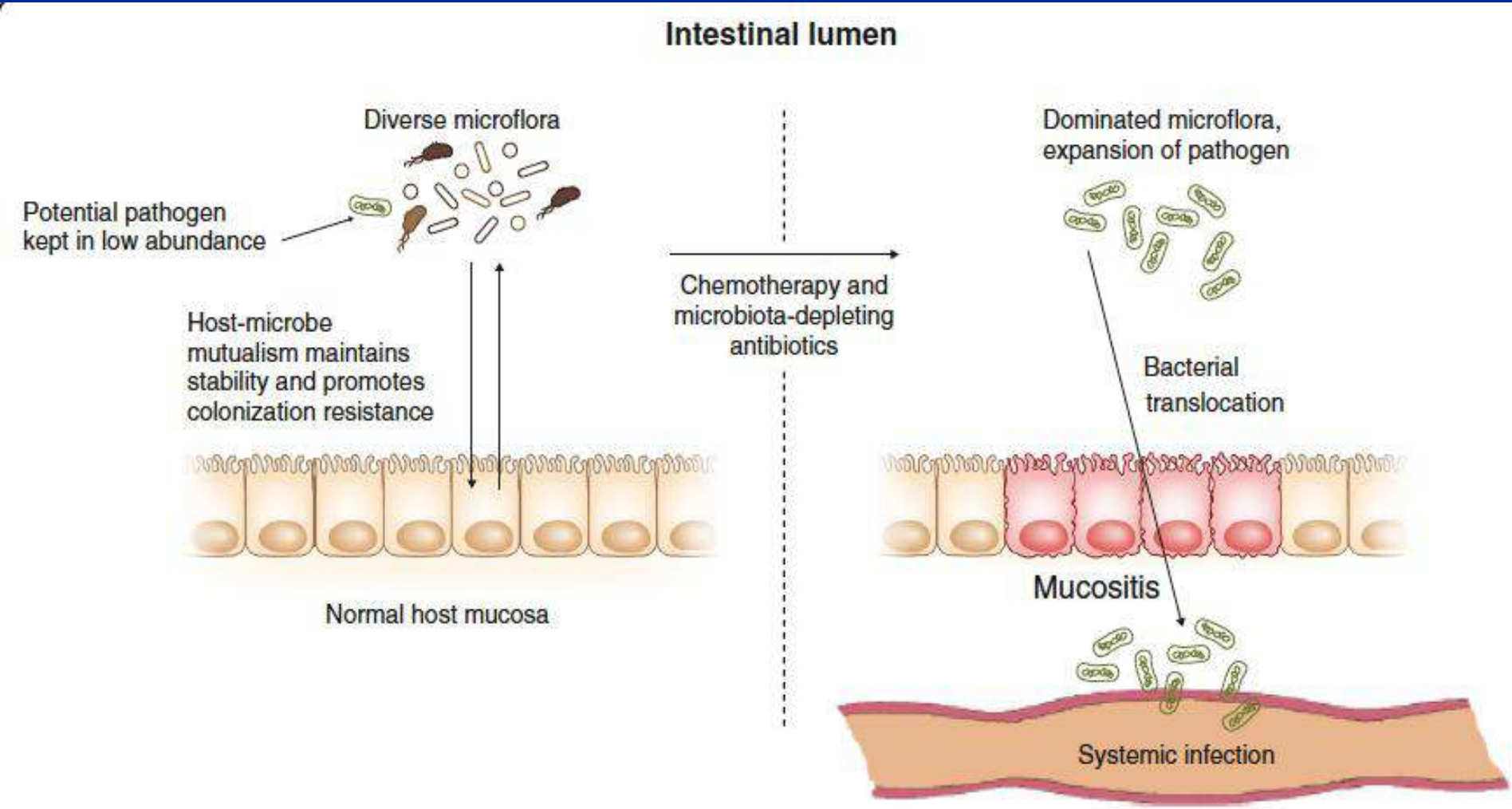
30. Günde Mortalite

	Sekonder İnfeksiyon	
	Var n=129	Yok n=707
30. günde sağkalım	122	697
İnfeksiyona bağlı ölüm	4	2
Diğer nedenle ölüm	3	8
Ölüm oranı (%)	5.4	1.4

p <.01

Akova M, et al. Clin Infect Dis 2005;40:239

Kemoterapiye Bağlı İntestinal Mikrobiyota Hasarı



Taur Y, Pamer EG. Genome Medicine 2016;8:40

PLOS | ONE

DOI:10.1371/journal.pone.0135756 August 13, 2015

RESEARCH ARTICLE

Bacterial Landscape of Bloodstream Infections in Neutropenic Patients via High Throughput Sequencing

Peter Gyarmati[1,2]*, Christian Kjellander[3☯], Carl Aust[4☯], Mats Kalin[5], Lars Öhrmalm[4], Christian G. Giske[1,2]

1 Karolinska Institutet, Department of Microbiology, Tumor and Cell Biology, Nobels väg 16, Stockholm, Sweden, 2 Karolinska University Hospital, Department of Clinical Microbiology L2:02, Stockholm, Sweden, 3 Karolinska Institutet, Department of Medicine, Division of Hematology, Stockholm, Sweden, 4 Karolinska Institutet, Department of Medicine, Solna, Infectious Diseases Unit, Center for Molecular Medicine, Karolinska University Hospital, Stockholm, Sweden, 5 Karolinska Institutet, Department of Infectious Diseases, Stockholm, Sweden

CrossMark

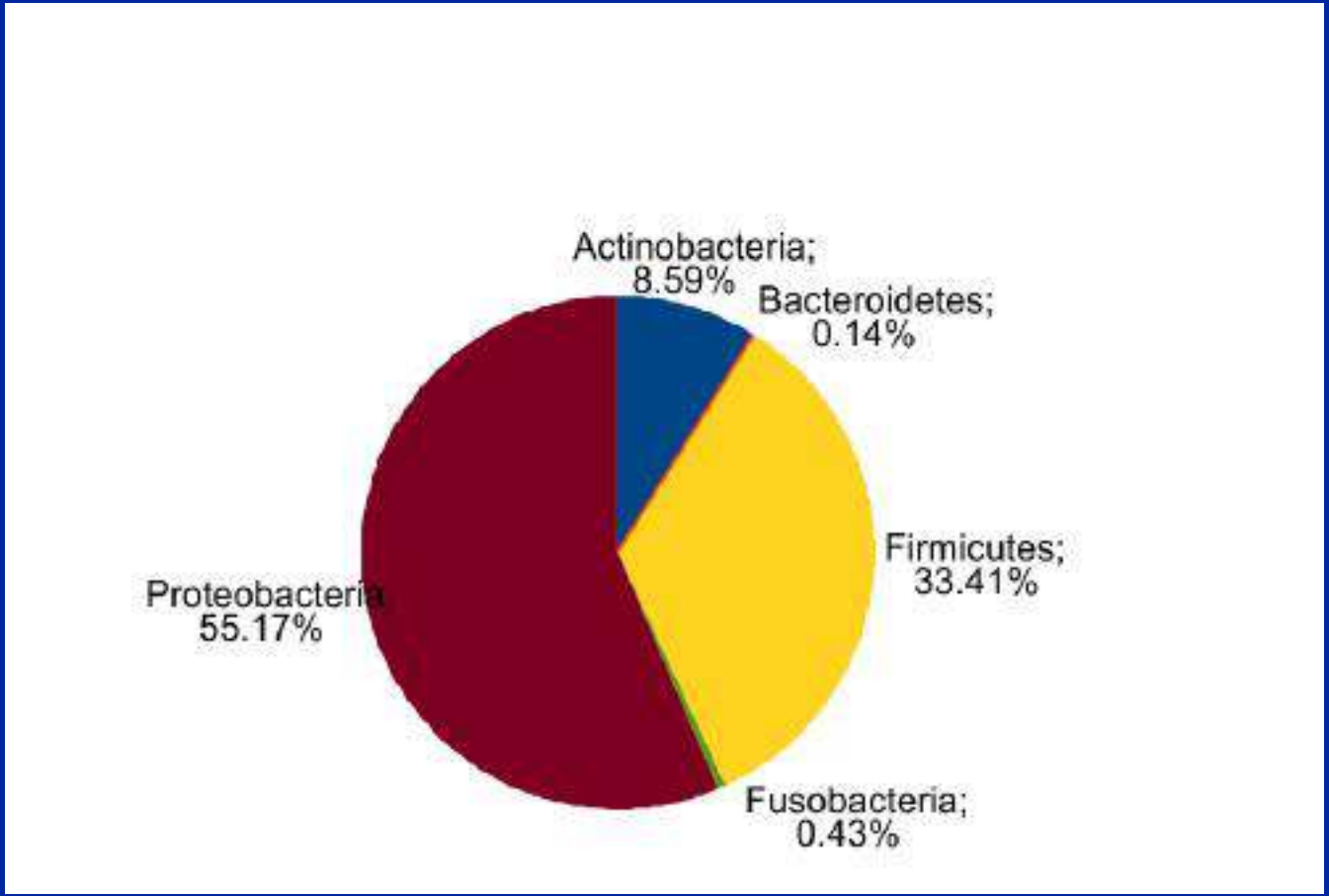
- **33 hematol. kanserli hasta, 130 kan örneği**
  - **62 kan kültürü pozitif**
  - **Tüm kan örneklerine 16sRNA PCR**
  - **PCR pozitif olanlara sekans analizi**

Saptanan Bakteriler

- Sekanslama ile
  - 5 şube (phyla), 30 cins (genera)
- Sadece kültürle
  - 2 şube, 4 cins

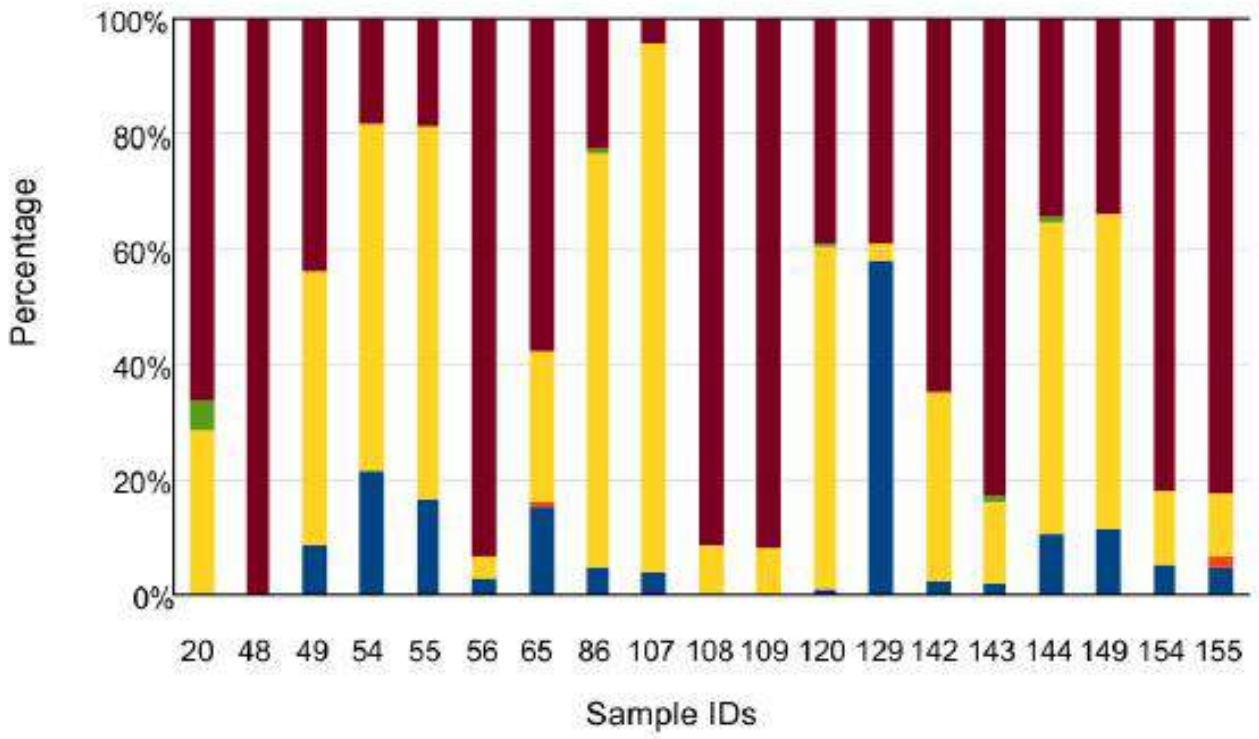
Gyarmati P, et al. PLoSONE. DOI:10.1371/journal.pone.0135756 August 13, 2015

Sekanslama ile Saptanan Bakteriler



Gyarmati P, et al. PLOSONE. DOI:10.1371/journal.pone.0135756
August 13, 2015

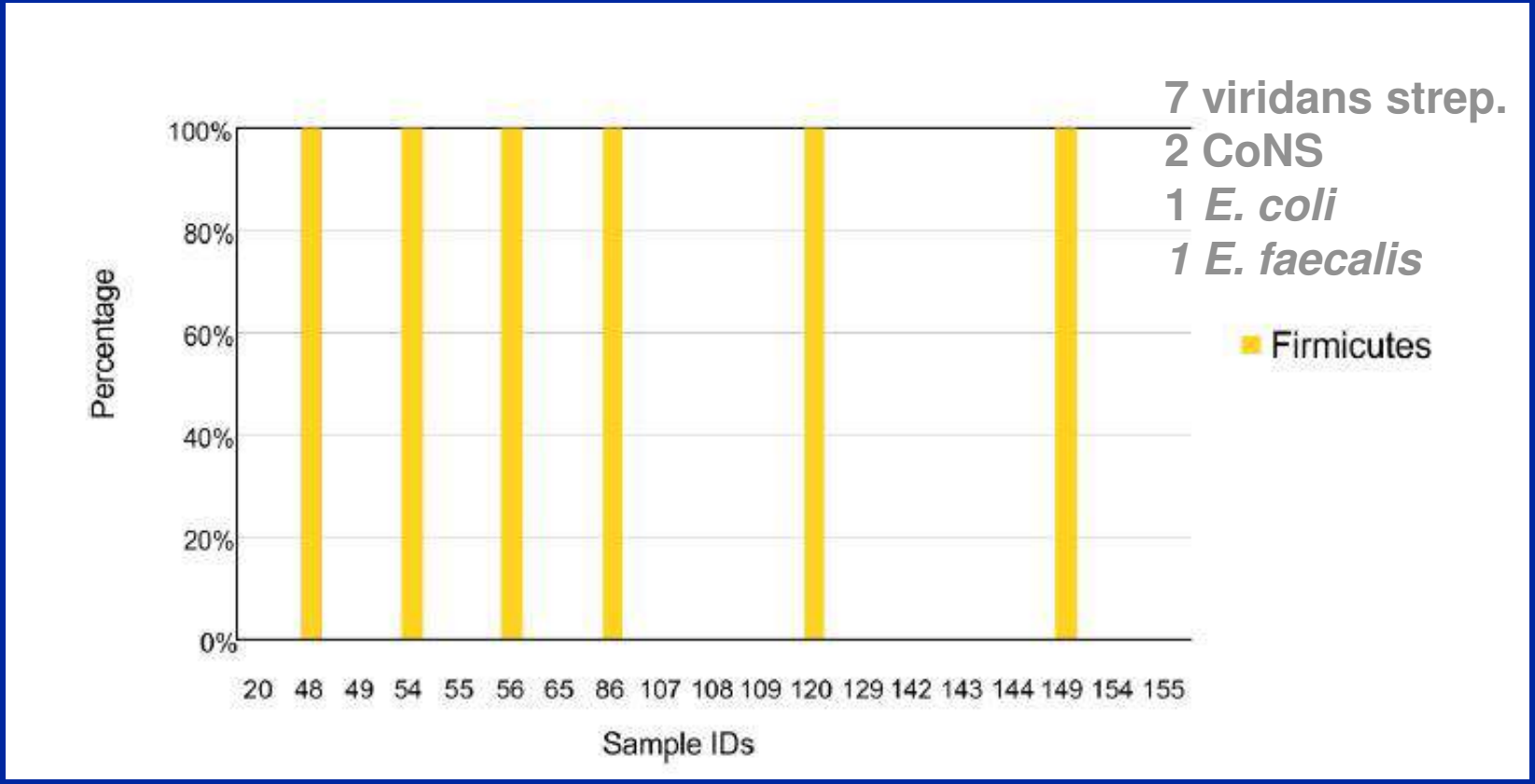
Sekanslama ile Hastalardan Elde Edilen Suşlar



En sık:
Pseudomonas
Streptococcus
Staphylococcus
Shewanella
Pelomonas
Propionibacter

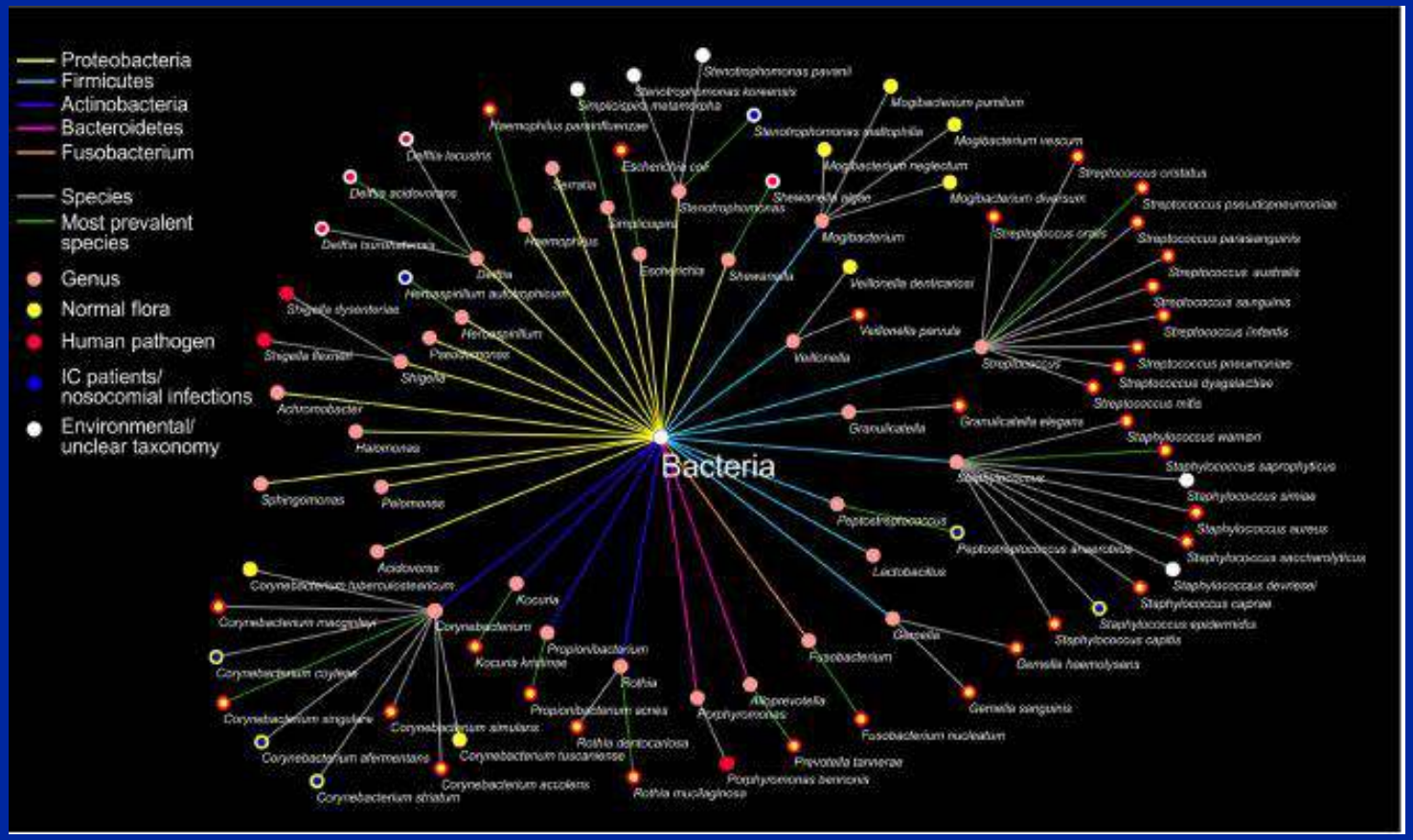
Gyarmati P, et al. PLOSONE. DOI:10.1371/journal.pone.0135756 August 13, 2015

Kan Kültürü ile Hastalardan Elde Edilen Suşlar



Gyarmati P, et al. PLOSONE. DOI:10.1371/journal.pone.0135756 August 13, 2015

Sekanslama ile Saptanan Bakteri Türleri



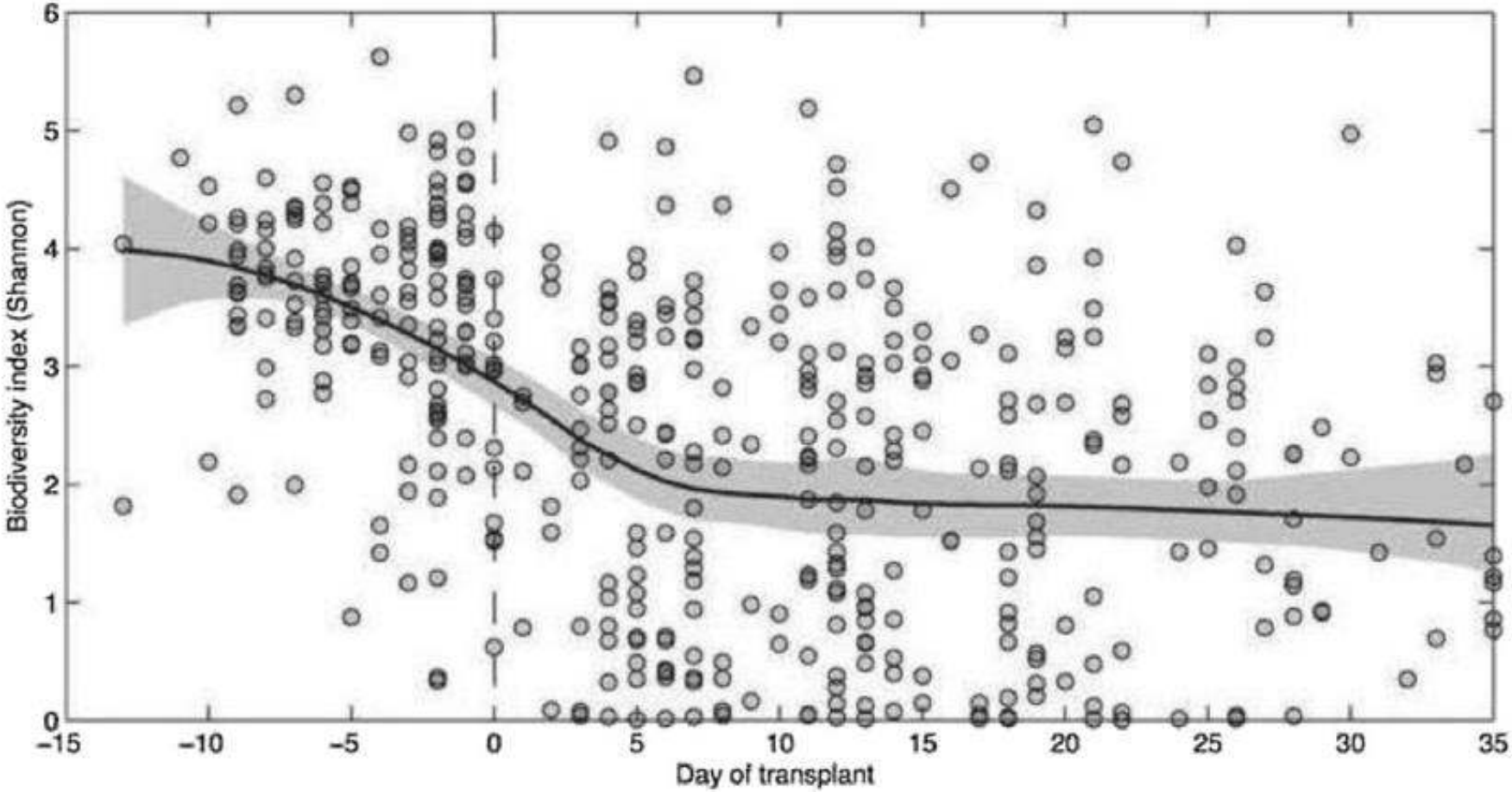
Gyarmati P, et al. PLOSONE. DOI:10.1371/journal.pone.0135756 August 13, 2015

Sonuçlar

- Febril nötropenili hastalarda bildiğimizden çok daha fazla bakteriyel etken var
- Etken profili inflamatuar barsak hastalığı veya mukozal infeksiyondakilere benzer

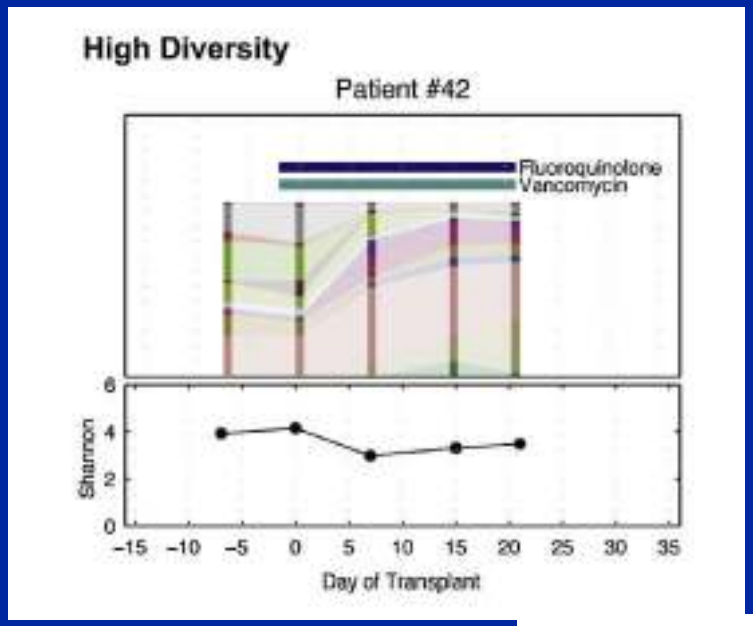
Gyarmati P, et al. PLOSONE. DOI:10.1371/journal.pone.0135756
August 13, 2015

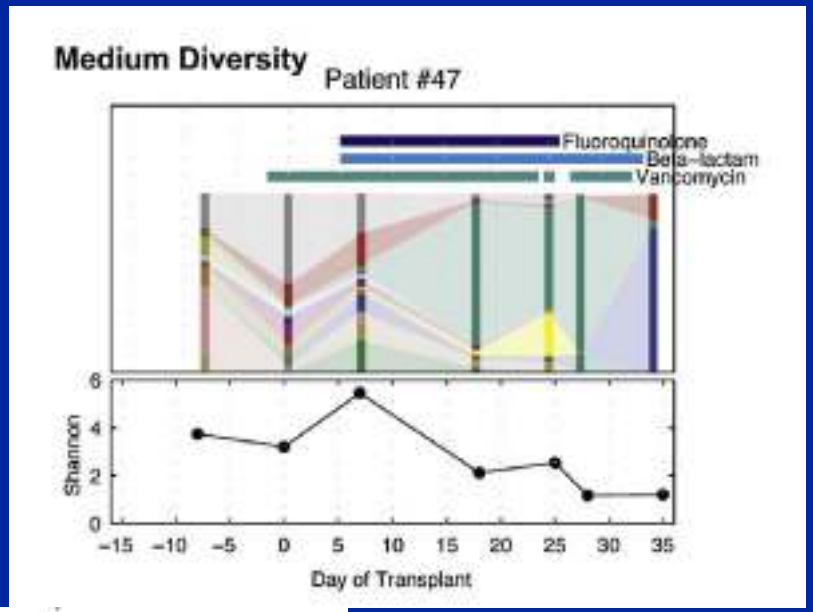
Allojeneik Kök Hücre Nakli Sonrası İntestinal Mikrobiyota Çeşitliliği

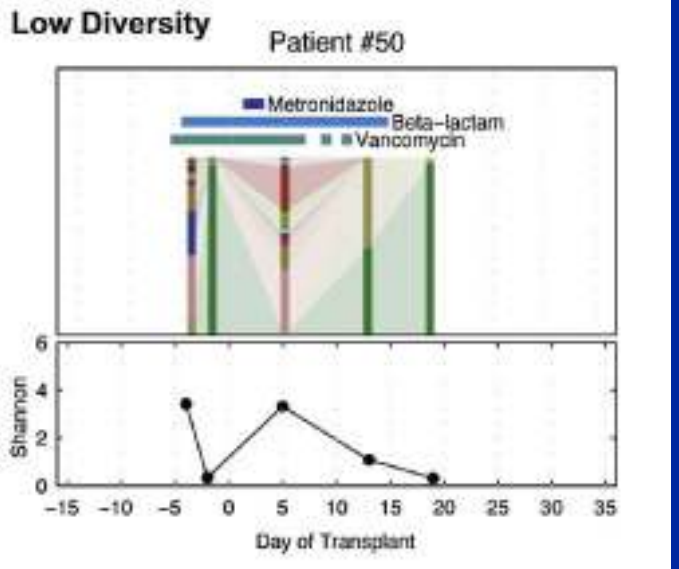


Taur Y, et al. Best Pract Res Clin Haematol 2015:28:155

Allo-KHN Sonrası İntestinal Mikrobiota Çeşitliliği

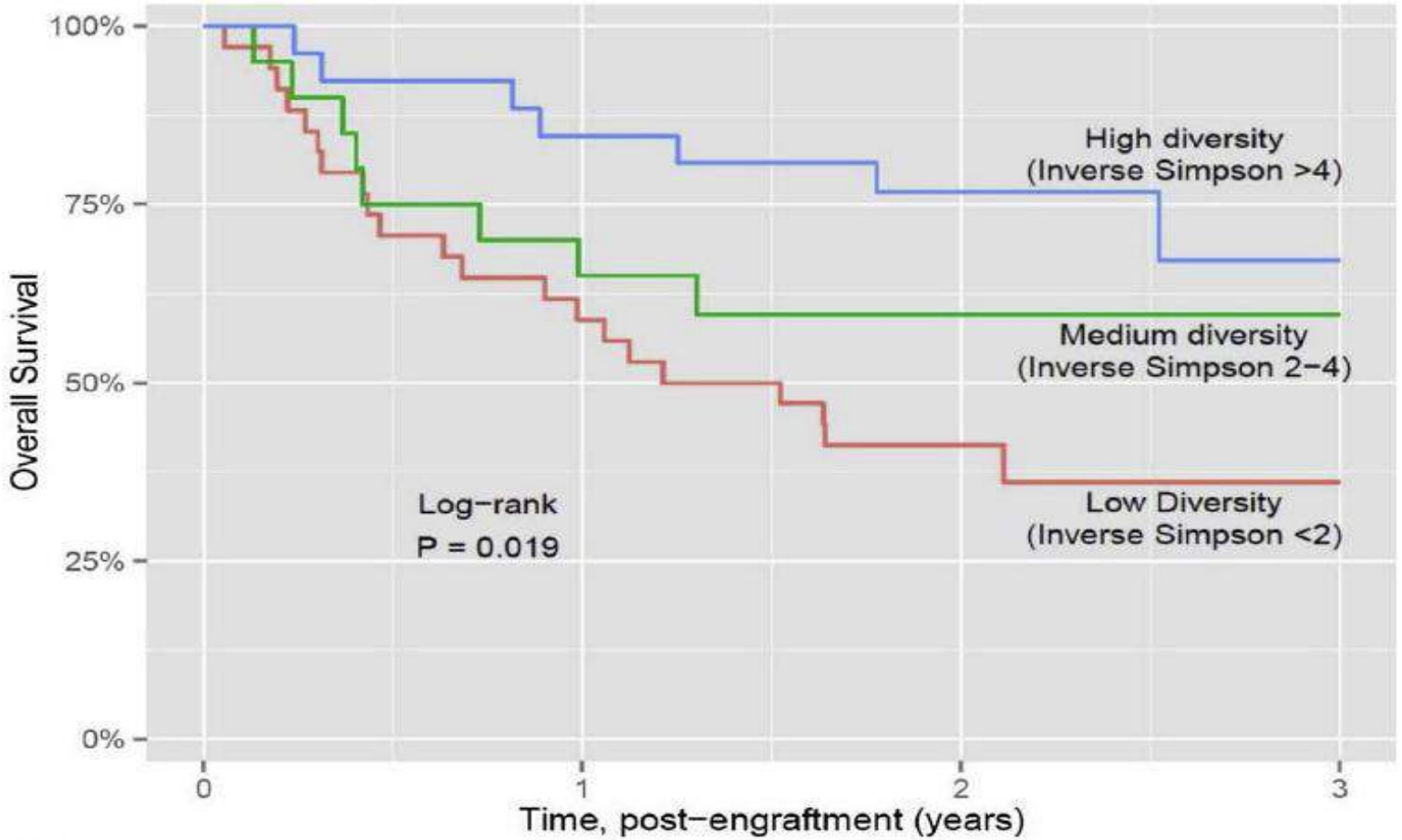






Taur Y, et al. Best Pract Res Clin Haematol 2015:28:155

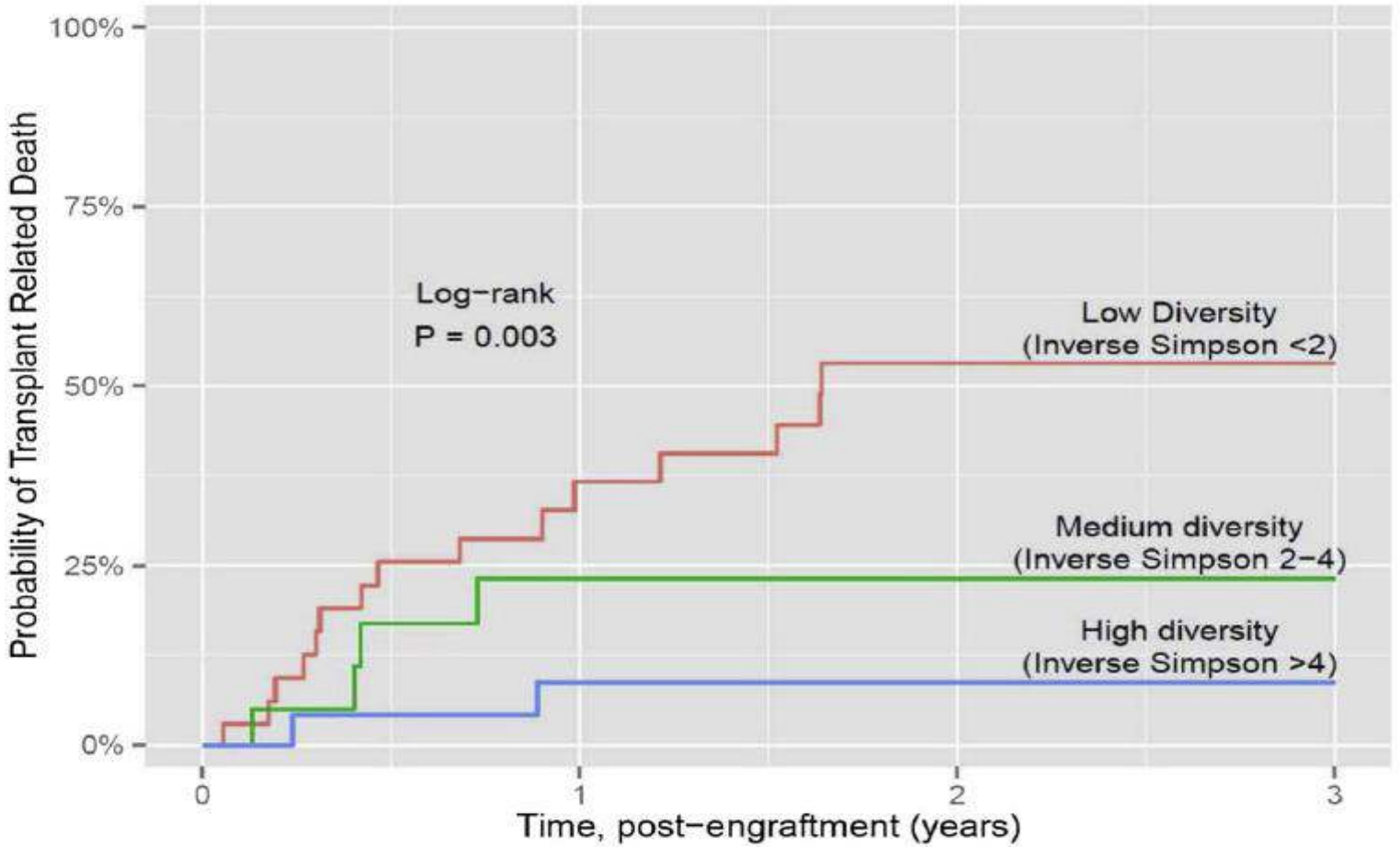
Engrafman Sonrası Sağkalım



Number at Risk				
High diversity	26	23	18	4
Medium diversity	20	14	10	3
Low Diversity	34	21	10	2

Taur Y, et al. Best Pract Res Clin Haematol 2015:28:155

Engrafman Sonrası Transplantasyonla İlişkili Mortalite



Number at Risk				
High diversity	26	21	17	4
Medium diversity	20	12	10	3
Low Diversity	34	17	7	2

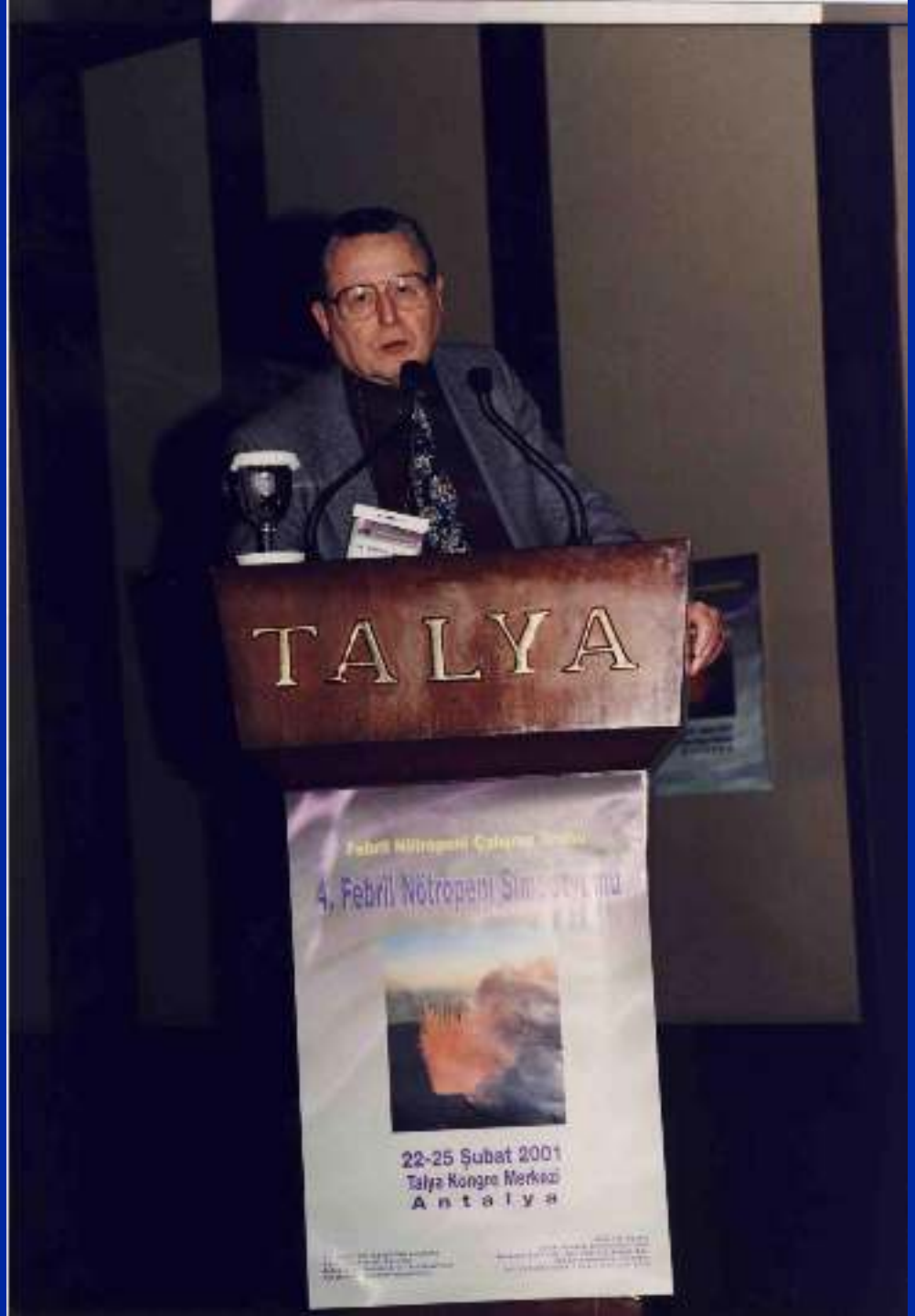
Taur Y, et al. Best Pract Res Clin Haematol 2015:28:155

2. Febril Nötropeni

16 - 17 Mart 1996, Çeşme

Simpozyumu


Winfried KERN
Gerald P. BODEY
Jayesh MEHTA
Haluk KOÇ
4.Febril Nötropeni Simpozyumu
22 - 25 Şubat 2001


TALYA
22-25 Şubat 2001
Talya Kongre Merkezi
Antalya

Febril Nötropeni

www.febrilnotropeni.net

takip edin

sitеiçi arama | Kategori Seçiniz | Ara

Ana Sayfa | Sizi Dinliyoruz | Linkler

12. Febril Nötropeni Simpozyumu

Bildiri göndermek için tıklayınız.

Bilimsel program için tıklayınız.

FUNGOLİNE

FUNGAL İNFEKSİYONLAR UZAKTAN EĞİTİM PROGRAMI

Ulaşmak için tıklayınız...

Kanser Hastalarında İnvaziv Fungal İnfeksiyonlar

33 Yazar, 28 Konu, Güncel yaklaşımlar, yeni kılavuzlar devam...

ONLINE KİTAP

duyurular - haberler

Tüm Haberler

Temas önlemlerinin kaldırılması MRSA ve VRE infeksiyonlarının artmasına neden olmayabilir: American Journal Infection Control'da metaanaliz *25/10/2017*

Ondört araştırmanın dahil edildiği metaanalizde, 6 çalışmada temas izolasyonu kaldırılmış. Takiben MRSA ve VRE oranlarında azalma gözlenmiş. Ancak bu önlemler salgın sırasında devam ettirilmeli.

Dirençli bakteri infeksiyonları için 10 yeni antibiyotik *23/10/2017*

4-8 Ekim 2017 tarihleri arasında San Diego'da yapılan ID Week sırasında bir oturumda tartışılan ve FDA tarafından kısa süre önce onaylanan ve onaylanma aşamasında olan 10 yeni antibiyotikle ilgili Medscape Infectious Diseases web sitesinde yayınlanan habere serbest erişim mümkün.

Journal of Travel Medicine'da Antimikrobiyal Direnç Özel Sayısı: Serbest erişim *19/10/2017*

Yeni IDSA Kılavuzu: İnfeksiyöz diarenin tanı ve tedavisi *24/10/2017*

Amerikan İnfeksiyon hastalıkları Derneği'nin (IDSA) 19 Ekim'de yayınladığı yeni tanı ve tedavi kılavuzunun konusu infeksiyöz diare. Kılavuza Derneğin web sitesi üzerinden serbest erişim mümkün.

CID'den: Kök hücre naklinde bakteremi yapan Gram negatiflere direnç. Türkiye katılımlı.. *20/10/2017*

Kök hücre naklinde bakteremi yapan Gram negatiflere direnç: Türkiye katılımlı çalışma. Çalışma CID son sayısında yayınlandı.

2009-2016 yılları arası sepsis epidemiyolojisi: JAMA'da

sürekli tıp eğitimi

FUNGAMENTAL 2016 dördüncü kurs sunumları... *29/10/2016*

FUNGAMENTAL 2015 üçüncü kurs sunumları... *17/09/2015*

Türkiye'den yayınlar

Türkiye'den: VAP'ı önlemede personel eğitimi... *22/03/2017*

Karbapenem dirençli Gr (-) bakteri sürveyansı gero... *03/03/2017*

kılavuzlar

Çocuklarda profilaksi doğru yapılıyor mu?... *27/07/2017*

ESCMID yeni Aspergillosis kılavuzunu bilim camiası... *31/03/2017*

Toplantı İşlemleri
Bilgi Haberleri
Haber Havuzu
Kullanıcılar
Gazete
Kategoriler
Çalışma Alanları
Anket/Soru
İstatistikler
Unvanlar

Olgular

- Olgu Listesi
- Kullanıcı İstatistikleri
- Olgu İstatistikleri
- Soru İstatistikleri
- Yorumlar

Filtre

Çalışma alanı: Tümü Ünvan: Tümü

Kullanıcı tipi: Tümü Ad: Soyad:

Sayfa başına kullanıcı sayısı: 10 Uygula

Kullanıcı Ekle

Toplam **5688** kullanıcı

Ad Soyadı	Çalışma alanı	İli
	Diğer sağlık personeli	İstanbul
	Enfeksiyon Hastalıkları	İstanbul
A.Semra Kantarcıoğlu	Tıbbi Mikrobiyoloji	İstanbul
A. AVNİ ATAY	Çocuk Sağlığı ve Hastalıkları	İSTANBUL
A. Emin Kürekçi	Hematoloji (Pediatrik)	Ankara
A.Kübra Başkın	Çocuk Sağlığı ve Hastalıkları	İstanbul
A.Nedret Koç	Tıbbi Mikrobiyoloji	Kayseri
A.Suzan Inal	Enfeksiyon Hastalıkları	ADANA
abbas taner	Tıbbi Mikrobiyoloji	ankara
abdi turker	Diğer sağlık personeli	antalya
abdulkadir baştürk	Hematoloji (Erişkin)	ANKARA
abdulkadir bedel	Enfeksiyon Hastalıkları	GAZİANTEP
Abdulkadir Küçükbayrak	Klinik Mikrobiyoloji ve Enfeksiyon Hastalıkları	Bolu
Abdulkadir Yıldırım	Enfeksiyon Hastalıkları	SİVAS
abdulkerim arlan	Diğer Uzmanlık Dalları	ankara
Abdullah Alkaz	Hematoloji (Pediatrik)	elazığ
abdullah altaş	Pratisyen hekim	bitlis
ABDULLAH CELEP	Diğer Uzmanlık Dalları	KONYA
abdullah cetin	İç Hastalıkları	İstanbul
Abdullah Coşkun	Enfeksiyon Hastalıkları	Manisa
Abdullah Hacıhanefioğlu	Hematoloji (Erişkin)	İstanbul
Abdullah Karakoç	Hematoloji (Erişkin)	diyarbakır
Abdullah Sayınır	Diğer Uzmanlık Dalları	İzmir
abdullah velioğlu	Pratisyen hekim	İstanbul
ABDULLAH YILMAZ	Enfeksiyon Hastalıkları	KONYA
ABDULLAH YILMAZ	Klinik Mikrobiyoloji ve Enfeksiyon Hastalıkları	İSTANBUL
abdurrahim ayhan	Pratisyen hekim	bursa
Abdurrahim Elvin	Göğüs Endokrinolojisi	diyarbakır
abdurrahman kara	Hematoloji (Pediatrik)	Ankara
abdurrahman kaya	Enfeksiyon Hastalıkları	siirt
Abdurrahman Temocin	Göğüs Endokrinolojisi	İstanbul
Abdülkadir Budney	İç Hastalıkları	antalya
Abdülkadir Dalca	Enfeksiyon Hastalıkları	antalya
Abdülkadir KÇoşkbayrak	Enfeksiyon Hastalıkları	DÇzce
abdülmecit arıkan	Göğüs Endokrinolojisi	İzmir
Abdülmecit Yıldız	İç Hastalıkları	Bursa
abdülmuttalip özdemir	İç Hastalıkları	ankara
Adalet ALTUNSOY	Enfeksiyon Hastalıkları	Ankara
Adalet Meral Güneş	Hematoloji (Pediatrik)	Bursa
adem altayatak	Enfeksiyon Hastalıkları	samsun

Febril Nötropeni Çalışma Grubu*
www.febrilnotropeni.net

FEBRİL NÖTROPENİK HASTALARDA TANI ve TEDAVİ KILAVUZU

* Kılavuzun hazırlanmasında görev alanların isim listesi, soyadına göre alfabetik sırayla metin sonunda verilmiştir.

ÖNEMLİ NOT: Bu metin içeriği henüz taslak halinde olup, 20-23 Şubat 2003 tarihleri arasında Antalya'da yapılacak olan 5. Febril Nötropeni Simyozyumu sırasında, Pediatrik Febril Nötropeni Kılavuzu'nu hazırlayan grup ile ortak tartışma sonrası son biçimine dönüştürülecektir. Bu nedenle, bu metin bu haliyle kaynak olarak kullanılamaz.


30 3 2002


31 3 2002

FEN
FEBRİL NÖTROPENİ
Derneği

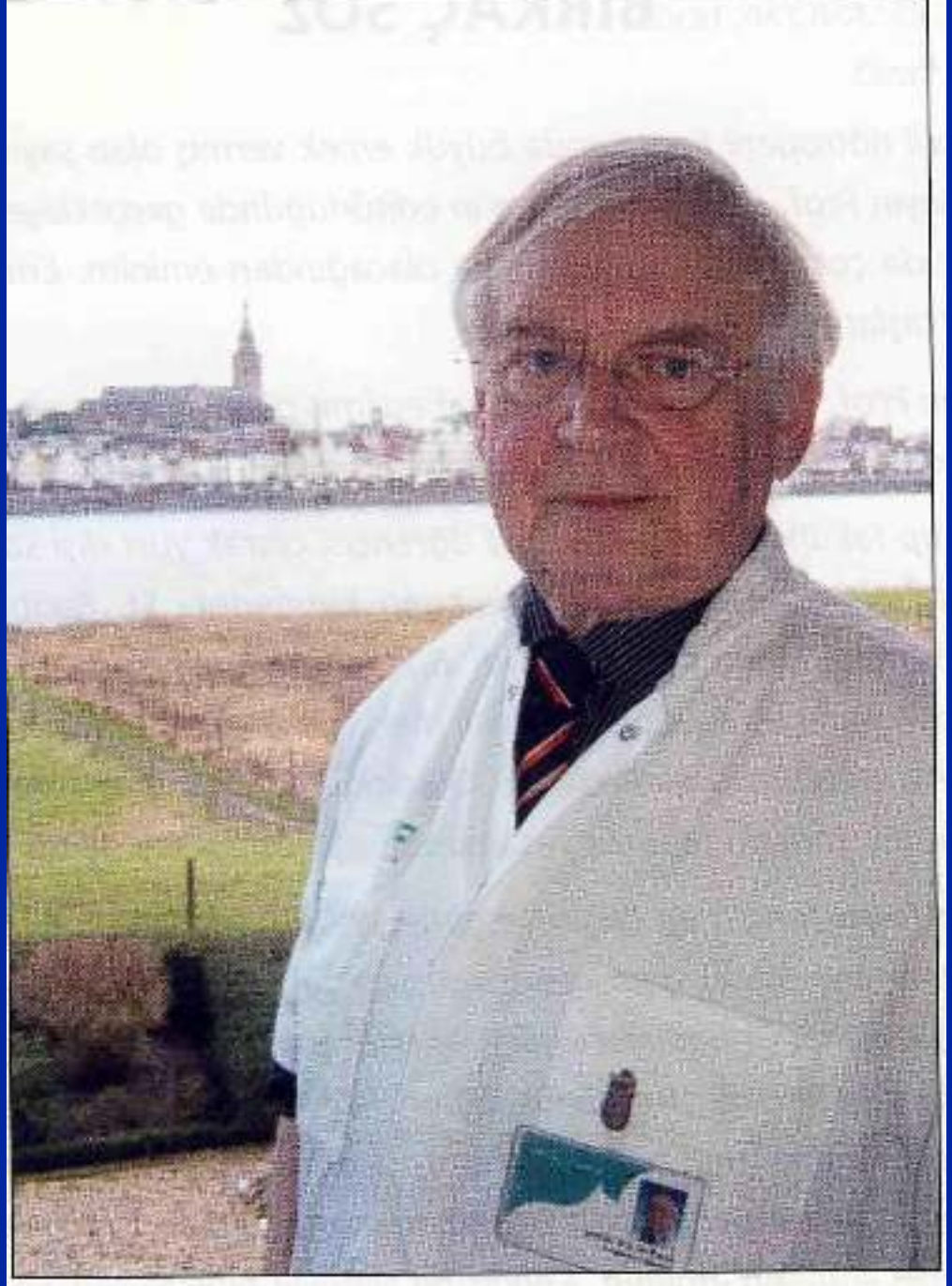
FEBRİL NÖTROPENİ

Editörler

Prof. Dr. Murat AKOVA
Hacettepe Üniversitesi Tıp Fakültesi,
İç Hastalıkları Anabilim Dalı,
Enfeksiyon Hastalıkları Ünitesi, Ankara

Prof. Dr. Hamdi AKAN
Ankara Üniversitesi Tıp Fakültesi,
İç Hastalıkları Anabilim Dalı,
Hematoloji Bilim Dalı, Ankara

bilimsel tıp
YAYINEVİ



Prof. Ben E. de Pauw

ESCMID Conference on Infections in Immunocompromised Hosts

17 - 18 November 2011, Istanbul, Turkey

Organising Committee

- Murat Akova, Ankara, TR
- Winfried V. Kern, Frieburg, DE
- Claudio Viscoli, Genoa, IT

In cooperation with

The European Group for Blood and Marrow Transplantation

European Organisation for Research and Treatment of Cancer

ESCMID Study Group for Infections in Compromised Hosts (ESGICH)

International Immunocompromised Host Society

1st European Conference on Infections in Leukemia

ECIL 1

Introduction

Sept. 30th / Oct. 1st 2005 Juan-les-Pins - France

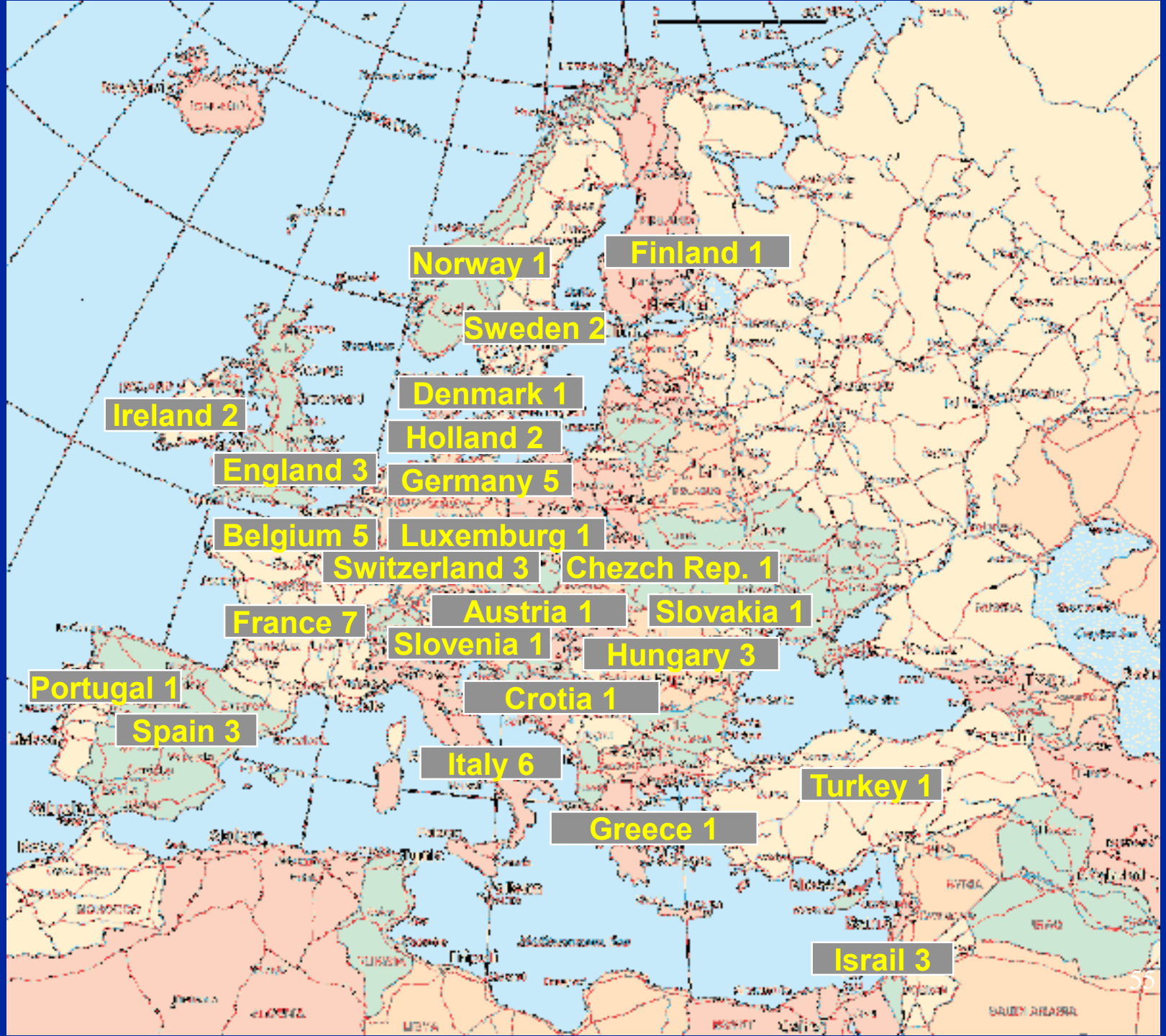
ELN LeukemiaNet European

EBMT

EORTC European Organisation for Research and Treatment of Cancer

ICHS

- 30 Eylül-1 Ekim 2005, Nice
- 24 ülke, 56 merkezden davetli temsilci
- Kılavuz başlıkları
  - Aminoglikozid kullanımı
  - Glikopeptid kullanımı
  - Kinolon profilaksisi
  - Empirik antifungal tedavi
  - Antifungal profilaksi
  - İnvaziv aspergillus ve kandidiyazis tedavisi


Norway 1
Finland 1
Sweden 2
Denmark 1
Ireland 2
Holland 2
England 3
Germany 5
Belgium 5
Luxemburg 1
Switzerland 3
Chezch Rep. 1
Austria 1
Slovakia 1
France 7
Slovenia 1
Hungary 3
Portugal 1
Crotia 1
Spain 3
Italy 6
Turkey 1
Greece 1
Israil 3

PROGRAM 2017 http://www.ecil-leukaemia.com/program2017.htm Archives

Program • Thursday September 21th			
	Arrival on site in the morning or early afternoon for members of working groups Arrival on site in the afternoon for participants *Welcome buffet in the evening*		

Program • Friday September 22th		Speakers	Chairs
9.00 AM - 09.30 AM	Introduction	C. Cordonnier, P. Donnelly	
9.30 AM - 10.45 AM	CMV infection	P. Ljungman	H. Grenix, T. Calandra
10.45 AM - 11.00 AM	*Coffee break*		
11.00 AM - 11.30 AM	HHV8 infection	K. Ward	M. Slavin, T. Calandra
11.30 AM - 12.30 PM	Vaccines in stem cell transplant patients	C. Cordonnier	R. Duarte, P. Donnelly
12.30 PM - 2.00 PM	*Lunch break*		
2.00 PM - 3.15 PM	Management of infection in hematology patients receiving new drugs and biotherapies	G. Maschmeyer	N. Blijlevens, C. Viscoli
3.15 PM - 3.45 PM	*Break*		
3.45 PM - 4.45 PM	Vaccines in non-HSCT patients with hematological malignancies	M. Mikulska	T. Lehrnbecher, P. Donnelly
4.45 PM - 6.00 PM	Restricted meetings for guideline revision		
6.00 PM - 11.00 PM	*Dinner at the Restaurant "L'amandier" (Mougins) Bus Departure at 7.15 pm – gathering in the hotel lobby*		

Program • Saturday September 23st	Speakers	Chairs

EUROPEAN CONFERENCE ON INFECTIONS IN LEUKAEMIA

2017

ESCMID Study Group for Infections in Compromised Hosts (ESGICH)

- Kasım 2010'da kuruldu
  - 11 Avrupa ülkesinden 50 kurucu üye
- Başkan: Claudio Viscoli, İtalya
- Başkan yrd.: Jose M. Aguado, İspanya
- Sekreter: Murat Akova, Türkiye
- Muhasip: Oriol Manuel, İsviçre

Bacterial Resistance in Haematology-ECIL 4 Study Groups & Participants

- **Epidemiology & resistance**
  - M Mikulska*, M Akova, D Averbuch, G Klyasova, DM Livermore, C Orasch, M Tumbarello
- **Empirical & targeted antibacterial therapy**
  - D Averbuch*, C Cordonnier, WV Kern, C Viscoli
- **Duration of antibacterial therapy**
  - C Orasch*, G Klyasova, P Munoz
- **Antibiotic stewardship**
  - IC Gyssens*, WV Kern, DM Livermore

Group leader: Murat AKOVA

Meeting: September 8-10th, 2011

Final version: Feb 14th, 2012

* Presenting authors

European guidelines for empirical antibacterial therapy for febrile neutropenic patients in the era of growing resistance: summary of the 2011 4th European Conference on Infections in Leukemia

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ABSTRACT

Owing to increasing resistance and the limited arsenal of new antibiotics, especially against Gram-negative pathogens, carefully designed antibiotic regimens are obligatory for febrile neutropenic patients, along with effective infection control. The Expert Group of the 4th European Conference on Infections in Leukemia has developed guidelines for initial empirical therapy in febrile neutropenic patients, based on: i) the local resistance epidemiology; and ii) the patient's risk factors for resistant bacteria and for a complicated clinical course. An 'escalation' approach, avoiding empirical carbapenems and combinations, should be employed in patients without particular risk factors. A 'de-escalation' approach, with initial broad-spectrum antibiotics or combinations, should be used only in those patients with: i) known prior colonization or infection with resistant pathogens; or ii) complicated presentation; or iii) in centers where resistant pathogens are prevalent at the onset of febrile neutropenia. In the latter case, infection control and antibiotic stewardship also need urgent review. Modification of the initial regimen at 72-96 h should be based on the patient's clinical course and the microbiological results. Discontinuation of antibiotics after 72 h or later should be considered in neutropenic patients with fever of unknown origin who are hemodynamically stable since presentation and afebrile for at least 48 h, irrespective of neutrophil count and expected duration of neutropenia. This strategy aims to minimize the collateral damage associated with antibiotic overuse, and the further selection of resistance.

Averbuch D, et al. Haematologica 2013;98:1826-35

Yüksek Riskli Hastalarda Eskalasyon Tedavisi

- **İndikasyonlar (BII)**
  - Komplike olmayan klinik tablo
  - Dirençli bakteri kolonizasyonu veya önceden infeksiyon yok
  - Dirençli bakteri infeksiyonlarının görülmediği merkezler
- **Başlangıç tedavisi**
  - Anti-psödomonal sefalosporin (AI)
  - Piperasilin-tazobaktam (AI)
  - Tikarsilin-klavulanat, sulbaktam-sefoperazon, piperasilin + gentamisin

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De-eskalasyon Tedavisi

- **İndikasyonlar (BII)**
  - Komplike klinik tablo
  - Dirençli bakteri ile kolonizasyon veya önceden infeksiyon
  - Dirençli bakteri infeksiyonlarının sık görüldüğü merkezler
- **Başlangıç tedavi seçenekleri**
  - Karbapenem monoterapisi (BII)
  - Kombinasyon tedavisi ve Gram (+) kapsama

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Duration of antibiotics in FUO: Evidence & Recommendations

- Discontinue **iv** empirical antibacterials after ≥ 72h

  - *If patient has been afebrile ≥ 48h and is **stable***
  - *Irrespective of neutrophil count or **expected** duration of neutropenia **BII***

Joshi *et al., Am J Med* 1984
Jones *et al., J Pediatr* 1994
Cornelissen *et al., Clin Infect Dis* 1995
Horowitz *et al., Leuk Lymphoma* 1996
Santoloya *et al., Clin Infect Dis* 1997
Lehrnbecher *et al., Infection* 2002
Cherif *et al., Scand J Infect Dis* 2004
Slobbe *et al., Eur J Cancer* 2009

Averbuch D, et al. Haematologica 2013;98:1826-35

Duration of therapy in documented infections

Continue targeted antibiotics for clinically- or microbiologically- documented infection

- *Until infection is microbiologically eradicated &*
- *Until all clinical signs of infection are resolved*
- *At least 7 days, of which at least 4 days afebrile*

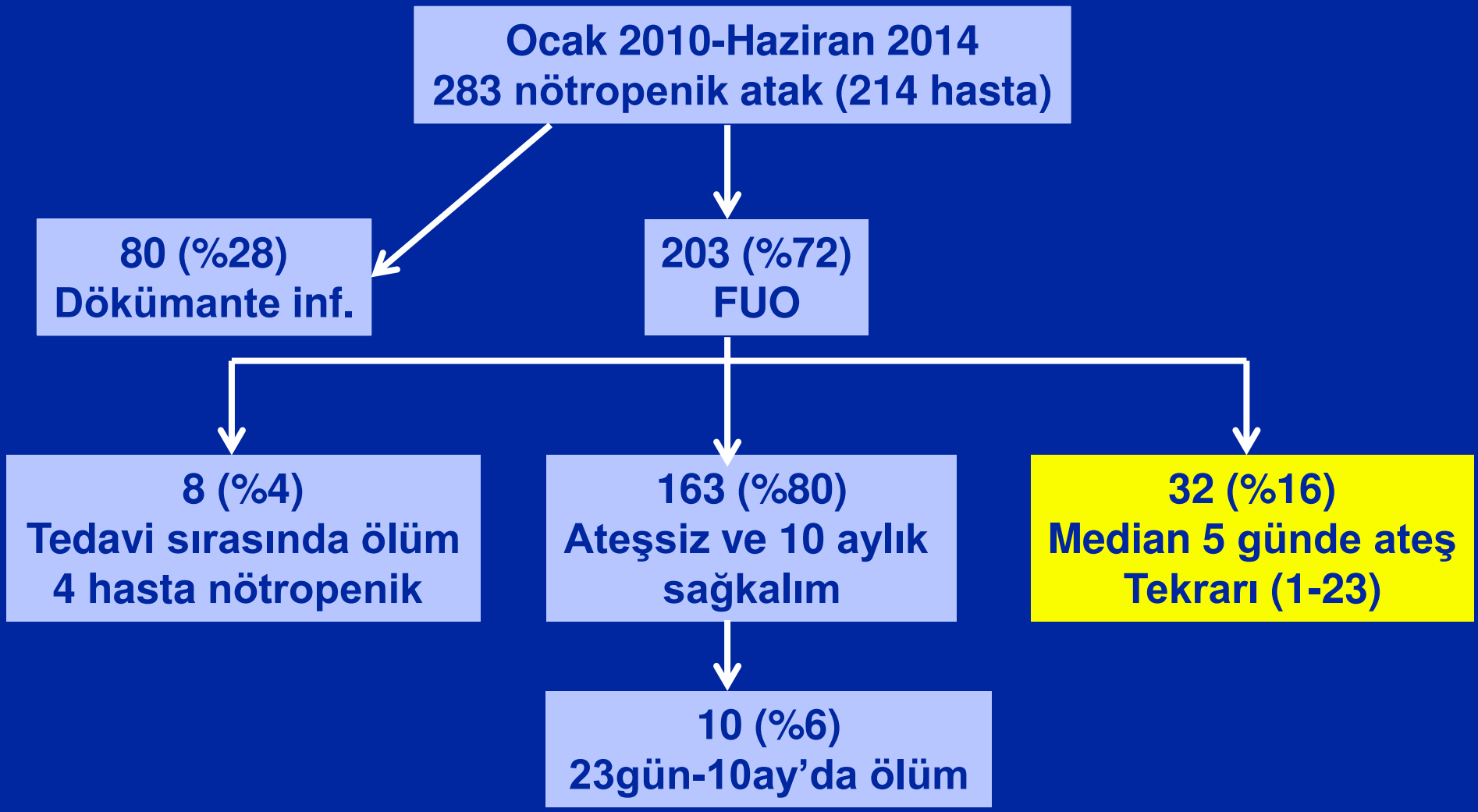
BIII

Eggimann *et al., J Antimicrob Chemother* 1993
Cometta *et al., Antimicrob Agents Chemother* 1995
Cordonnier *et al., Clin Infect Dis* 1997
Biron *et al., J Antimicrob Chemother* 1998
Elting *et al., J Clin Oncol* 2000
Feld *et al., J Clin Oncol* 2000

Giamarellou *et al., Antimicrob Agents Chemother* 2000
Viscoli *et al., Clin Microbiol Infect.* 2002
Sanz *et al., J Antimicrob Chemother* 2002
Tamura *et al., Am J Hematol* 2002
Cometta *et al., Clin Infect Dis* 2003
Raad *et al., Cancer* 2003

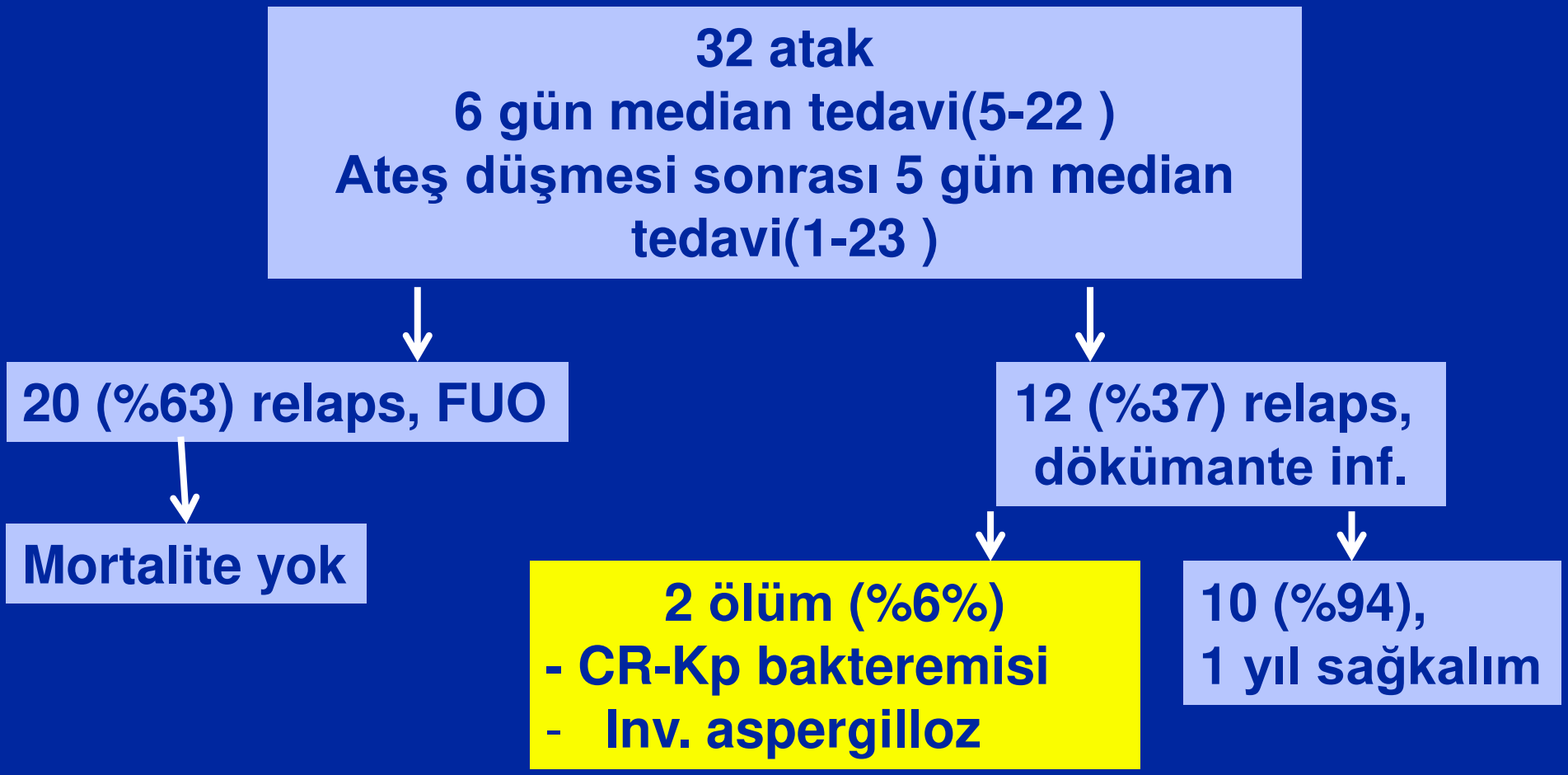
Averbuch D, et al. Haematologica 2013;98:1826-35

Erken Tedavi Sonlandırımı-Hacettepe Deneyimi



Korucu B & Akova M. ECCMID 2015'te sunuldu

Ateşin Tekrarladığı 32 Atak Analizi



Korucu B & Akova M. Accepted to be presented in ECCMID 2015

Journal of Infection (2018) 76, 20–37

ELSEVIER

BIAM British Infection Association

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Fluoroquinolone prophylaxis in haematological cancer patients with neutropenia: ECIL critical appraisal of previous guidelines

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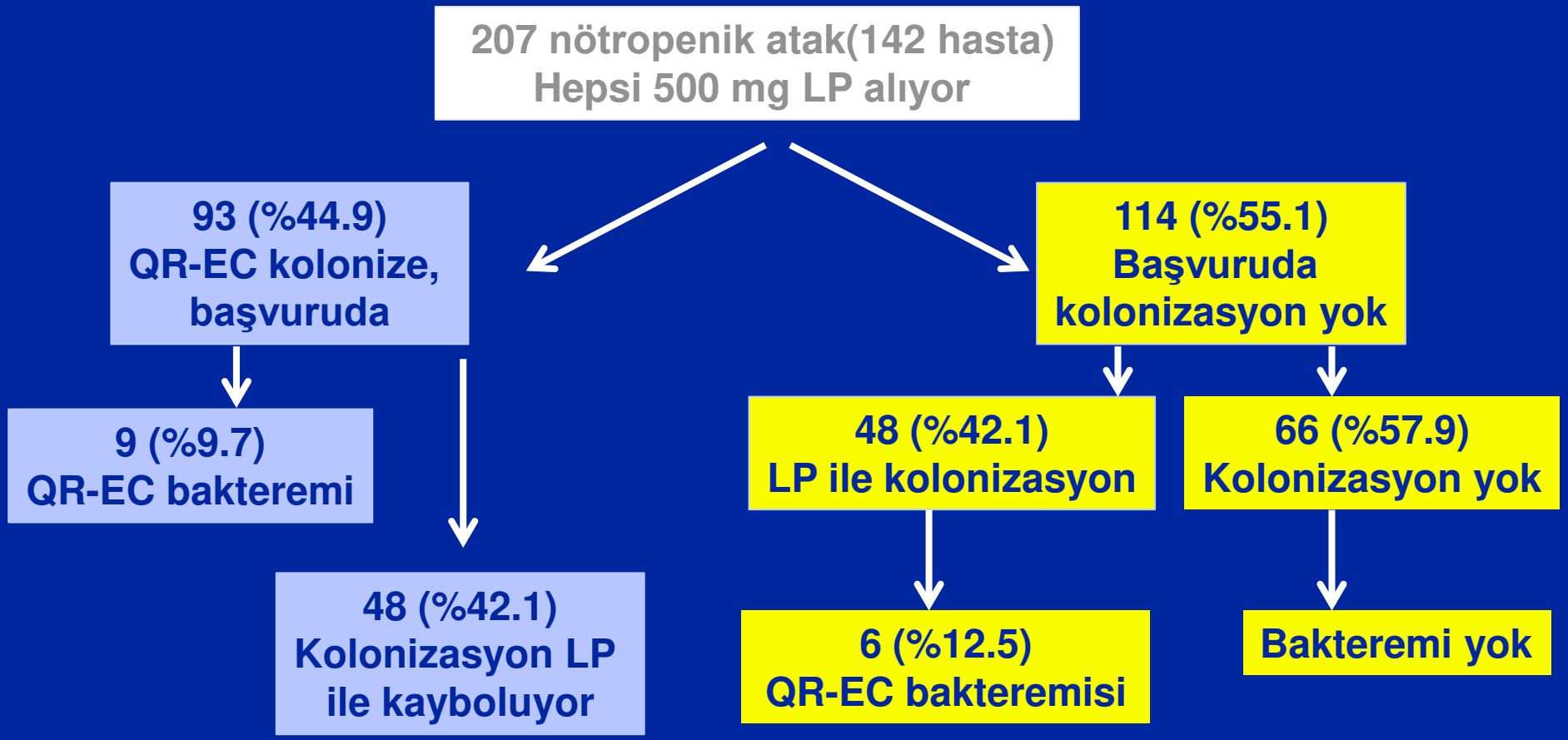
Accepted 13 October 2017
Available online 25 October 2017

Nötropenik Hastalarda Quinolone-R *E. coli* (QR-EC) ve Levofloksasin Profilaksisi (LP)



Etgül S, et al. ICAAC 2014 Abst no. C-1433

Diğer Veriler ve Yorum

- ESBL (+) olanların %40'ı ESBL (+)
  - Sadece karbapenem ve amikasin duyarlı
- Kolonizasyon ve bakteremi yapan suşların PFGE paternleri aynı
- Karbapenemler LP altında ateş gelişen hastalarda empirik tedavi için tercih edilmeli

Etgül S, et al. ICAAC 2014 Abst no. C-1433

Impact of the inclusion of an aminoglycoside in the initial empirical antibiotic therapy on haematologic neutropenic patients with Gram-negative bacteraemia in an era of widespread antimicrobial resistance (AMINOLACTAM study).

Royo-Cebrecos C[1,8], Gudiol C[1,8], Ayaz MC[2], Puerta-Alcalde P[3], Torres D[4], Martín-Dávila P[5], Escrihuela-Vidal F[1], Akova M[2], Cardozo C[3], Herrera F[4], Fortún J[5], Bergas A[1], Banegas A[1], García-Vidal C[3], Tebe C[6], Pomares H[7], Carratalà J[1,8].

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Background: To compare the current impact of the inclusion of an aminoglycoside in the initial empirical antibiotic therapy of haematologic neutropenic patients with Gram-negative bacteraemia in an era of widespread antimicrobial resistance.

Methods: Multicenter, observational, retrospective analysis of prospectively collected episodes of Gram-negative bacteraemia in haematologic patients with neutropenia (<500) from 2010 to 2017 in five centers (three from Spain, one from Turkey and one from Argentina). Patients treated empirically with ß-lactam monotherapy were compared with those who received combination therapy (ß-lactam + aminoglycoside).

Results: Among 537 episodes of bacteraemia, 272 (50.6%) treated with β-lactam monotherapy were compared to 265 (49.3%) treated with combination therapy, which included an aminoglycoside. Patients who received monotherapy were younger (52 years vs. 55 years, p=0.025), had a higher MASCC risk score (62.5% vs. 52.1%, p=0.019), and had more comorbidities (40.2% vs. 26.8%, p<0.001) than those treated with combination therapy. Carbapenems were significantly more used as

Impact of antibiotic resistance on outcomes of neutropenic cancer patients with *Pseudomonas aeruginosa* bacteremia (IRONIC study).

Gudiol C[1,14], Royo-Cebrecos C[1,14], Ruiz-Camps I[2], Puerta-Alcalde P[3], Ayaz MC[4], Montejo M[5], Torres D[6], Martín-Dávila P[7], del Pozo JL[8], Manzur A[9], Marquez I[10], Escrihuela-Vidal F1, Aguilar J[2], Cardozo C[3], Akova M[4], Cespedes R[11], Herrera F[6], Fortún J[7], Sangro P[8], Bergas A[1], Larrosa N[12], Garcia-Vidal C[3], López-Soria L[13], Maiques M[1], Carratalà J[1,14].

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Introduction: *Pseudomonas aerugionsa* (PA) has historically been one of the main causes of severe sepsis and death in neutropenic cancer patients. The emergence of multidrug-resistant (MDR) strains is worrying, and may compromise the prognosis of these patients. The objective of this study is to determine the impact of multiresistence in neutropenic onco-haematological patients with bacteremia due to PA, and to identify the risk factors for multidrug resistance, as

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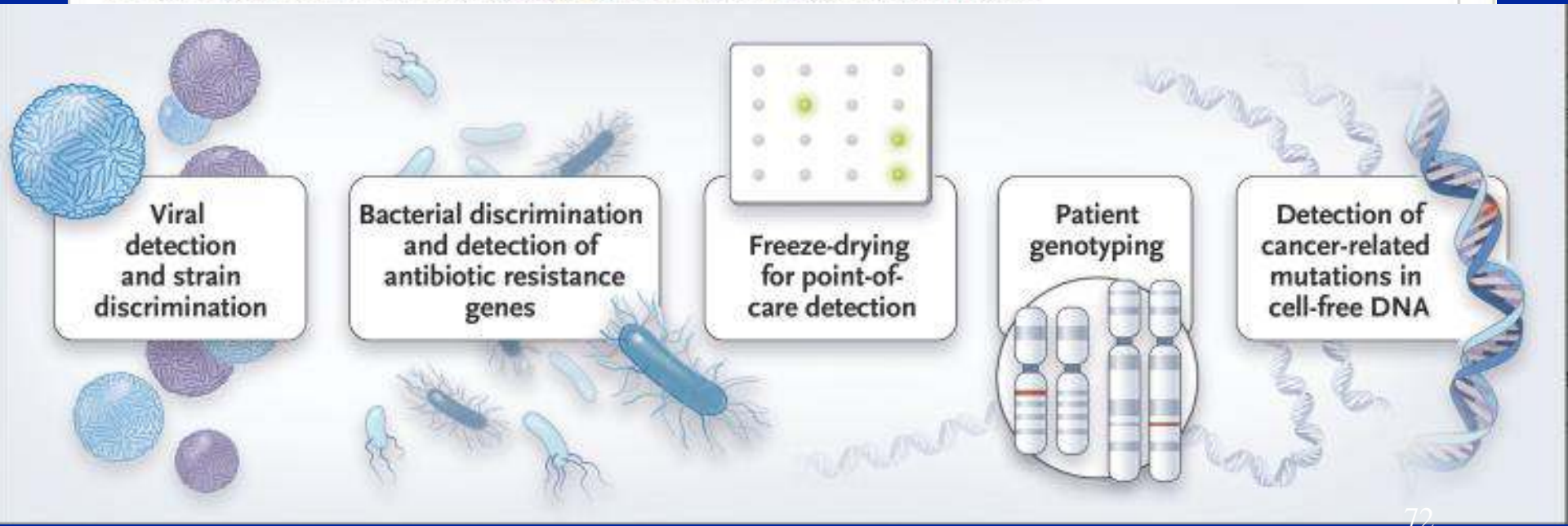
CLINICAL IMPLICATIONS OF BASIC RESEARCH

Elizabeth G. Phimister, Ph.D., Editor

A CRISPR Way to Diagnose Infectious Diseases

Angela M. Caliendo, M.D., Ph.D., and Richard L. Hodinka, Ph.D.

N Engl J Med 2017; 377:1685-1687 | October 26, 2017 | DOI: 10.1056/NEJMcibr1704902



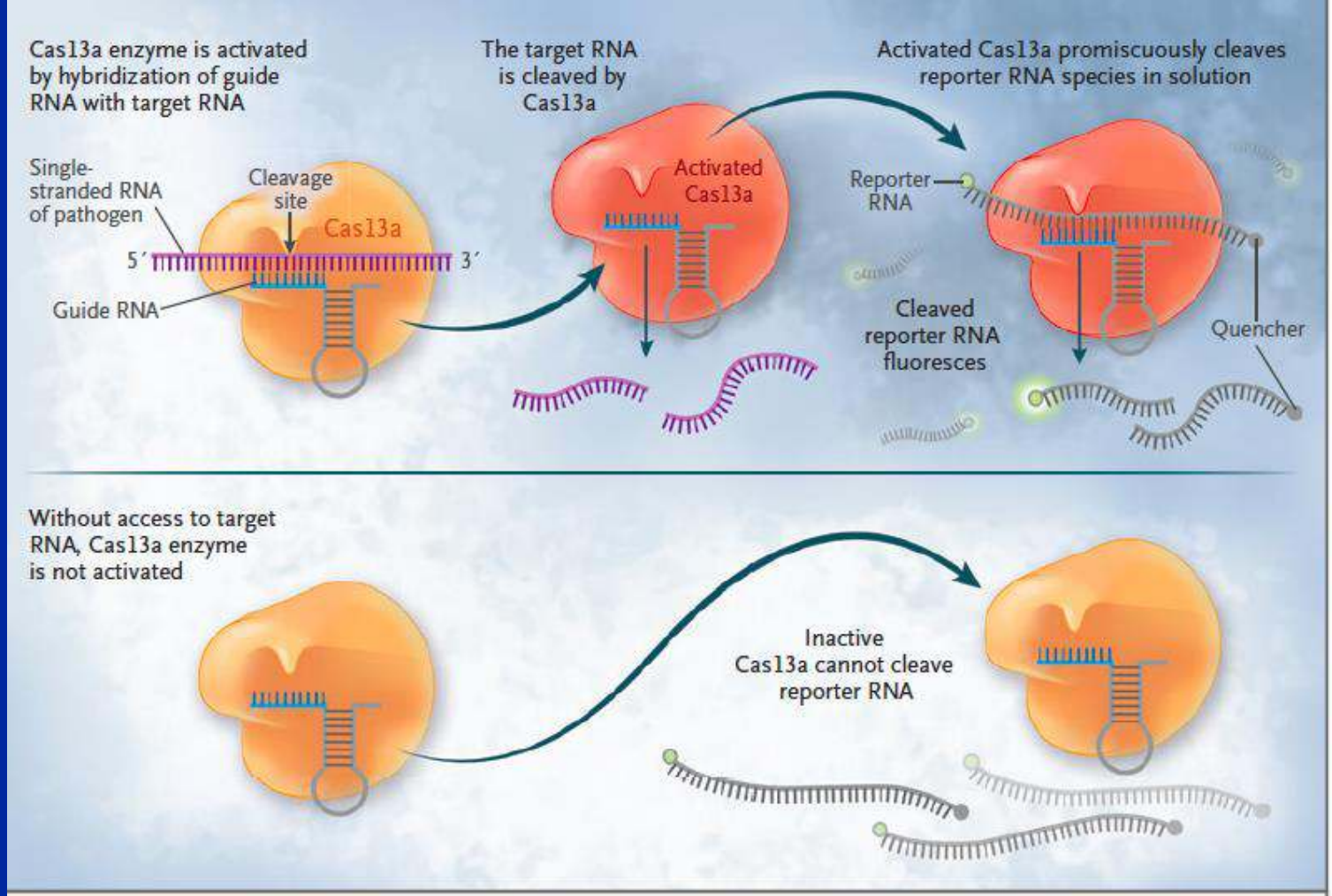


Figure 1. The Mechanism of SHERLOCK.

The SHERLOCK reaction combines a preamplification of DNA with recombinase polymerase amplification (RPA) or a preamplification of RNA with reverse-transcription RPA with subsequent Cas13a-directed collateral detection. During preamplification, T7 RNA polymerase promoters are added to allow the transcription of amplified DNA to RNA. This RNA can then be detected through incubation with Cas13a, complementary CRISPR RNAs, and fluorescent RNA sensors. On binding a target RNA sequence, the Cas13a enzyme becomes activated and promiscuously cleaves other RNA species in solution, a phenomenon known as the collateral effect. RNA sensors with a fluorescent reporter molecule on the 5′ end and a quencher molecule on the 3′ end are cleaved by activated Cas13a, generating a fluorescent signal. In the absence of Cas13a activation, cleavage of the reporter RNA and generation of fluorescence do not occur. The combination of amplification steps and this detection system allows for attomolar detection with single-base specificity within 1 to 2 hours.

50 Yılda Nereden Nereye…

1960

1966

2017

Teşekkürler…