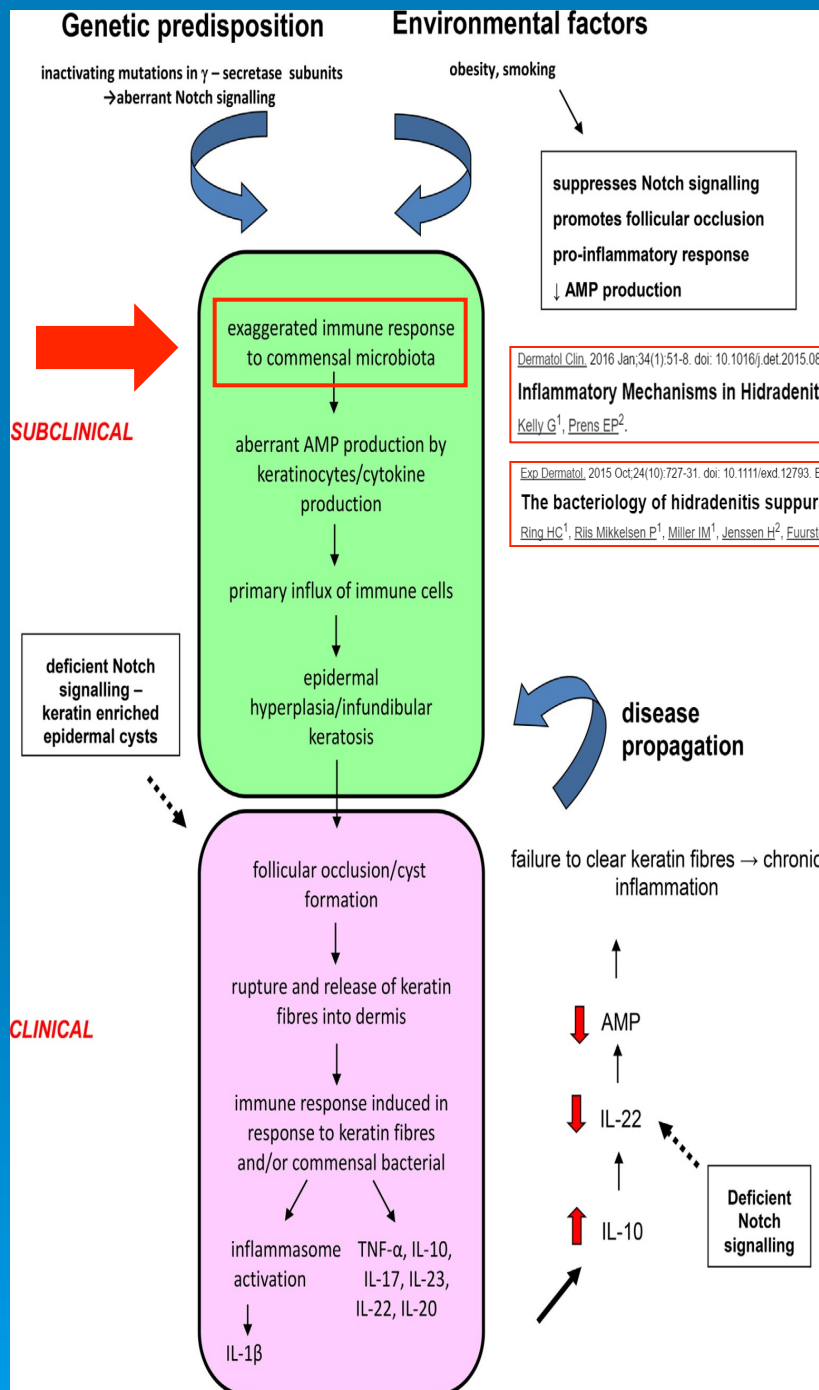




FOCUS SU IDROSADENITE SUPPURATIVA **Aspetti microbiologici**

Marco Libanore

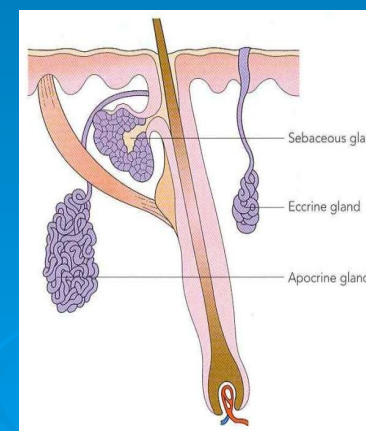
Unità Operativa Complessa Malattie Infettive
Azienda Ospedaliera Universitaria Ferrara



PATHOGENESIS



G. Kelly, Errol P. Prens.
Dermatol Clin 2016; 34:
51-58



Microbiologia

- **Contaminante ?**
- **Colonizzante ?**
- **Patogeno ?**

Patogeno

GIORNALE ITALIANO DI CHEMIOTERAPIA 1998; 45:221-223

Infezioni invasive da streptococco beta-emolitico di gruppo A: aspetti epidemiologici, clinici e terapeutici

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⁴Laboratorio di Batteriologia e Micologia Medica, Istituto Superiore di Sanità, Roma

II dilemma

The role of bacteria remains controversial. HS is not considered to be primarily an infectious disease. A variety of Gram-positive and Gram-negative bacteria have been isolated from the lesions sporadically, including *Staphylococcus aureus*, *Peptostreptococcus* spp., *Propionibacterium acnes*, *Escherichia coli*, *Proteus mirabilis* and *Klebsiella* spp. [27]. However, the clinical relevance of these findings in HS remains unclear: negative cultures from the surface of HS lesions are not uncommon; there is a variety of isolated organisms; infectious complications, such as cellulitis, are rare, and regional lymph nodes remain almost invariably uninvolved [27–30].

Microbial Profile and Antimicrobial Susceptibility of Bacteria Found in Inflammatory Hidradenitis Suppurativa Lesions

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Falk G. Bechara^a

^aDepartment of Dermatology, Venereology and Allergology, and ^bDepartment of Medical Microbiology, National Reference Centre for Multidrug-Resistant Gram-Negative Bacteria, Ruhr University Bochum, Bochum, and

^cDepartment of Dermatology, Venereology and Allergology, HELIOS St. Johannes-Hospital, Duisburg, Germany

Table 1. Patient characteristics and characteristics of microbiological samples obtained from deep portions of inflammatory lesions of patients with HS

Patients included	113
Gender	
Male	57 (50.4)
Female	56 (49.5)
Age, years	42 (27.8–50)
Smoking	88 (77.9)
Hurley stage	
II	66 (58.4)
III	47 (41.6)
Pre-treatment	
Topical antibiotics	33 (29.2)
Systemic antibiotics	90 (79.6)
Microbiological samples	
Microbiological samples	113
Positive bacteriology	95 (84.1)
Isolates per sample	2 (1–2)
Range	1–5
Polymicrobial (isolates n > 1)	51 (45.1)
Obtained from	
Axilla	54 (47.7)
Groin	44 (38.9)
Gluteus/perineum	15 (13.2)

Values are n (%) or median (IQR), as appropriate.

Bacterial isolates	Total, n (%)
CoNS	34 (19.9)
<i>Staphylococcus epidermidis</i>	9 (5.3)
<i>Staphylococcus lugdunensis</i>	7 (4.1)
<i>Staphylococcus haemolyticus</i>	3 (1.8)
Other CoNS	15 (8.8)
<i>S. aureus</i>	22 (12.9)
<i>P. mirabilis</i>	19 (11.1)
<i>E. coli</i>	17 (9.9)
<i>Corynebacterium</i> spp.	11 (6.4)
<i>Enterococcus</i> spp.	11 (6.4)
Viridans streptococci	10 (5.8)
<i>Streptococcus anginosus</i>	5 (2.9)
<i>Streptococcus constellatus</i>	2 (1.2)
Other viridans streptococci	3 (1.8)
<i>Streptococcus agalactiae</i>	7 (4.1)
<i>Streptococcus dysgalactiae</i> subsp. <i>equisimilis</i>	5 (2.9)
<i>Klebsiella pneumoniae</i>	5 (2.9)
<i>Prevotella</i> spp.	4 (2.3)
<i>Enterobacter cloacae</i>	4 (2.3)
<i>Porphyromonas</i> spp.	3 (1.8)
<i>Fusobacterium</i> spp.	3 (1.8)
<i>Bacteroides fragilis</i>	3 (1.8)
<i>Finegoldia magna</i>	3 (1.8)
<i>Pseudomonas oryzihabitans</i>	3 (1.8)
<i>Citrobacter</i> spp.	2 (1.2)
<i>Peptostreptococcus</i> spp.	2 (1.2)
<i>Acinetobacter</i> genomospecies 3	1 (0.6)
<i>Lactobacillus</i> spp.	1 (0.6)
<i>Morganella morganii</i>	1 (0.6)

Aerobic and Anaerobic Bacteriology of Hidradenitis Suppurativa: A Study of 22 Cases

Alexandros C. Katoulis^a Dimitra Koumaki^a Aikaterini I. Liakou^a
Georgia Vrioni^b Vasiliki Koumaki^b Dimitra Kontogiorgi^a Korina Tzima^a
Athanasios Tsakris^b Dimitris Rigopoulos^a

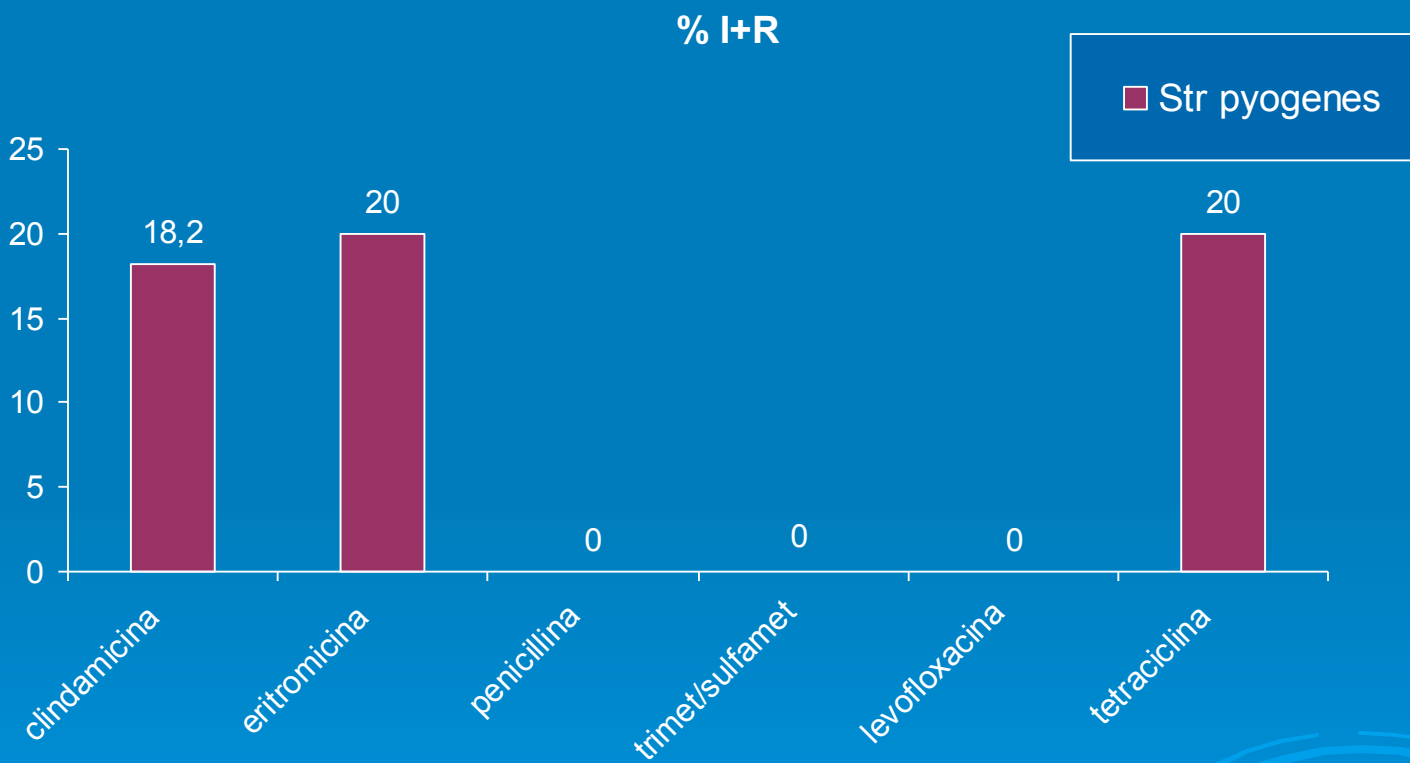
^aSecond Department of Dermatology and Venereology, 'Attikon' Hospital, and ^bDepartment of Microbiology, National and Kapodistrian University of Athens Medical School, Athens, Greece

Table 2. Microbiological findings of 22 HS patients

Patient No.	Aerobes	Anaerobes
1	<i>S. haemolyticus</i>	
2	No isolation	
3	<i>S. lugdunensis</i>	
4	<i>S. haemolyticus</i>	
5	No isolation	
6	No isolation	
7		<i>D. nishinomiyaensis/K. sedentarius</i>
8	No isolation	
9	No isolation	
10	<i>P. mirabilis</i>	
11	<i>E. coli</i>	
12	<i>S. lugdunensis</i>	
13	<i>P. aeruginosa</i>	
14	<i>P. mirabilis</i>	
15	No isolation	
16	<i>P. mirabilis</i>	
17	<i>S. aureus</i>	
18	<i>S. haemolyticus</i>	
19	<i>P. mirabilis</i>	
20	<i>Pseudomonas fluorescens</i>	
21	<i>S. epidermidis</i>	<i>P. granulosum</i>
22	No isolation	

Streptococco pyogenes

n. ceppi
11



Microrganismi isolati da PUS, CUTE E TESSUTI MOLLI

Gennaio-Ottobre 2017

Emilia Orientale

Microrganismo	Ospedalizzati	Ambulatoriali	totale	%
<i>Enterobatteri</i>	269	150	419	31,1
<i>Pseudomonas</i>	96	54	150	11,1
<i>Acinetobacter</i>	19	9	28	2,1
<i>Enterococchi</i>	75	26	101	7,5
<i>Stafilococchi</i>	214	176	390	29,0
<i>Streptococchi</i>	50	32	82	6,1
<i>Miceti</i>	47	16	63	4,7
<i>Altri</i>	68	46	114	8,5
<i>Totale</i>	838	509	1347	100

Microrganismi isolati da CUTE

Microrganismo	Ospedalizzati	Ambulatoriali	totale	%
<i>Enterobatteri</i>	64	71	135	34,9
<i>Pseudomonas</i>	27	23	50	12,9
<i>Acinetobacter</i>	3	4	7	1,8
<i>Enterococchi</i>	16	9	25	6,5
<i>Stafilococchi</i> (<i>S. aureus</i>)	52 (41)	65 (40)	117 (81)	30,2 (11,8)
<i>Streptococchi</i>	8	9	17	4,4
<i>Miceti</i>	15	9	24	6,2
<i>Altri</i>	8	4	12	3,1
<i>Totale</i>	193	194	387	100

Microrganismi isolati da PUS

Microrganismo	Ospedalizzati	Ambulatoriali	totale	%
<i>Enterobatteri</i>	63	34	97	24,9
<i>Pseudomonas</i>	20	9	29	7,5
<i>Acinetobacter</i>	1	1	2	0,5
<i>Enterococchi</i>	18	9	27	6,9
<i>Stafilococchi</i> (S. aureus)	78 (45)	62 (25)	140 (70)	36 (18)
<i>Streptococchi</i>	24	10	34	8,7
<i>Miceti</i>	7	6	13	3,3
<i>Altri</i>	31	25	56	14,4
<i>Totale</i>	242	156	398	100

Microrganismi isolati da FERITE

Microrganismo	Ospedalizzati	Ambulatoriali	totale	%
<i>Enterobatteri</i>	142	45	187	33,2
<i>Pseudomonas</i>	49	22	71	12,6
<i>Acinetobacter</i>	15	4	19	3,4
<i>Enterococchi</i>	41	8	49	8,7
<i>Stafilococchi</i> (S. aureus)	85 (59)	49 (40)	134 (99)	23,8 (17.6)
<i>Streptococchi</i>	16	13	29	5,2
<i>Miceti</i>	25	1	26	4,6
<i>Altri</i>	31	17	48	8,5
Totale	404	159	563	100

Patogeni prevalenti

microrganismo	paz.ospedalizzati	paz ambulatoriali	totale
<i>E.coli</i>	93	47	140*
<i>K.pneumoniae</i>	27	11	38*
<i>P. mirabilis</i>	42	53	95*
<i>Ps aeruginosa</i>	92	52	144
<i>Staf. aureo</i>	145	128	273
<i>Str.pyogenes</i>	4	7	11
Totale	403	298	701

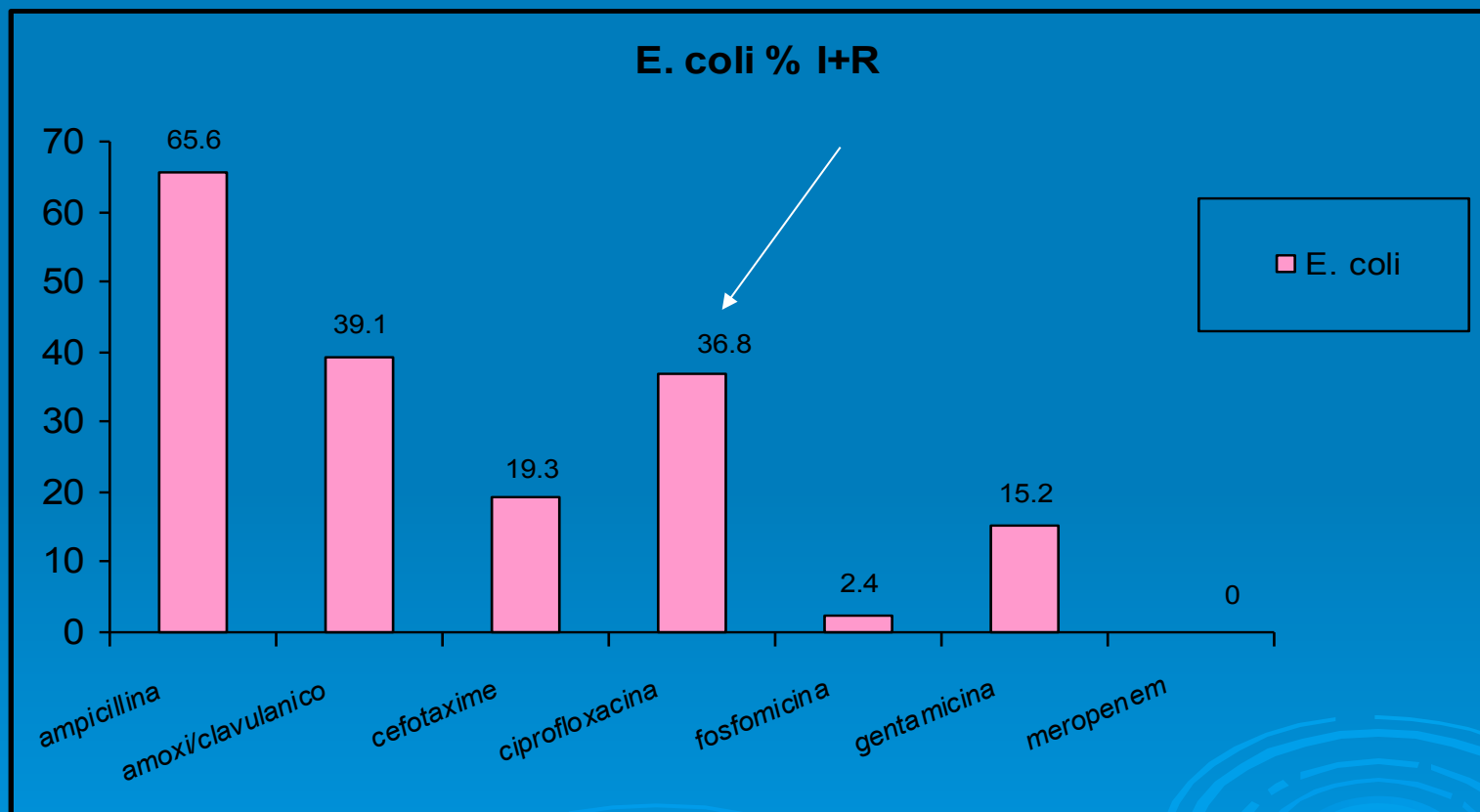
**273 = 65,1 % del totale
degli enterobatteri ***

Antibiotico-resistenza

E.COLI
KLEBSIELLA
PROTEUS MIRABILIS
PS.AERUGINOSA
STAF. AUREO
STR. PYOGENES

n. ceppi
128

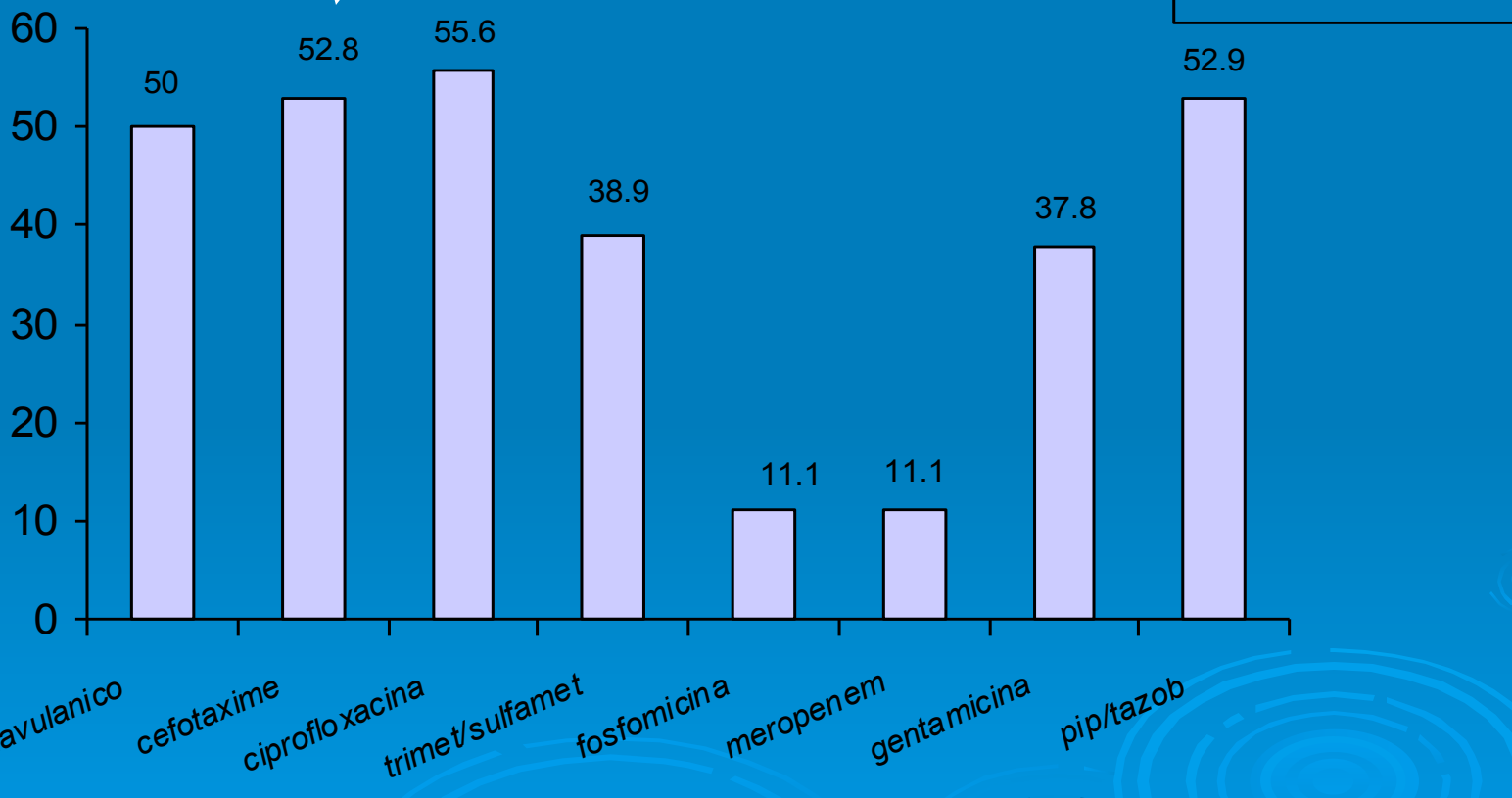
E. Coli



n. ceppi
37

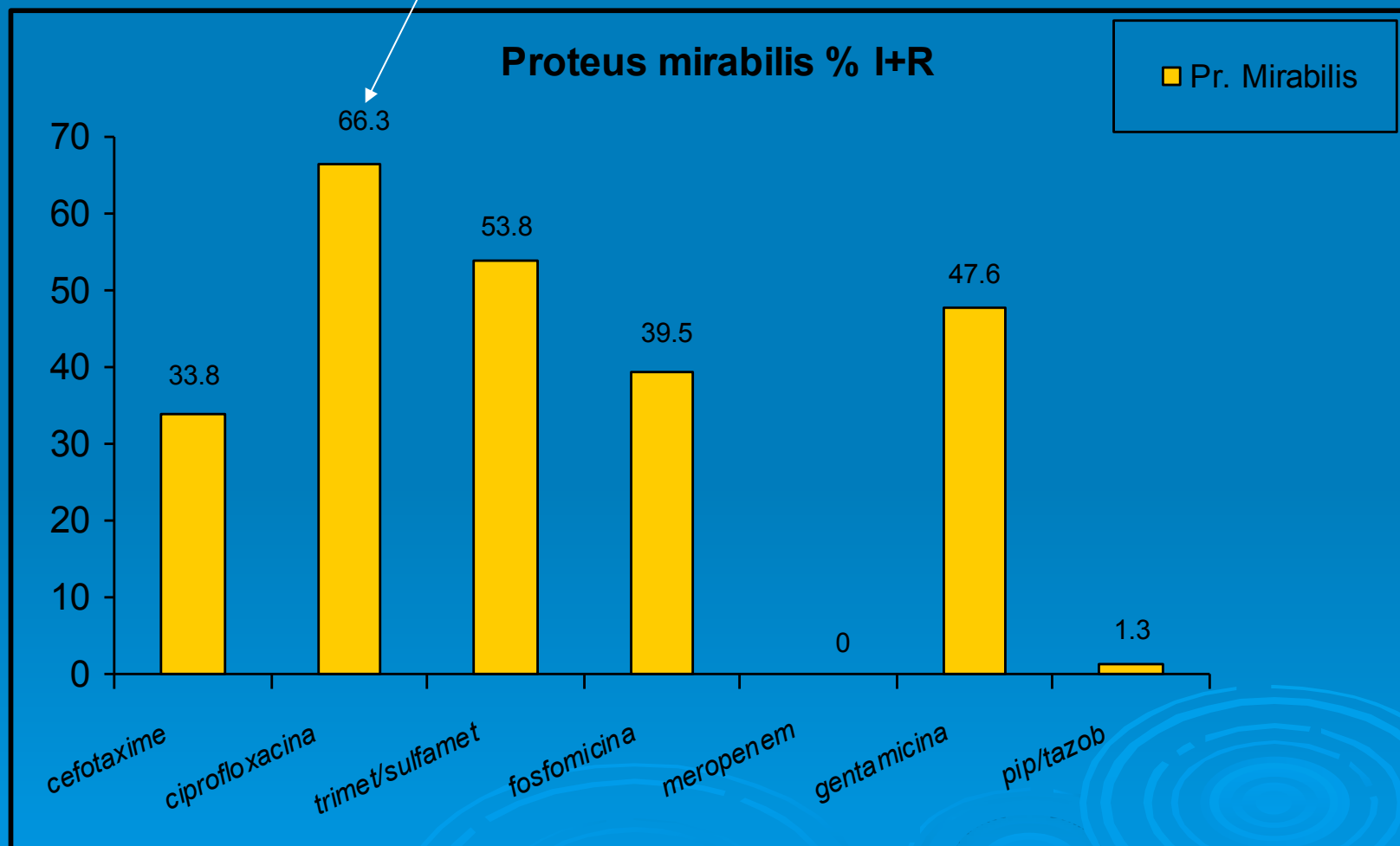
Klebsiella pneumoniae

Klebsiella pneumoniae % I+R



n. ceppi
81

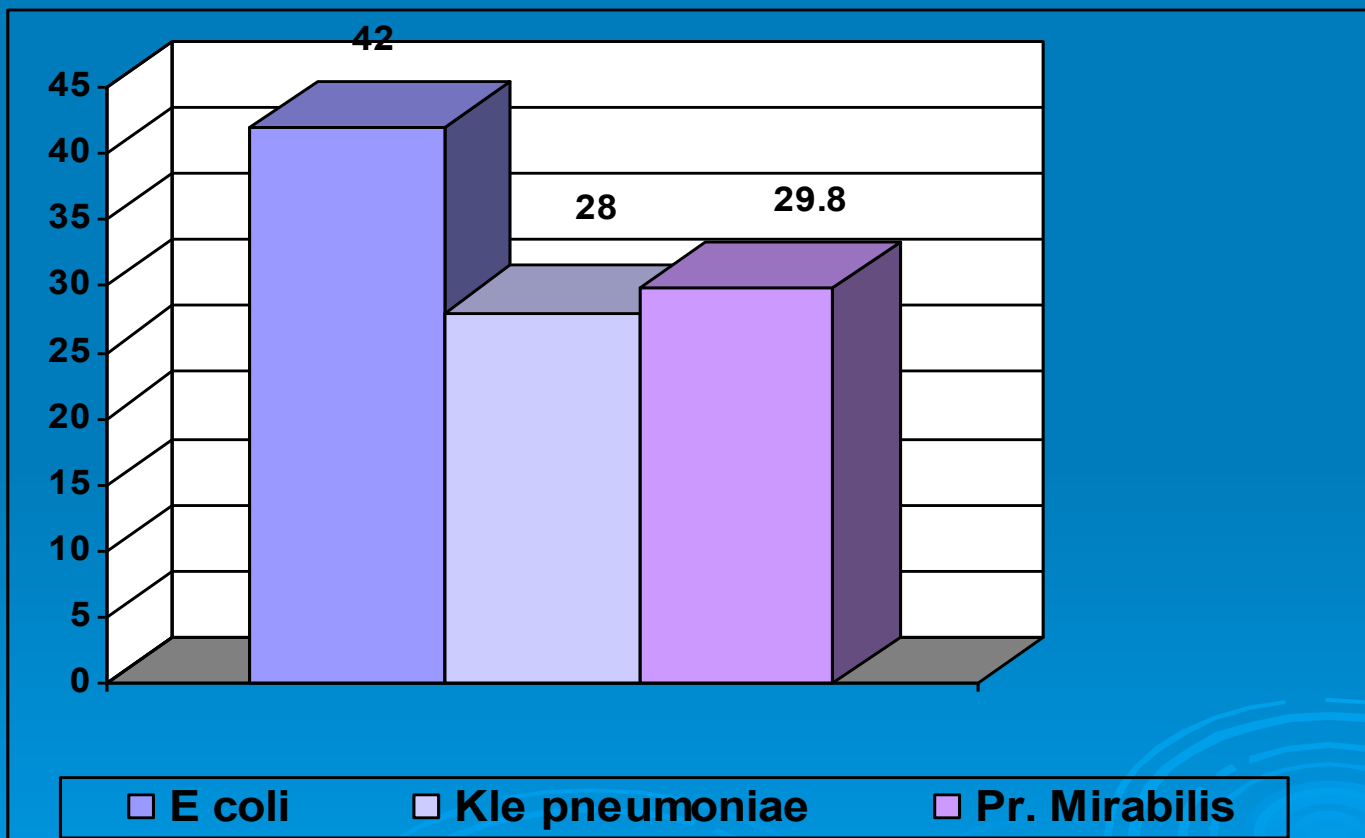
Proteus mirabilis



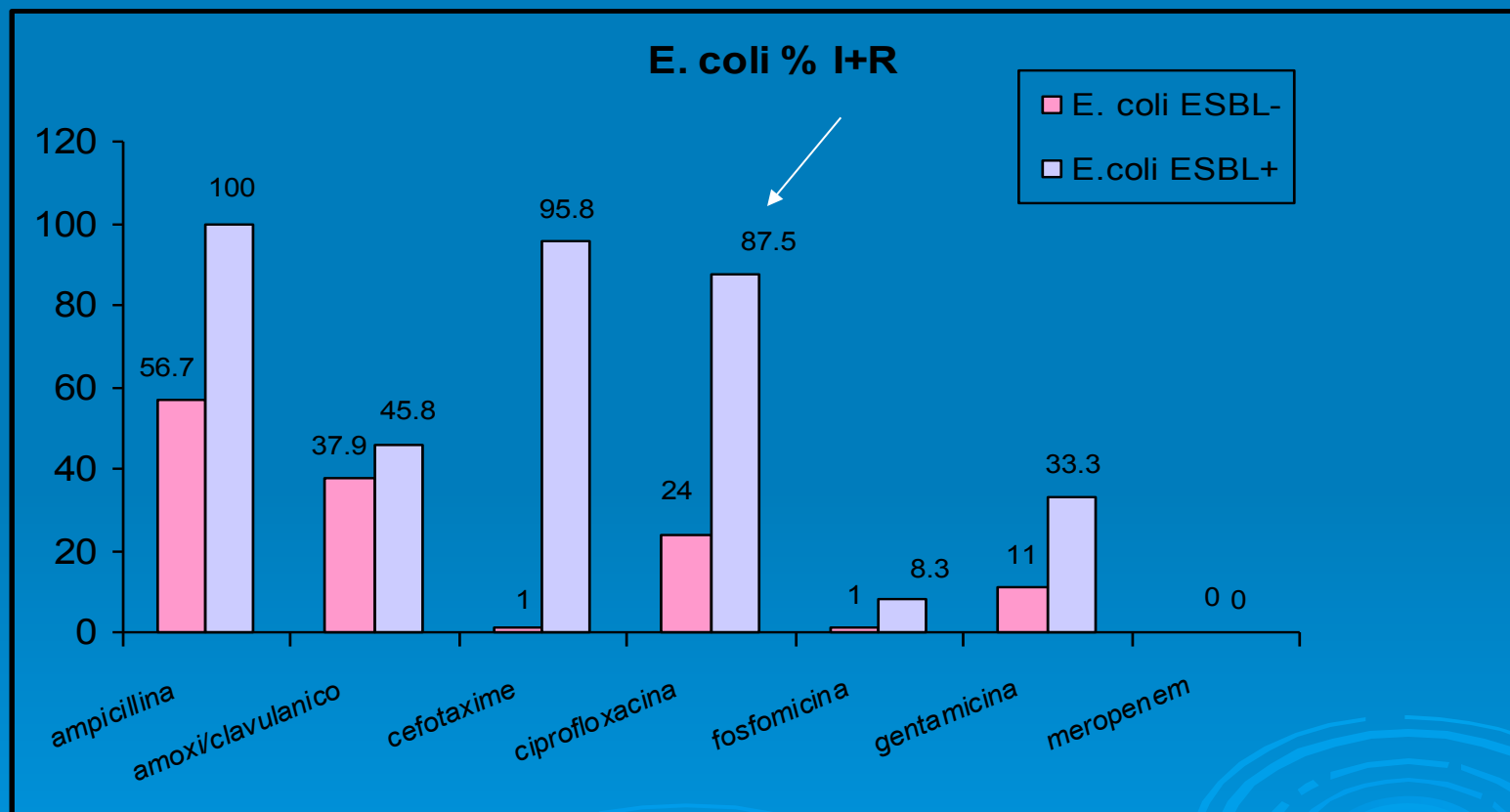
Enterobatteri produttori ESBL +

microrganismo	Tot ceppi	ESBL +	%
<i>E.coli</i>	128	24	18.7
<i>K. pneumoniae</i>	37	16	43.2
<i>P. mirabilis</i>	81	17	20.9
Totale	246	57	23.1

% Enterobatteri produttori di ESBL sul totale di ESBL +

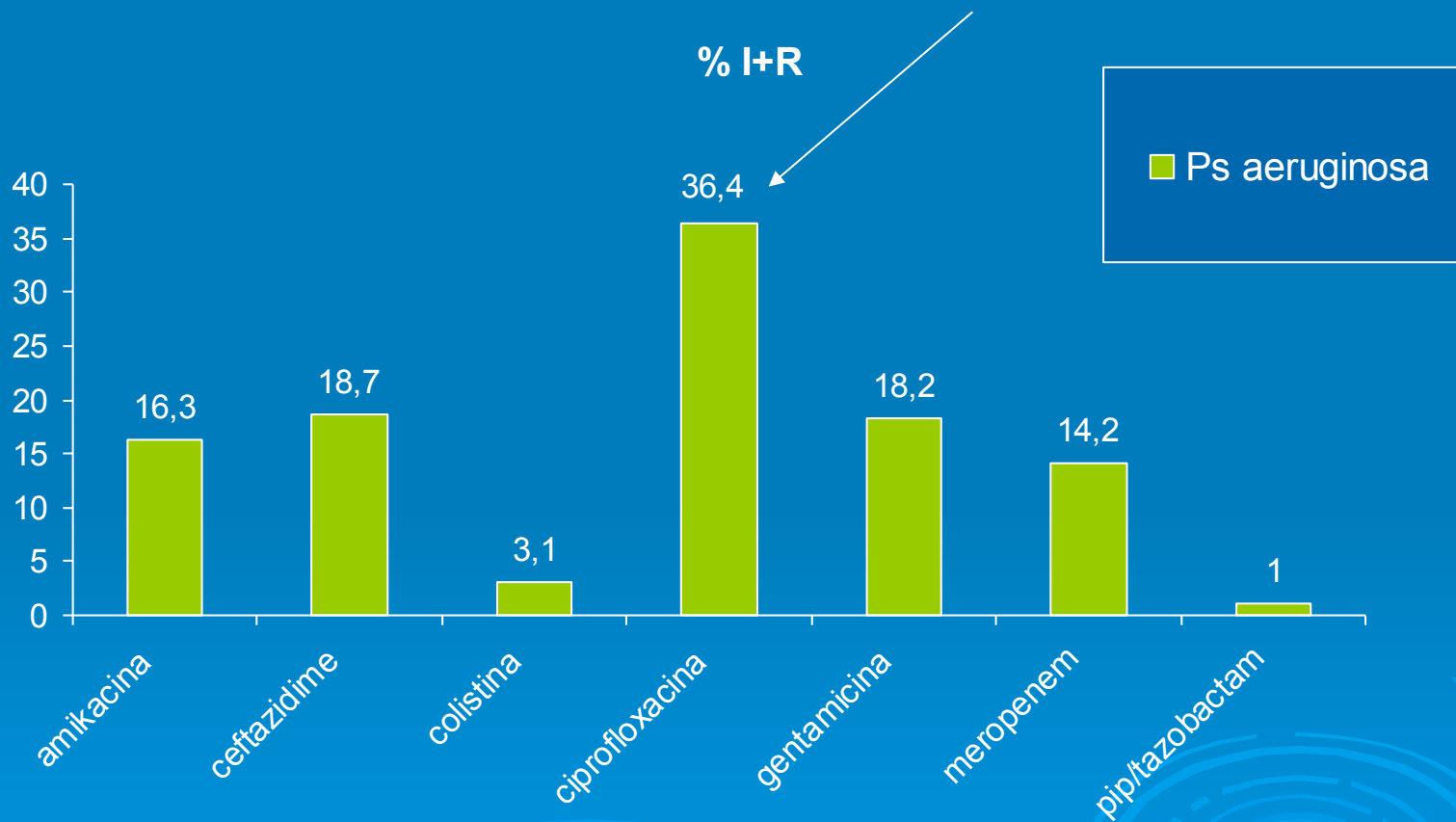


E.coli ESBL + e ESBL negativi % I+R



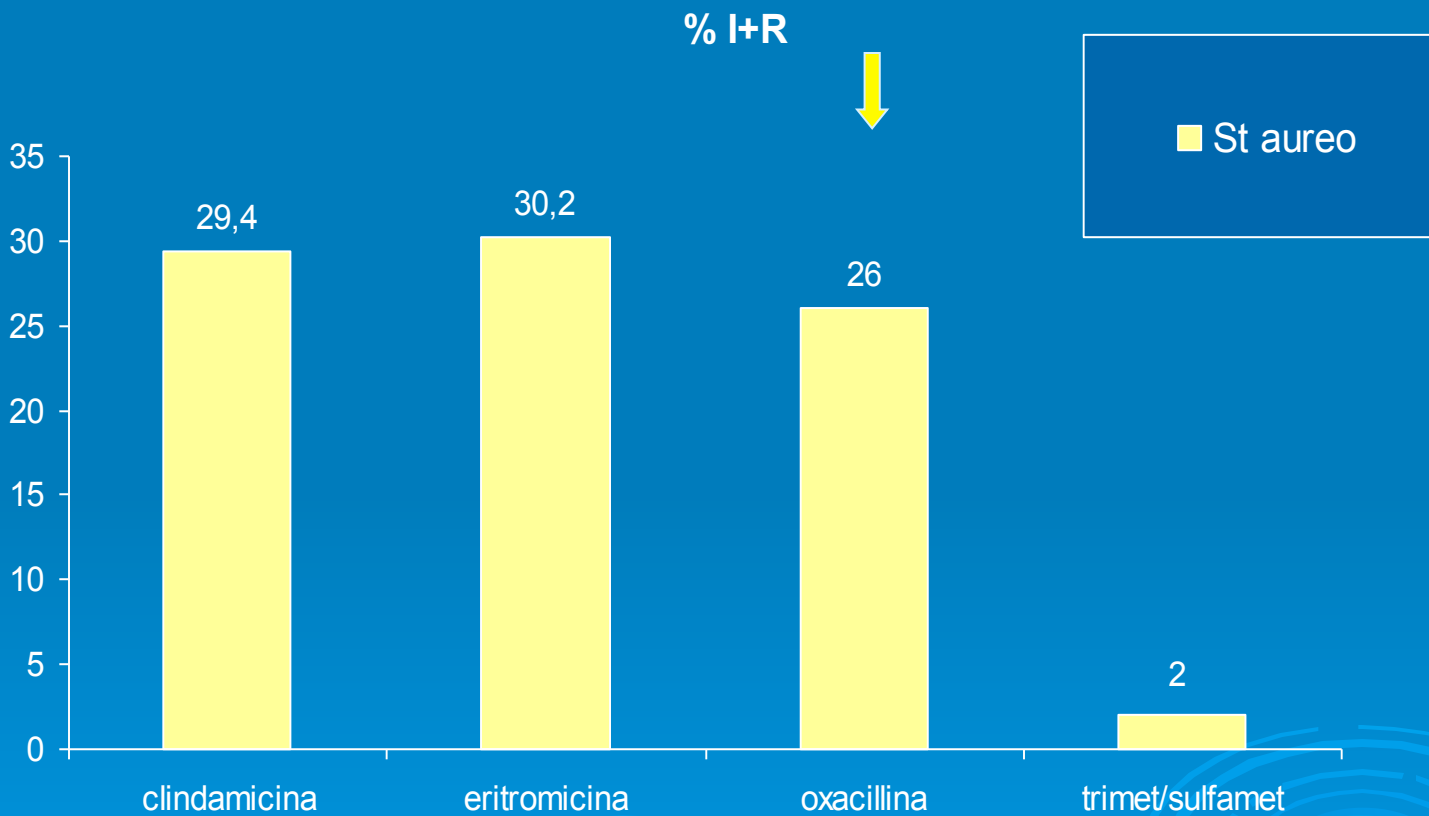
Pseudomonas aeruginosa

n. ceppi
135

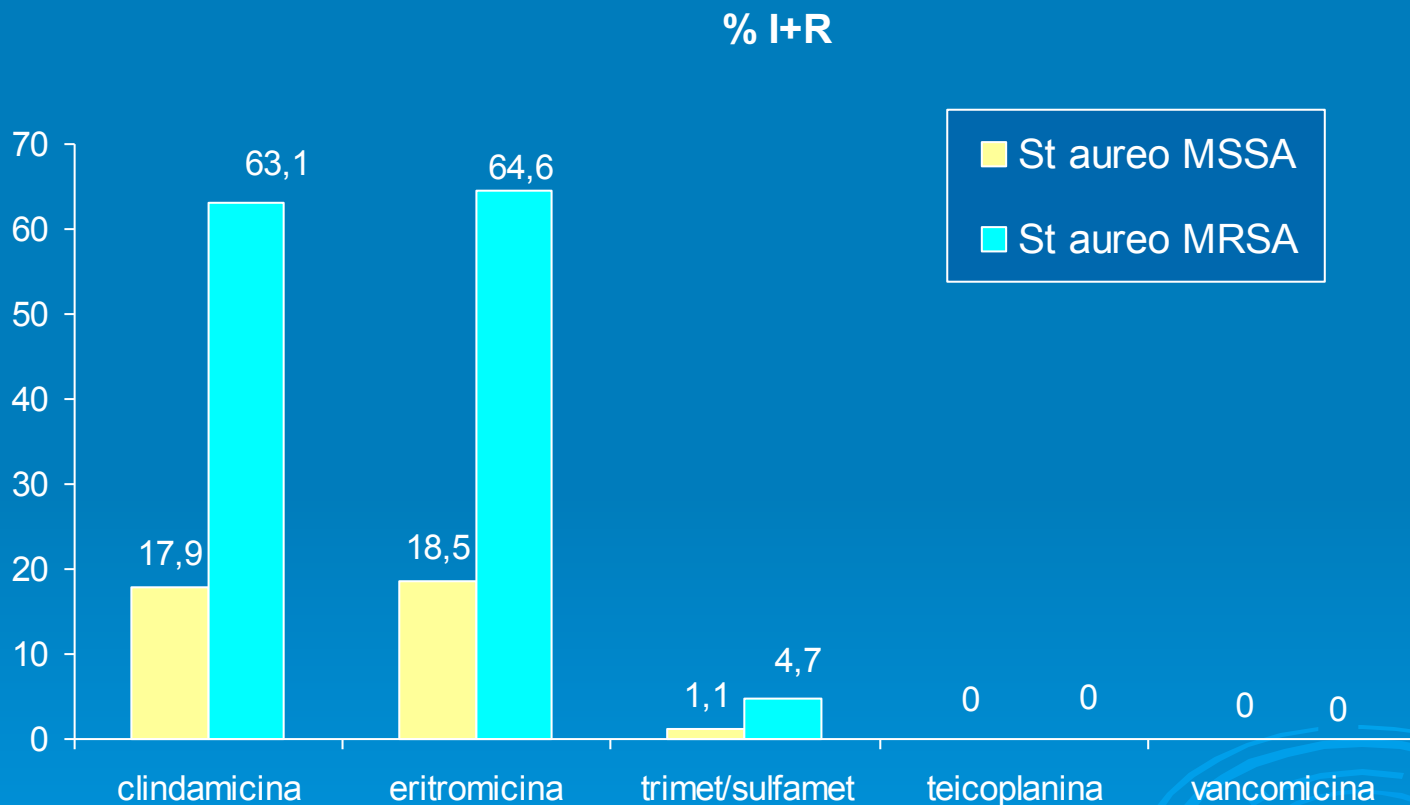


Stafilococco aureo

n. ceppi
248

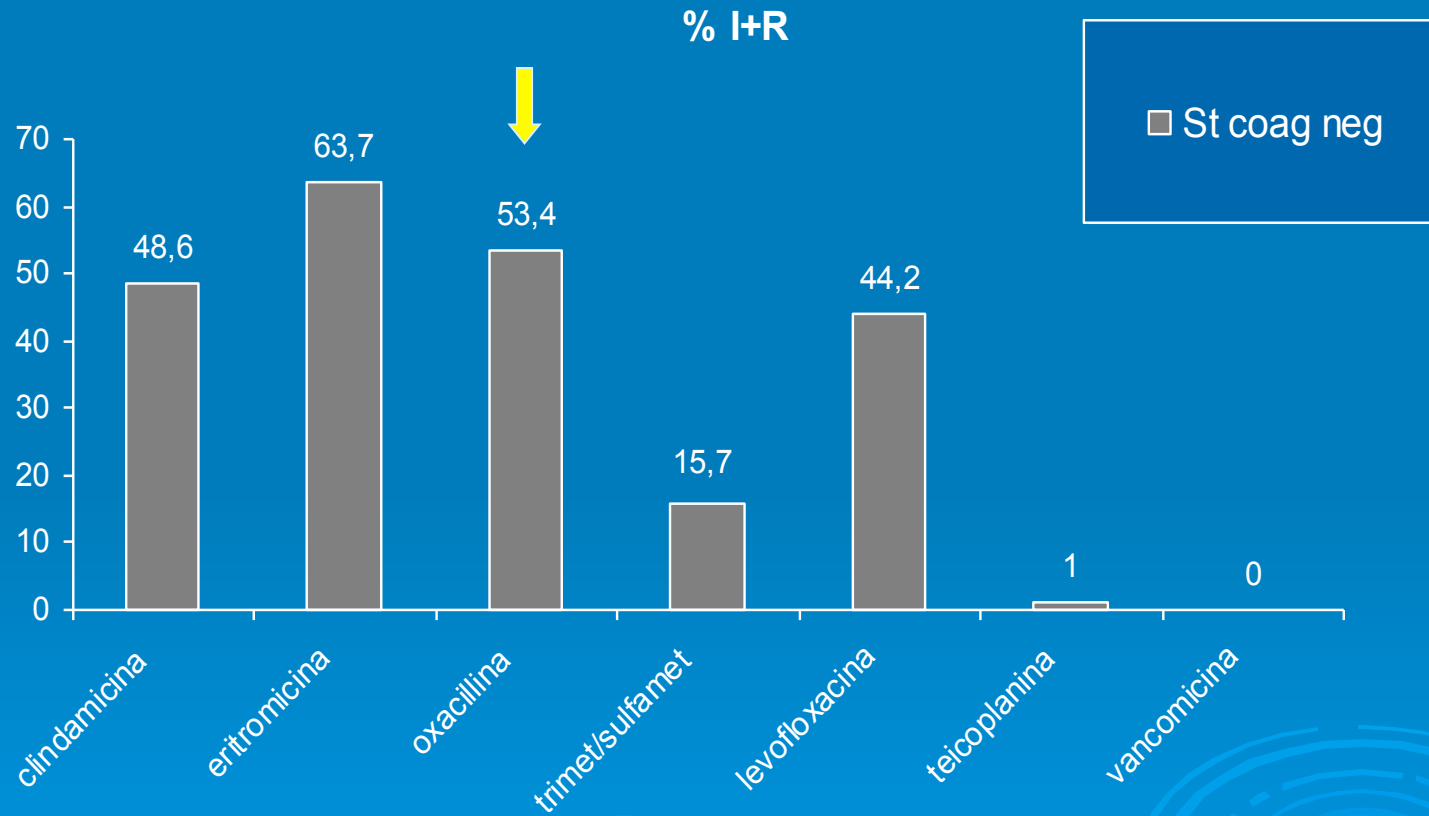


Stafilococco aureo MSSA e MRSA % I+R

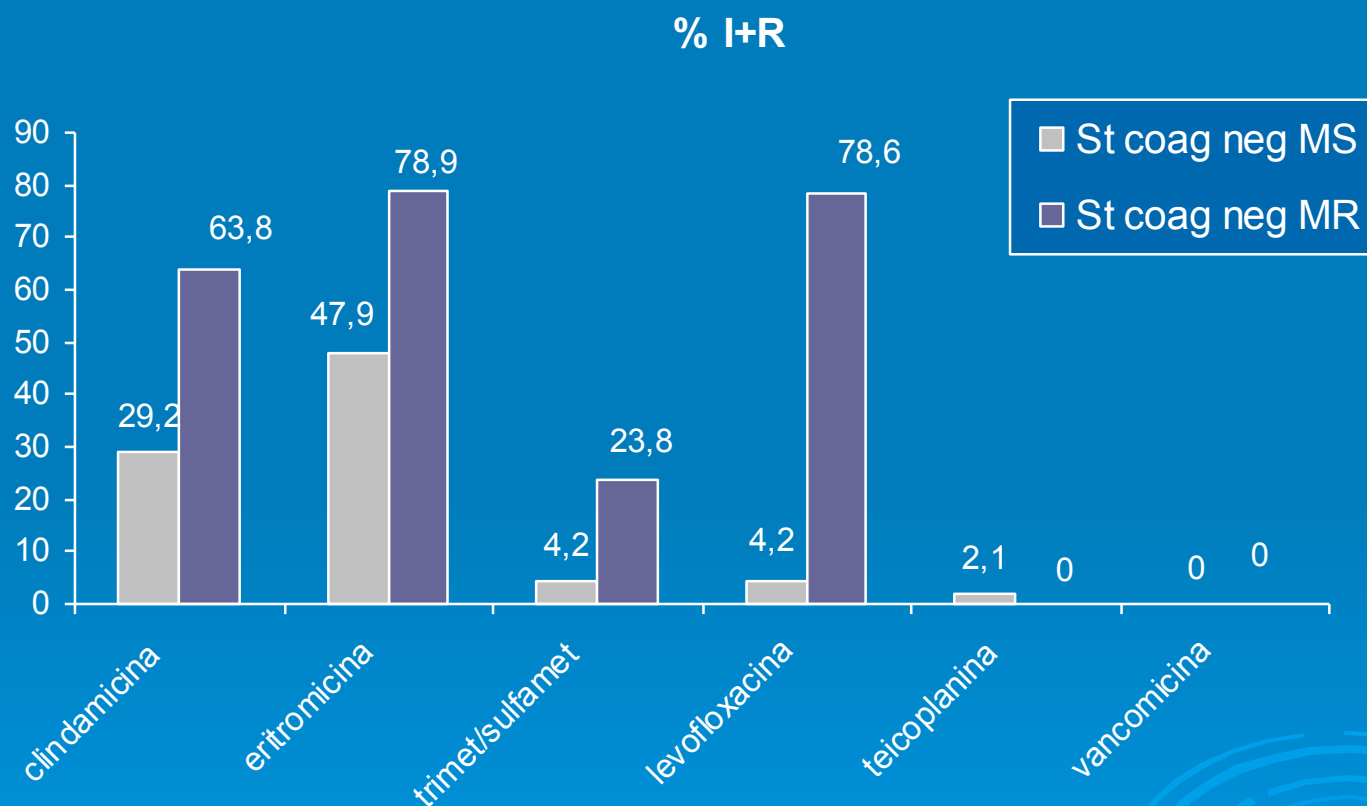


Stafilococco coagulasi negativi

n. ceppi
108

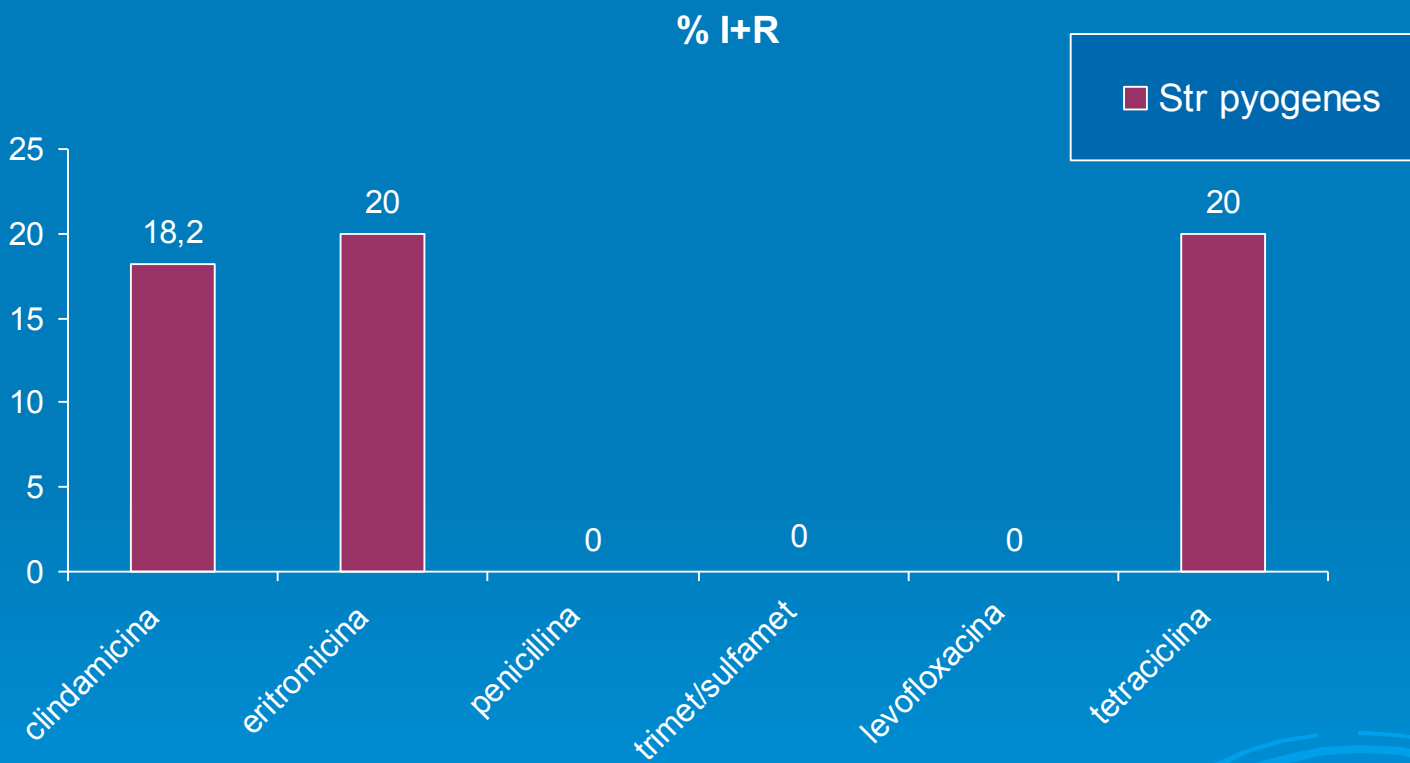


Stafilococco coag neg MS e MR % I+R



Streptococco pyogenes

n. ceppi
11





Isolamento microbiologico

- Valutato nel singolo caso in rapporto al quadro clinico;
- Fattori di rischio : patologie croniche, immunodepressione, diabete ecc:
- Germi a diversa patogenicità ;
- Produzione di tossine;
- Biofilm;
- Prelievo profondo in prima istanza ?
- O dopo fallimento di terapia empirica ?