

CNRP

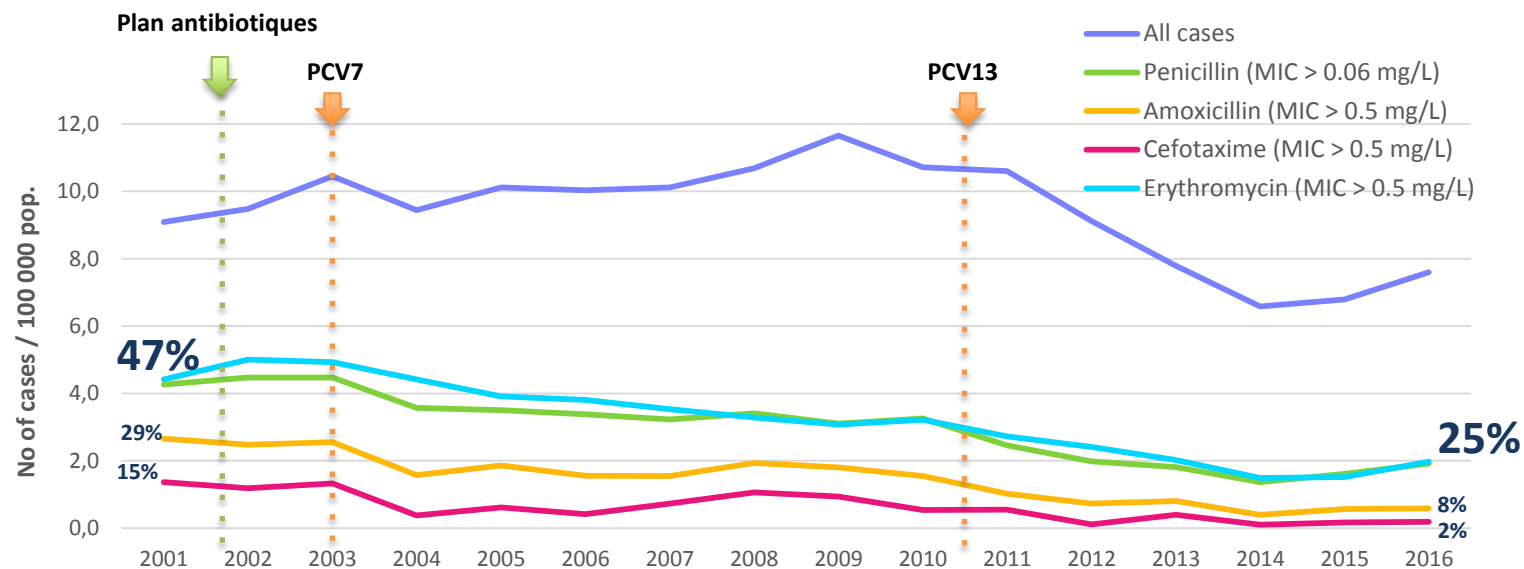


Décrire l'épidémiologie locale

Emmanuelle Varon

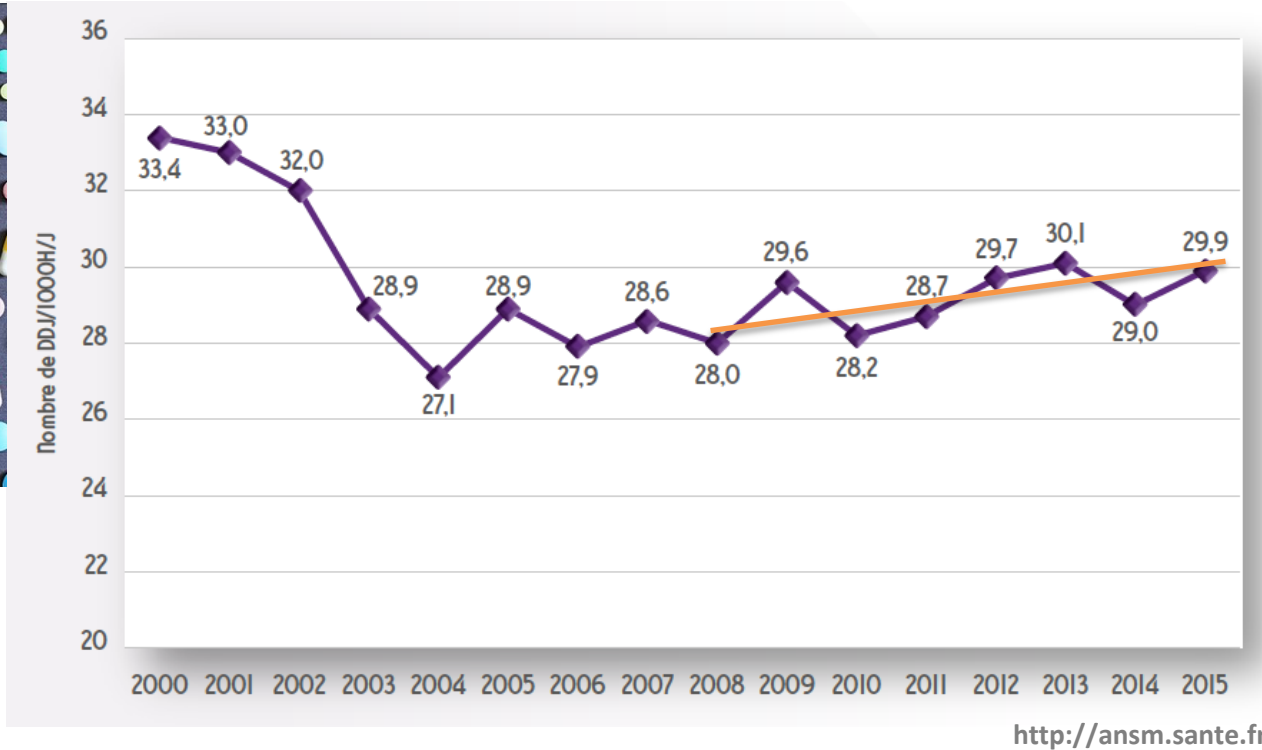
AP-HP, HEGP, Paris

Incidence des infections invasives à pneumocoque en France, 2001-2016



Taux d'incidence : EPIBAC-Santé Publique France
CNRP-ORP, Données 2017 non publiées.

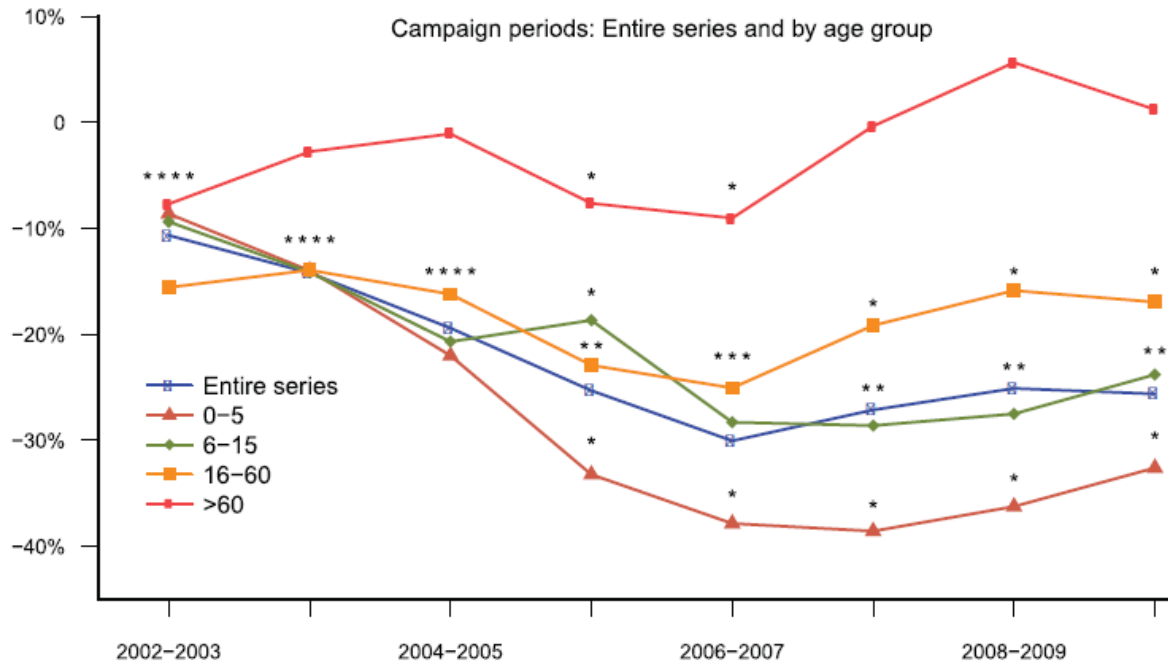
Consommation d'antibiotiques en ville, France, 2000-2015



Avec une DDJ de 29,9 pour 1000 hab. en 2015, la France reste un des pays les plus consommateurs d'antibiotiques dans la communauté (30 % de plus que la moyenne européenne).

Outpatient Antibiotic Use in France between 2000 and 2010: after the Nationwide Campaign, It Is Time To Focus on the Elderly

Adeline Bernier,^{a,b,c} Elisabeth Delarocque-Astagneau,^{a,b,c} Caroline Ligier,^{a,b,c} Marie-Anne Vibet,^{a,b,c} Didier Guillemot,^{a,b,c,d} Laurence Watier^{a,b,c}



Estimated % differences compared to the baseline period (2000 to 2002) during campaign periods for the entire series and by age group.



Local epidemiology and resistance profiles in acute uncomplicated cystitis (AUC) in women: a prospective cohort study in an urban urological ambulatory setting

Michael Seitz^{1,2*}, Christian Stief² and Raphaela Waidelich²

Background: Acute uncomplicated cystitis (AUC) is a common ailment in the urological setting. Guidelines for urinary tract infections are based on large-scale multi-centre, epidemiological and international studies. The objective of this observational study was to establish whether the results of a multi-centre study on the resistance profile of *Escherichia coli* (*E. coli*) in patients with AUC could be directly applied to an urological practice in a major European city or whether there are divergences in the resistance profile.

Est-ce que les reco européennes, qui s'appuient sur des études épidémiologiques multi-centriques ECO-SENS, peuvent être utilisées dans une grande ville d'Europe?

Munich, Jan 2015 à 2017

Seitz et al. *BMC Infectious Diseases* (2017) 17:685
DOI 10.1186/s12879-017-2789-7

Table 2 Percentage susceptibility of *E. coli* isolated from women with AUC

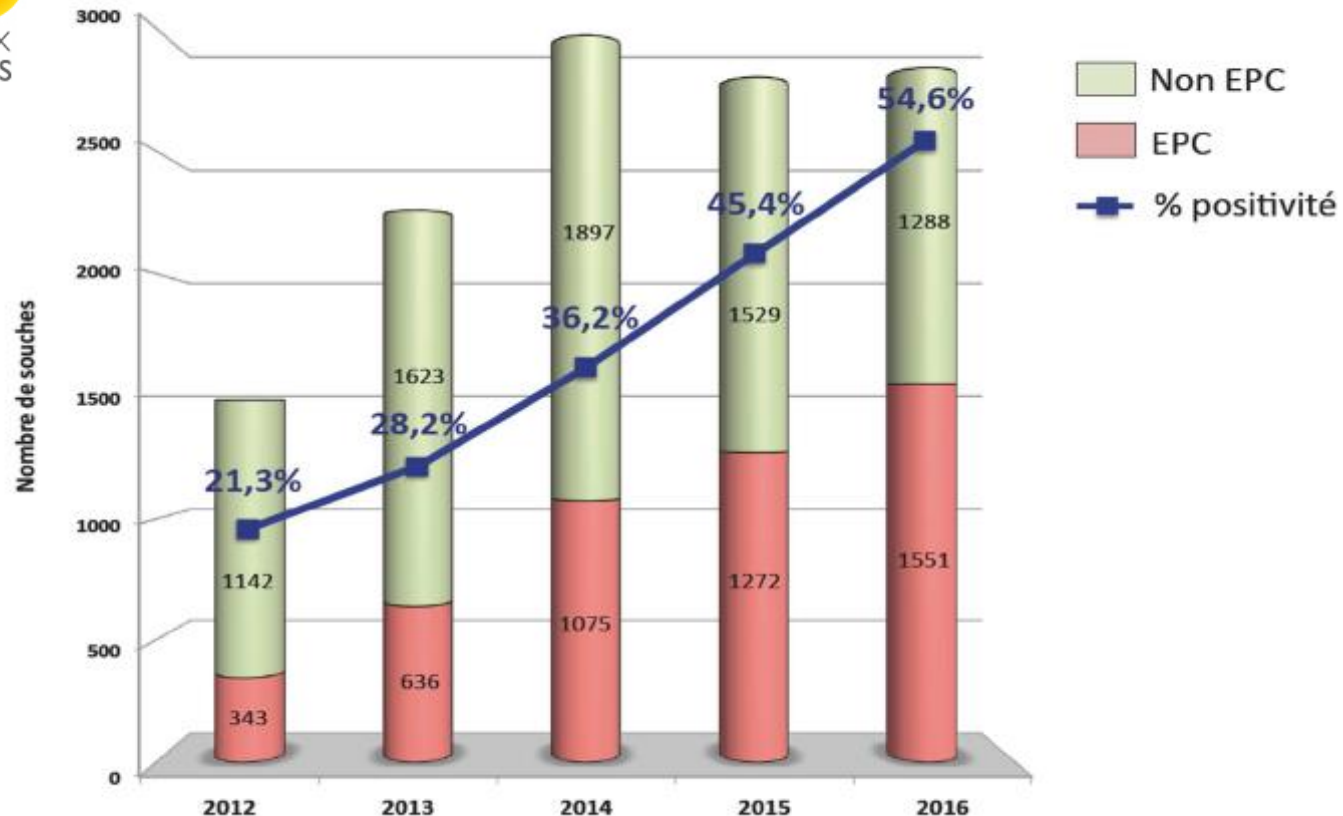
Antibiotic	Susceptibility of the antibiotic to <i>E. coli</i> [in %]
Ampicillin	60.3
Ampicillin/sulbactam	65.5
Amoxicillin	69.6
Amoxicillin/clavulanic acid	74.8
Piperacillin	69.6
Piperacillin/tazobactam	91.8
Cefuroxime	90.7
Cefpodoxime	92.9
Cefotaxime	95.6
Ceftazidime	95.3
Imipenem	100
Meropenem	100
Ciprofloxacin	84.9
Levofloxacin	86.3
Moxifloxacin	86.0
Gentamycin	94.0
Tetracycline	74.8
Nitrofurantoin	98.1
Trimethoprim/sulfamethoxazole	74.8
Fosfomycin-trometamol	99.2

→ % R >> aux % R ECO-SENS

Seitz *et al.* *BMC Infectious Diseases* (2017) 17:685
DOI 10.1186/s12879-017-2789-7

ENTÉROBACTÉRIES PRODUCTRICES DE CARBAPÉNÉMASE (EPC)

Evolution du nombre d'EPC reçues au CNR, 2012-2016

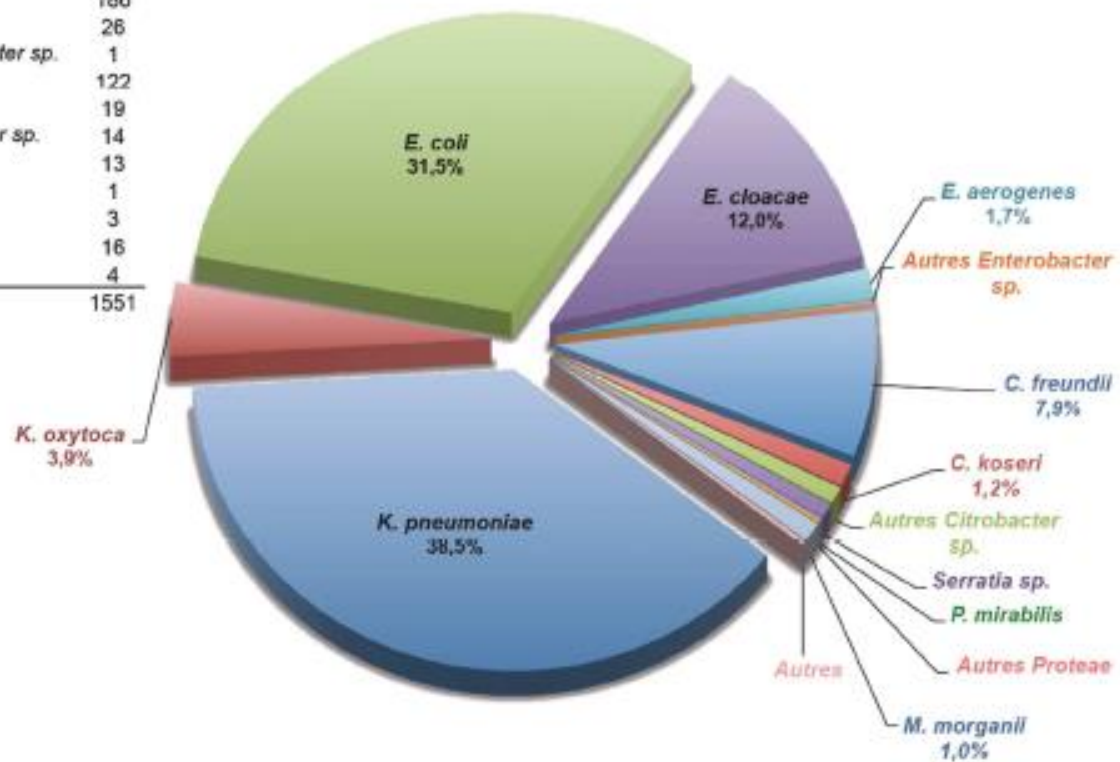


Dortet et al., Rapport annuel 2016

Distribution par espèce des EPC reçues au CNR en 2016



Espèce	n
<i>K. pneumoniae</i>	597
<i>K. oxytoca</i>	61
<i>E. coli</i>	488
<i>E. cloacae</i>	186
<i>E. aerogenes</i>	26
Autres <i>Enterobacter</i> sp.	1
<i>C. freundii</i>	122
<i>C. koseri</i>	19
Autres <i>Citrobacter</i> sp.	14
<i>Serratia</i> sp.	13
<i>P. mirabilis</i>	1
Autres <i>Proteae</i>	3
<i>M. morganii</i>	16
Autres	4
Total	1551



Dortet et al., Rapport annuel 2016

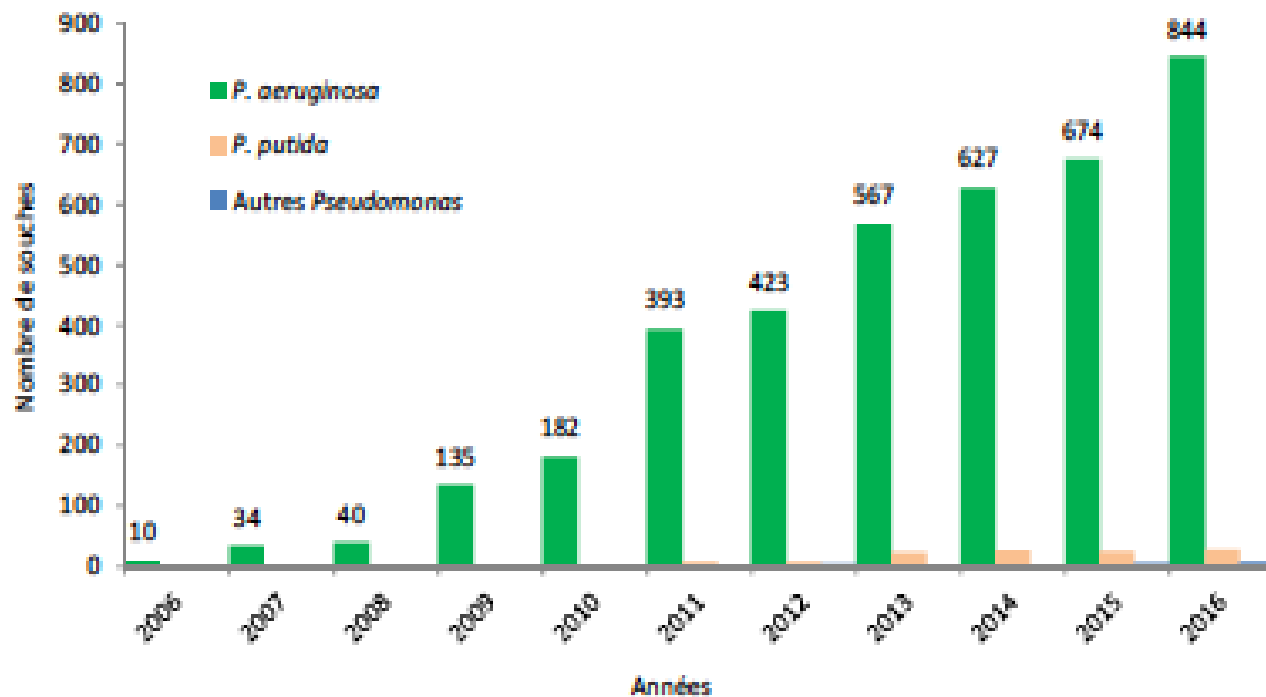
Prévalence des entérobactéries productrices de carbapénèmase en France?

- CNR en 2012 : 343 souches
- CNR et ONERBA en 2013 : Enquête nationale d'incidence de la résistance aux carbapénèmes chez les entérobactéries
 - 130 000 entérobactéries isolées
 - 10 000 souches R à au moins 1 carbapénème (dépistage exclu)
 - 400 EPC



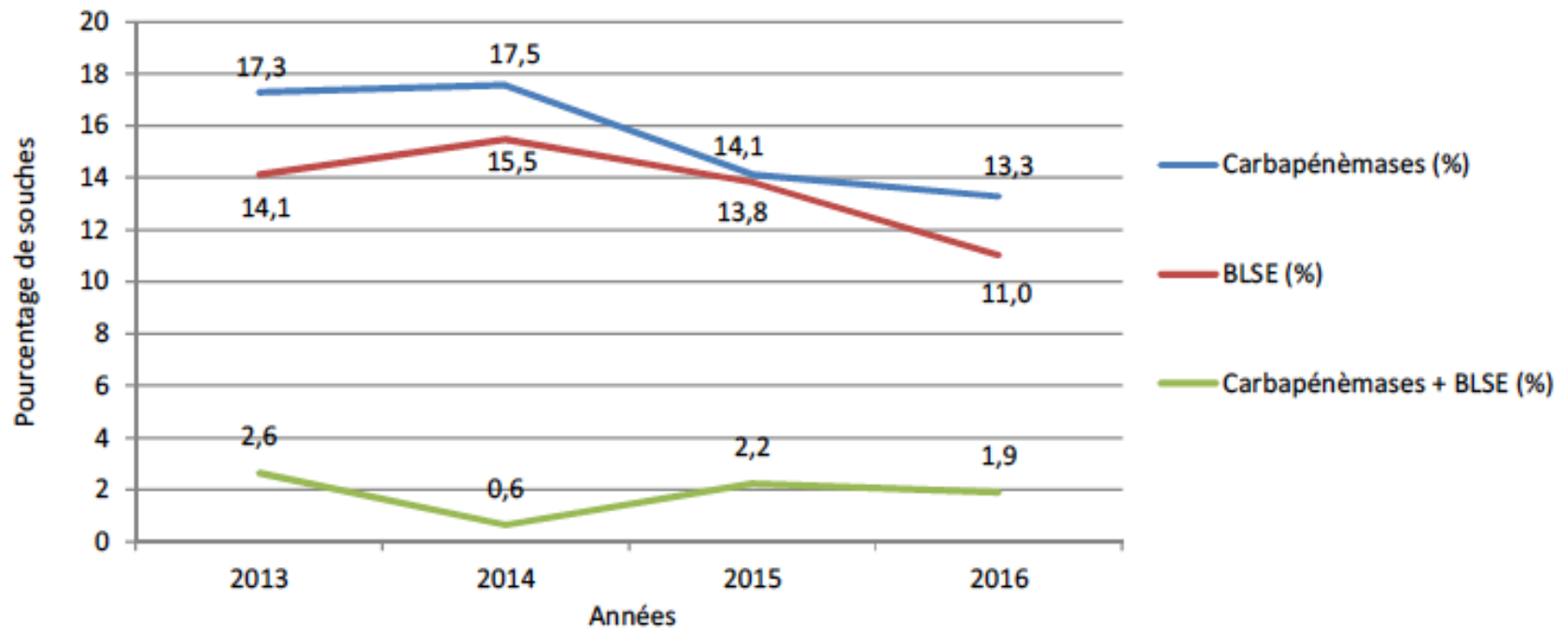
0,3%

Evolution du nombre de souches de *P. aeruginosa* reçues au CNR, 2006-2016



Plésiat et al., Rapport annuel 2016

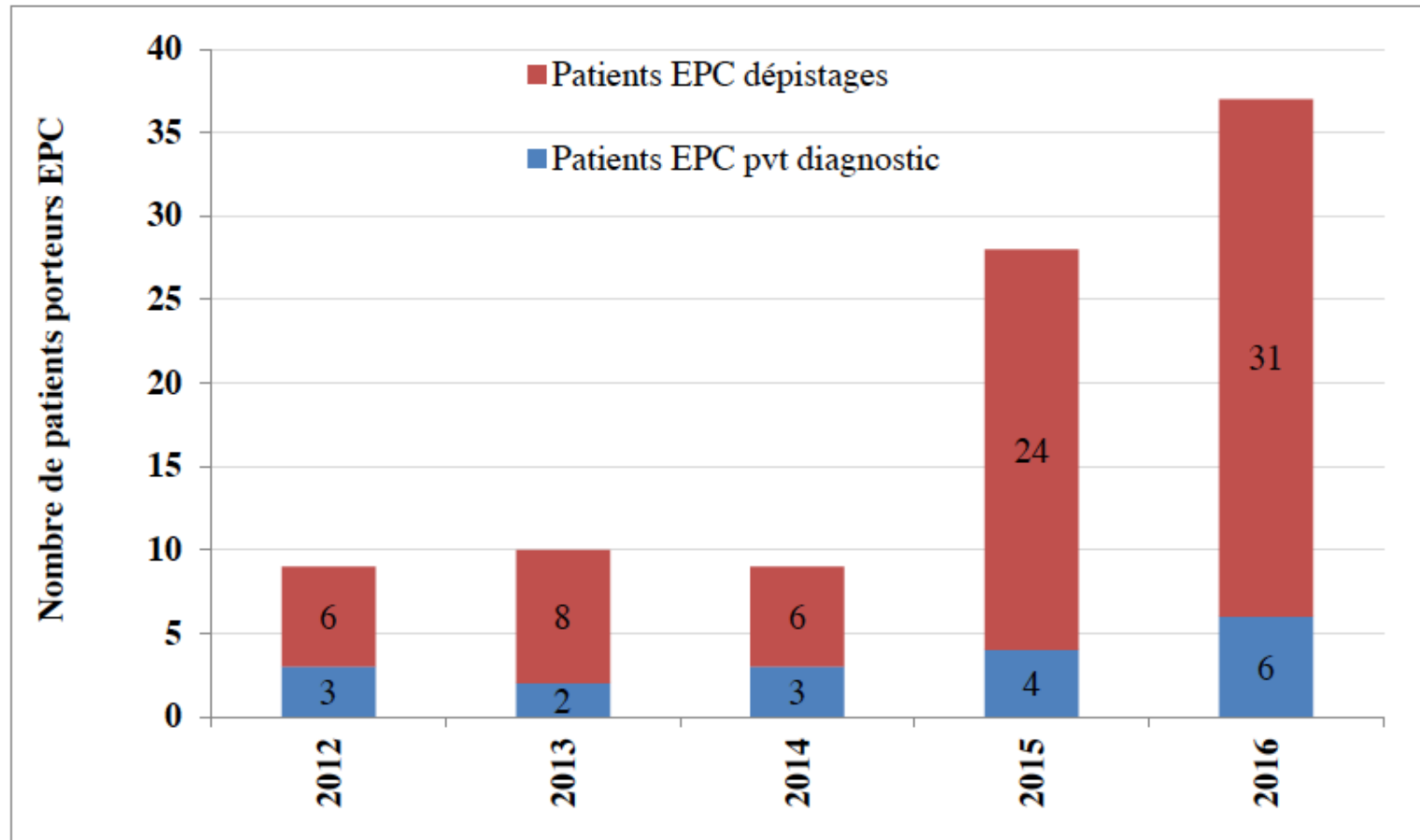
P. aeruginosa producteurs de BLSE et/ou de carbapénémase



Plésiat et al., Rapport annuel 2016

Exemple de surveillance locale : les EPC à l'HEGP

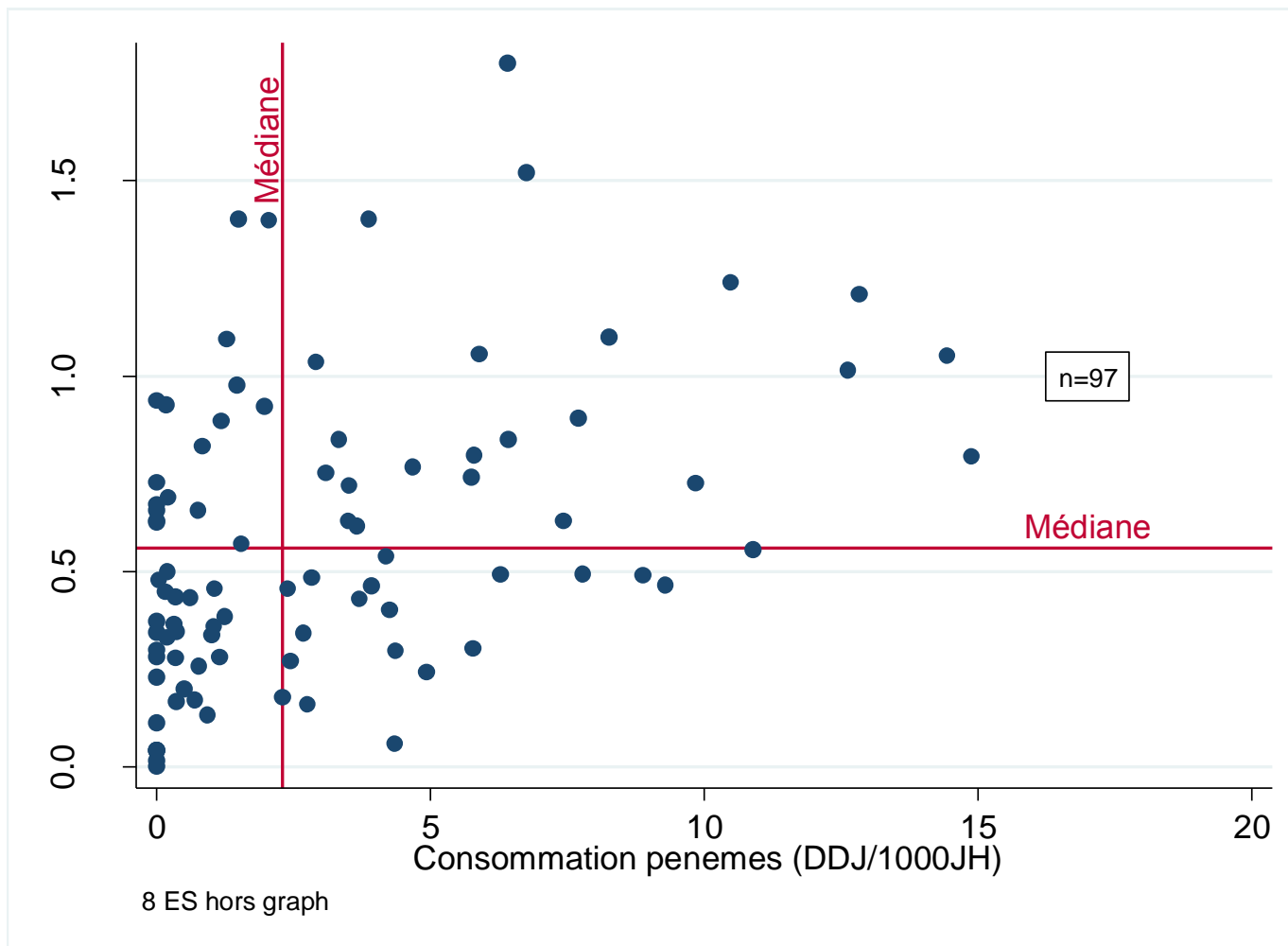
Patients porteurs d'EPC



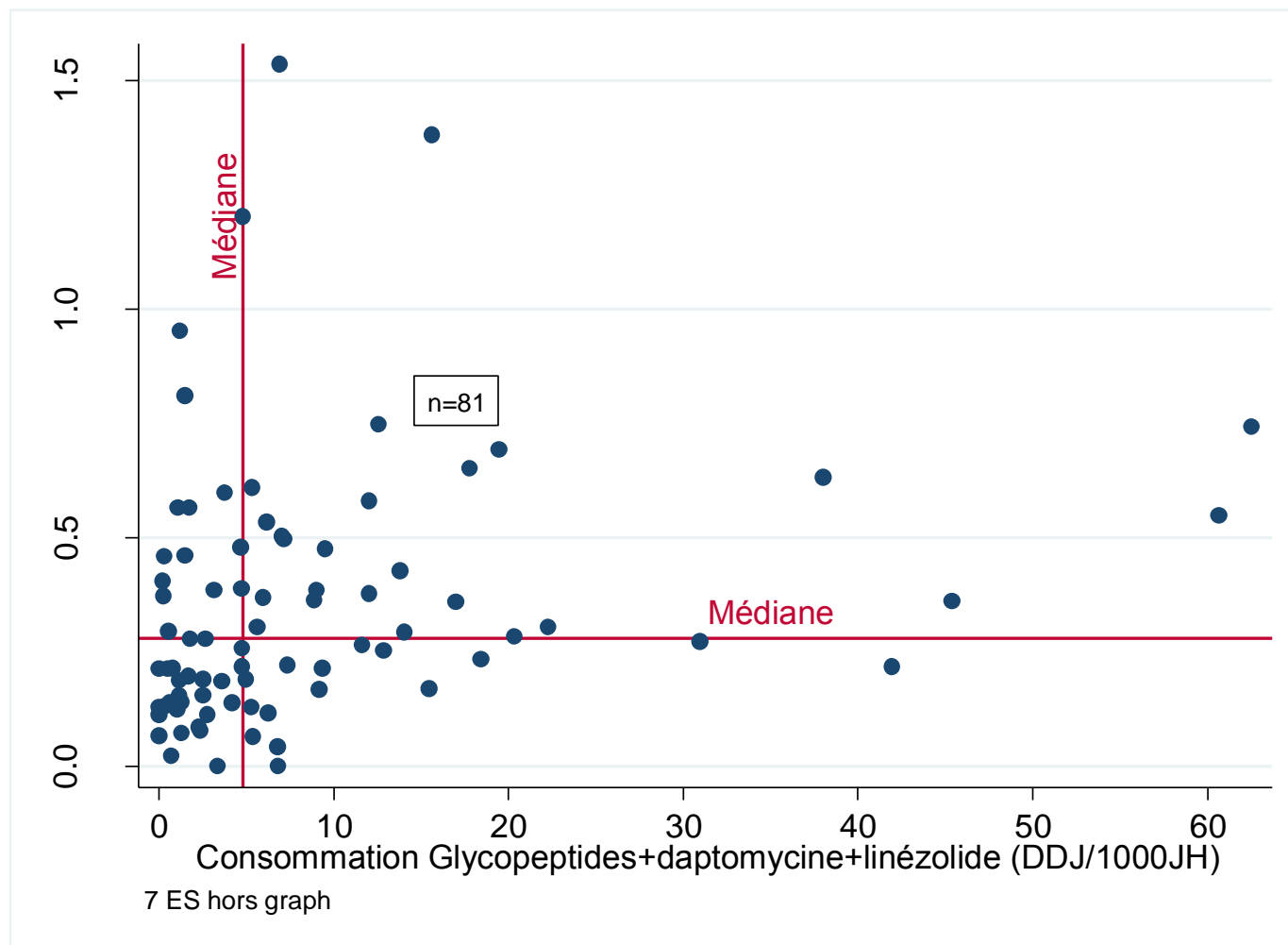
Grohs et al., Rapport Microbiologie HEGP 2017

L'ÉCOLOGIE BACTÉRIENNE (RÉSISTANCES) LOCALE PEUT-ELLE EXPLIQUER LES CONSOMMATIONS ?

INCIDENCE DE E. COLI CTX (CRO) I/R ET CONSOMMATIONS DE PÉNÈMES

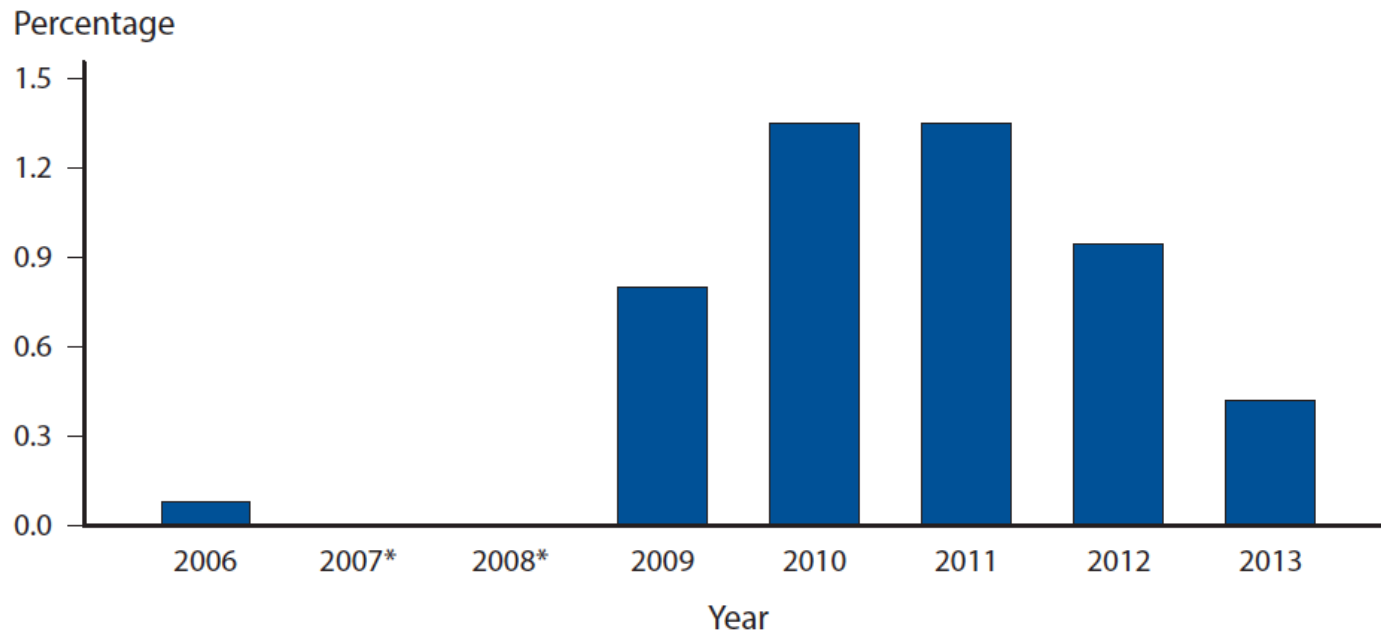


INCIDENCE DE SARM ET CONSOMMATIONS DE GLYCOPEPTIDES+DAPTOMYCINE+LINEZOLIDE



Gonocoques résistants au céfixime (CMI \geq 0,25 mg/L)

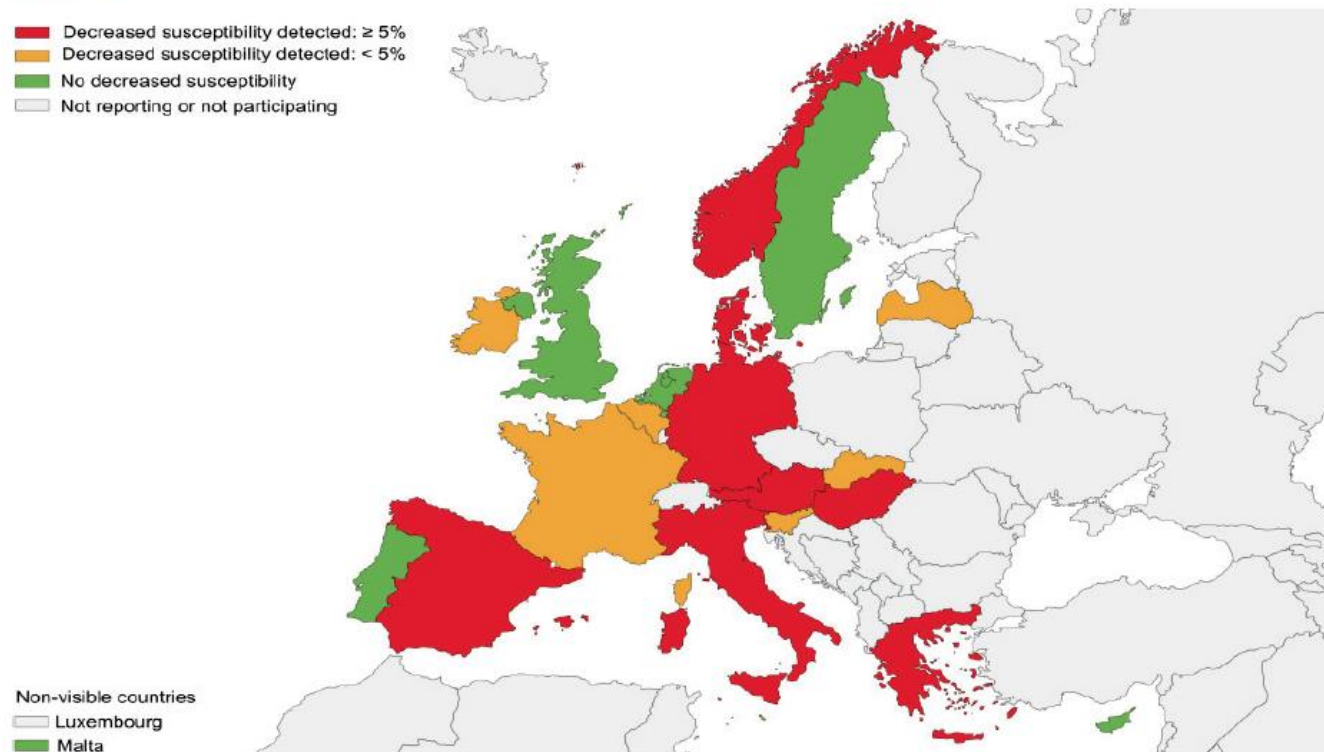
Gonococcal Isolate Surveillance Project (GISP), 2006–2013



* Isolates not tested for cefixime susceptibility in 2007 and 2008.

Epidémiologie des infections à gonocoque en Europe

Figure 3. Proportion of gonococcal isolates with decreased susceptibility to cefixime, EU/EEA, 2012



Source: *European Gonococcal Antimicrobial Surveillance Programme (Euro-GASP), 2012.*

www.ecdc.europa.eu/

Annual epidemiological report 2014 - Sexually transmitted infections, 2015

Worldwide Susceptibility Rates of *Neisseria gonorrhoeae* Isolates to Cefixime and Cefpodoxime: A Systematic Review and Meta-Analysis

Rui-xing Yu¹, Yueping Yin^{1*}, Guan-qun Wang², Shao-chun Chen¹, Bing-jie Zheng¹, Xiu-qin Dai¹, Yan Han¹, Qi Li¹, Guo-yi Zhang¹, Xiangsheng Chen¹





¹ Reference STD Lab, National Center for STD Control, Chinese CDC, Institute of Dermatology, Chinese Academy of Medical Sciences, Peking Union Medical College, Jiangsu Key Laboratory of Molecular Biology for Skin Diseases and STIs, Nanjing, Jiangsu Province, China, ² Department of STD, Anhui Provincial Institute of Dermatology, Hefei, Anhui Province, China

Table 3. Subgroup analysis for cefixime susceptibility rates.

Subgroup type	Susceptibility rate (95%CI)	No. of the NG isolates	No. of the studies	Heterogeneity		χ^2 test	
				I ² (%)	P-value	χ^2	P-value
Population^a							
Men (RS)	96.5 (94.6–97.8)	868	5	0.405	<0.001	-	-
mix	99.9 (99.9–99.9)	76415	7	0.480	<0.001	1341.499	<0.001
Patients	99.8 (99.7–99.9)	11330	6	0.383	0.022	6776.778	<0.001
FSWs	99.7 (94.8–100.0)	147	1	-	-	-	-
Sex workers	98.4 (78.9–99.9)	30	1	-	-	-	-
Young men	99.7 (98.3–99.8)	168	1	-	-	-	-
Continents							
Asia (RS)	97.4 (95.7–98.1)	1650	9	0.397	<0.001	-	-
Europe	99.0 (98.1–99.4)	3080	6	0.389	0.017	669.637	<0.001
North America	99.9 (99.9–99.9)	84005	4	0.375	0.054	183.740	<0.001
Africa	99.5 (96.4–99.9)	223	2	<0.001	0.367	3.987	0.046
Japan or other countries							
Other Asian countries (RS)	99.3 (97.3–99.8)	339	3	<0.001	0.416	-	-
Japan	93.8 (91.6–95.4)	1311	6	0.468	<0.001	6.069	0.014
Other continents	99.9 (99.8–99.9)	87366	12	0.466	<0.001	3.768	0.052
Collection period							
Before or during 2003 (RS)	99.8 (99.8–99.9)	78558	9	0.485	<0.001	-	-
After 2003	99.0 (98.6–99.3)	10202	13	0.460	<0.001	198.597	<0.001
Unknown	99.3 (95.3–99.9)	198	2	<0.001	0.283	-	-
Overall	99.8 (99.7–99.8)	88958	21	0.481	<0.001	-	-

^aStudy population: FSWs (female sex workers); men (men with urethritis); mix (male and female patients), patients (patients whose gender was not identified); young men (young men with discharge); Sex workers (sex workers whose gender was not identified). RS: Reference Subgroup (the subgroups compared with others by χ^2 test).

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- La proportion de souches résistantes au céfixime a légèrement diminué entre 2013 (1,4 %) et 2015 (0,3 %).



PAS D'ALTERNATIVE AUX C3G !!!