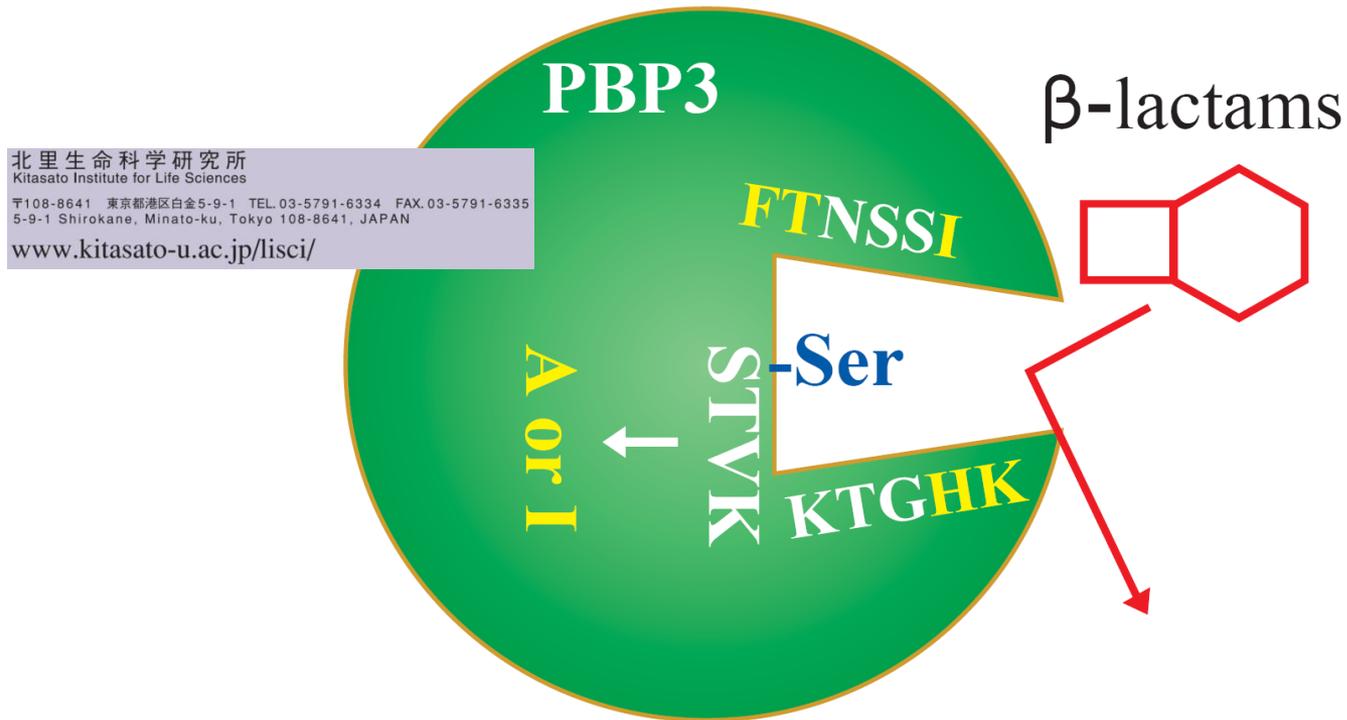


High-level beta-lactam resistance in *Haemophilus influenzae*



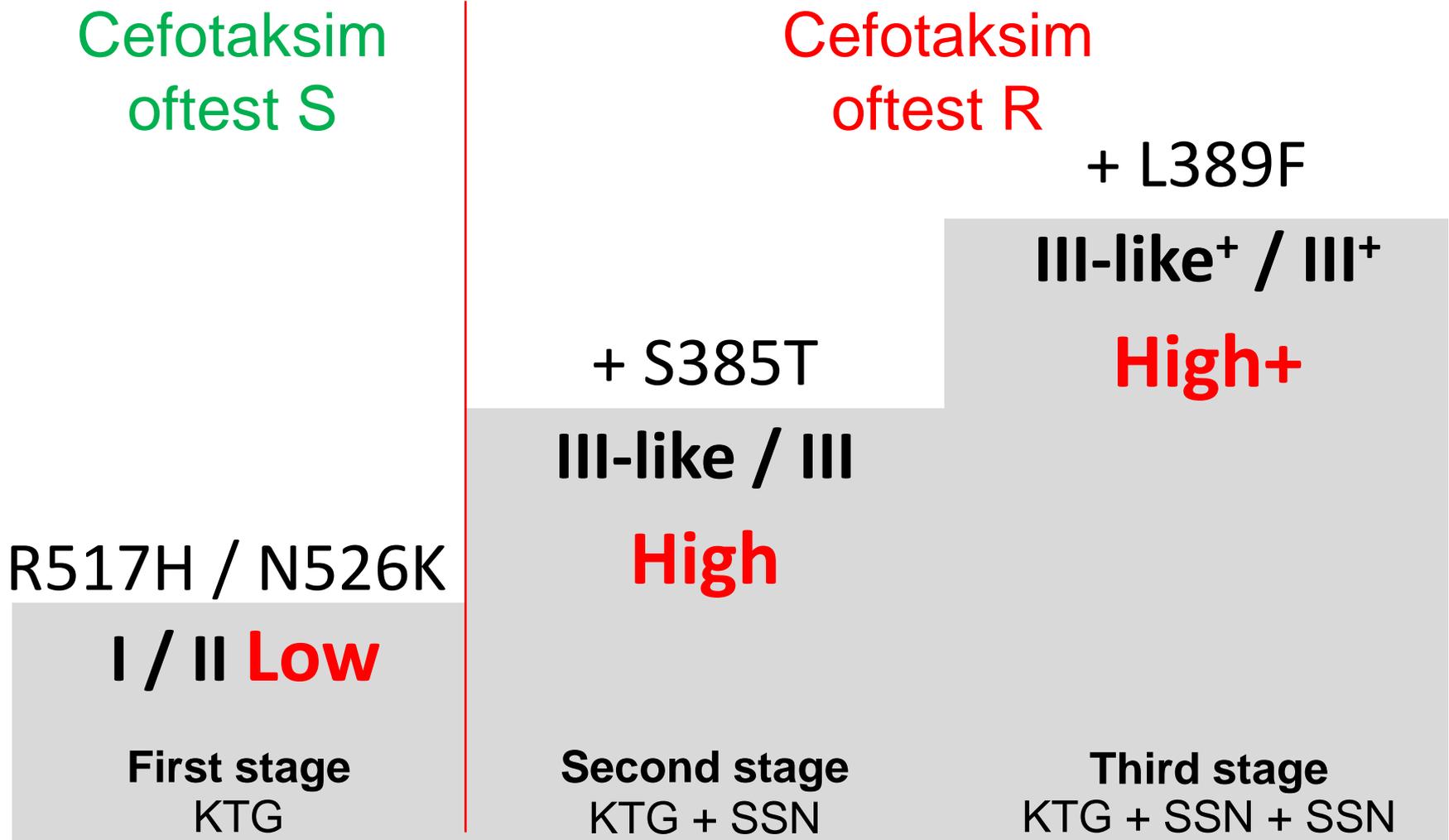
Department of Microbiology, Vestfold Hospital Trust

University of Tromsø

WS 26 May, 2014



Three stages



EUCAST Expert rules

Rule no.	Organisms	Exceptional phenotypes
5.1	<i>Any Enterobacteriaceae</i> (except <i>Proteae</i>)	Resistant to meropenem and/or imipenem ^a
5.2	<i>Serratia marcescens</i> and <i>Proteae</i>	Susceptible to colistin
5.3	<i>Pseudomonas aeruginosa</i> and <i>Acinetobacter</i> spp.	Resistant to colistin
5.4	<i>Haemophilus influenzae</i>	Resistant to any third-generation cephalosporin, carbapenems, and fluoroquinolones

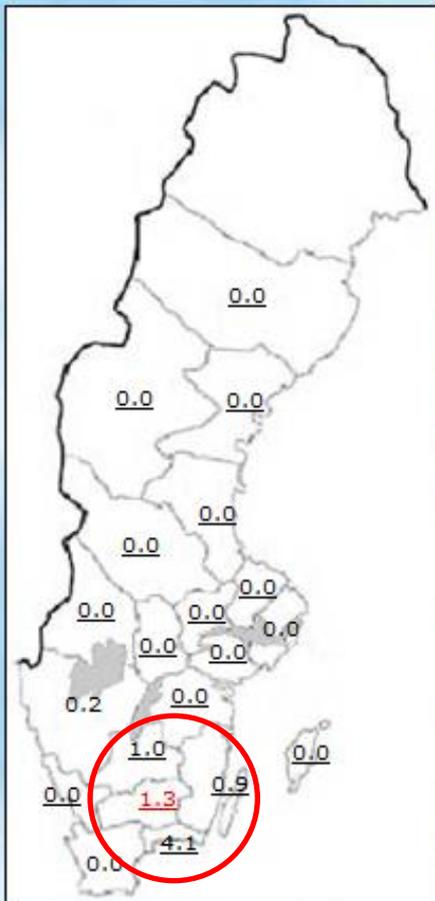
Respiratory tract isolates

Norway 2011

	Proportion of isolates (%)		
	Susceptible	Intermediately susceptible	Resistant
Ampicillin	81.7	-	18.3
Amoxicillin-clavulanic acid	93.8	-	6.2
Cefuroxime	75.3	7.7	17.0
Cefotaxime	100.0	-	0.0
Ciprofloxacin	99.9	-	0.1
Chloramphenicol	99.3	-	0.7
Tetracycline	96.2	3.4	0.4
Trimethoprim-sulfamethoxazole	75.6	2.4	22.0
Nalidixic acid (mm)	99.7	-	0.3
Beta-lactamase	87.7	-	12.3

Cefotaxim-R

Sweden 2013



County	Percentage resistant	County	Percentage resistant
Blekinge	4.1 (0.3)	- Medilab	0.0 (0.3)
Dalarna	0.0 (0.3)	- St Görans Nova Medical AB	-
Gotland	0.0 (0.3)	- Huddinge sjukhus	-
Gävleborg	0.0 (0.3)	Södermanland	0.0 (0.3)
Halland	0.0 (0.3)	Uppsala	0.0 (0.3)
Jämtland	0.0 (0.3)	Värmland	0.0 (0.3)
Jönköping	1.0 (0.3)	Västerbotten	0.0 (0.3)
Kalmar	0.9 (0.3)	Västernorrland	0.0 (0.3)
Kronoberg	1.3 (0.3)	Västmanland	0.0 (0.3)
Norrbotten	-	Västra Götaland	0.2
Skåne	0.0 (0.3)	- Borås	0.0 (0.3)
- Lund	-	- Göteborg	0.0 (0.3)
- Kristianstad	-	- Skövde	1.0 (0.3)
- Malmö	0.0 (0.3)	- Uddevalla	0.0 (0.3)
SMI	-	Örebro	0.0 (0.3)
Stockholm	0.0 (0.3)	Östergötland	0.0 (0.3)
- Karolinska sjukhuset	0.0 (0.3)		
Sweden: -			

Species

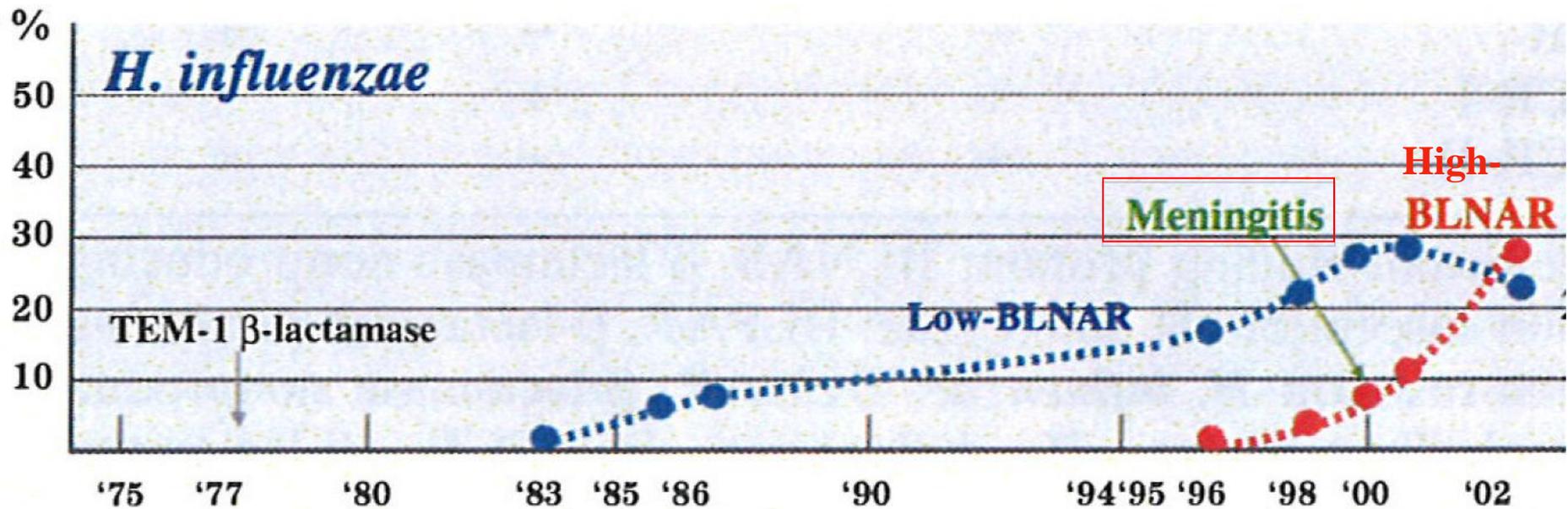
Antibiotic

Year

Show years ahead

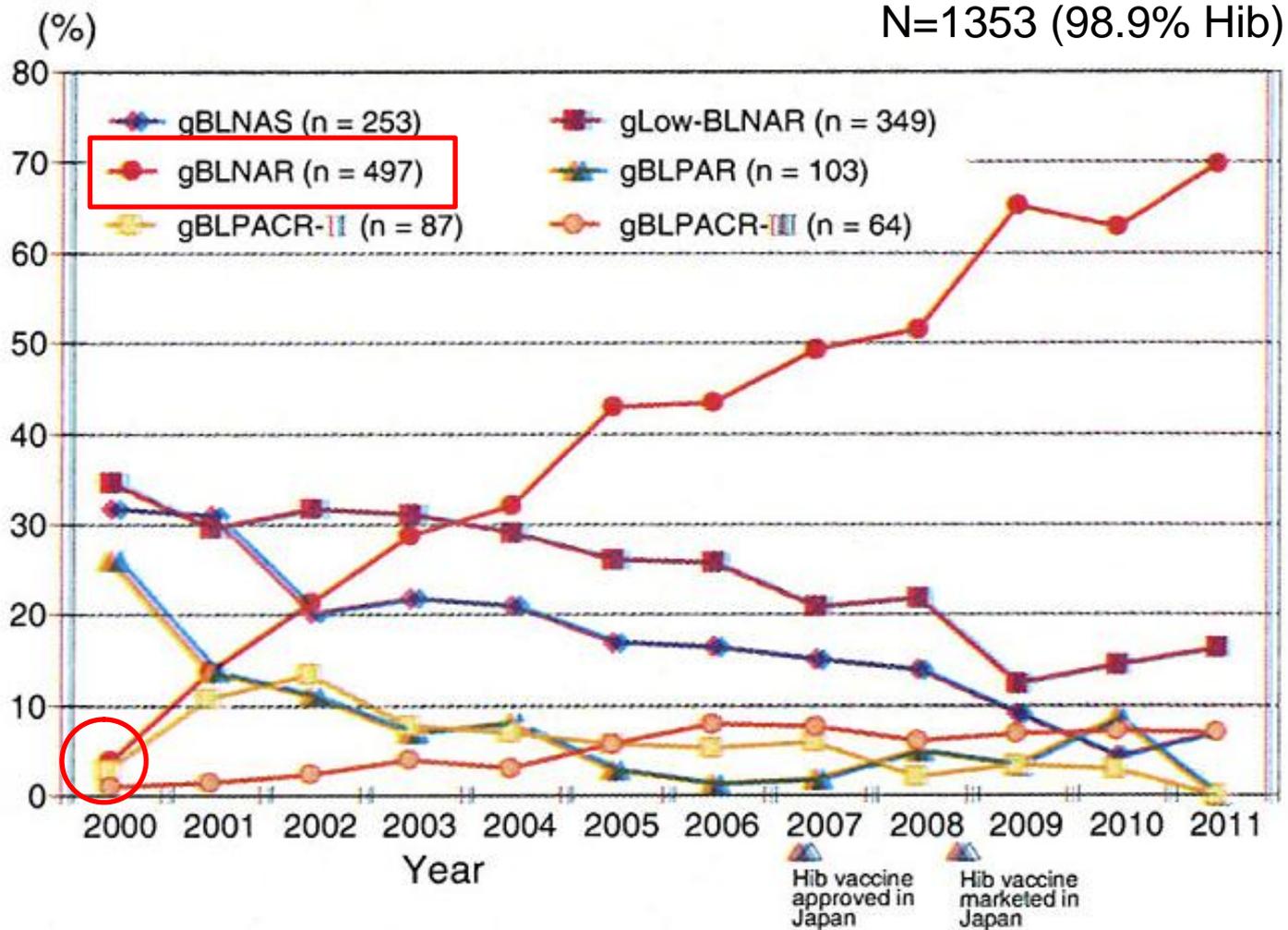
Respiratory tract isolates

Japan 1975-2002



Norway 2011 [Δ 15 yrs]

CSF isolates Japan 2000-2011



- Slides er fjernet fra opprinnelig presentasjon pga manus 'under review'

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- All the Norwegian laboratories

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