



**EUCAST**

European Committee  
on Antimicrobial  
Susceptibility Testing

# ***Haemophilus influenzae***

Calibration of zone diameter  
breakpoints to MIC values

Version 10.0  
January 2026

# *Haemophilus influenzae*

## MIC and zone diameter correlates

- The following histograms present inhibition zone diameter distributions from EUCAST antimicrobial susceptibility testing. In most, the different colours of the bars indicate different MIC values. In some, the colours of the bars indicate a resistance gene or a resistance mechanism.
- The distributions include data for wild-type isolates and for isolates with acquired resistance mechanisms. A large number of isolates with MIC values close to the edge of the wild-type distribution and/or close to EUCAST clinical breakpoints were intentionally included. These distributions can not be used to infer resistance rates or the performance of the tests with routine isolates.
- For some agents, isolates were tested on more than one occasion, including parallel tests with disks and media from several manufacturers. When this is the case, data are presented as both the “number of isolates tested” and the “total number of MIC-zone diameter correlates”, including replicate tests and parallel tests with disks and media from different sources.

# *Haemophilus influenzae*

## Materials and methods

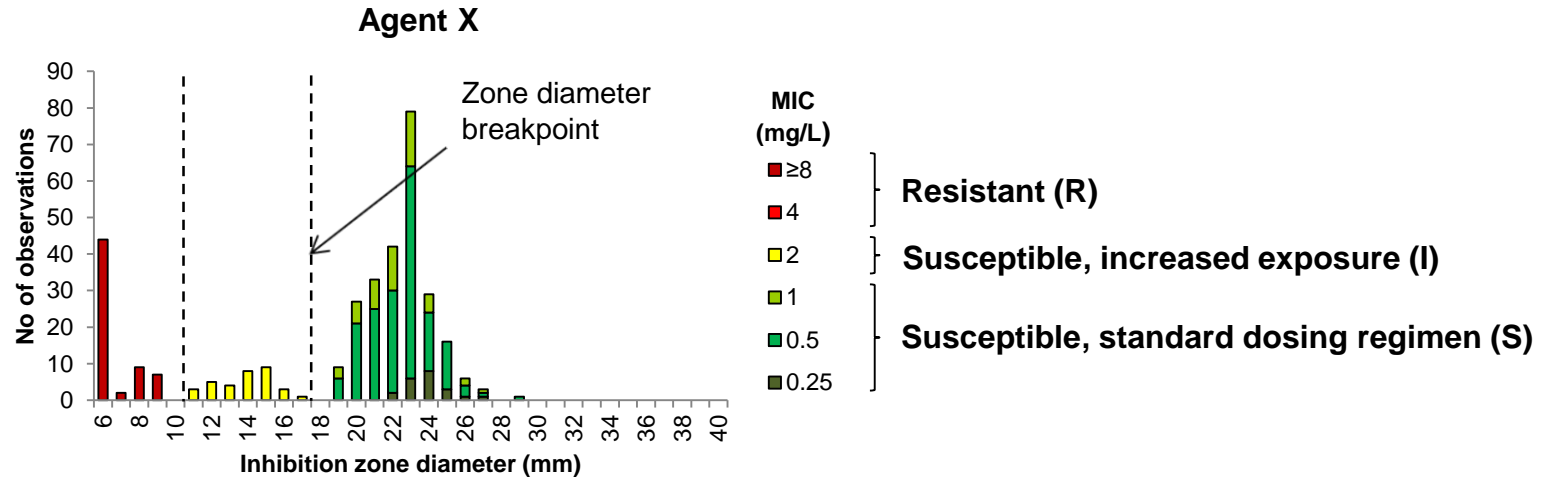
- Antimicrobial susceptibility testing was performed on a collection of *Haemophilus influenzae*, including many isolates with beta-lactam resistance. Disk diffusion was performed on MH-F media according to EUCAST methodology and MIC determination was performed with the ISO broth microdilution method using MH-F broth
- For all beta-lactam agents, data are also presented as separate distributions per beta-lactam resistance mechanism. A nitrocefin-based disk test was used to analyse  $\beta$ -lactamase production and PCR was used to detect PBP mutations.
- The distributions in this presentation are the result of a collaboration between EUCAST, JMI Laboratories (USA), Laboratory Specialists Inc. (USA) and Sykehuset i Vestfold, Tønsberg (Norway).
- This presentation is based on EUCAST Clinical Breakpoint Tables v. 16.0.

# Changes from previous version (9.0)

<b>Changes</b>
<ul style="list-style-type: none"><li>• Indications updated for ampicillin and amoxicillin iv.</li><li>• MIC and zone diameter breakpoints changed for trimethoprim-sulfamethoxazole.</li></ul>

# Explanation of graphs:

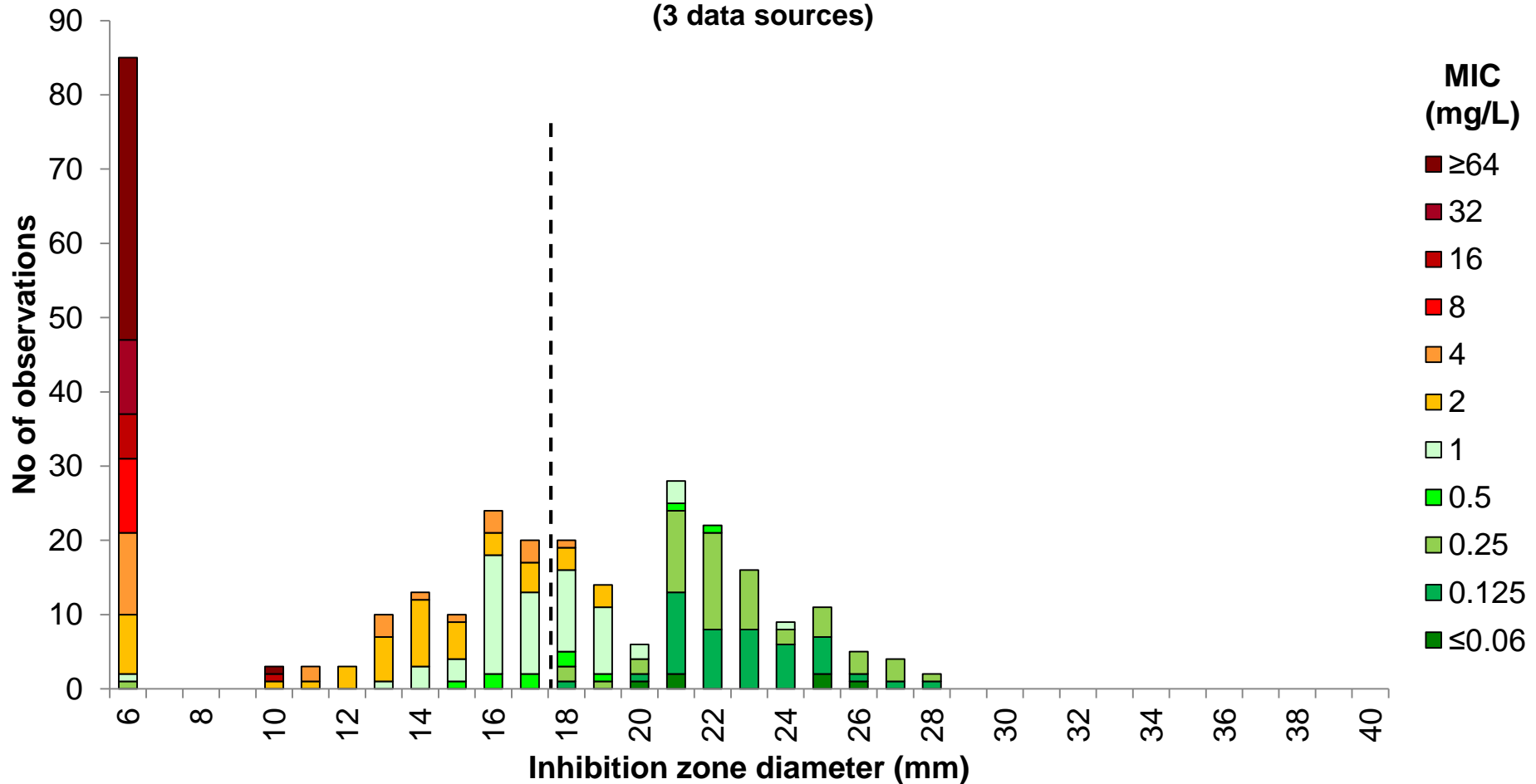
- These graphs show zone diameter distributions with MIC values or resistance mechanisms as coloured bars. Colours are related to current EUCAST MIC breakpoints.



# Ampicillin 2 µg vs. MIC

## *H. influenzae*, 166 isolates (305 correlates)

(3 data sources)



**Breakpoints (non-meningitis)**

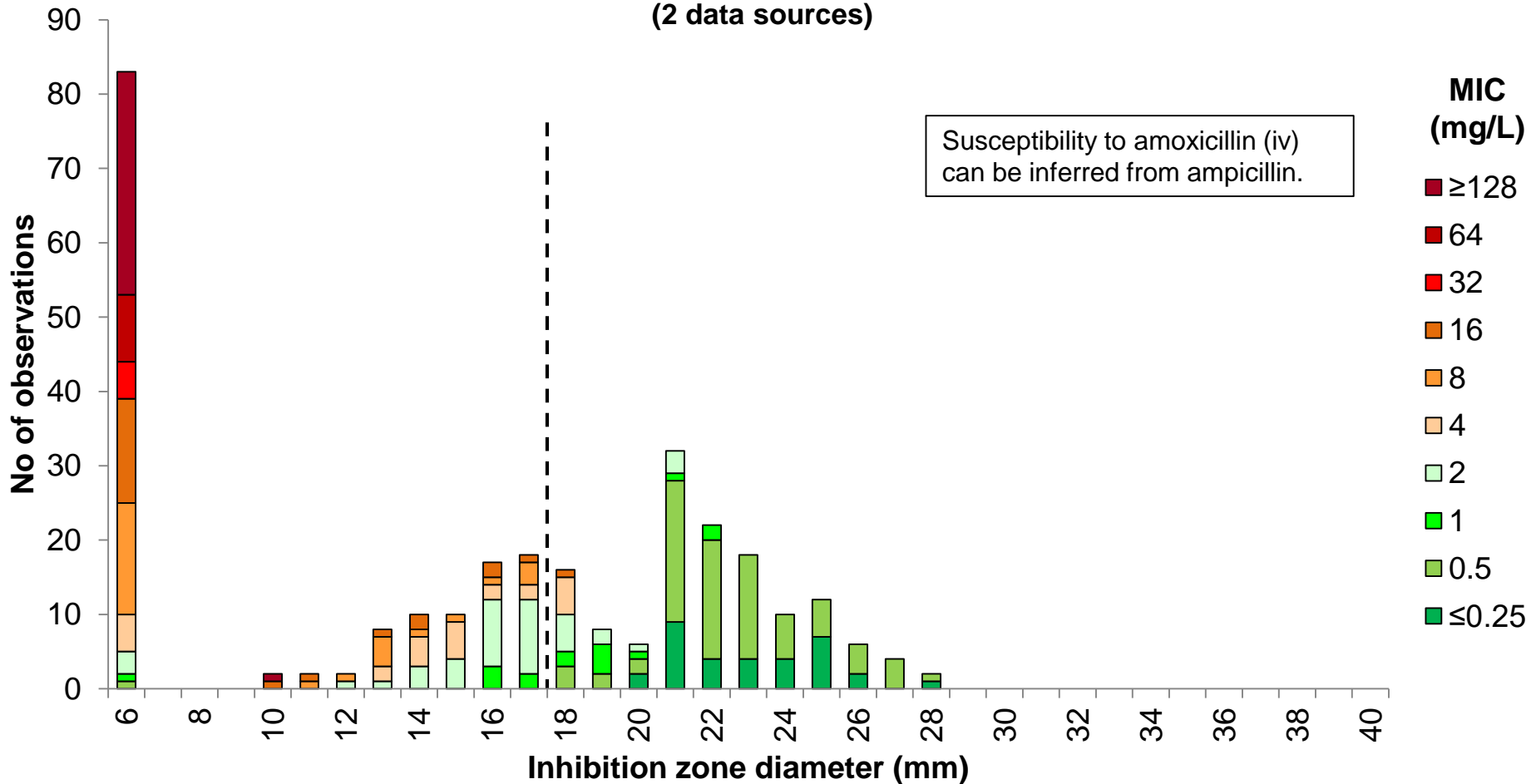
MIC	$S \leq 1, R > 1$ mg/L
Zone diameter	$S \geq 18, R < 18$ mm



# Ampicillin 2 µg vs. Amoxicillin MIC

## *H. influenzae*, 147 isolates (288 correlates)

(2 data sources)



### Breakpoints (non-meningitis)

Amoxicillin (iv) MIC

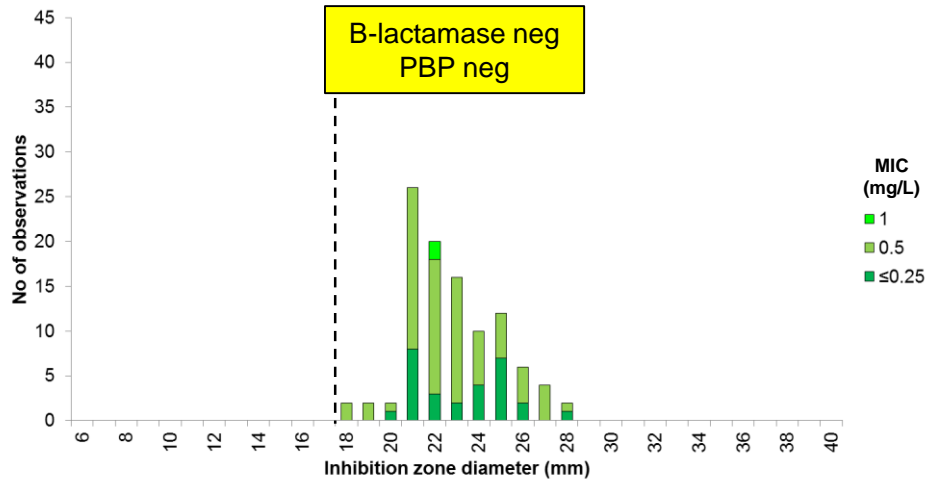
$S \leq 2$ ,  $R > 2$  mg/L

Ampicillin zone diameter

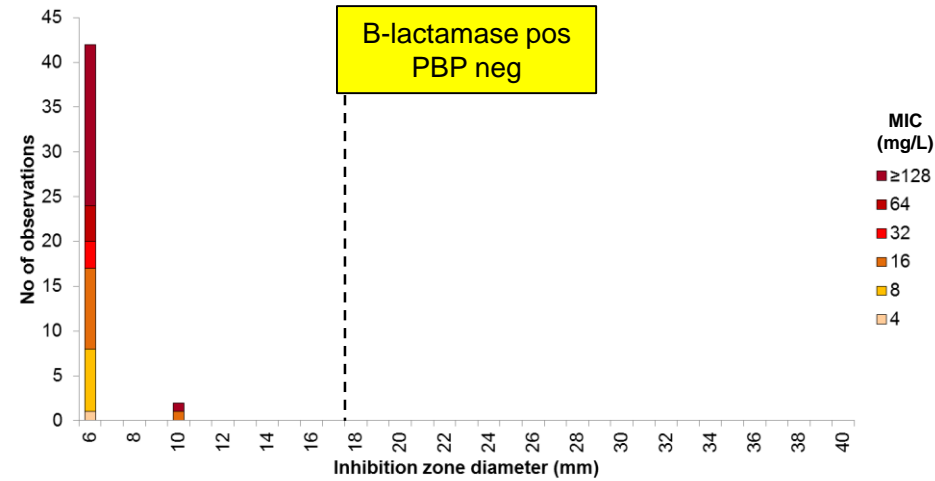
$S \geq 18$ ,  $R < 18$  mm

# Ampicillin/amoxicillin (iv) vs. resistance mechanism

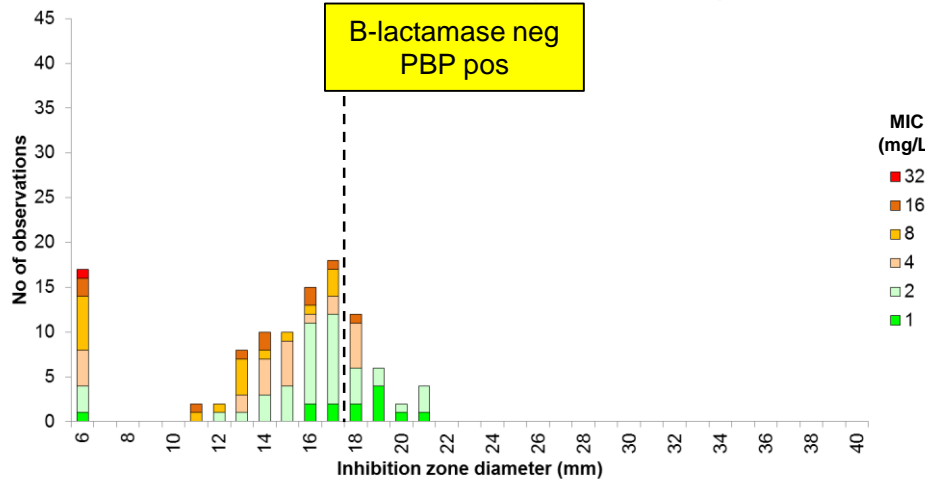
**Ampicillin 2 µg vs. Amoxicillin MIC**  
*H. influenzae*, 51 isolates (102 correlates)



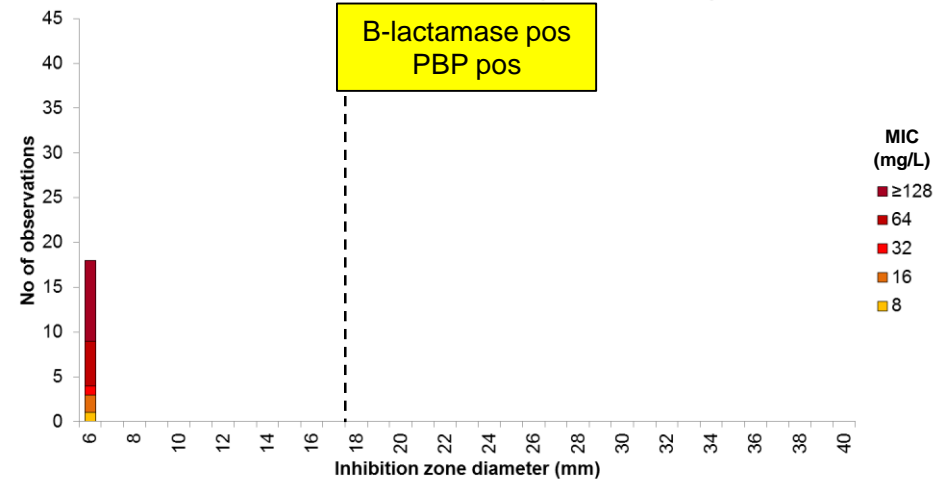
**Ampicillin 2 µg vs. Amoxicillin MIC**  
*H. influenzae*, 23 isolates (44 correlates)



**Ampicillin 2 µg vs. Amoxicillin MIC**  
*H. influenzae*, 55 isolates (106 correlates)



**Ampicillin 2 µg vs. Amoxicillin MIC**  
*H. influenzae*, 9 isolates (18 correlates)



## Breakpoints (non-meningitis)

Amoxicillin (iv) MIC

$S \leq 2$ ,  $R > 2$  mg/L

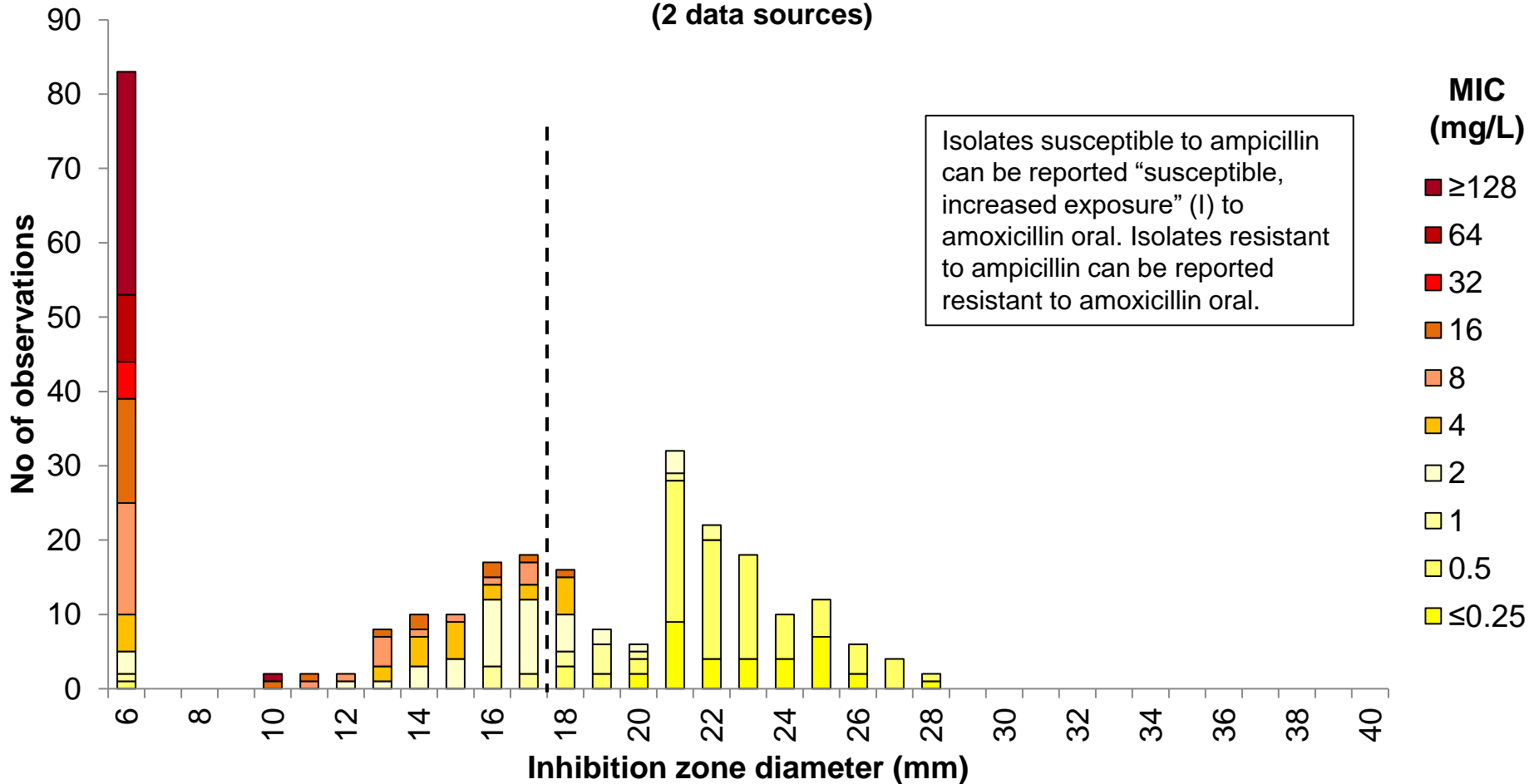
Ampicillin zone diameter

$S \geq 18$ ,  $R < 18$  mm

# Ampicillin 2 µg vs. Amoxicillin MIC

## *H. influenzae*, 147 isolates (288 correlates)

(2 data sources)



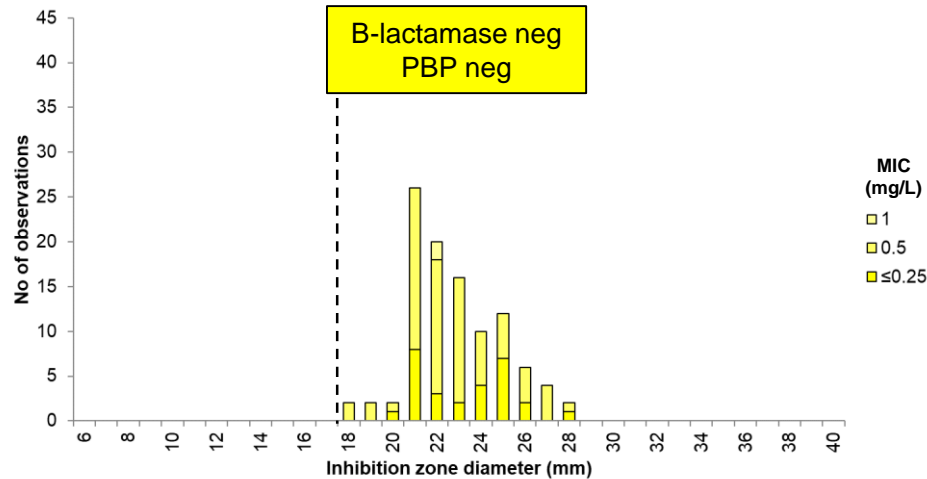
### Breakpoints (oral)

Amoxicillin MIC  $S \leq 0.001$ ,  $R > 2$  mg/L

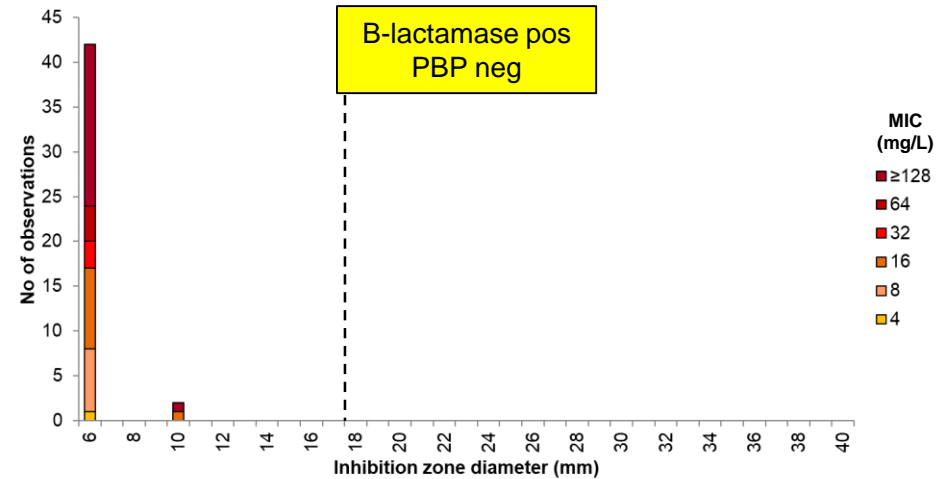
Ampicillin zone diameter  $S \geq 18$ ,  $R < 18$  mm

# Ampicillin/amoxicillin (oral) vs. resistance mechanism

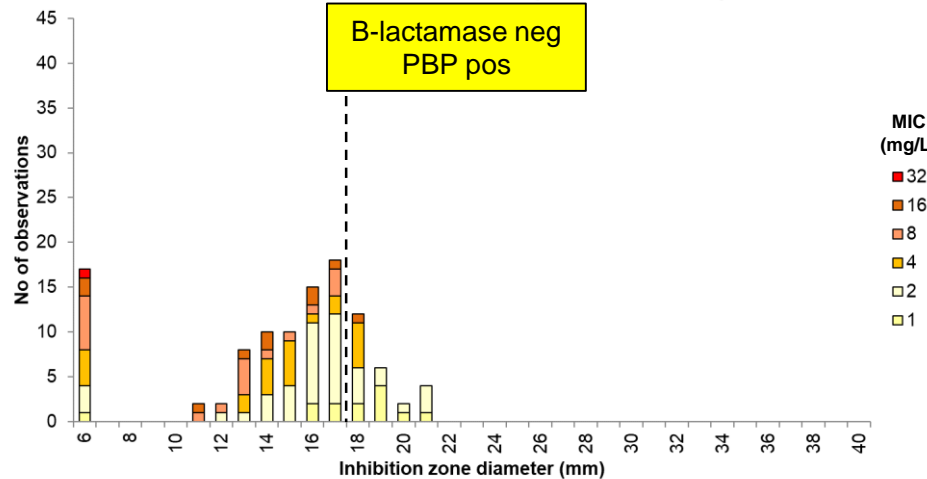
**Ampicillin 2 µg vs. Amoxicillin MIC**  
*H. influenzae*, 51 isolates (102 correlates)



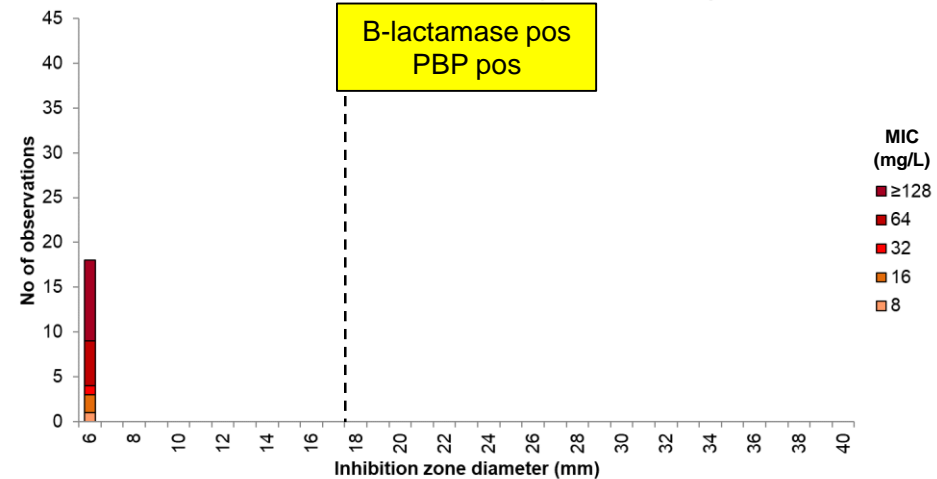
**Ampicillin 2 µg vs. Amoxicillin MIC**  
*H. influenzae*, 23 isolates (44 correlates)



**Ampicillin 2 µg vs. Amoxicillin MIC**  
*H. influenzae*, 55 isolates (106 correlates)



**Ampicillin 2 µg vs. Amoxicillin MIC**  
*H. influenzae*, 9 isolates (18 correlates)



## Breakpoints (oral)

Amoxicillin MIC

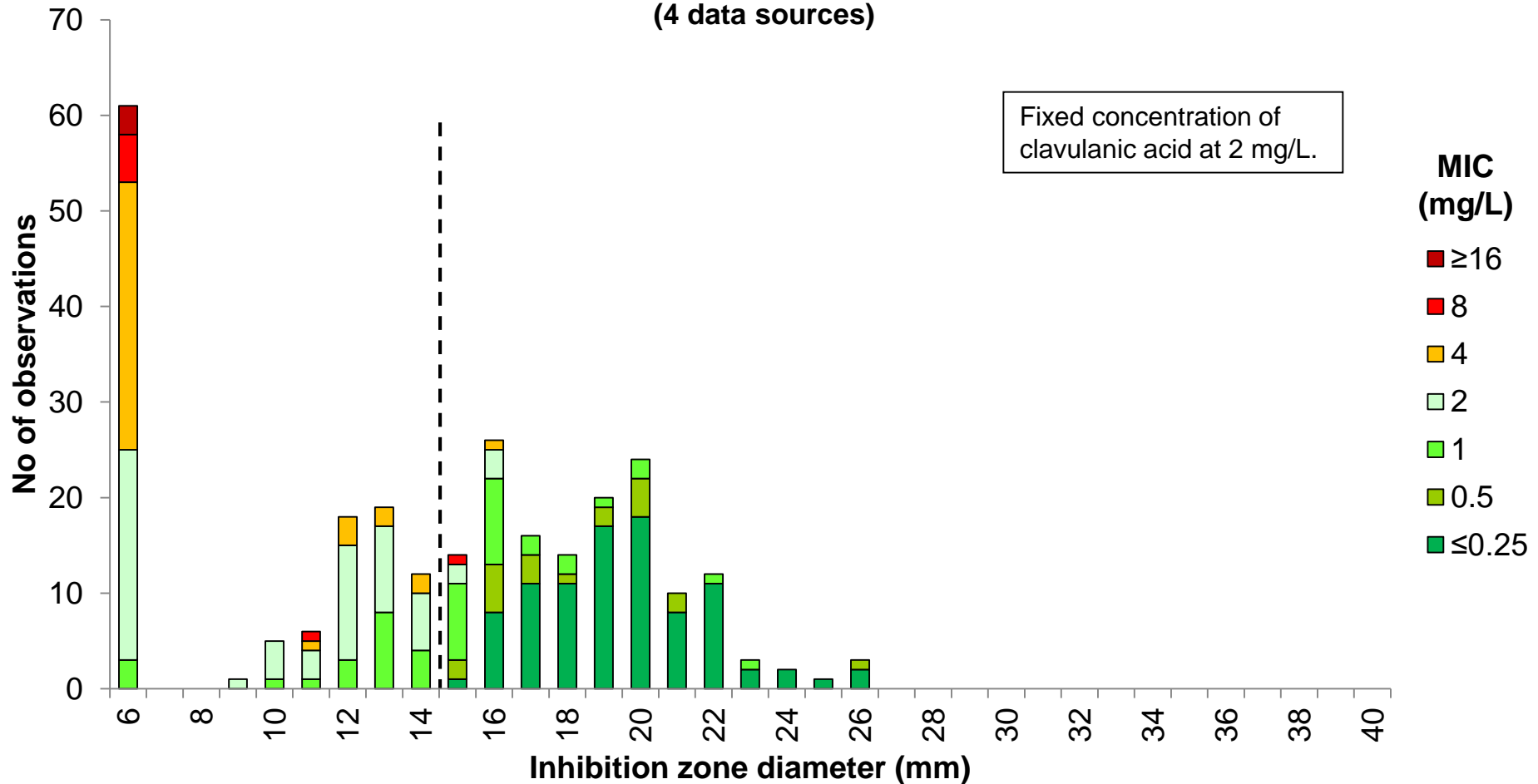
$S \leq 0.001$ ,  $R > 2$  mg/L

Ampicillin zone diameter

$S \geq 18$ ,  $R < 18$  mm

# Amoxicillin-clavulanic acid 2-1 $\mu\text{g}$ vs. MIC *H. influenzae*, 177 isolates (267 correlates)

(4 data sources)



## Breakpoints (iv)

MIC

S ≤ 2, R > 2 mg/L

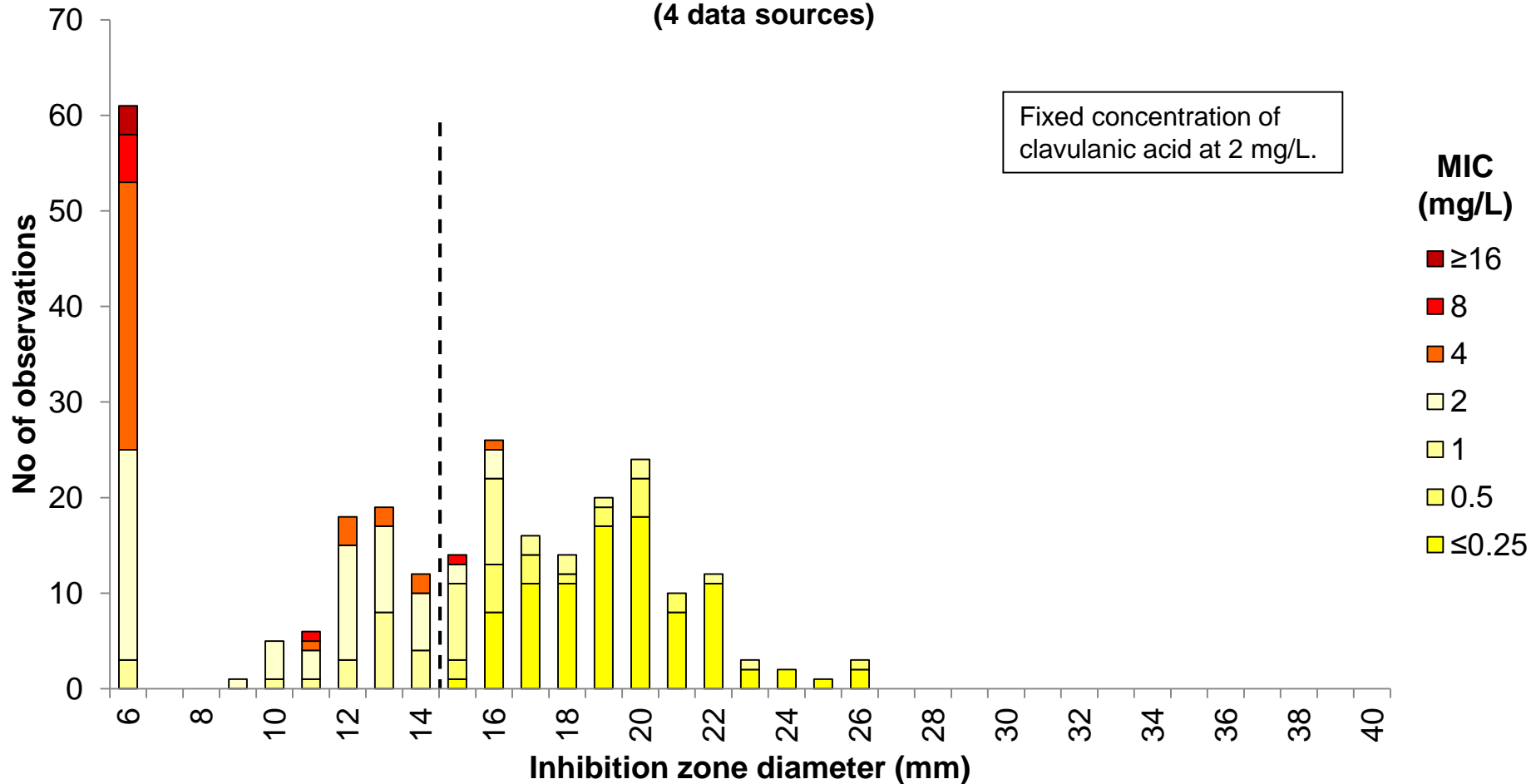
Zone diameter

S ≥ 15, R < 15 mm



# Amoxicillin-clavulanic acid 2-1 $\mu\text{g}$ vs. MIC *H. influenzae*, 177 isolates (267 correlates)

(4 data sources)



## Breakpoints (oral)

MIC

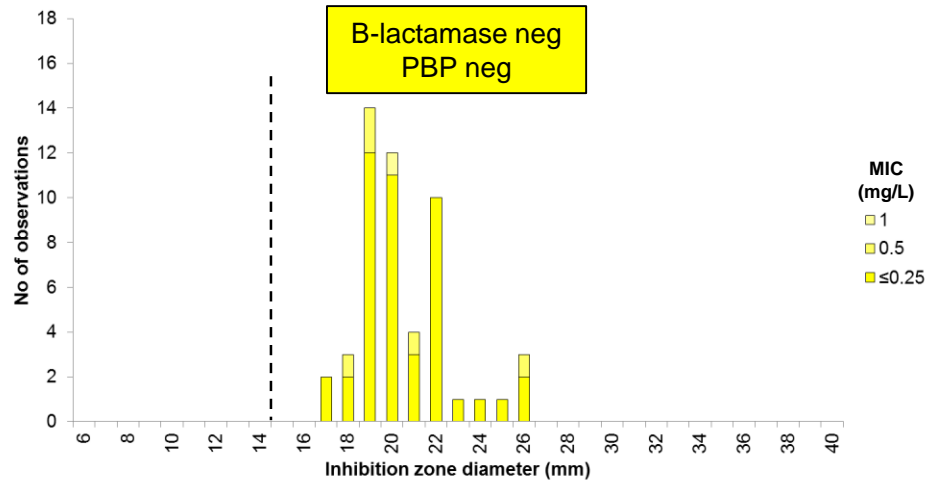
$S \leq 0.001$ ,  $R > 2$  mg/L

Zone diameter

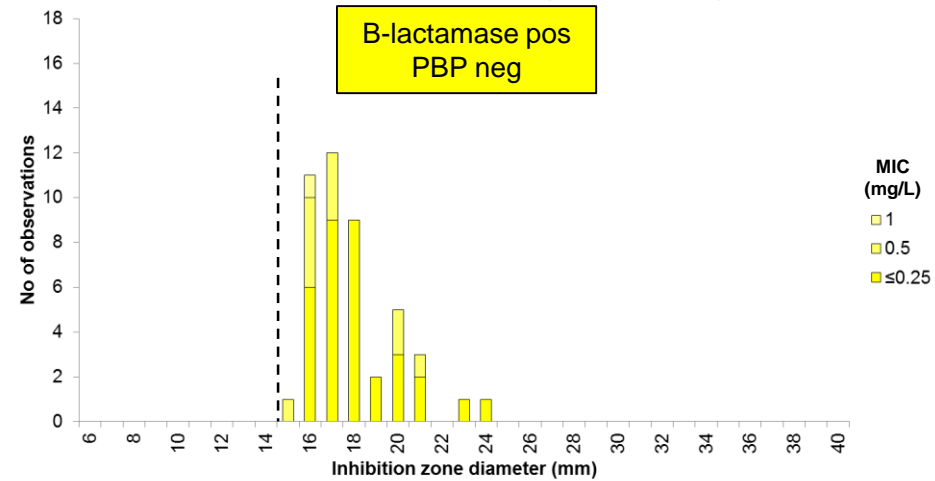
$S \geq 50$ ,  $R < 15$  mm

# Amoxicillin-clav (oral) vs. resistance mechanism

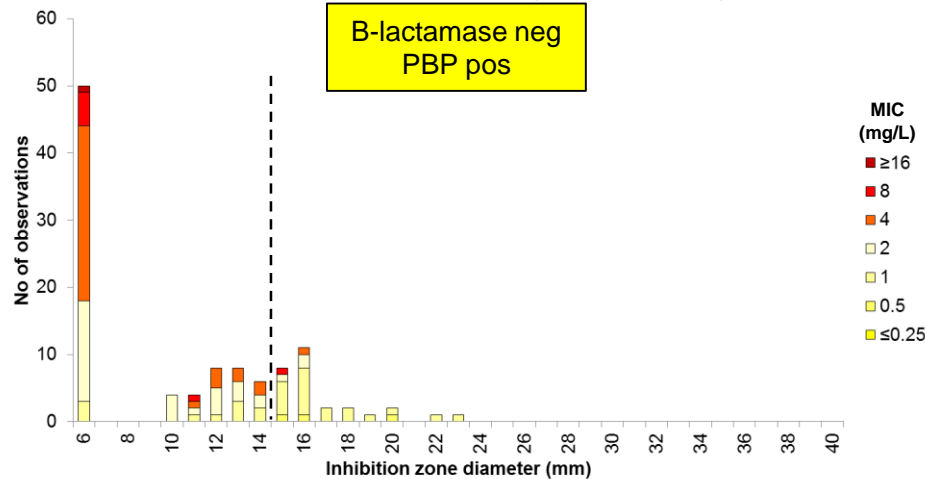
Amoxicillin-clavulanic acid 2-1 µg vs. MIC  
*H. influenzae*, 51 isolates



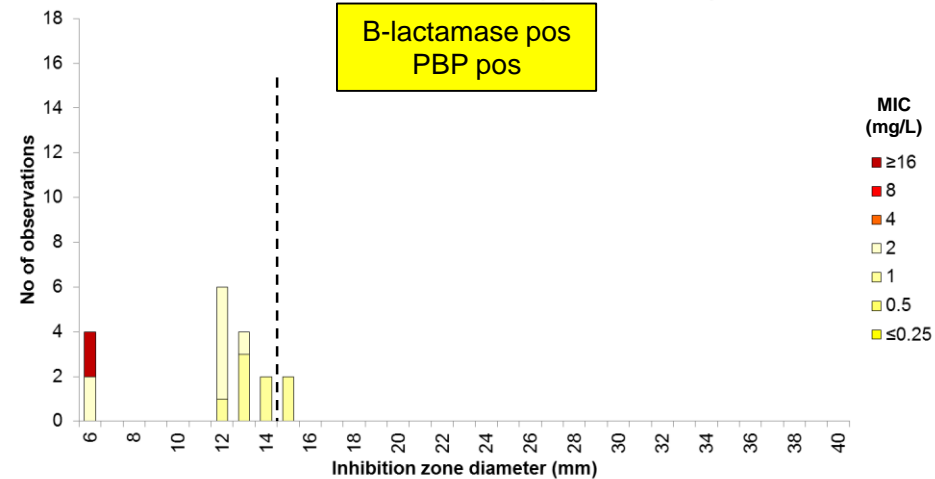
Amoxicillin-clavulanic acid 2-1 µg vs. MIC  
*H. influenzae*, 23 isolates (45 correlates)



Amoxicillin-clavulanic acid 2-1 µg vs. MIC  
*H. influenzae*, 65 isolates (108 correlates)



Amoxicillin-clavulanic acid 2-1 µg vs. MIC  
*H. influenzae*, 9 isolates (18 correlates)



## Breakpoints (oral)

MIC

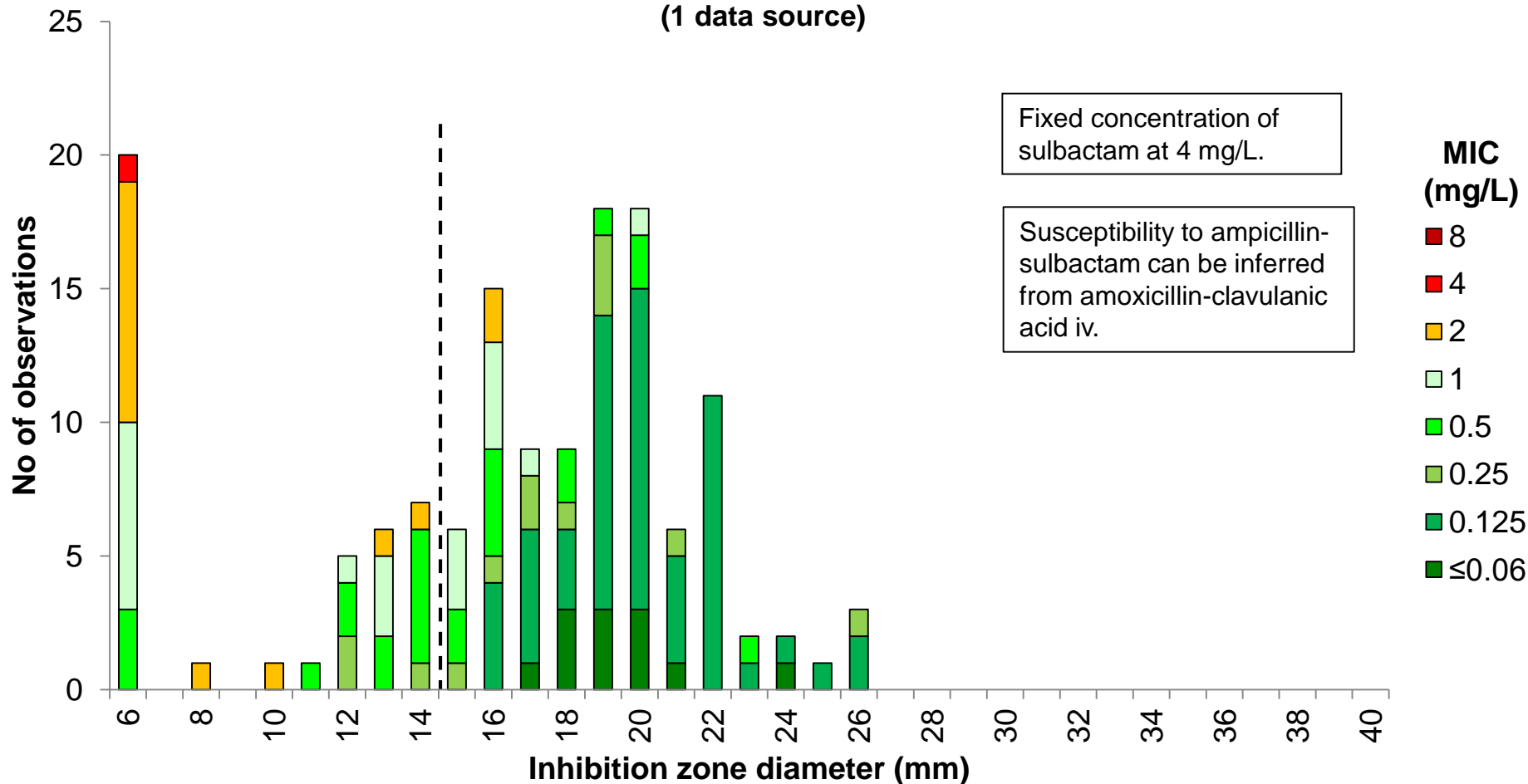
$S \le 0.001$ ,  $R > 2$  mg/L

Zone diameter

$S \ge 50$ ,  $R < 15$  mm

# Amoxicillin-clav. 2-1 µg vs Ampicillin-sulbactam MIC *H. influenzae*, 141 isolates

(1 data source)



## Breakpoints

Ampicillin-sulbactam MIC

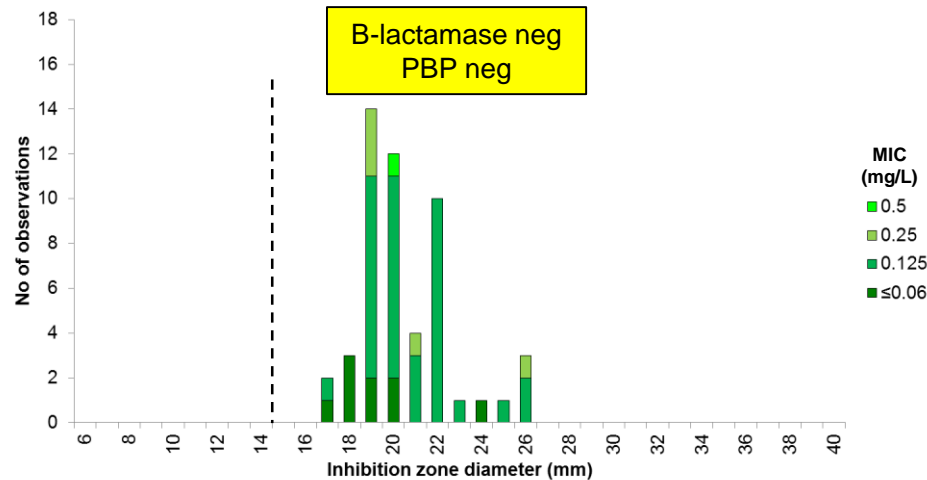
$S \leq 1$ ,  $R > 1$  mg/L

Amoxicillin-clav. (iv) zone diameter

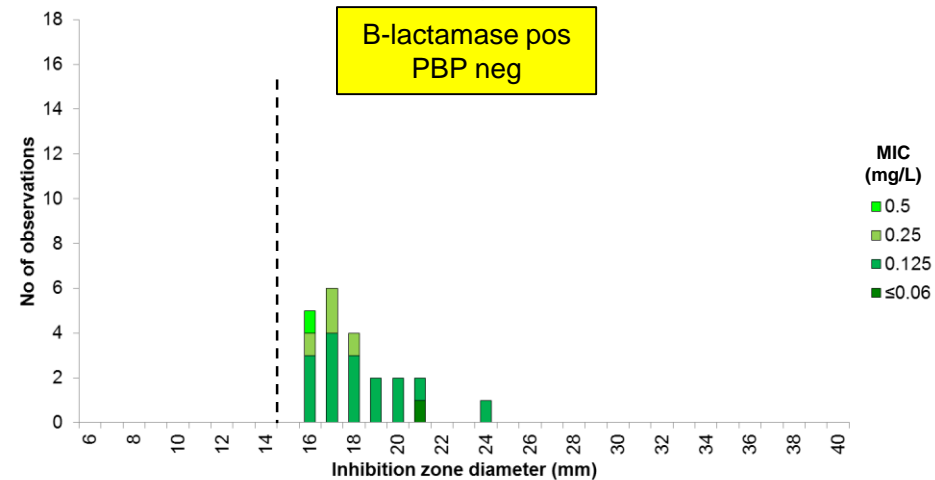
$S \geq 15$ ,  $R < 15$  mm

# Amox-clav/Amp-sulb vs. resistance mechanism

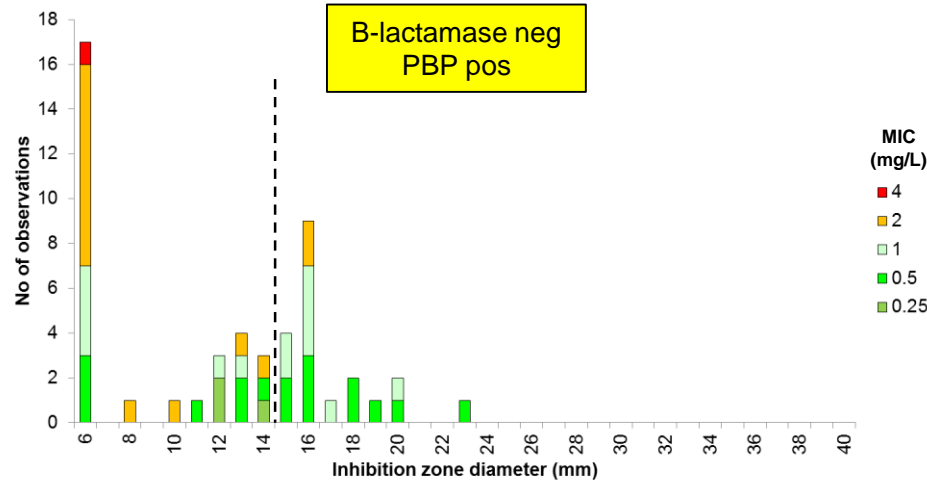
Amoxicillin-clav 2-1 µg vs Ampicillin-sulbactam MIC  
*H. influenzae*, 51 isolates



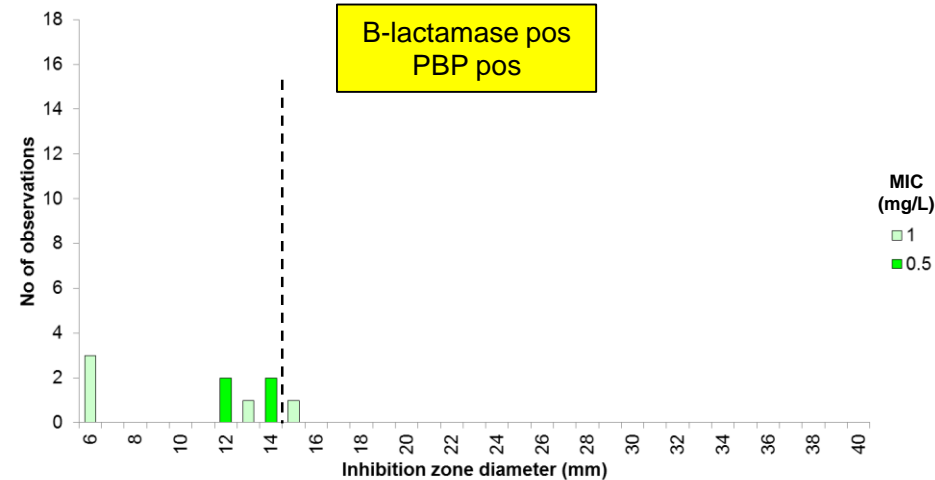
Amoxicillin-clav 2-1 µg vs Ampicillin-sulbactam MIC  
*H. influenzae*, 22 isolates



Amoxicillin-clav 2-1 µg vs Ampicillin-sulbactam MIC  
*H. influenzae*, 50 isolates



Amoxicillin-clav 2-1 µg vs Ampicillin-sulbactam MIC  
*H. influenzae*, 9 isolates



## Breakpoints

Ampicillin-sulbactam MIC

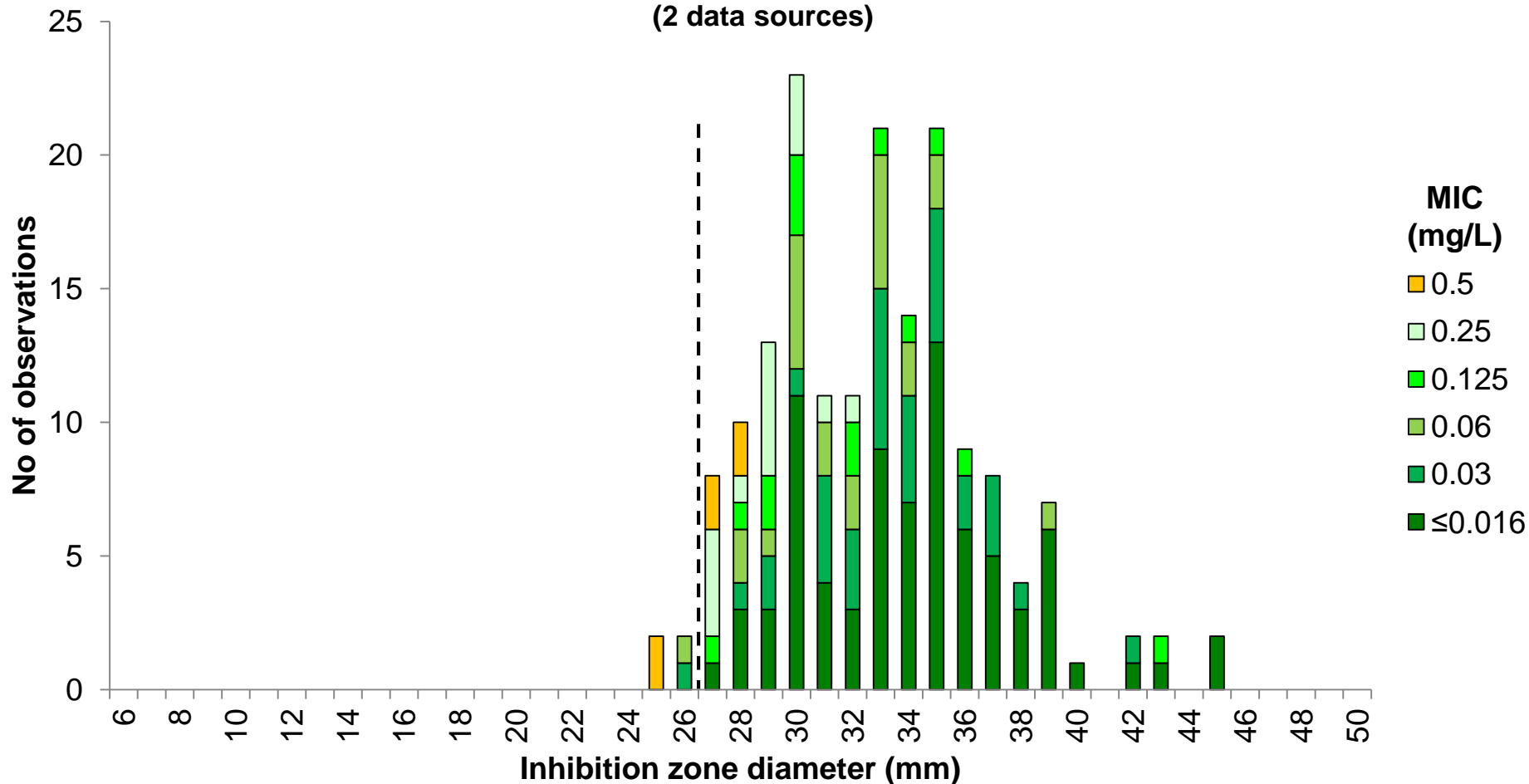
Amoxicillin-clavulanic acid (iv) zone diameter

S ≤ 1, R > 1 mg/L

S ≥ 15, R < 15 mm

# Piperacillin-tazobactam 30-6 $\mu\text{g}$ vs. MIC *H. influenzae*, 161 isolates (171 correlates)

(2 data sources)

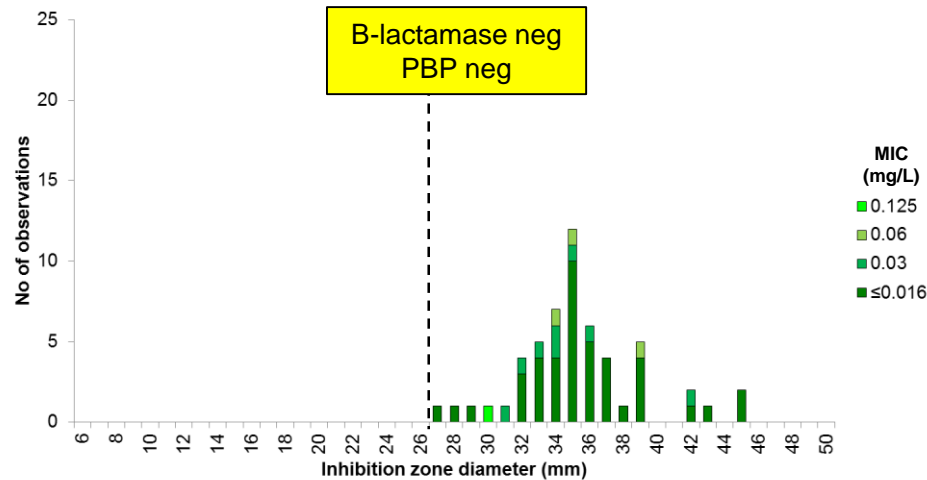


## Breakpoints

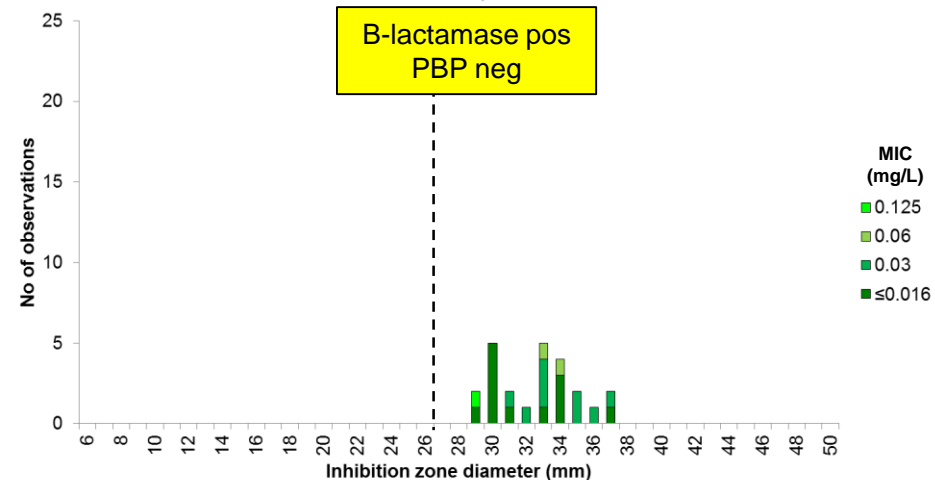
MIC	$S \leq 0.25$ , $R > 0.25$ mg/L
Zone diameter	$S \geq 27$ , $R < 27$ mm

# Piperacillin-tazo vs. resistance mechanism

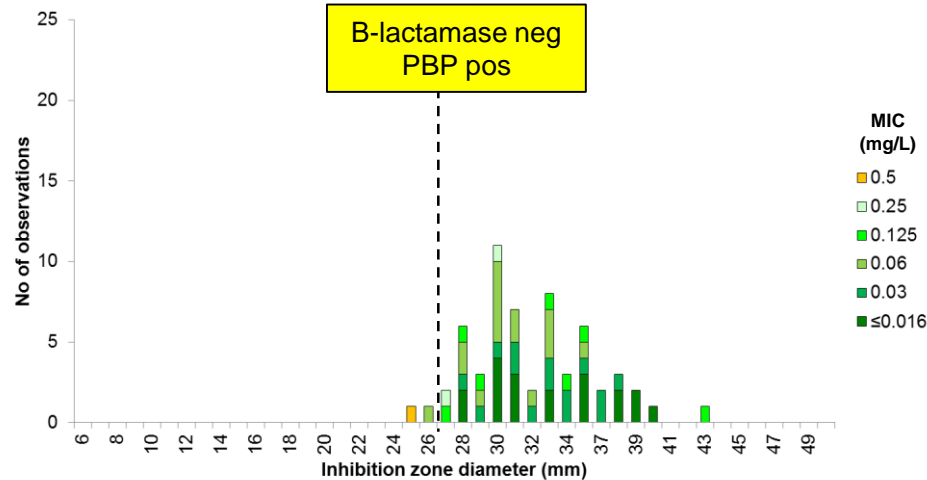
Piperacillin-tazobactam 30-6 µg vs. MIC  
*H. influenzae*, 54 isolates



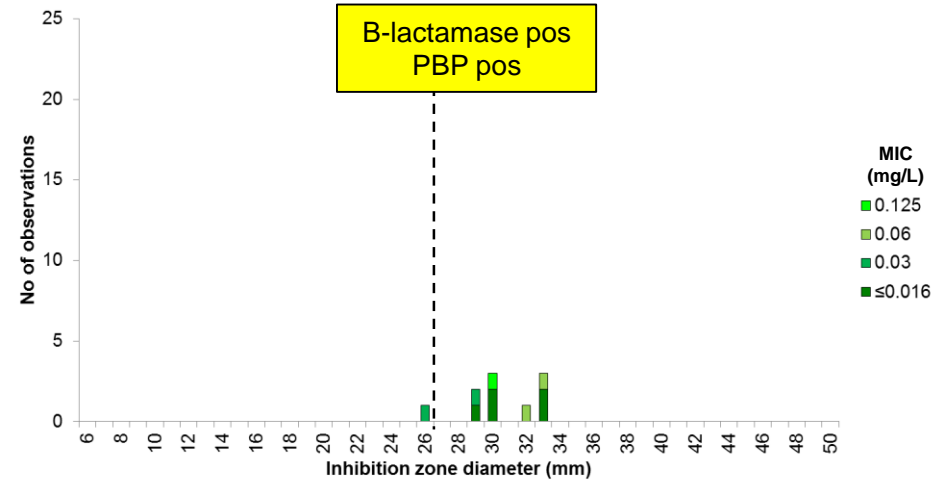
Piperacillin-tazobactam 30-6 µg vs. MIC  
*H. influenzae*, 24 isolates



Piperacillin-tazobactam 30-6 µg vs. MIC  
*H. influenzae*, 59 isolates



Piperacillin-tazobactam 30-6 µg vs. MIC  
*H. influenzae*, 10 isolates



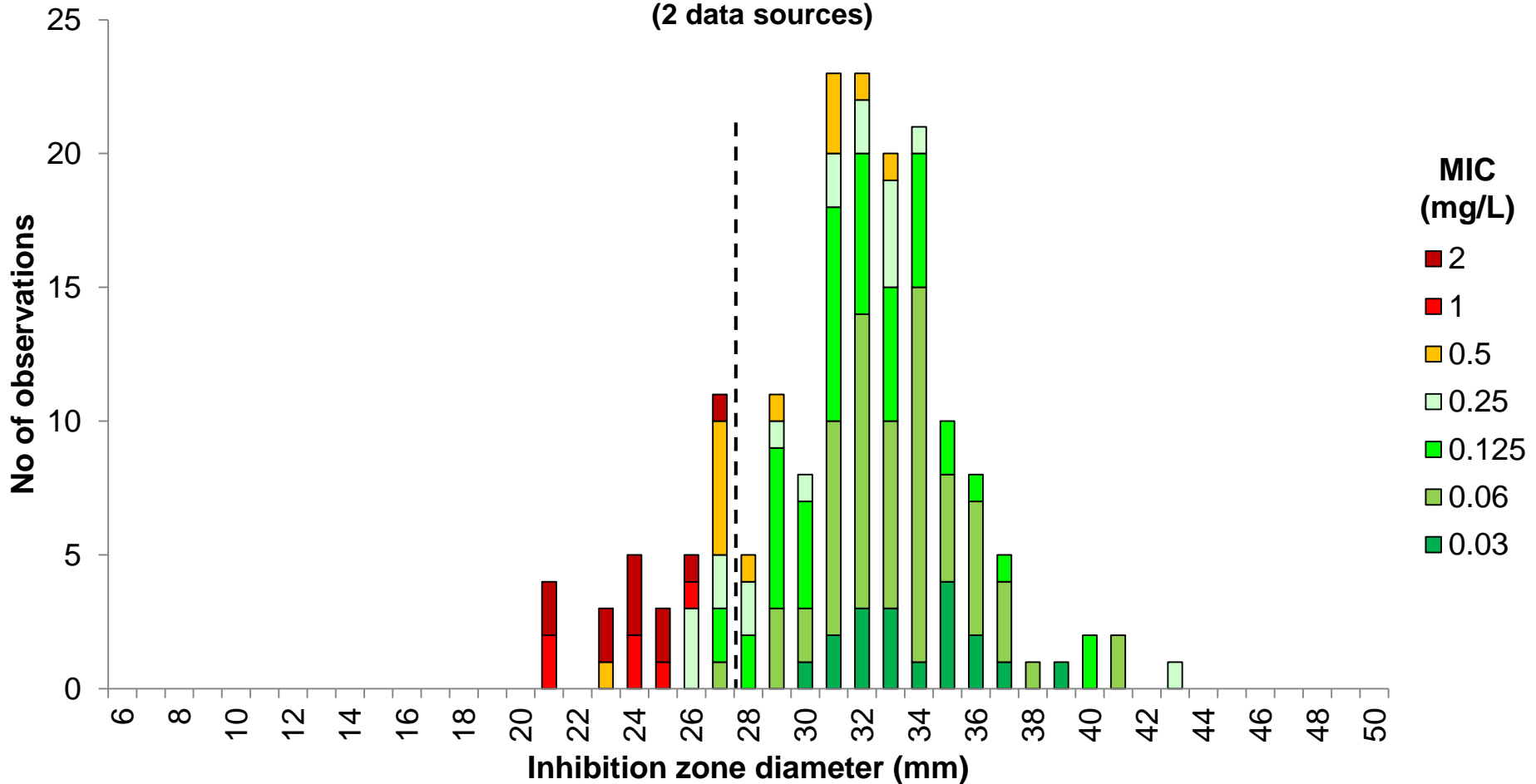
## Breakpoints

MIC	$S \leq 0.25$ , $R > 0.25$ mg/L
Zone diameter	$S \geq 27$ , $R < 27$ mm

# Cefepime 30 µg vs. MIC

## *H. influenzae*, 161 isolates (172 correlates)

(2 data sources)



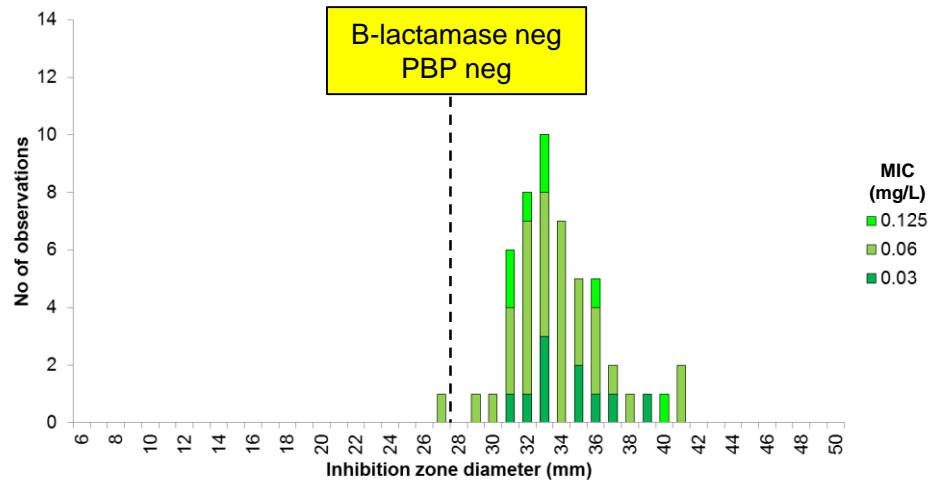
### Breakpoints

MIC S ≤ 0.25, R > 0.25 mg/L

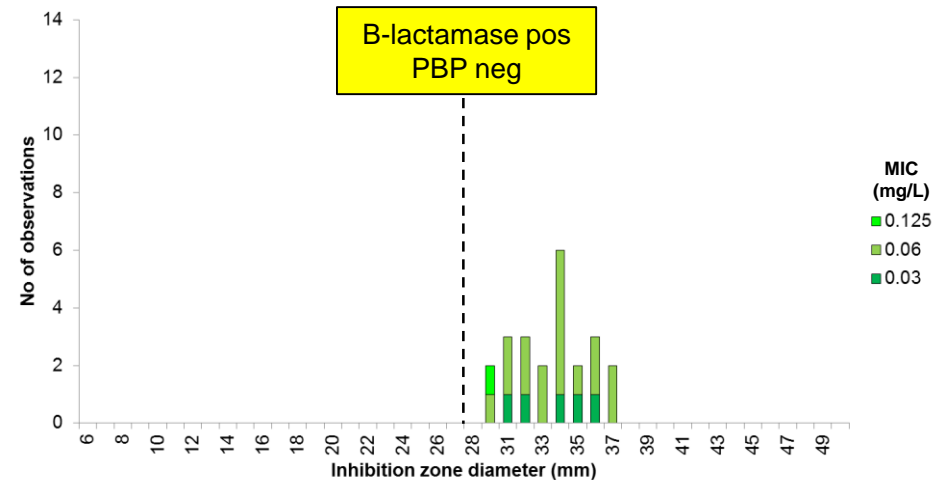
Zone diameter S ≥ 28, R < 28 mm

# Cefepime vs. resistance mechanism

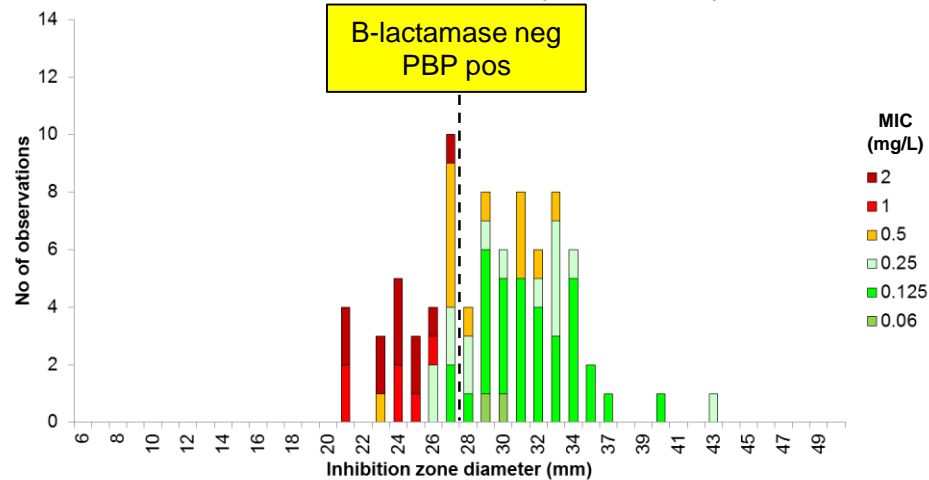
Cefepime 30 µg vs. MIC  
*H. influenzae*, 51 isolates



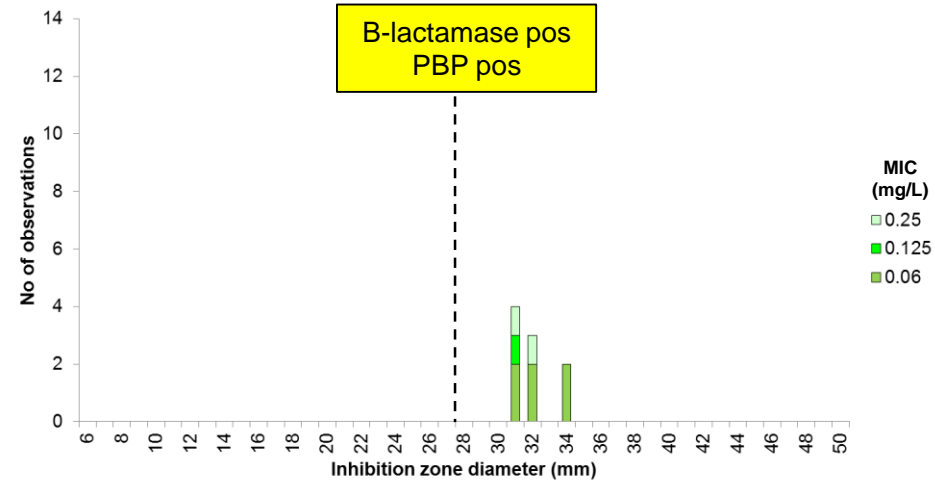
Cefepime 30 µg vs. MIC  
*H. influenzae*, 23 isolates



Cefepime 30 µg vs. MIC  
*H. influenzae*, 69 isolates (80 correlates)



Cefepime 30 µg vs. MIC  
*H. influenzae*, 9 isolates

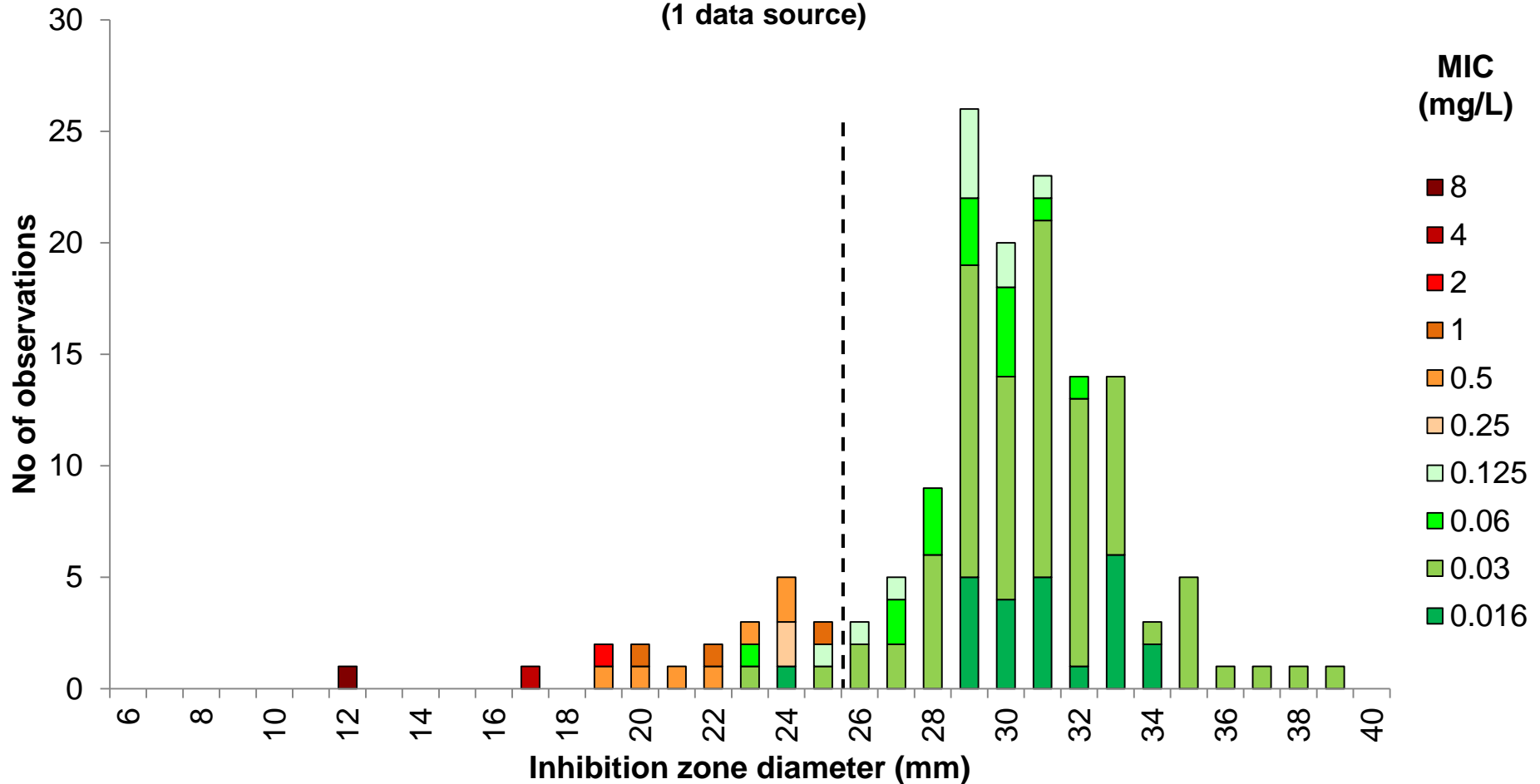


## Breakpoints

MIC  $S \leq 0.25$ ,  $R > 0.25$  mg/L  
 Zone diameter  $S \geq 28$ ,  $R < 28$  mm

# Cefixime 5 µg vs. MIC *H. influenzae*, 146 isolates

(1 data source)



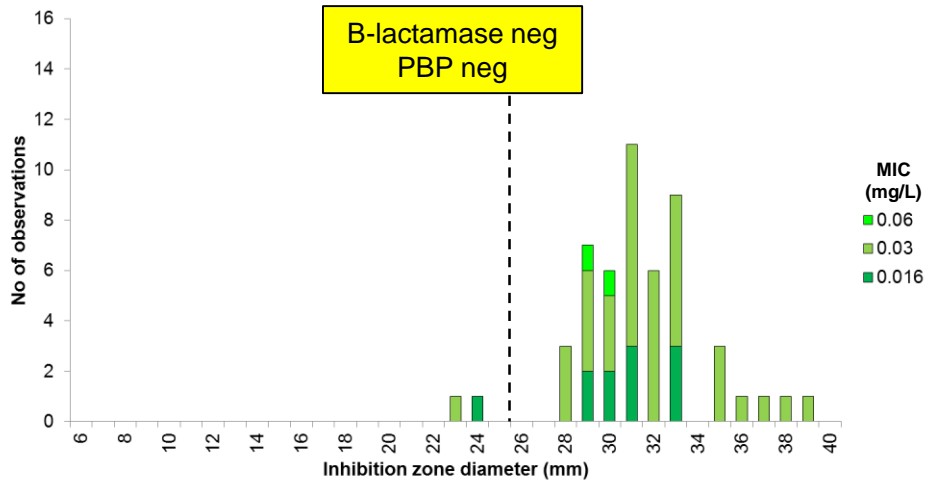
## Breakpoints

MIC  $S \leq 0.125$ ,  $R > 0.125$  mg/L

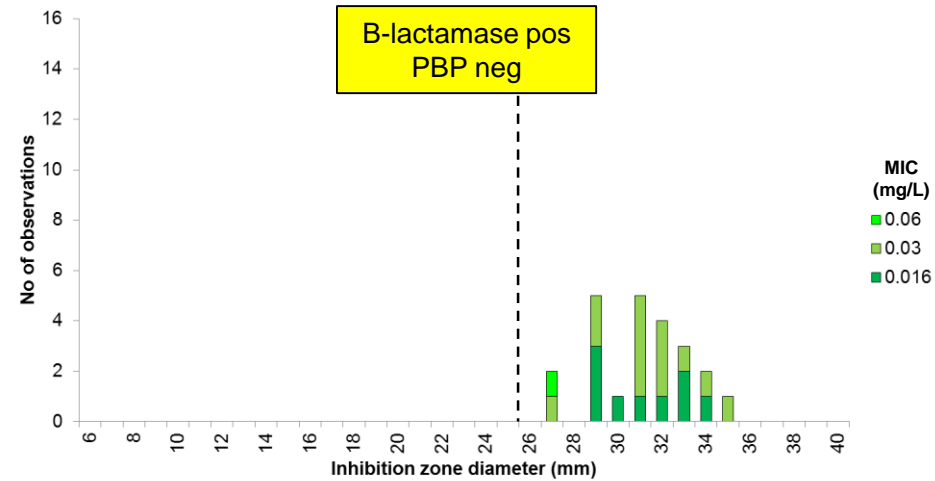
Zone diameter  $S \geq 26$ ,  $R < 26$  mm

# Cefixime vs. resistance mechanism

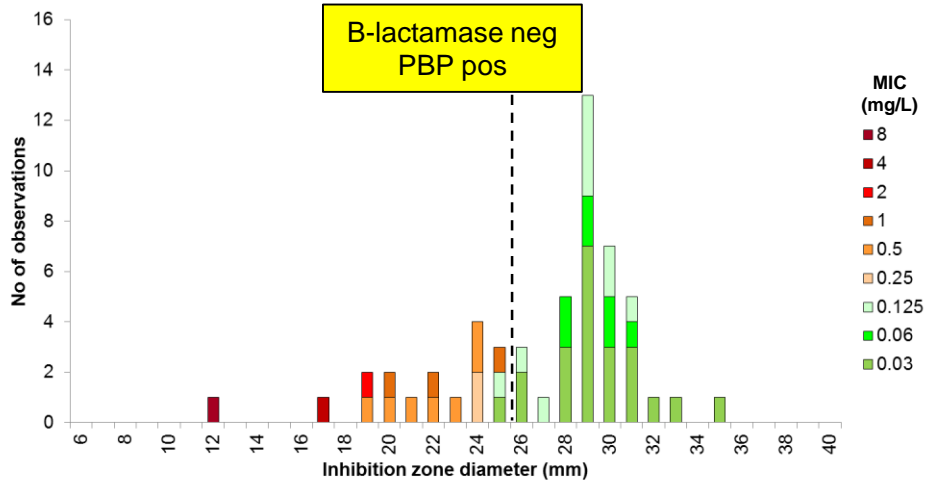
**Cefixime 5 µg vs. MIC**  
*H. influenzae*, 51 isolates



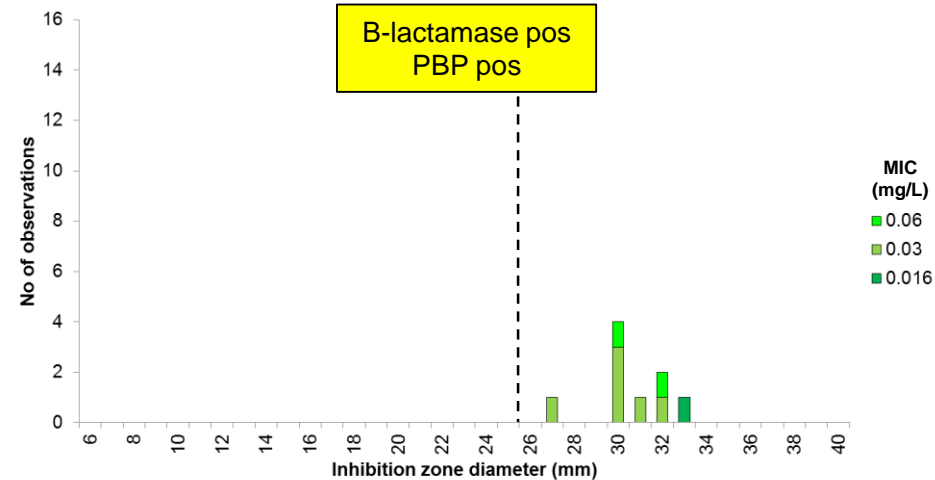
**Cefixime 5 µg vs. MIC**  
*H. influenzae*, 23 isolates



**Cefixime 5 µg vs. MIC**  
*H. influenzae*, 54 isolates



**Cefixime 5 µg vs. MIC**  
*H. influenzae*, 9 isolates



## Breakpoints

MIC

$S \leq 0.125$ ,  $R > 0.125$  mg/L

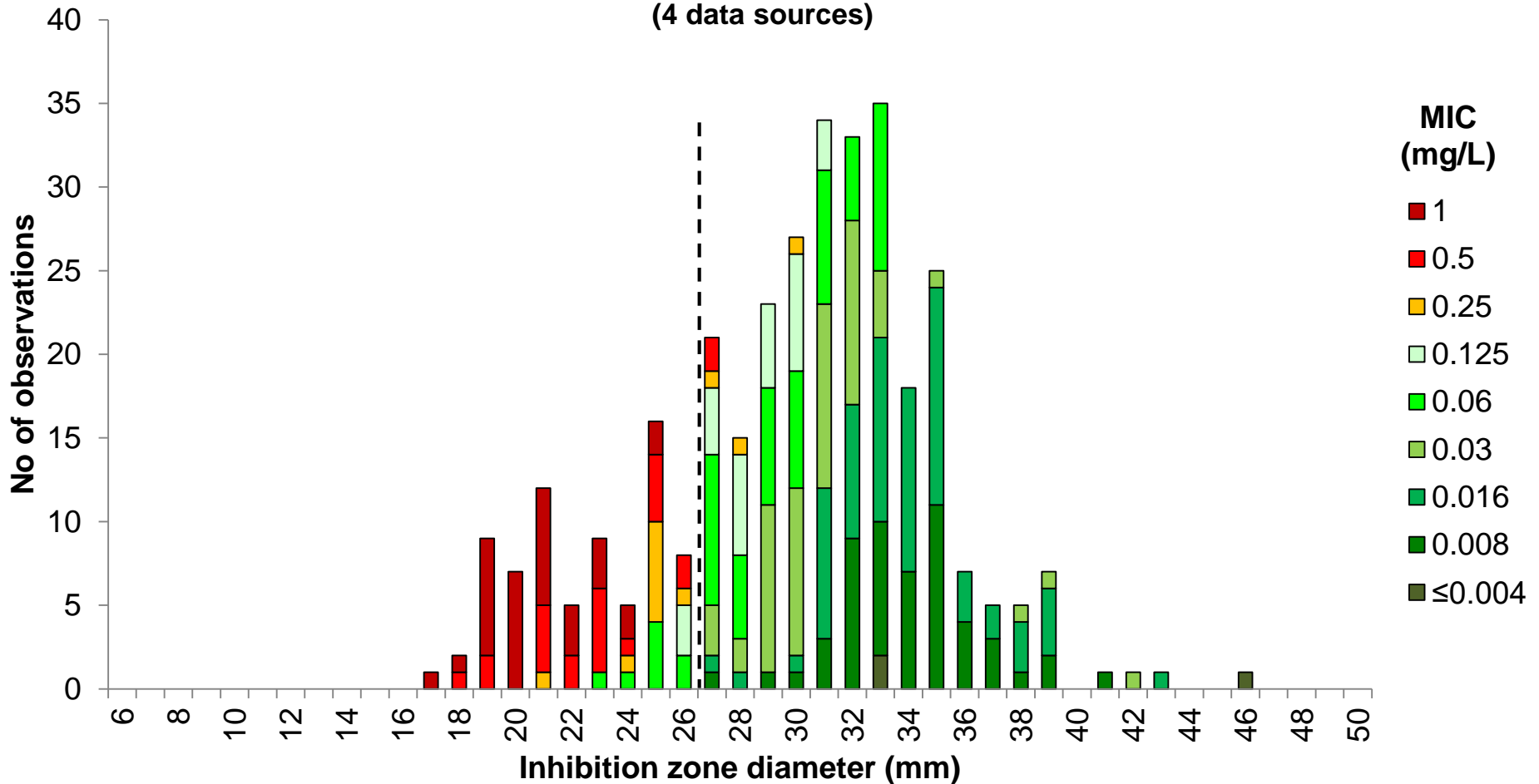
Zone diameter

$S \geq 26$ ,  $R < 26$  mm

# Cefotaxime 5 µg vs. MIC

## *H. influenzae*, 210 isolates (333 correlates)

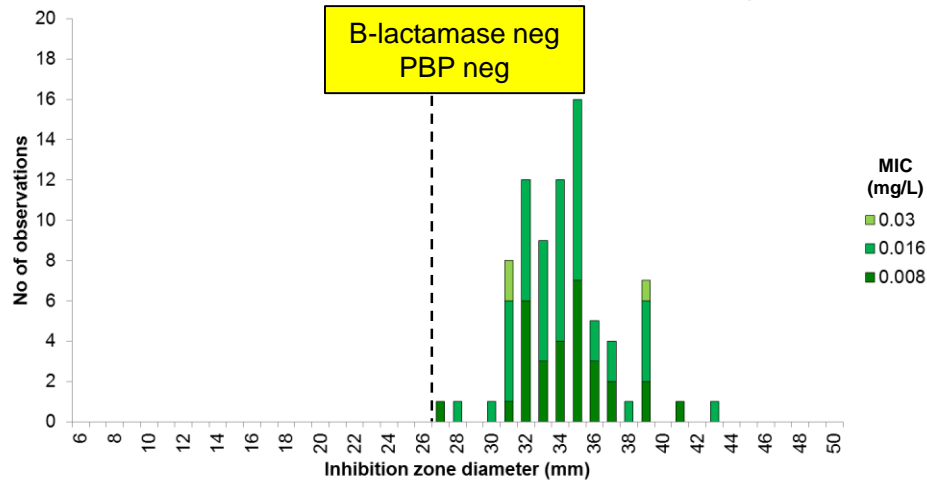
(4 data sources)



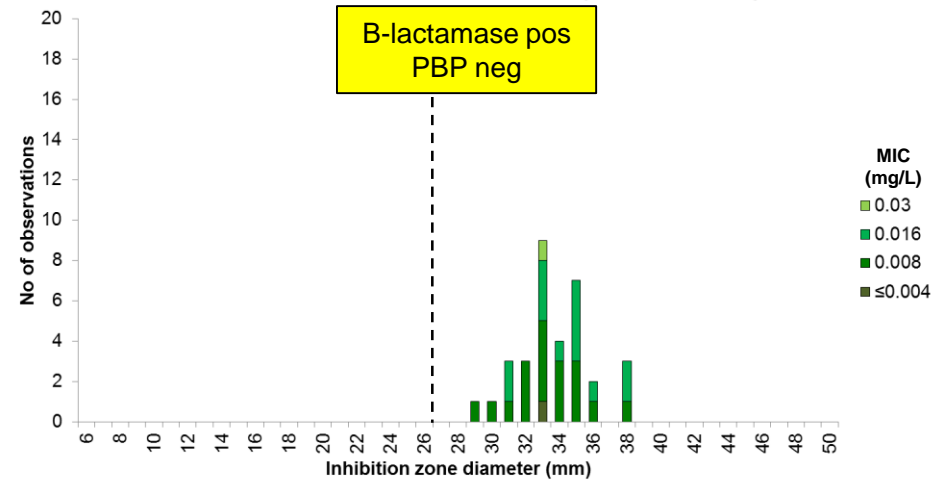
Breakpoints	
MIC	S ≤ 0.125, R > 0.125 mg/L
Zone diameter	S ≥ 27, R < 27 mm

# Cefotaxime vs. resistance mechanism

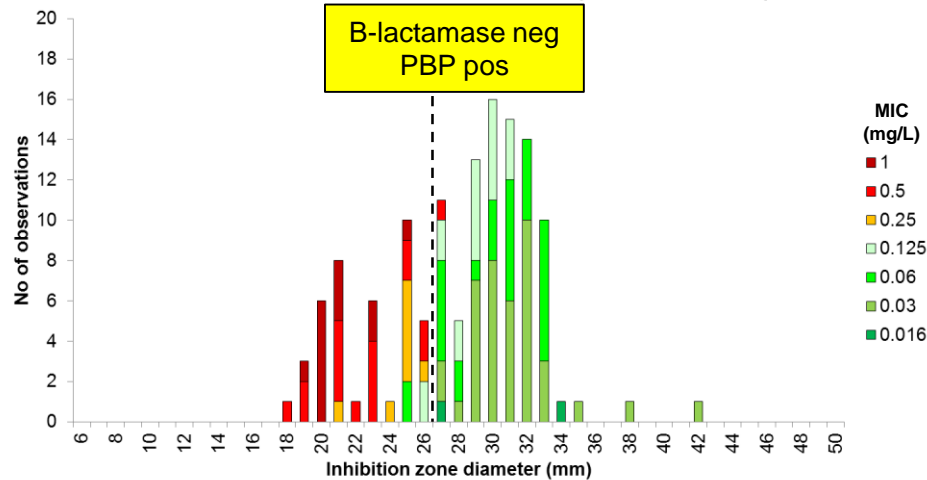
Cefotaxime 5 µg vs. MIC  
*H. influenzae*, 51 isolates (79 correlates)



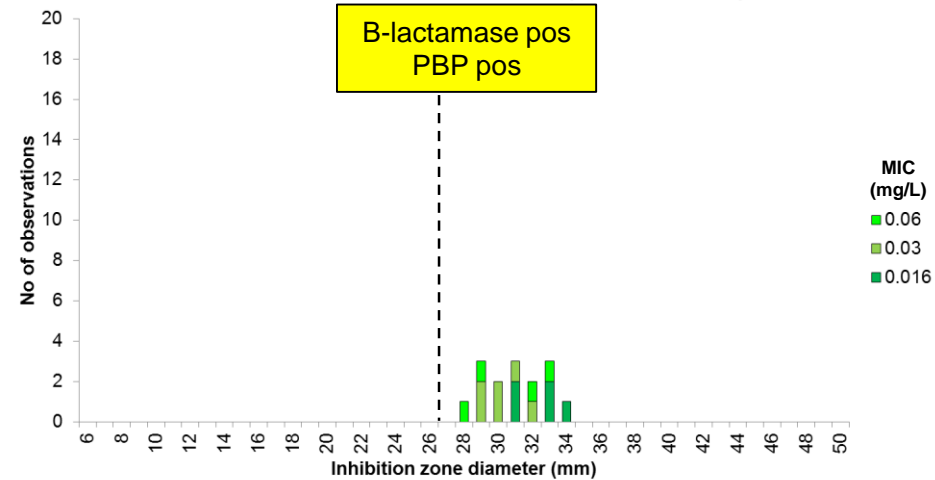
Cefotaxime 5 µg vs. MIC  
*H. influenzae*, 23 isolates (33 correlates)



Cefotaxime 5 µg vs. MIC  
*H. influenzae*, 69 isolates (129 correlates)



Cefotaxime 5 µg vs. MIC  
*H. influenzae*, 9 isolates (15 correlates)



## Breakpoints

MIC

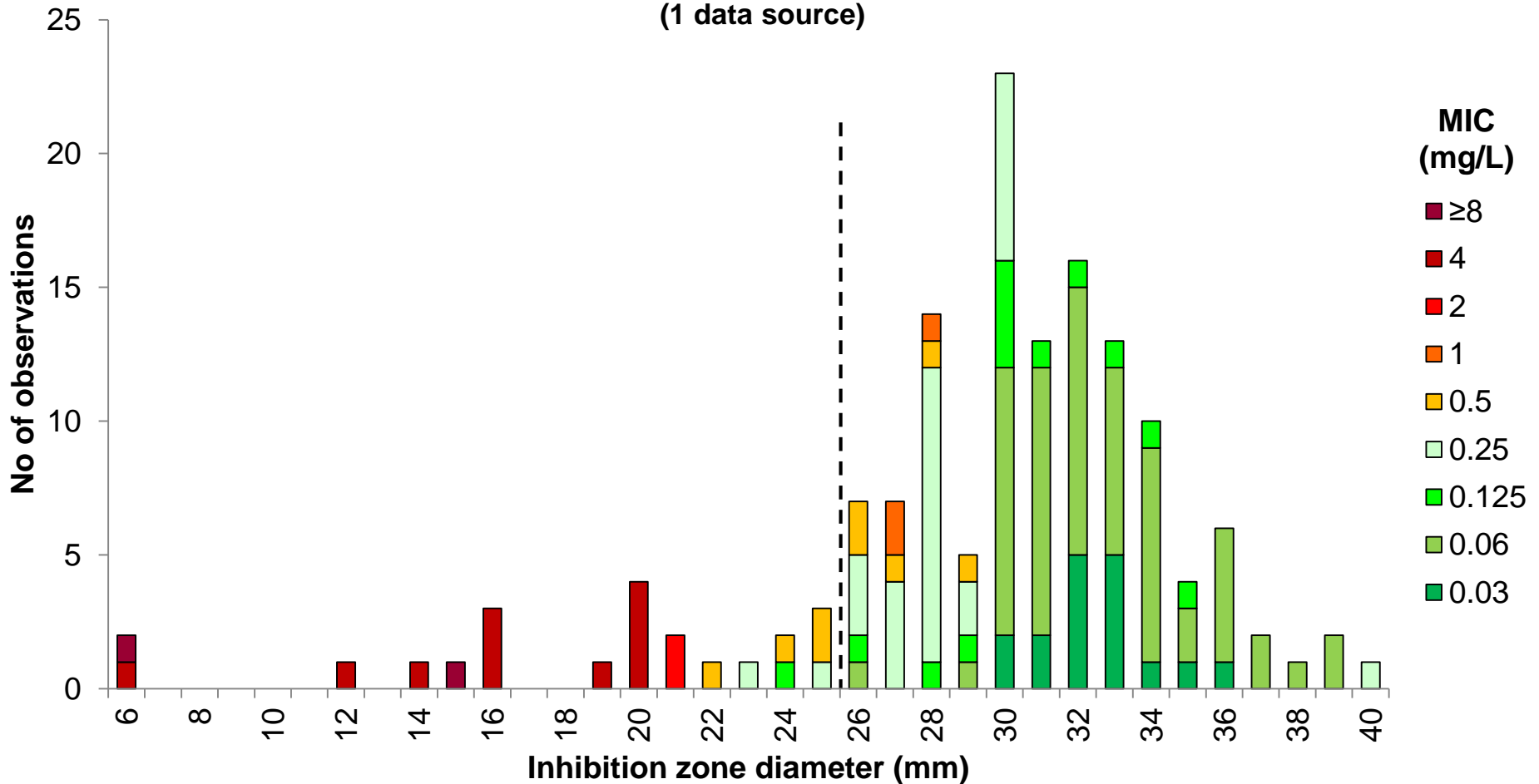
$S \leq 0.125$ ,  $R > 0.125$  mg/L

Zone diameter

$S \geq 27$ ,  $R < 27$  mm

# Cefpodoxime 10 µg vs. MIC *H. influenzae*, 146 isolates

(1 data source)



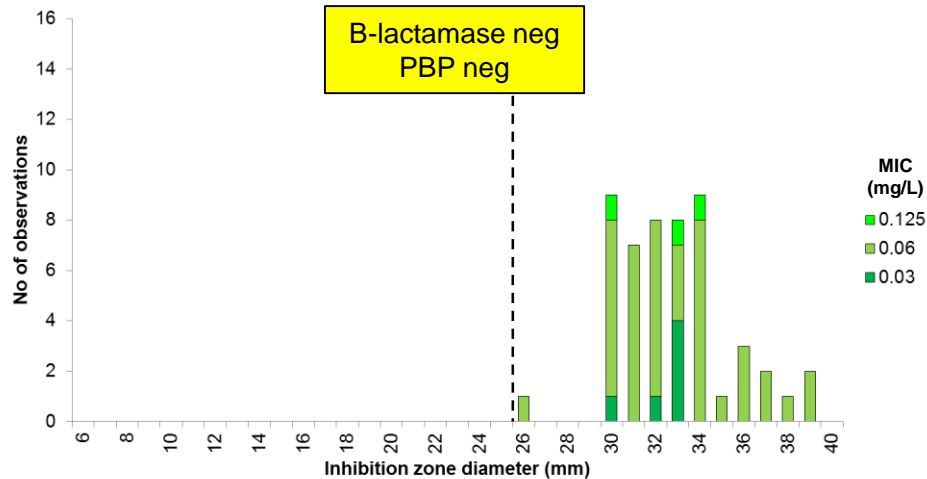
## Breakpoints

MIC S ≤ 0.25, R > 0.25 mg/L

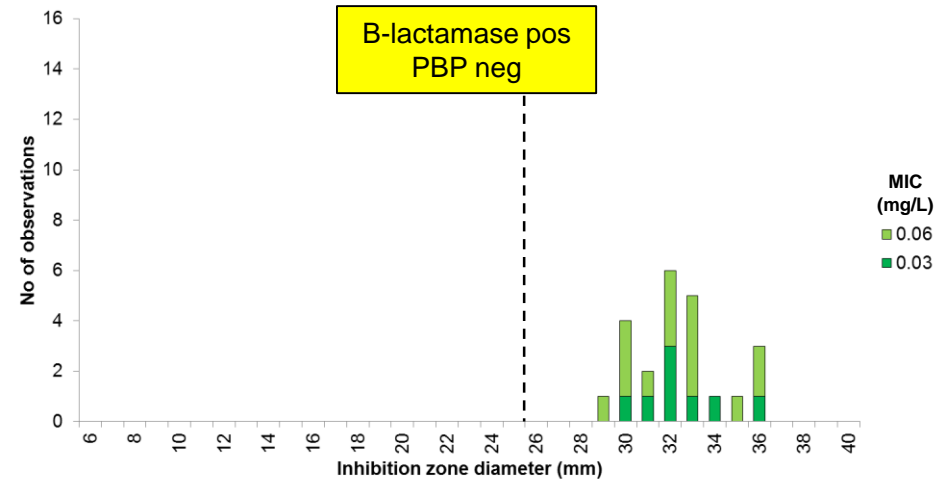
Zone diameter S ≥ 26, R < 26 mm

# Cefpodoxime vs. resistance mechanism

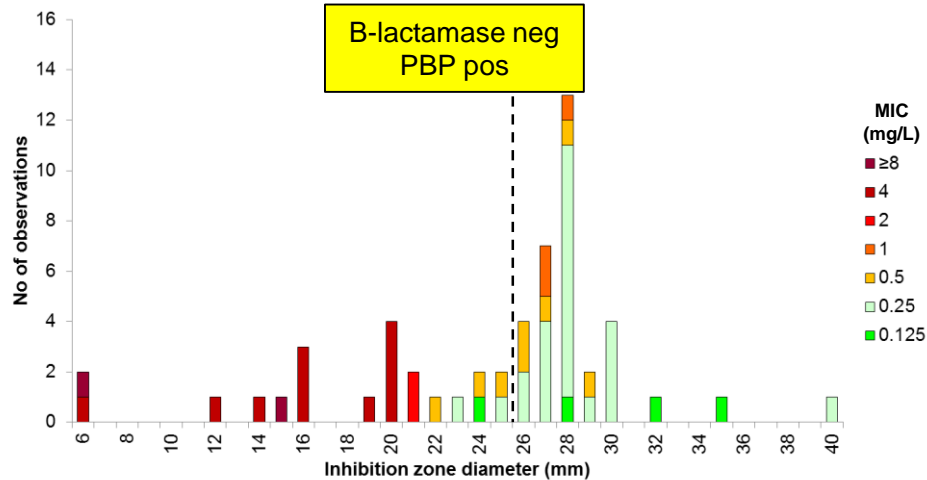
Cefpodoxime 10 µg vs. MIC  
*H. influenzae*, 51 isolates



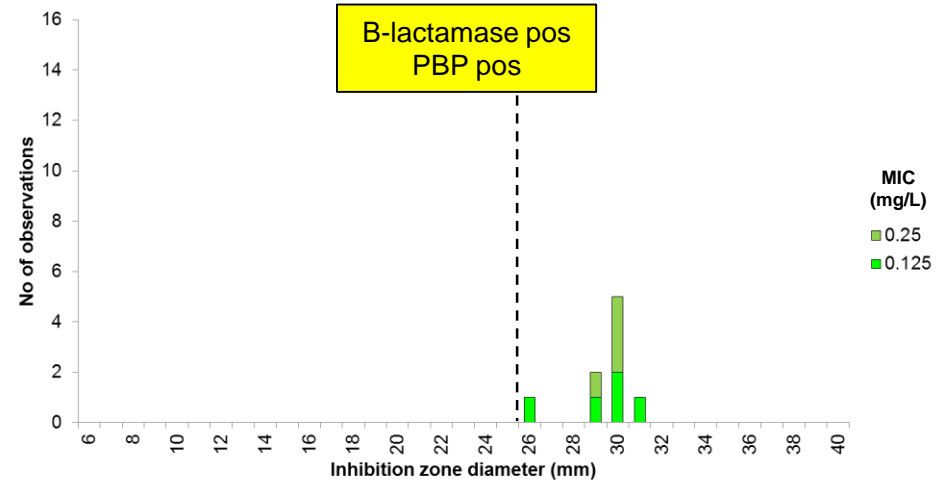
Cefpodoxime 10 µg vs. MIC  
*H. influenzae*, 23 isolates



Cefpodoxime 10 µg vs. MIC  
*H. influenzae*, 54 isolates



Cefpodoxime 10 µg vs. MIC  
*H. influenzae*, 9 isolates



## Breakpoints

MIC

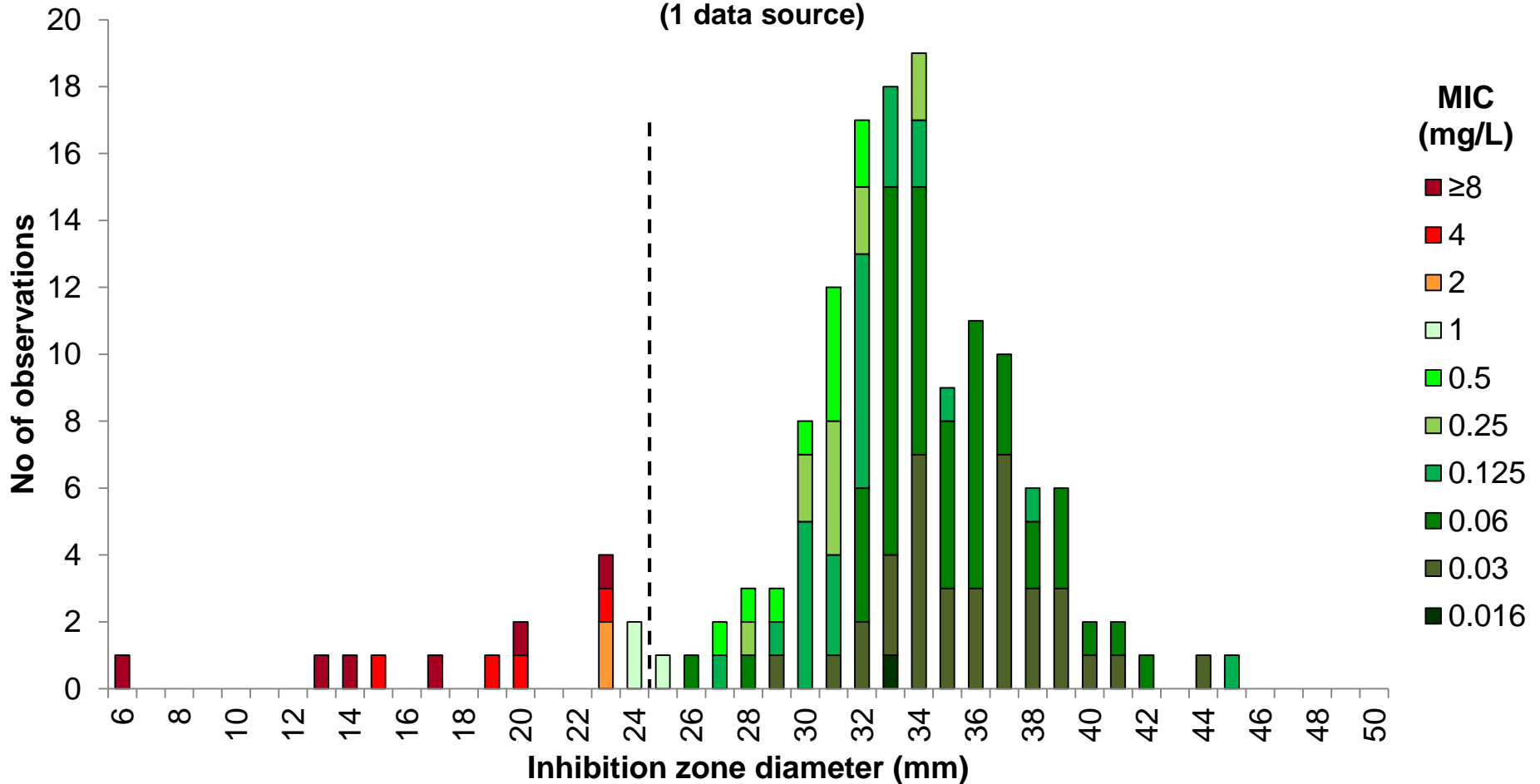
$S \leq 0.25$ ,  $R > 0.25$  mg/L

Zone diameter

$S \geq 26$ ,  $R < 26$  mm

# Ceftibuten 30 µg vs. MIC *H. influenzae*, 147 isolates

(1 data source)



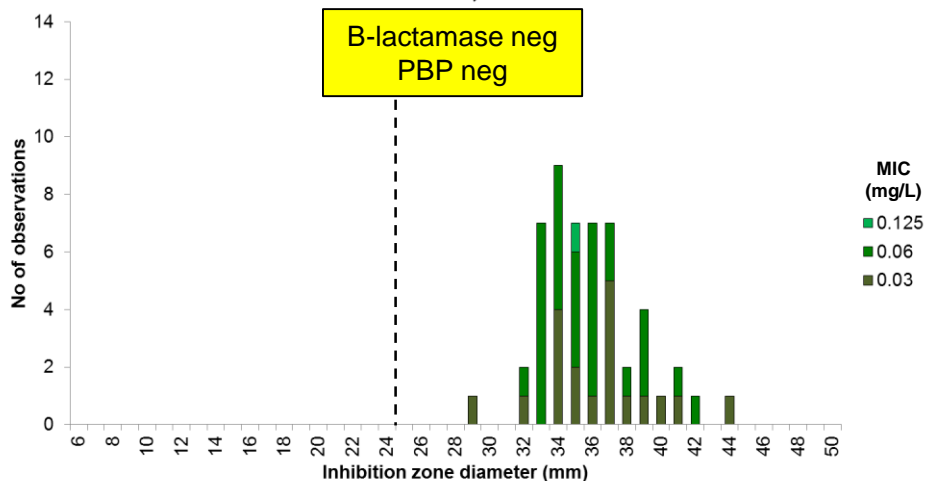
## Breakpoints

MIC  $S \leq 1, R > 1$  mg/L

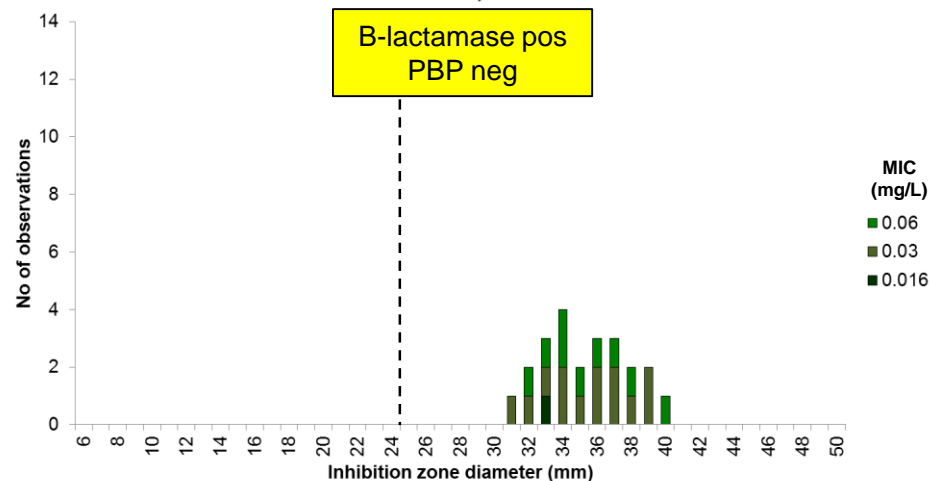
Zone diameter  $S \geq 25, R < 25$  mm

# Ceftibuten vs. resistance mechanism

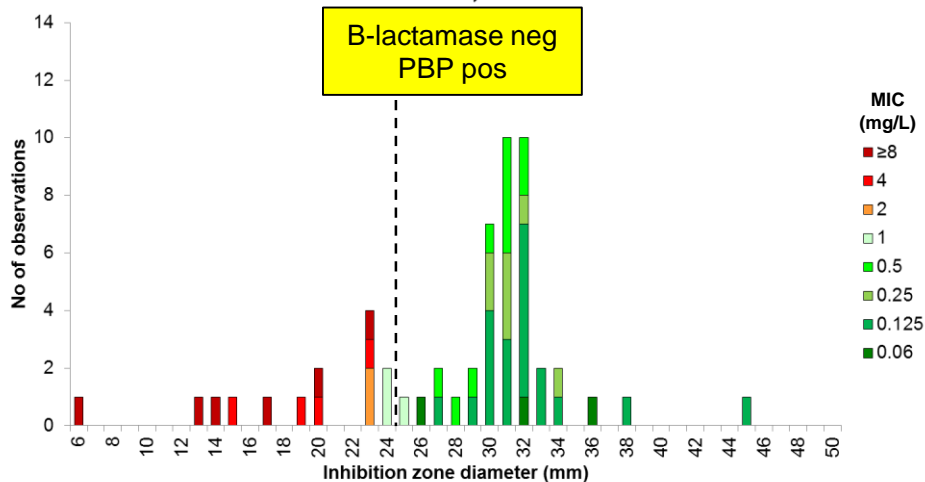
Ceftibuten 30 µg vs. MIC  
*H. influenzae*, 51 isolates



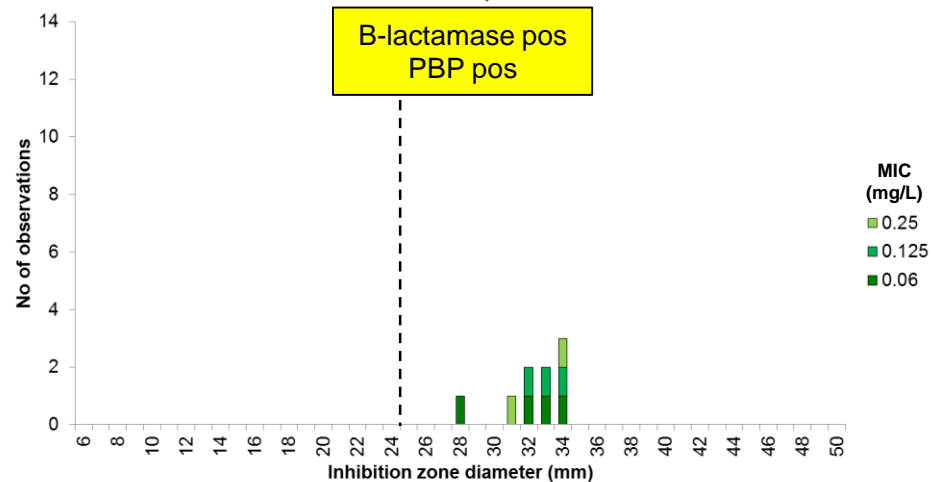
Ceftibuten 30 µg vs. MIC  
*H. influenzae*, 23 isolates



Ceftibuten 30 µg vs. MIC  
*H. influenzae*, 55 isolates



Ceftibuten 30 µg vs. MIC  
*H. influenzae*, 9 isolates

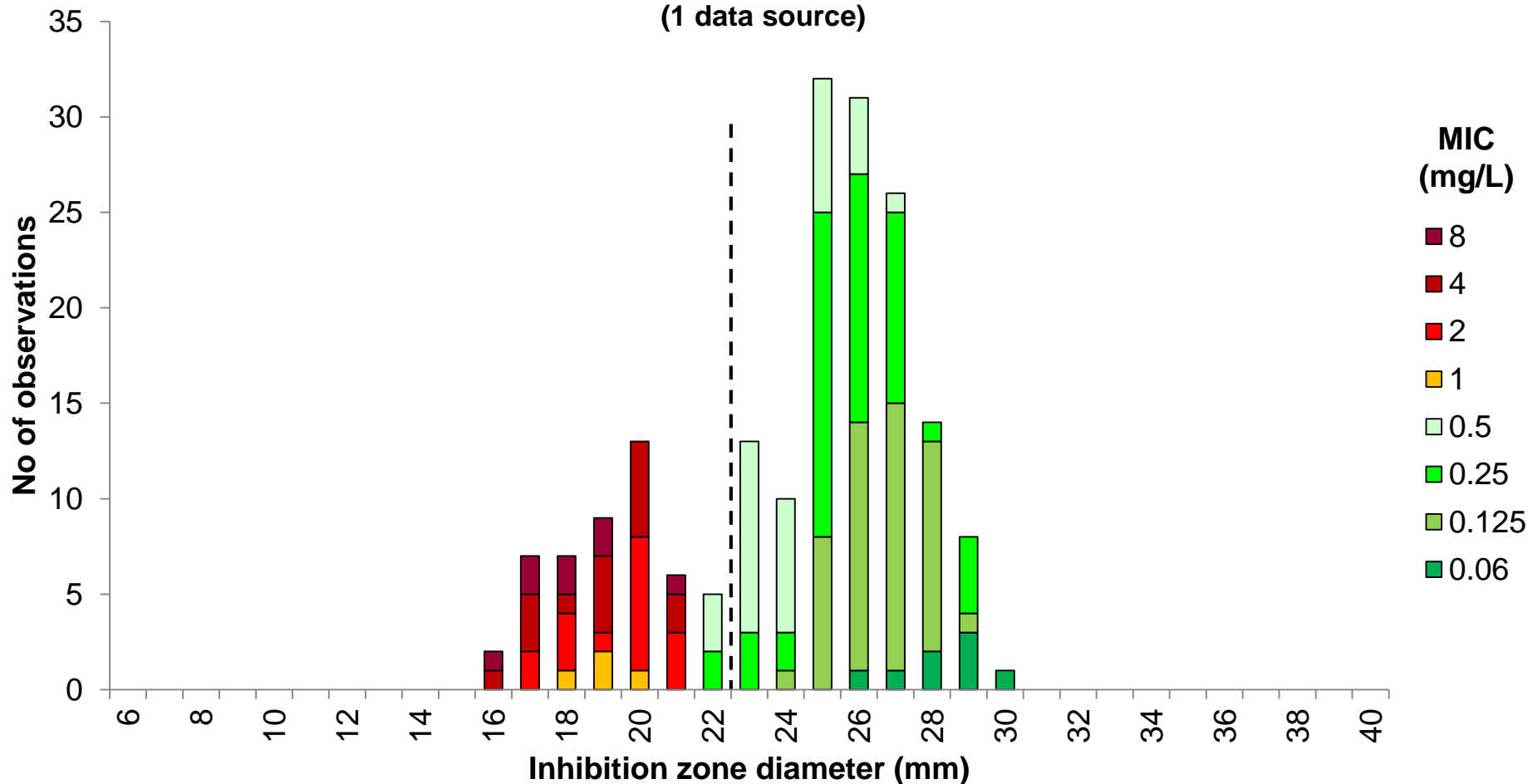


## Breakpoints

MIC  $S \leq 1, R > 1$  mg/L  
Zone diameter  $S \geq 25, R < 25$  mm

# Ceftolozane-tazobactam 30-10 µg vs. MIC *H. influenzae*, 46 isolates (184 correlates)

(1 data source)

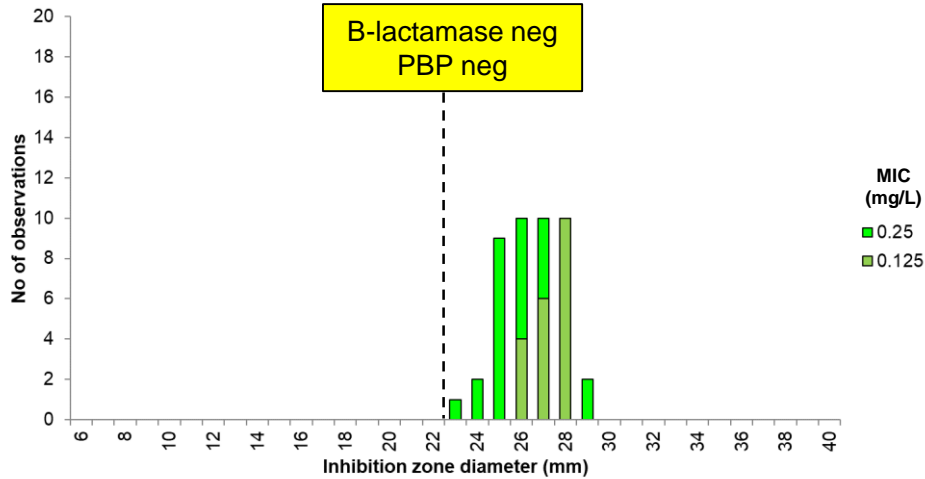


## Breakpoints (pneumonia)

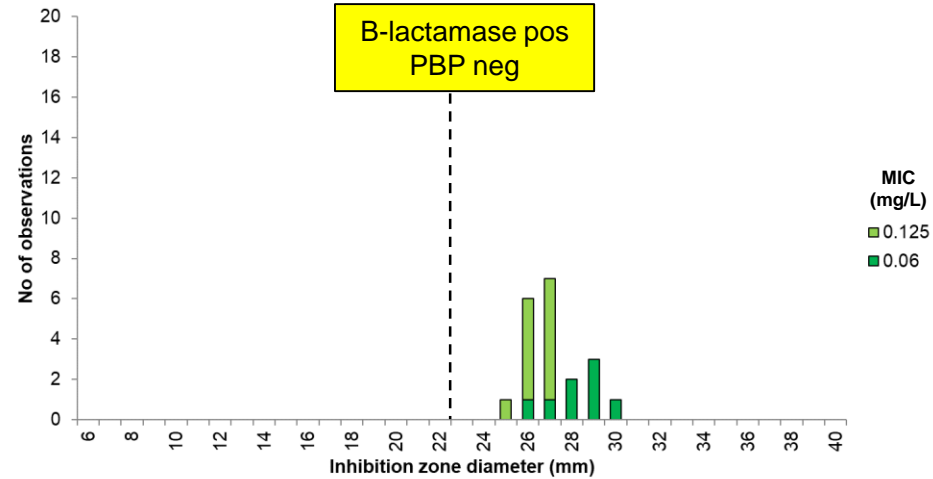
MIC	$S \leq 0.5$ , $R > 0.5$ mg/L
Zone diameter	$S \geq 23$ , $R < 23$ mm

# Ceftolozane-tazobactam vs. resistance mechanism

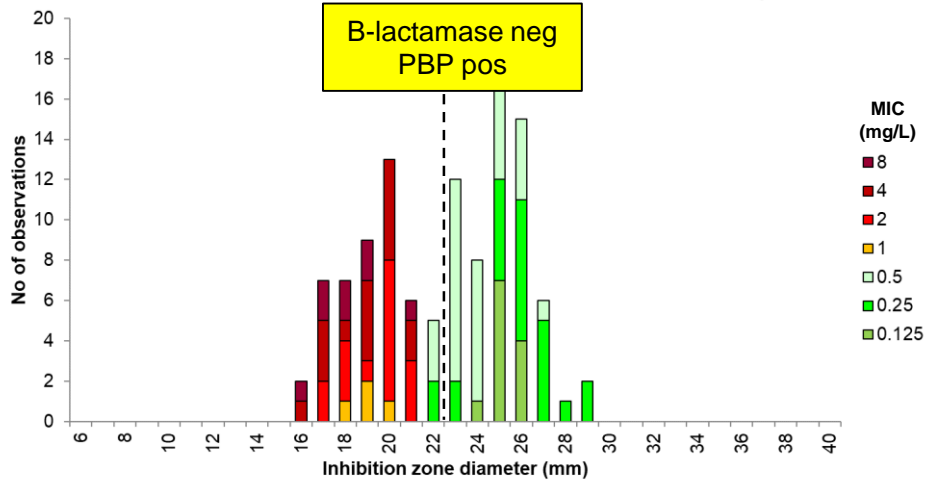
Ceftolozane-tazobactam 30-10 µg vs. MIC  
*H. influenzae*, 11 isolates (44 correlates)



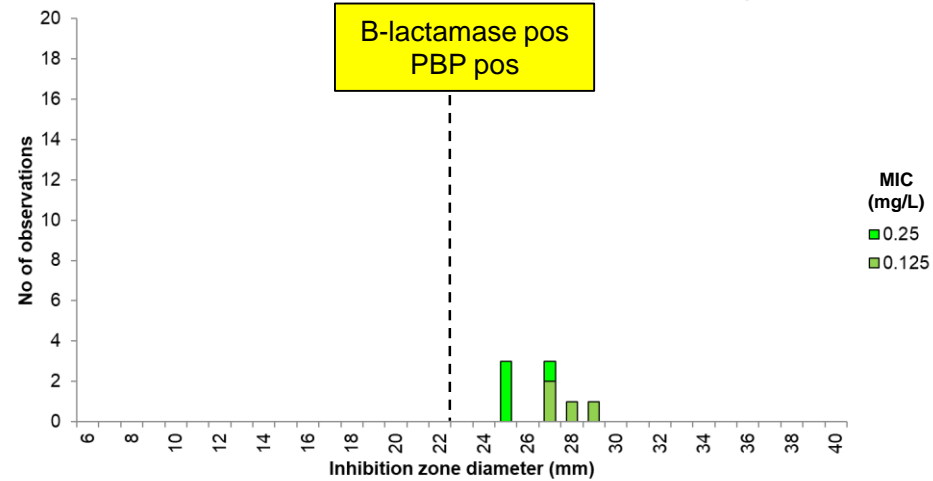
Ceftolozane-tazobactam 30-10 µg vs. MIC  
*H. influenzae*, 5 isolates (20 correlates)



Ceftolozane-tazobactam 30-10 µg vs. MIC  
*H. influenzae*, 28 isolates (112 correlates)



Ceftolozane-tazobactam 30-10 µg vs. MIC  
*H. influenzae*, 2 isolates (8 correlates)



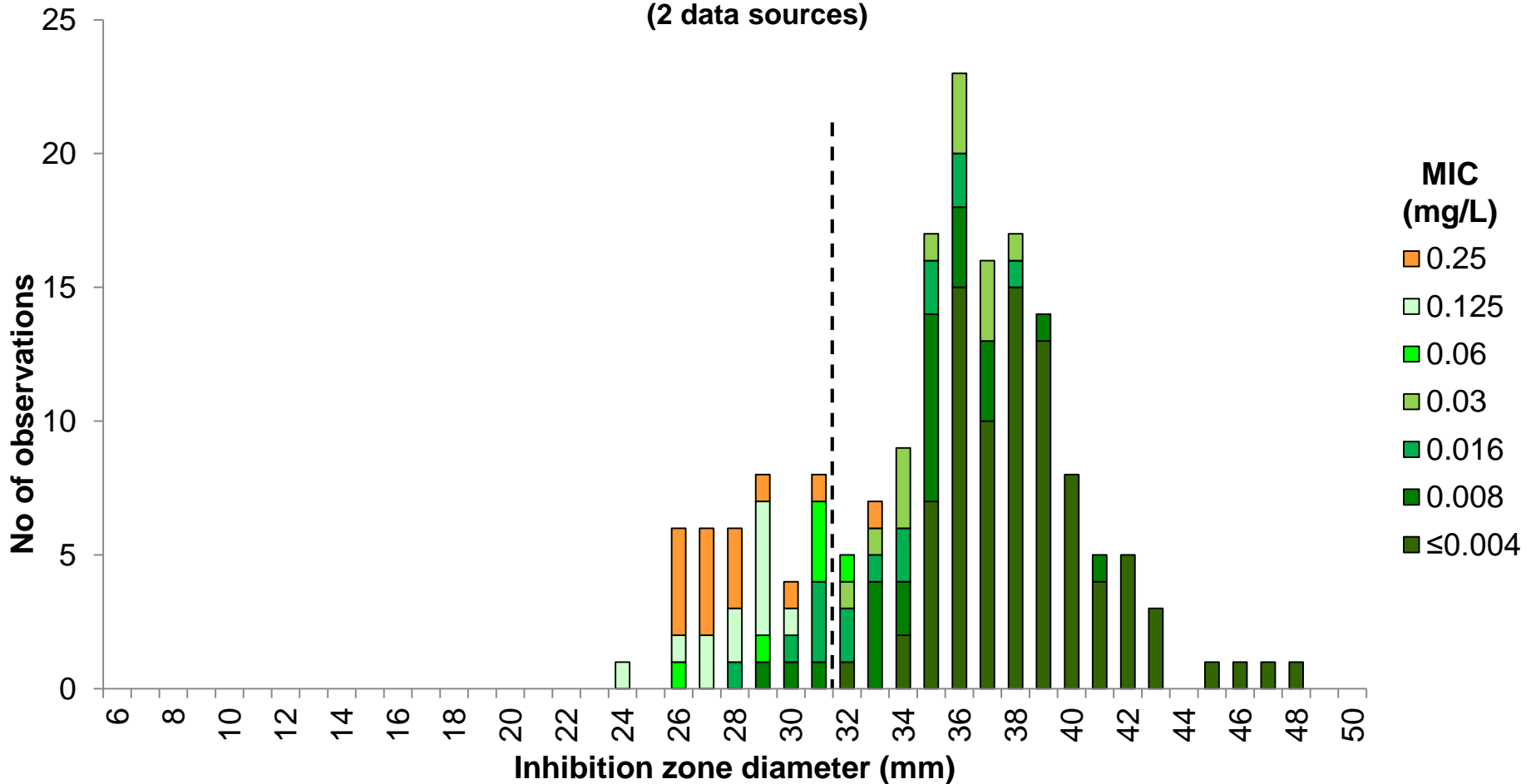
## Breakpoints (pneumonia)

MIC	$S \leq 0.5$ , $R > 0.5$ mg/L
Zone diameter	$S \geq 23$ , $R < 23$ mm

# Ceftriaxone 30 µg vs. MIC

## *H. influenzae*, 152 isolates (172 correlates)

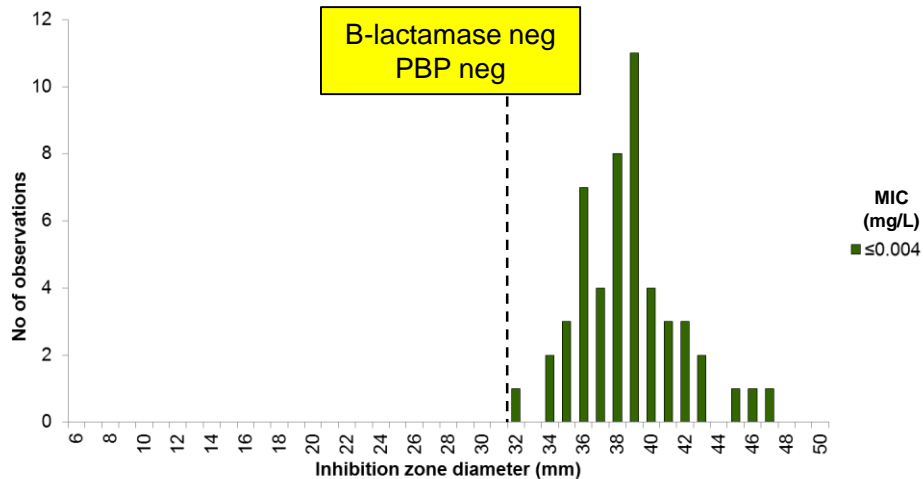
(2 data sources)



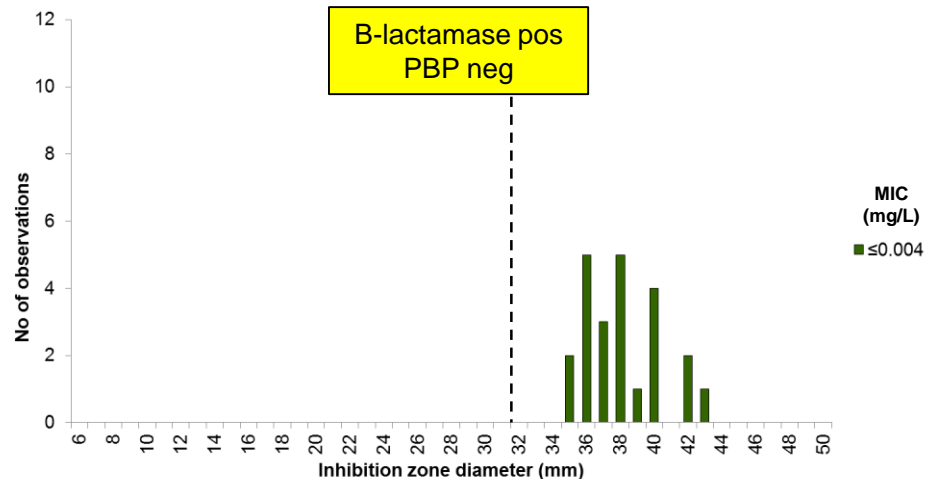
Breakpoints	
MIC	S ≤ 0.125, R > 0.125 mg/L
Zone diameter	S ≥ 32, R < 32 mm

# Ceftriaxone vs. resistance mechanism

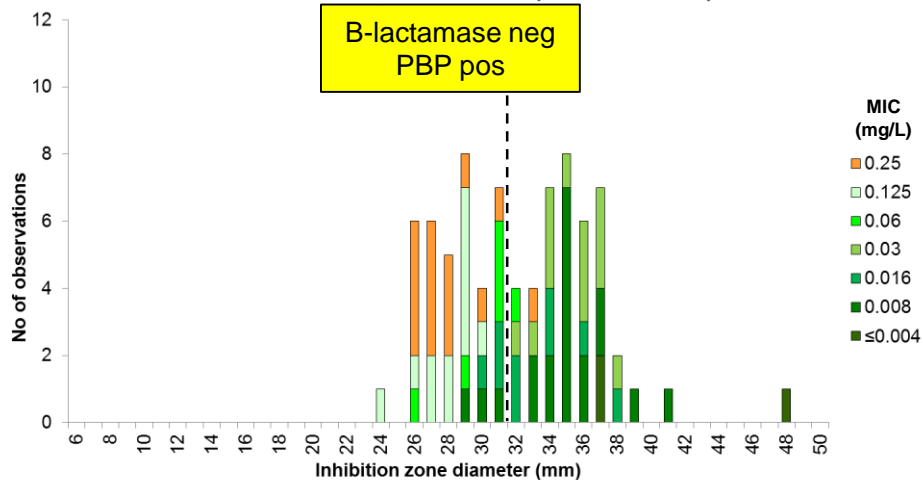
Ceftriaxone 30 µg vs. MIC  
*H. influenzae*, 51 isolates



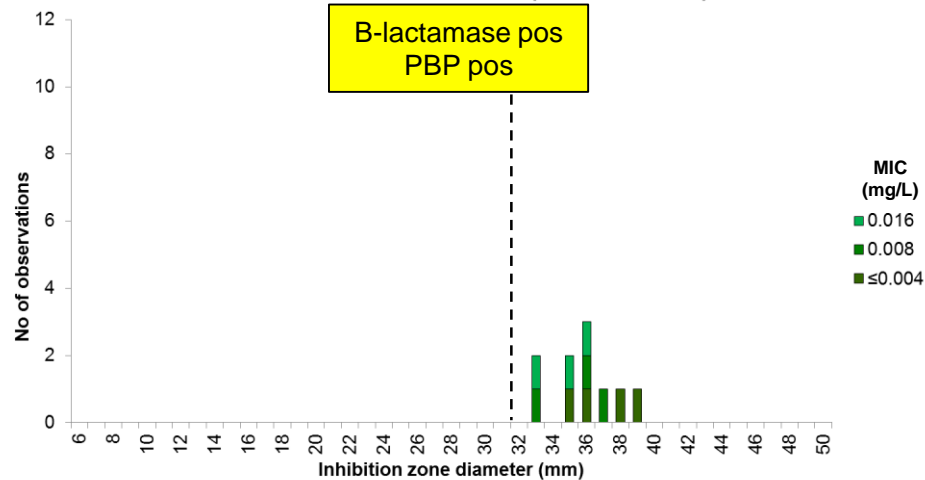
Ceftriaxone 30 µg vs. MIC  
*H. influenzae*, 23 isolates



Ceftriaxone 30 µg vs. MIC  
*H. influenzae*, 60 isolates (78 correlates)



Ceftriaxone 30 µg vs. MIC  
*H. influenzae*, 9 isolates (10 correlates)



## Breakpoints

MIC

S ≤ 0.125, R > 0.125 mg/L

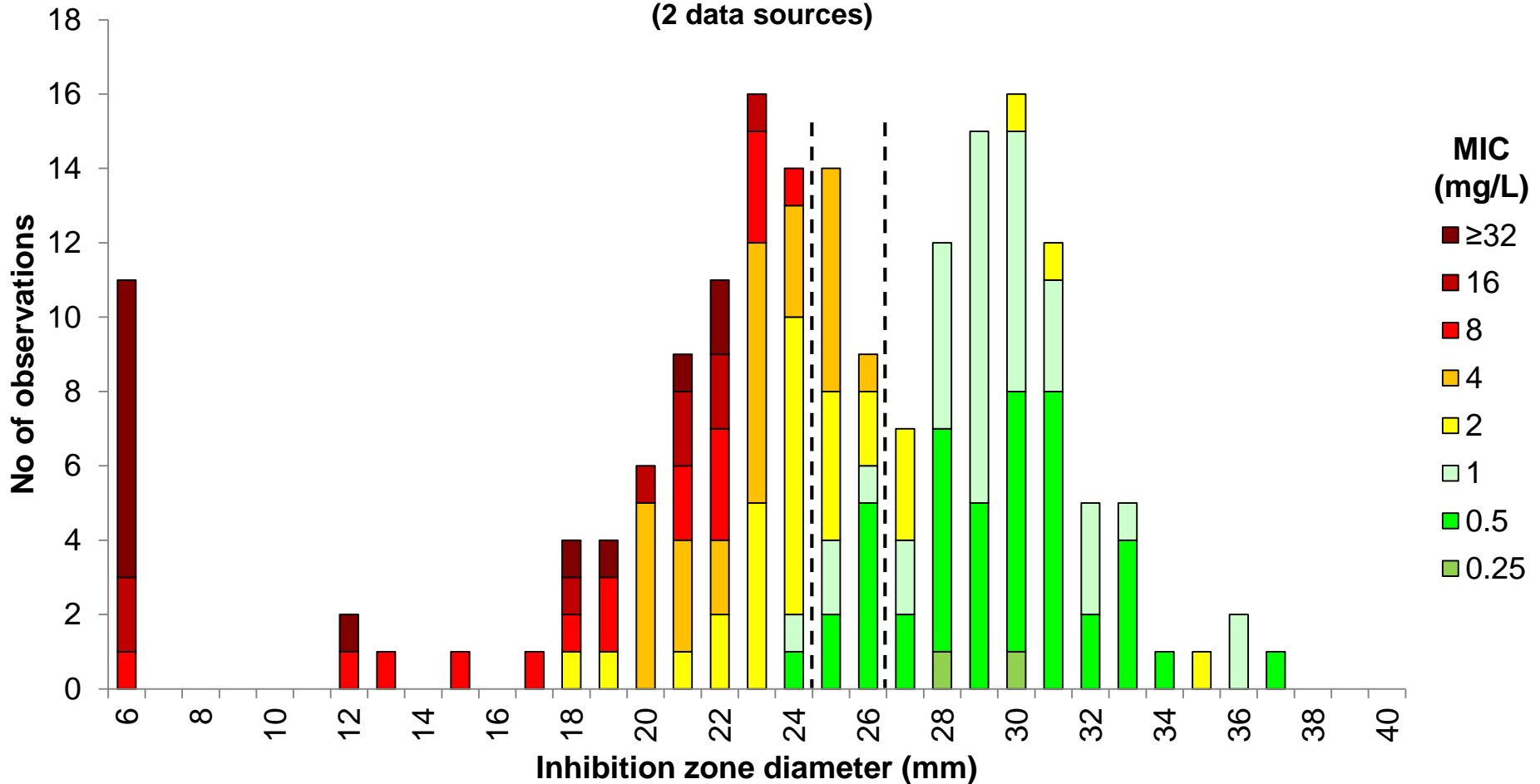
Zone diameter

S ≥ 32, R < 32 mm

# Cefuroxime 30 µg vs. MIC

## *H. influenzae*, 159 isolates (180 correlates)

(2 data sources)



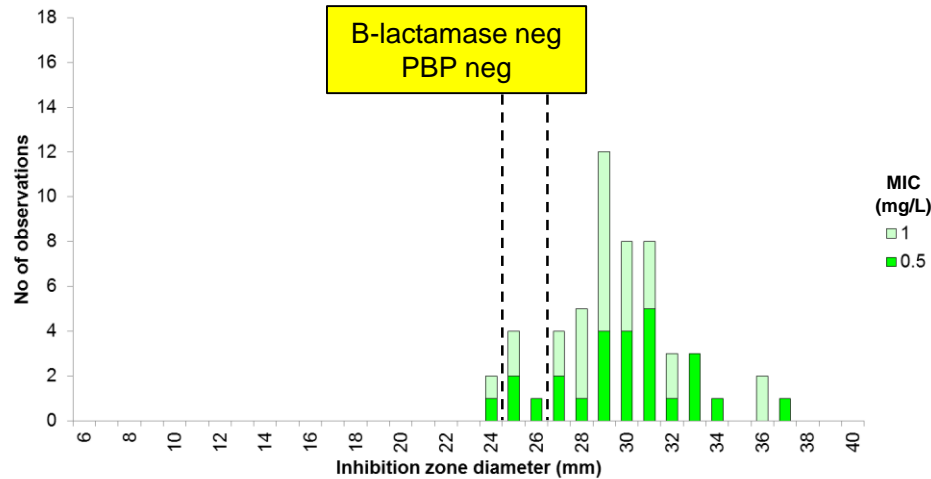
### Breakpoints (iv)

MIC  $S \leq 1, R > 2$  mg/L

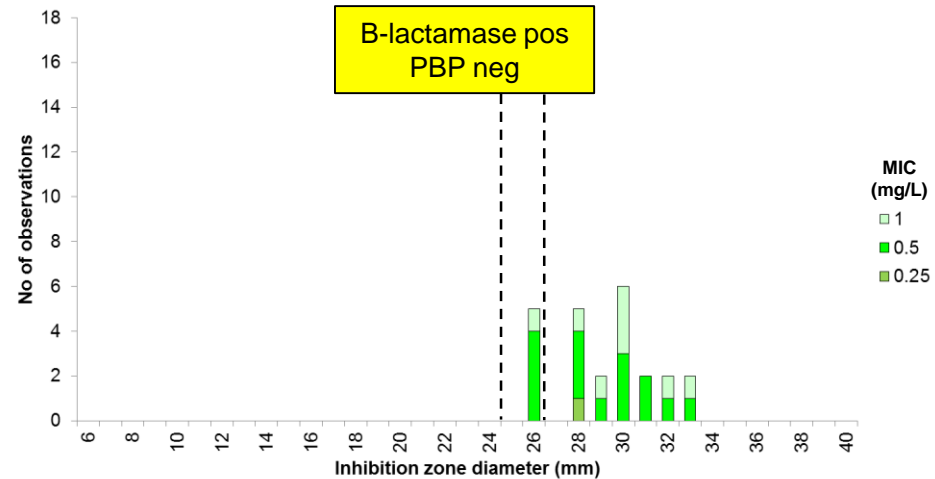
Zone diameter  $S \geq 27, R < 25$  mm

# Cefuroxime (iv) vs. resistance mechanism

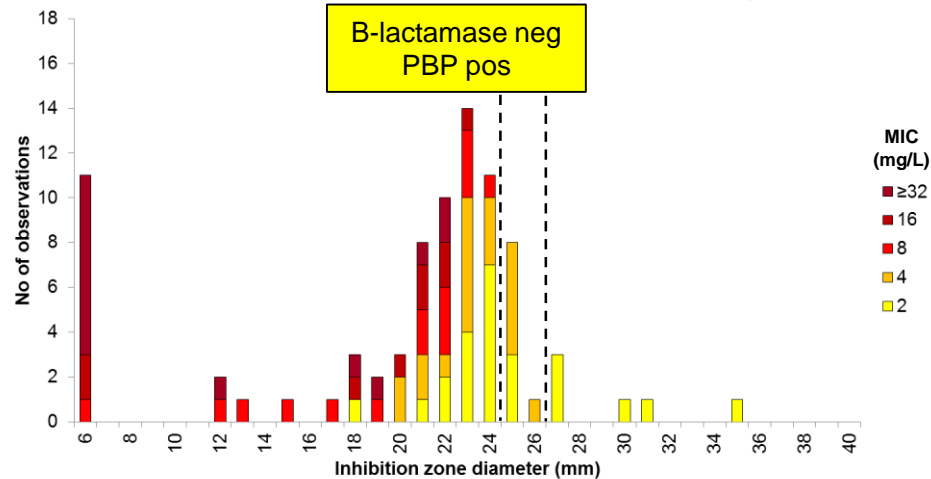
Cefuroxime 30 µg vs. MIC  
*H. influenzae*, 51 isolates (54 correlates)



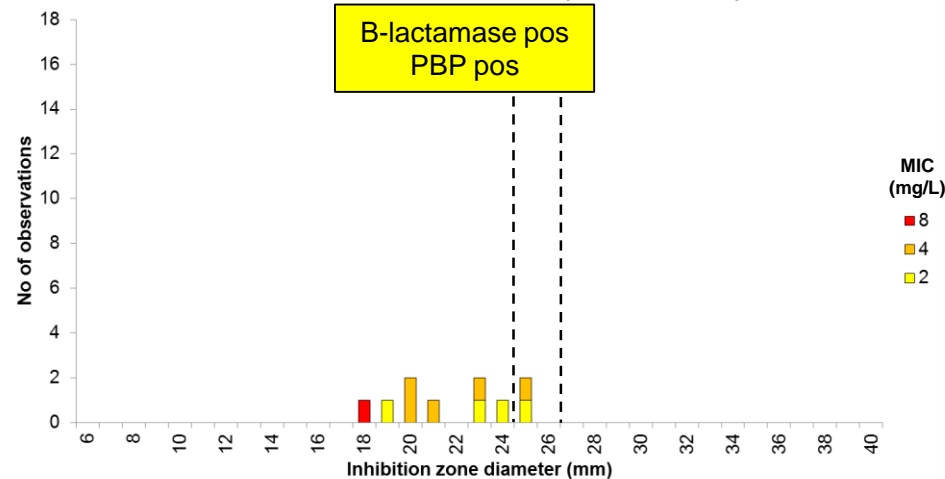
Cefuroxime 30 µg vs. MIC  
*H. influenzae*, 23 isolates (24 correlates)



Cefuroxime 30 µg vs. MIC  
*H. influenzae*, 65 isolates (82 correlates)



Cefuroxime 30 µg vs. MIC  
*H. influenzae*, 9 isolates (10 correlates)



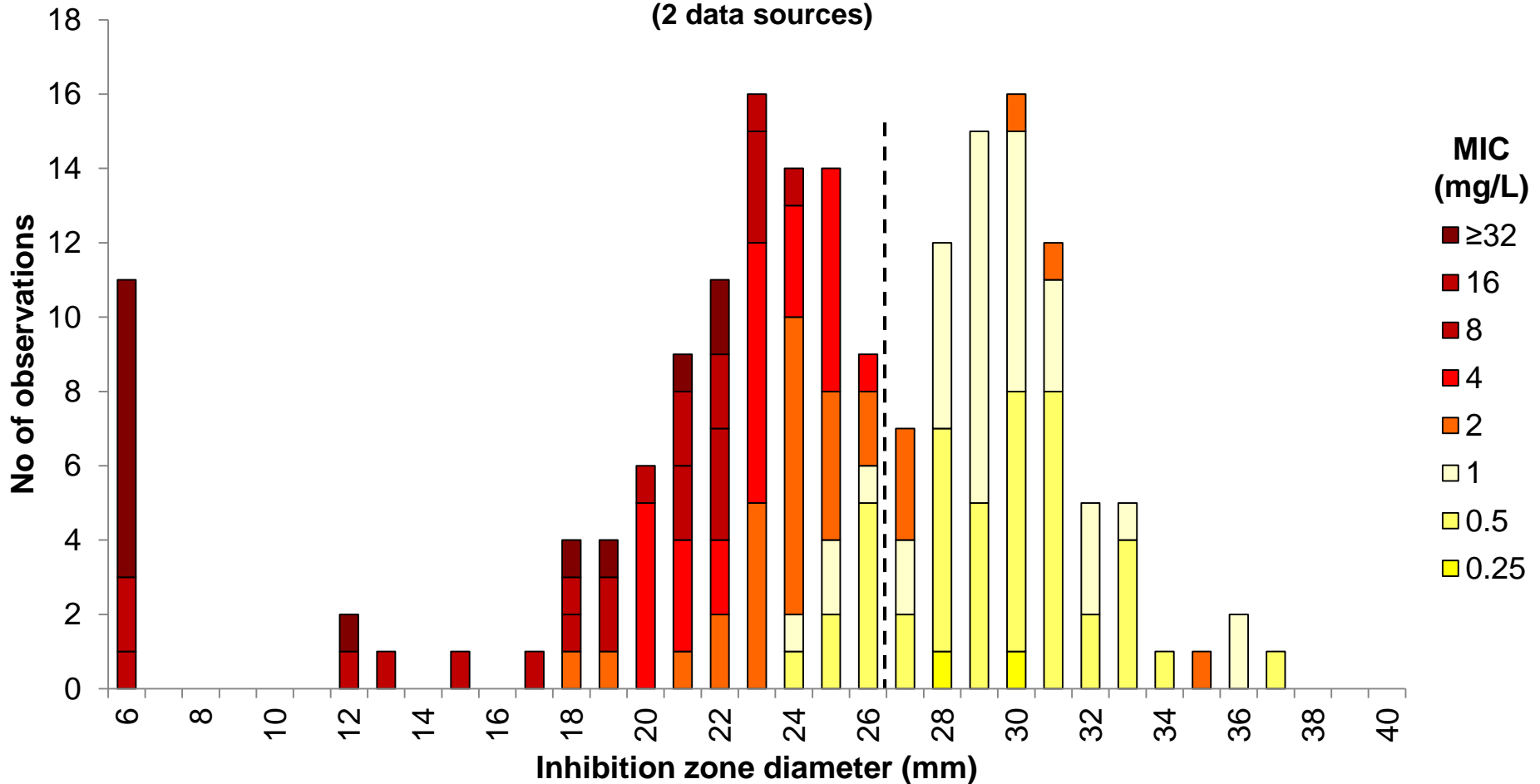
## Breakpoints (iv)

MIC  $S \leq 1$ ,  $R > 2$  mg/L  
Zone diameter  $S \geq 27$ ,  $R < 25$  mm

# Cefuroxime 30 µg vs. MIC

## *H. influenzae*, 159 isolates (180 correlates)

(2 data sources)



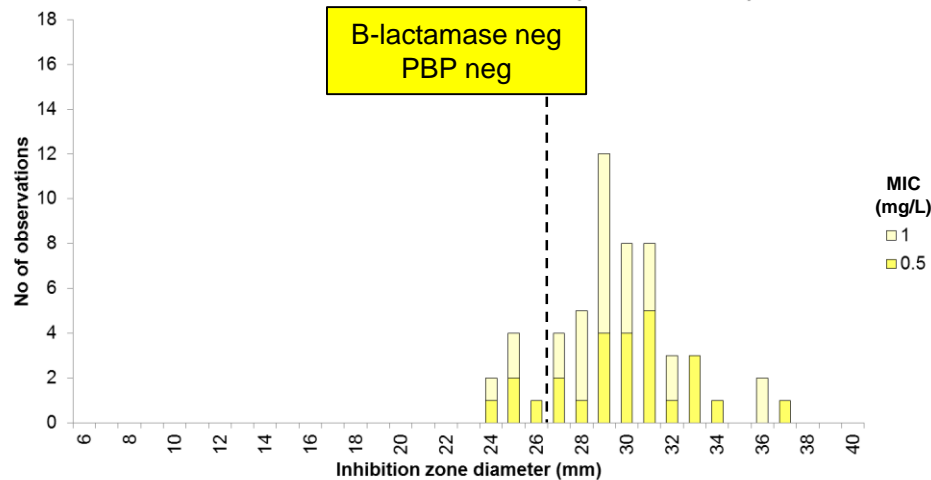
### Breakpoints (oral)

MIC  $S \leq 0.001$ ,  $R > 1$  mg/L

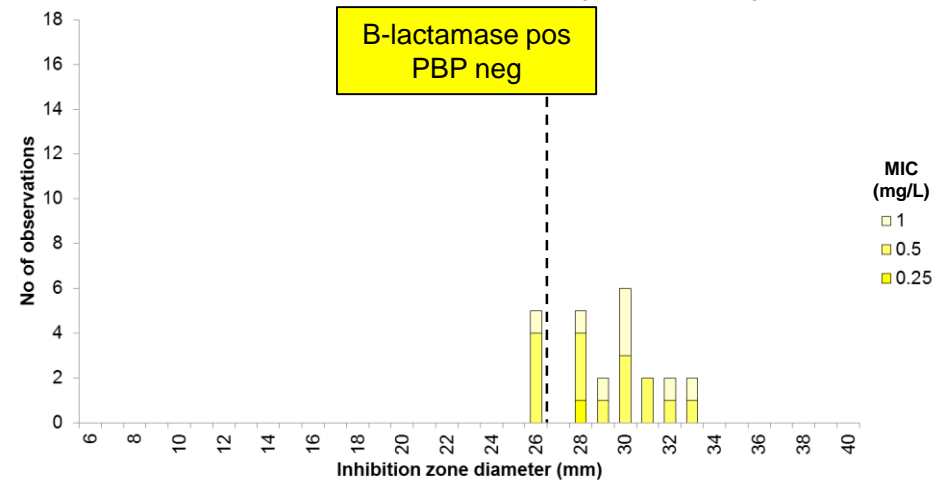
Zone diameter  $S \geq 50$ ,  $R < 27$  mm

# Cefuroxime (oral) vs. resistance mechanism

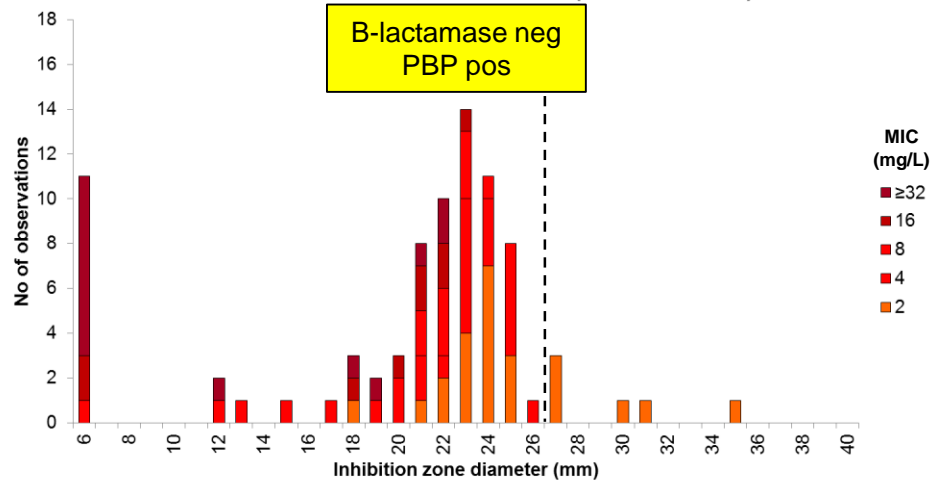
Cefuroxime 30 µg vs. MIC  
*H. influenzae*, 51 isolates (54 correlates)



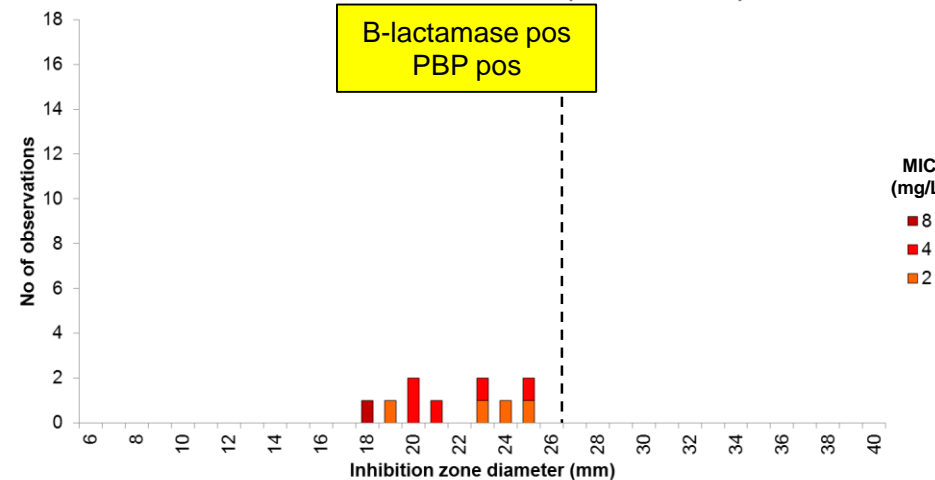
Cefuroxime 30 µg vs. MIC  
*H. influenzae*, 23 isolates (24 correlates)



Cefuroxime 30 µg vs. MIC  
*H. influenzae*, 65 isolates (82 correlates)



Cefuroxime 30 µg vs. MIC  
*H. influenzae*, 9 isolates (10 correlates)



## Breakpoints (oral)

MIC

$S \leq 0.001$ ,  $R > 1$  mg/L

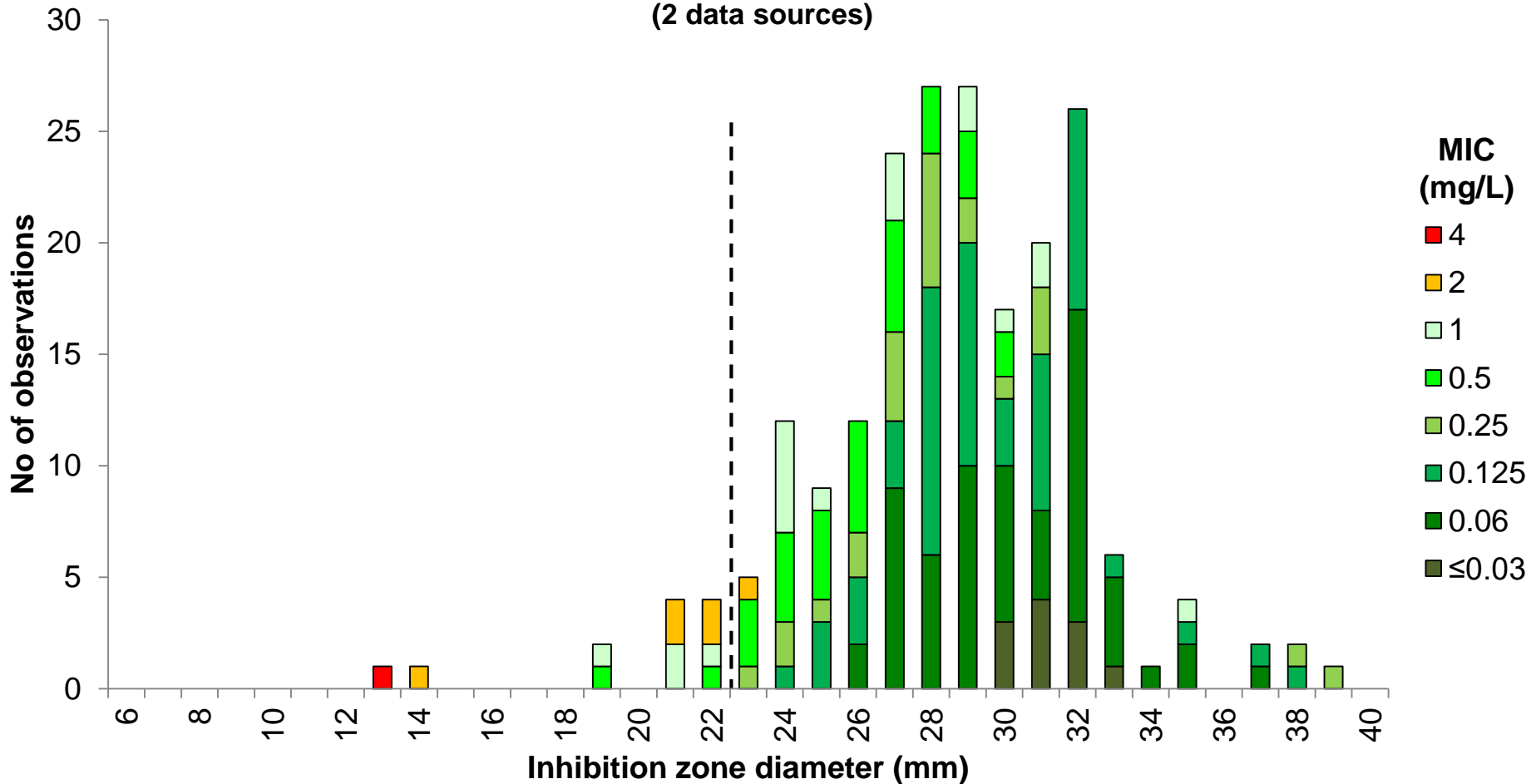
Zone diameter

$S \geq 50$ ,  $R < 27$  mm

# Doripenem 10 µg vs. MIC

## *H. influenzae*, 147 isolates (207 correlates)

(2 data sources)



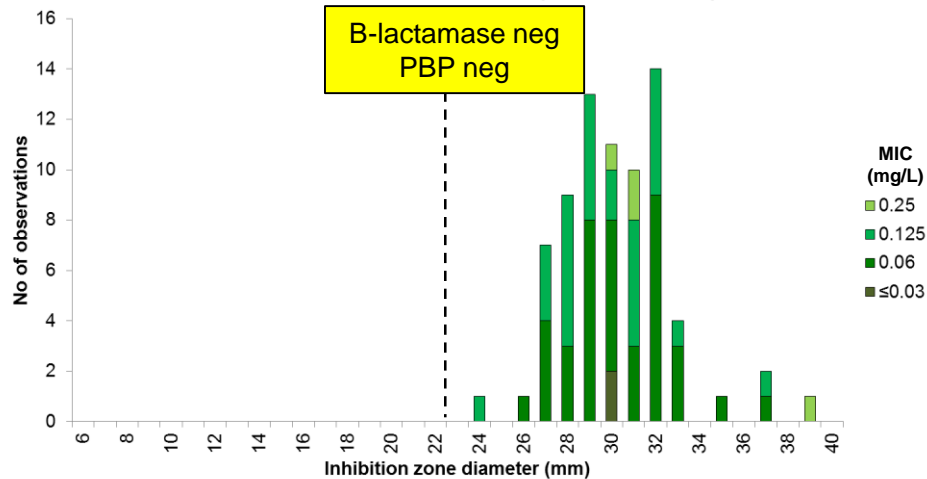
### Breakpoints

MIC  $S \leq 1, R > 1$  mg/L

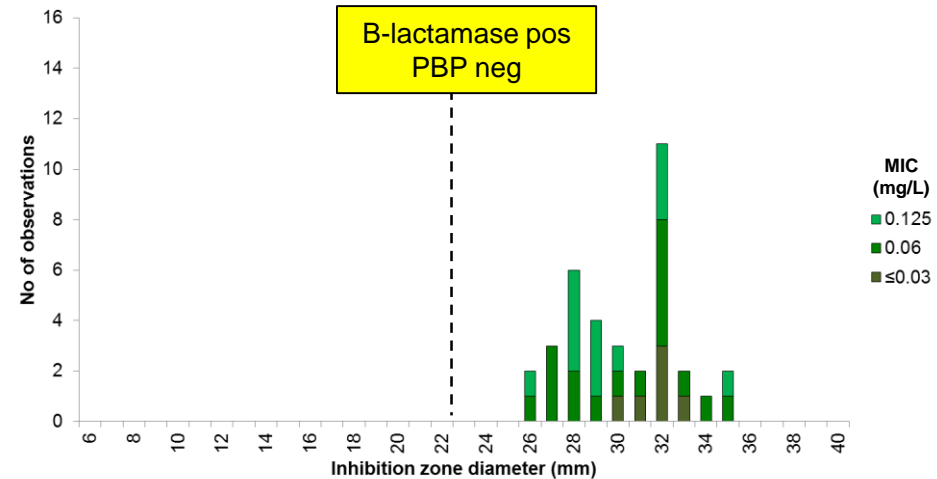
Zone diameter  $S \geq 23, R < 23$  mm

# Doripenem vs. resistance mechanism

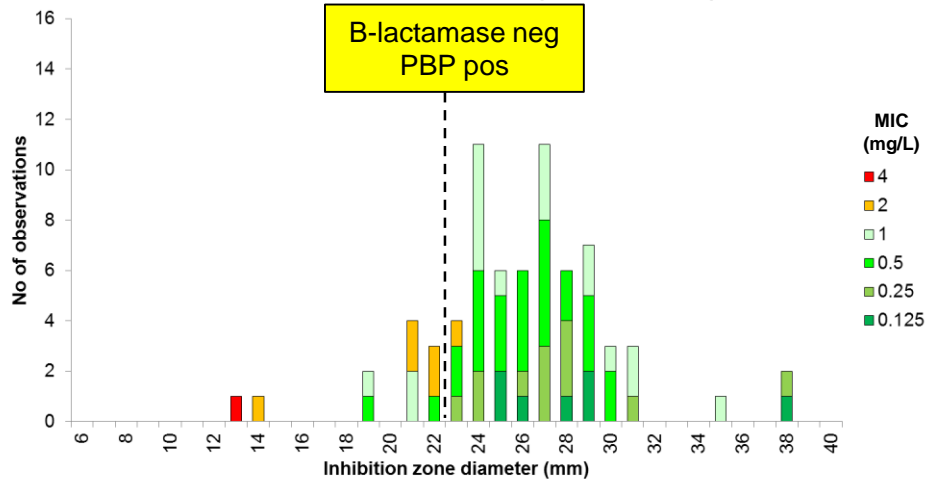
Doripenem 10 µg vs. MIC  
*H. influenzae*, 51 isolates (74 correlates)



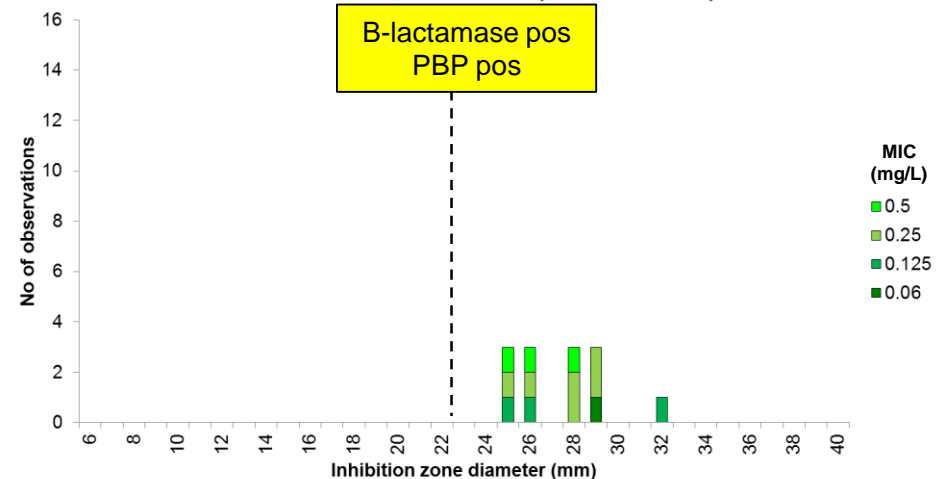
Doripenem 10 µg vs. MIC  
*H. influenzae*, 23 isolates (36 correlates)



Doripenem 10 µg vs. MIC  
*H. influenzae*, 55 isolates (71 correlates)



Doripenem 10 µg vs. MIC  
*H. influenzae*, 9 isolates (13 correlates)



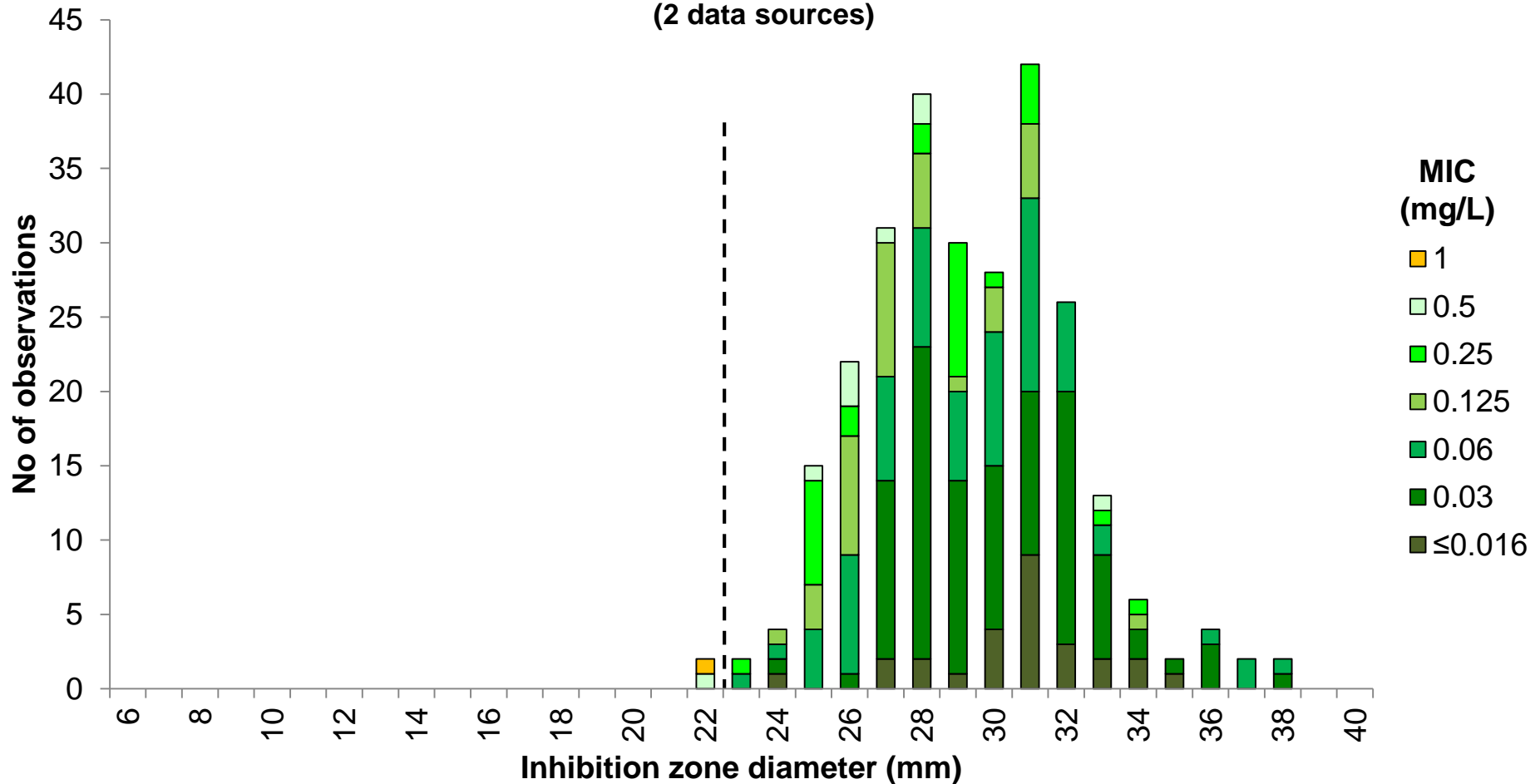
## Breakpoints

MIC  $S \leq 1$ ,  $R > 1$  mg/L  
Zone diameter  $S \geq 23$ ,  $R < 23$  mm

# Ertapenem 10 µg vs. MIC

## *H. influenzae*, 147 isolates (271 correlates)

(2 data sources)



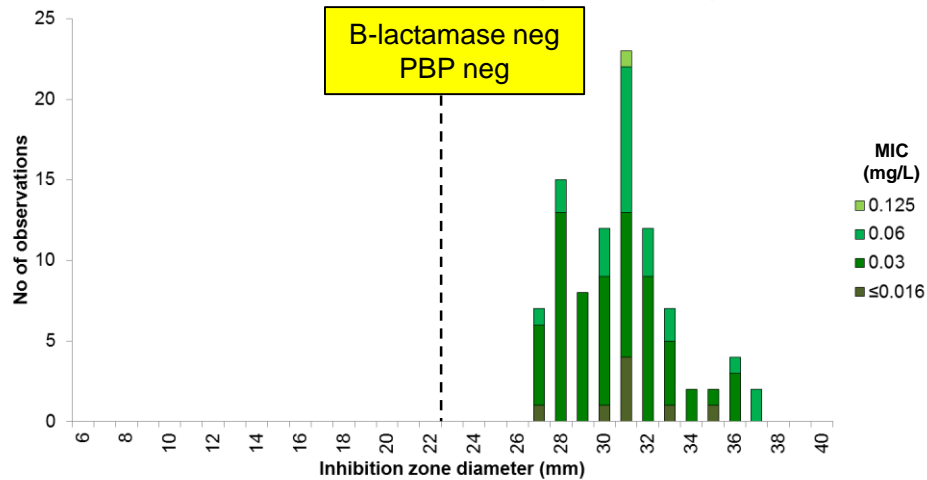
### Breakpoints

MIC S ≤ 0.5, R > 0.5 mg/L

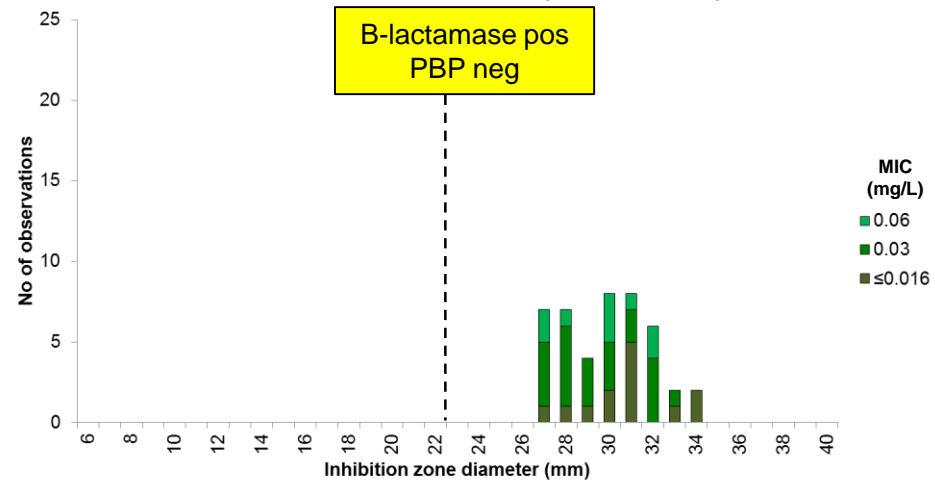
Zone diameter S ≥ 23, R < 23 mm

# Ertapenem vs. resistance mechanism

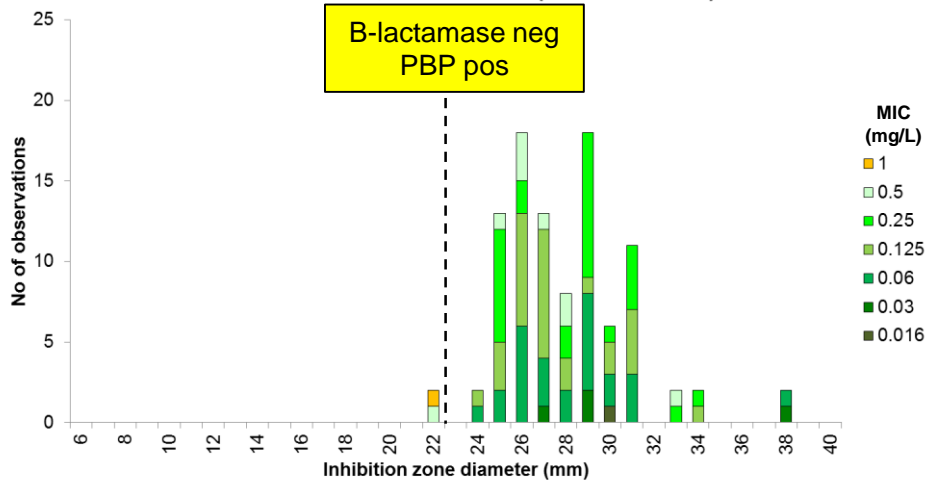
**Ertapenem 10 µg vs. MIC**  
*H. influenzae*, 51 isolates (94 correlates)



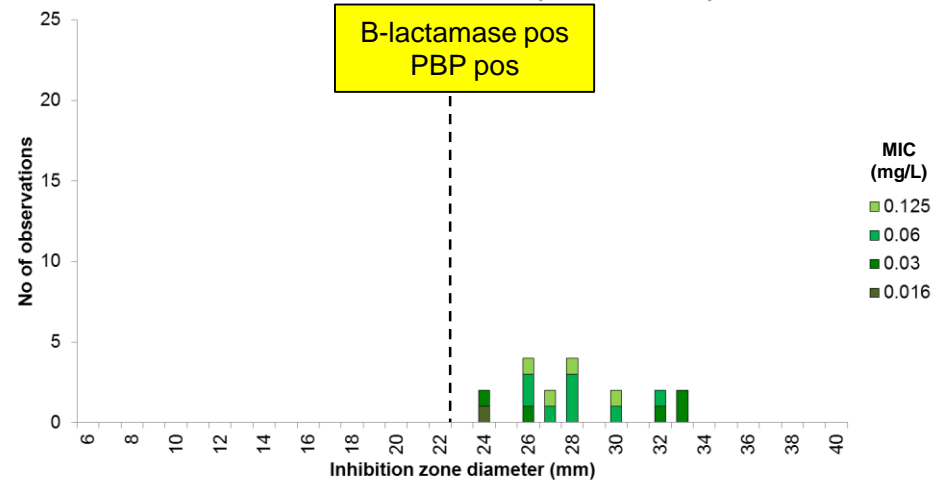
**Ertapenem 10 µg vs. MIC**  
*H. influenzae*, 23 isolates (44 correlates)



**Ertapenem 10 µg vs. MIC**  
*H. influenzae*, 55 isolates (97 correlates)



**Ertapenem 10 µg vs. MIC**  
*H. influenzae*, 9 isolates (18 correlates)



## Breakpoints

MIC

S ≤ 0.5, R > 0.5 mg/L

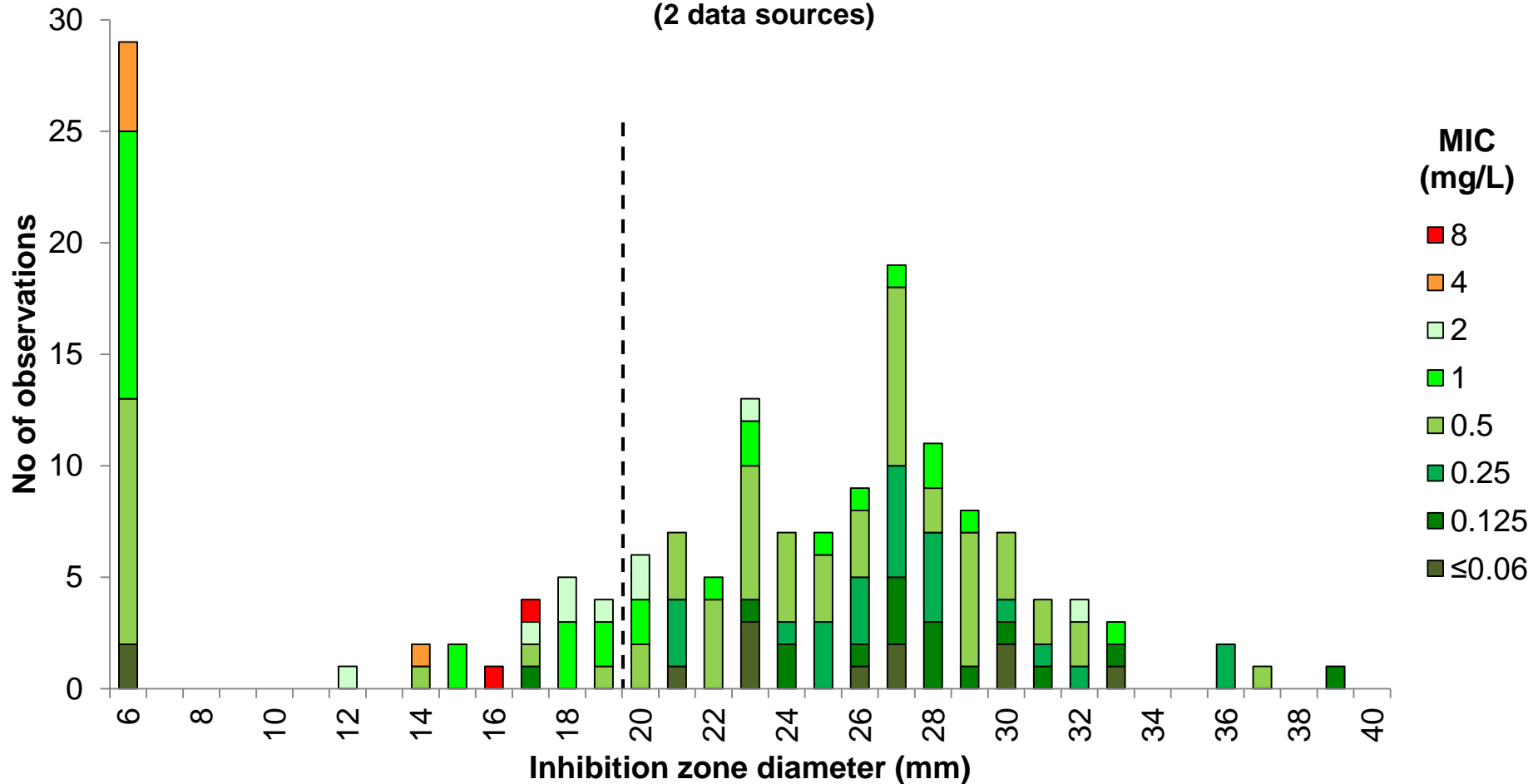
Zone diameter

S ≥ 23, R < 23 mm

# Imipenem 10 µg vs. MIC

## *H. influenzae*, 150 isolates (162 correlates)

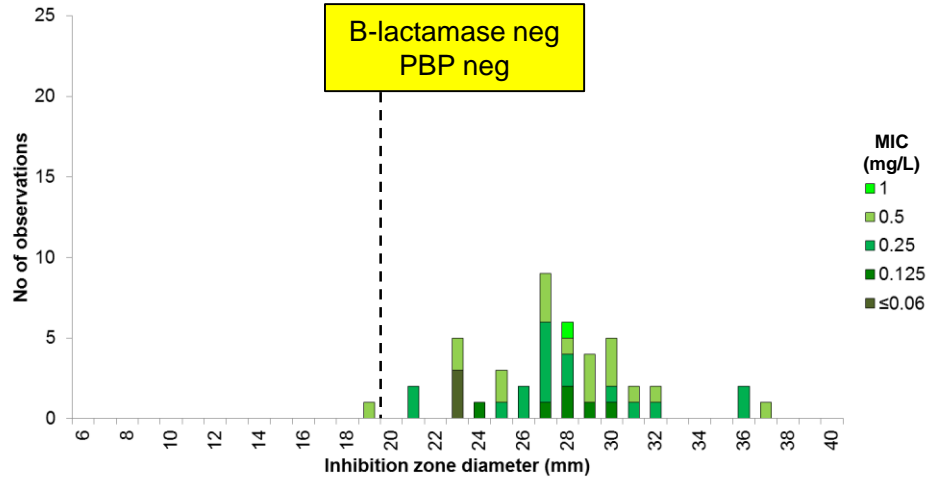
(2 data sources)



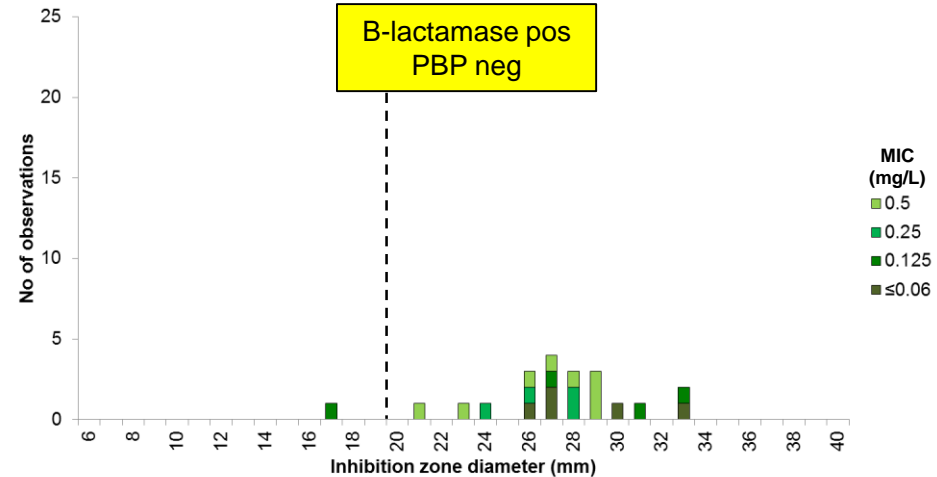
<b>Breakpoints</b>	
MIC	S ≤ 2, R > 2 mg/L
Zone diameter	S ≥ 20, R < 20 mm

# Imipenem vs. resistance mechanism

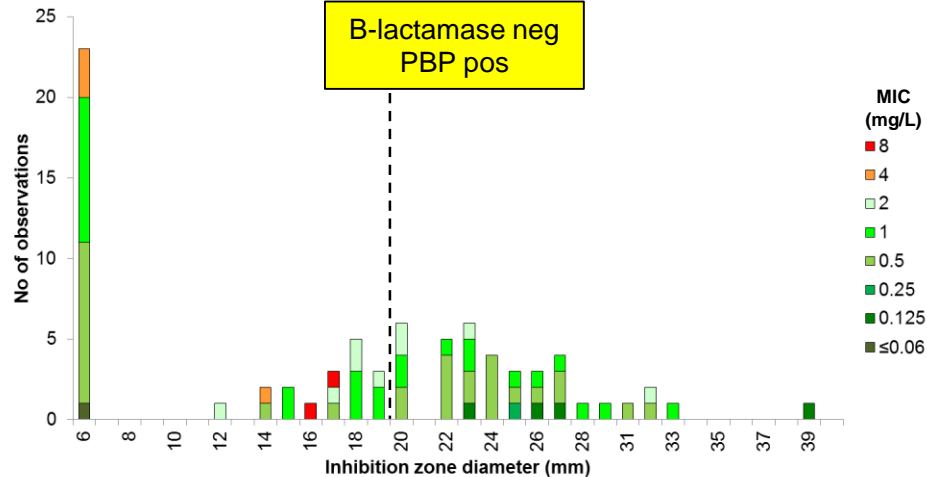
Imipenem 10 µg vs. MIC  
*H. influenzae*, 45 isolates



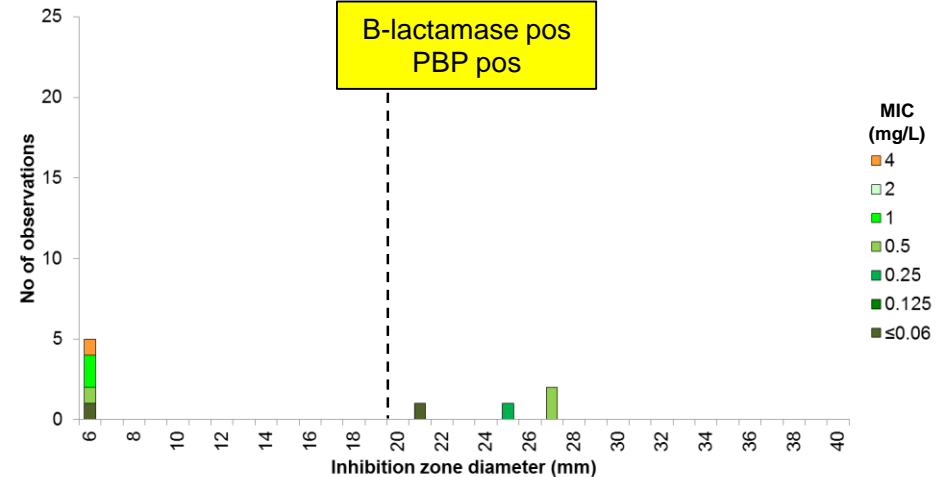
Imipenem 10 µg vs. MIC  
*H. influenzae*, 21 isolates



Imipenem 10 µg vs. MIC  
*H. influenzae*, 65 isolates (78 correlates)



Imipenem 10 µg vs. MIC  
*H. influenzae*, 9 isolates



## Breakpoints

MIC

S ≤ 2, R > 2 mg/L

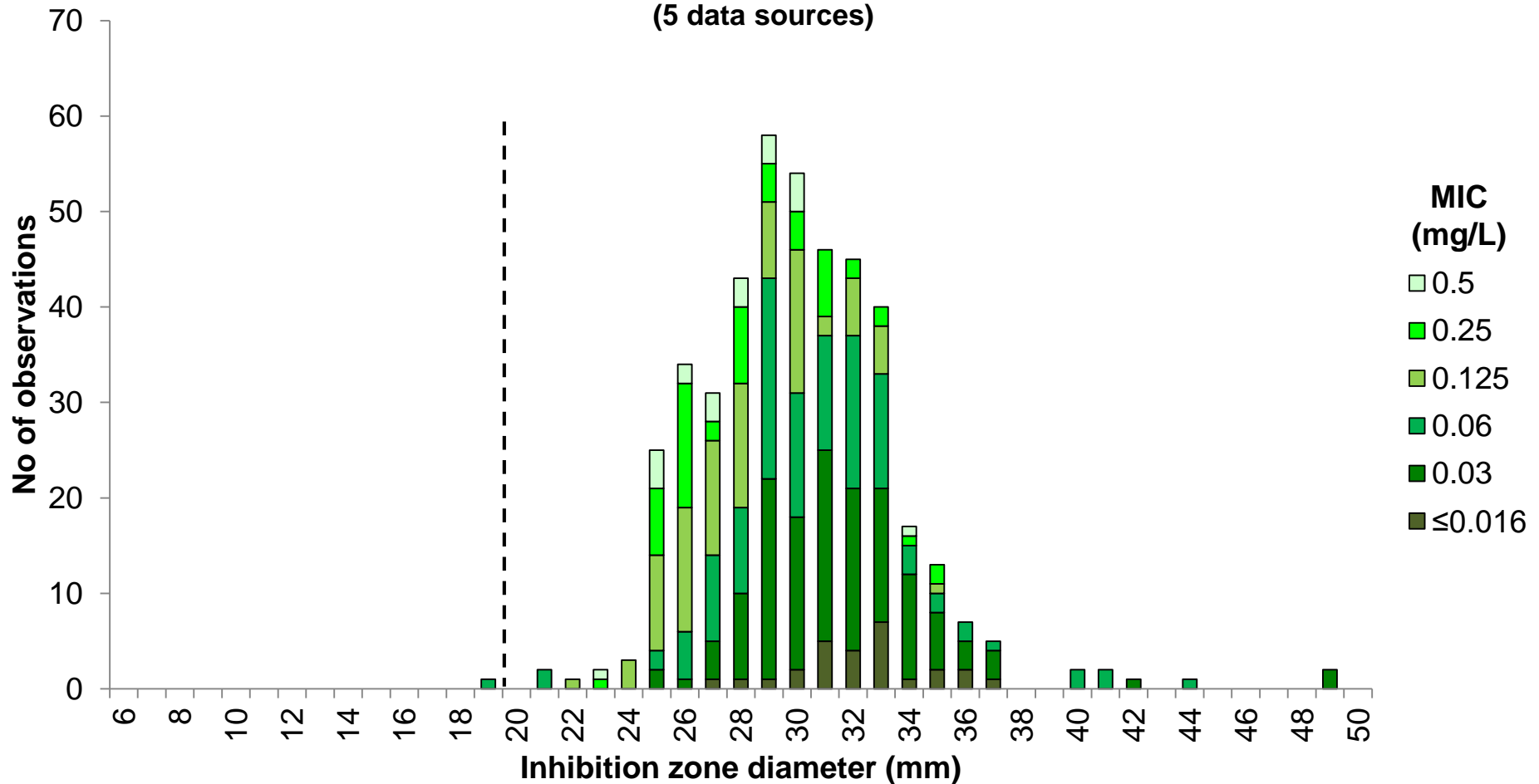
Zone diameter

S ≥ 20, R < 20 mm

# Meropenem 10 µg vs. MIC

## *H. influenzae*, 206 isolates (435 correlates)

(5 data sources)

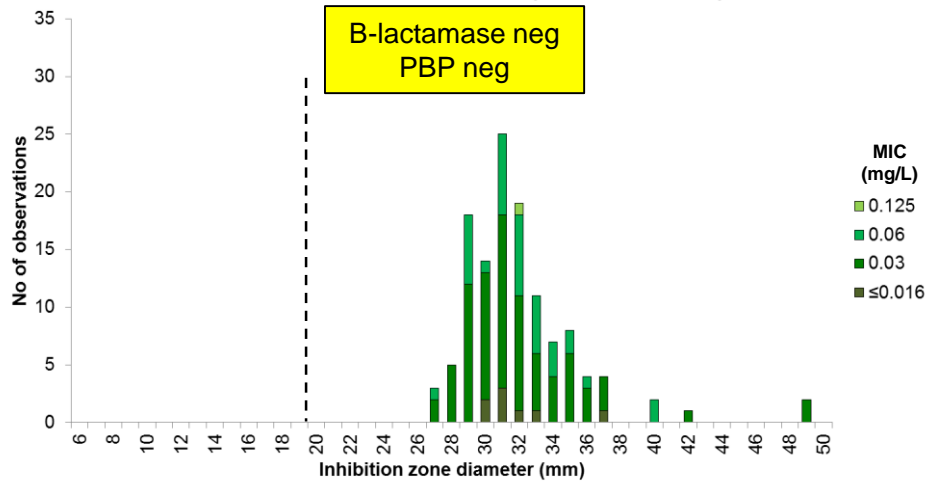


**Breakpoints (non-meningitis)**

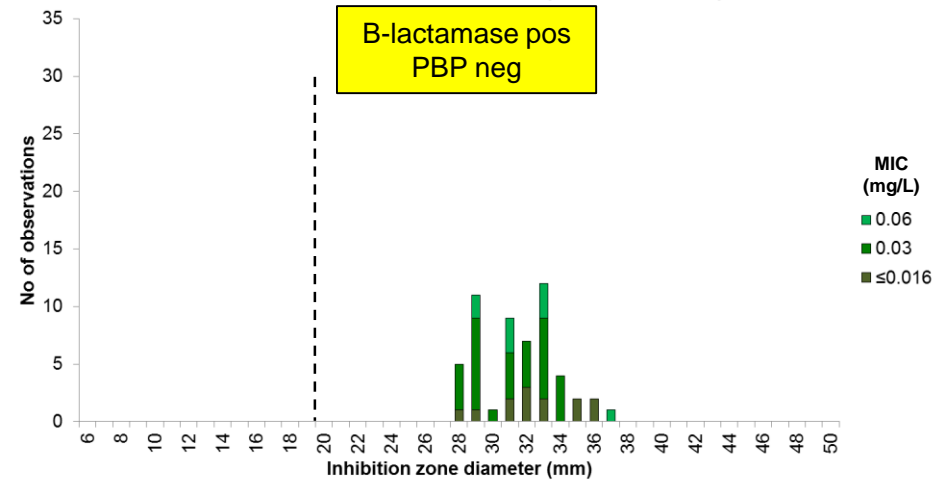
MIC	S ≤ 2, R > 2 mg/L
Zone diameter	S ≥ 20, R < 20 mm

# Meropenem vs. resistance mechanism

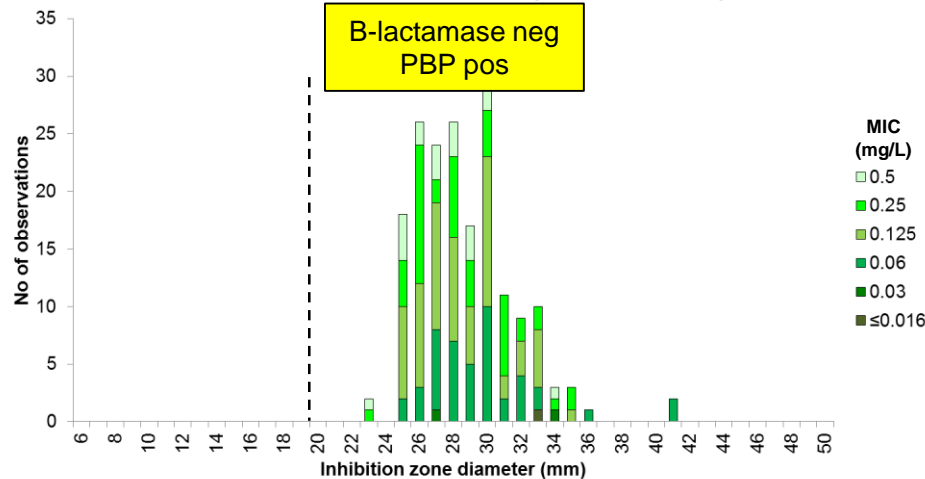
**Meropenem 10 µg vs. MIC**  
*H. influenzae*, 51 isolates (123 correlates)



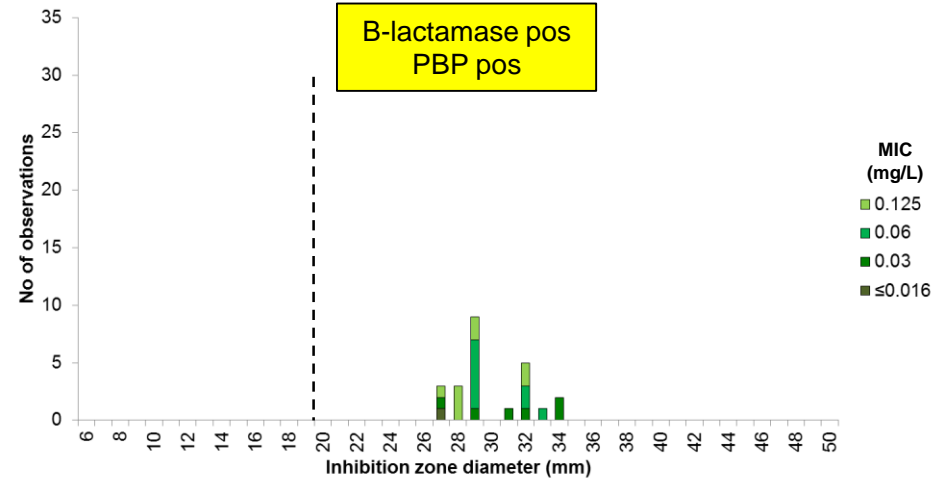
**Meropenem 10 µg vs. MIC**  
*H. influenzae*, 23 isolates (54 correlates)



**Meropenem 10 µg vs. MIC**  
*H. influenzae*, 69 isolates (183 correlates)



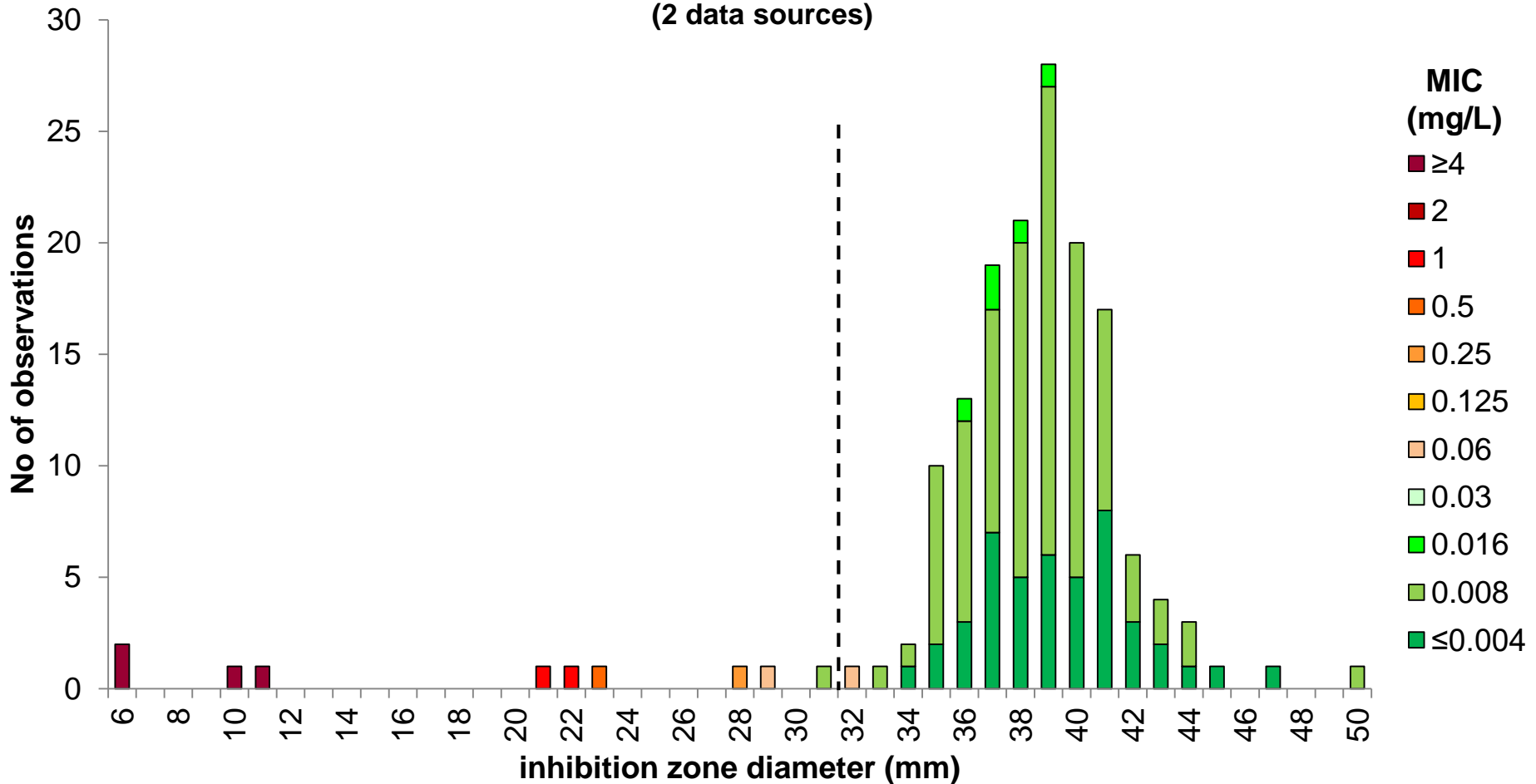
**Meropenem 10 µg vs. MIC**  
*H. influenzae*, 9 isolates (24 correlates)



**Breakpoints (non-meningitis)**  
 MIC S≤2, R>2 mg/L  
 Zone diameter S≥20, R<20 mm

# Ciprofloxacin 5 $\mu$ g vs. MIC *H. influenzae*, 158 isolates

(2 data sources)



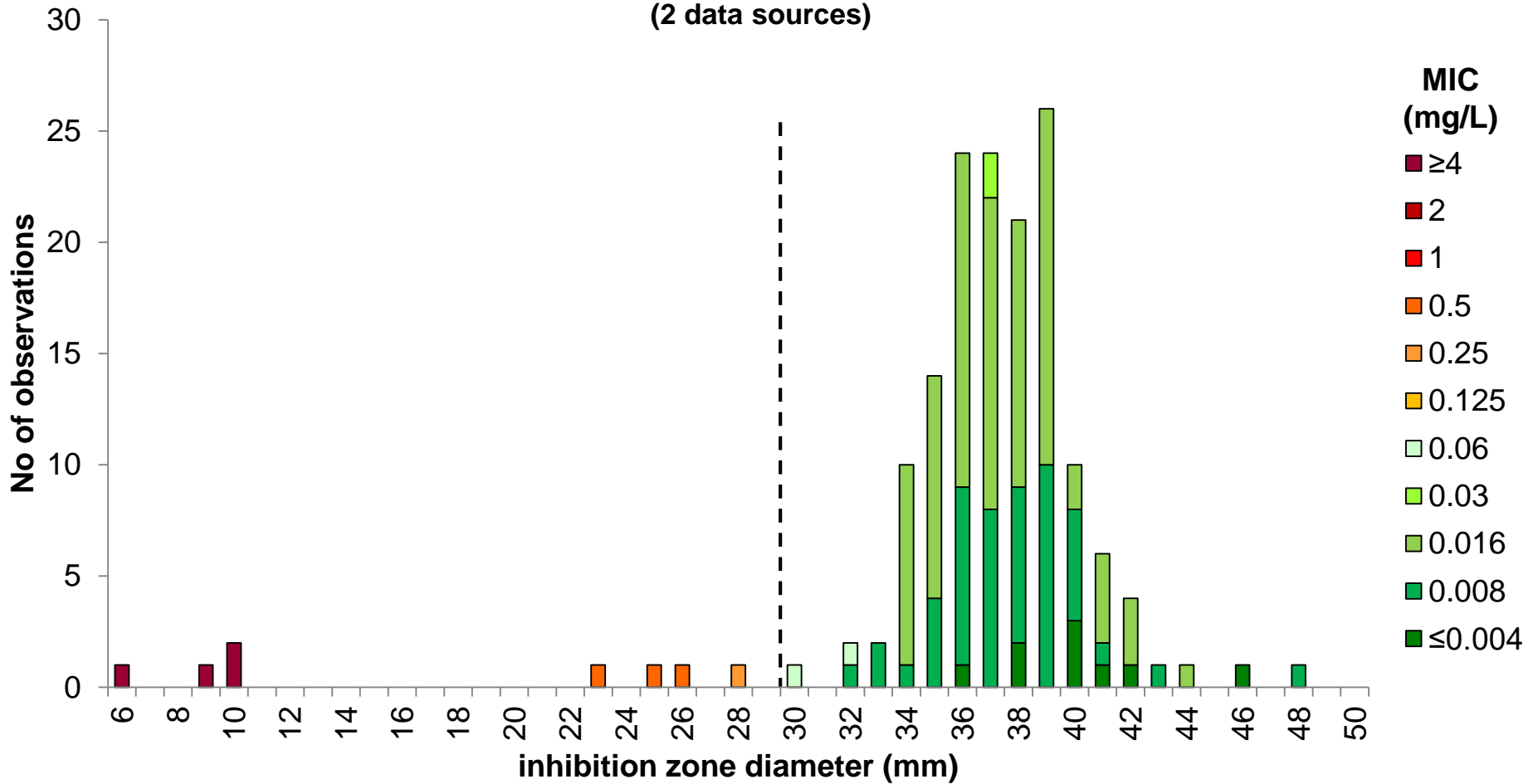
## Breakpoints

MIC  $S \leq 0.03$ ,  $R > 0.03$  mg/L

Zone diameter  $S \geq 32$ ,  $R < 32$  mm

# Levofloxacin 5 $\mu\text{g}$ vs. MIC *H. influenzae*, 156 isolates

(2 data sources)



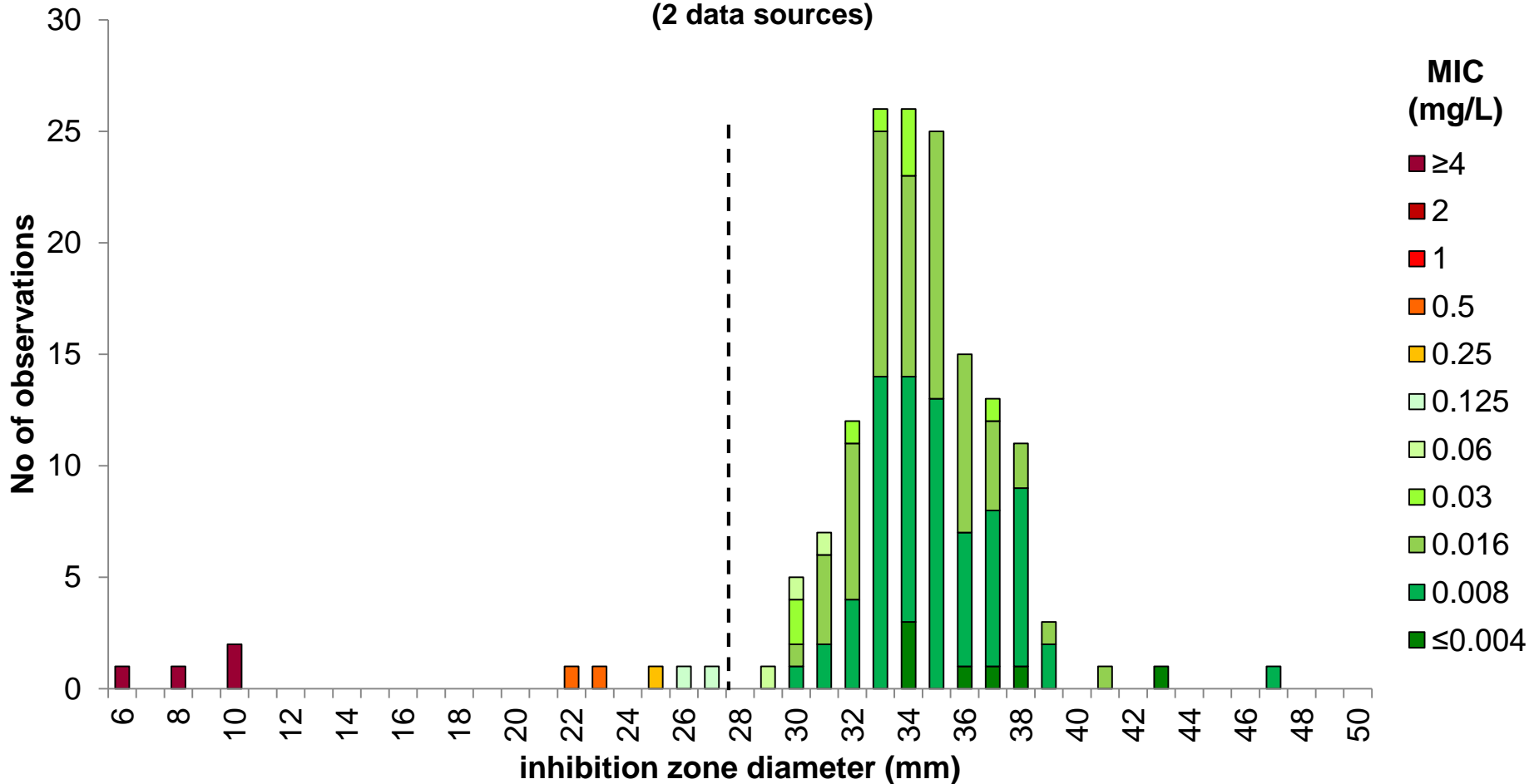
## Breakpoints

MIC  $S \leq 0.06$ ,  $R > 0.06$  mg/L

Zone diameter  $S \geq 30$ ,  $R < 30$  mm

# Moxifloxacin 5 µg vs. MIC *H. influenzae*, 156 isolates

(2 data sources)



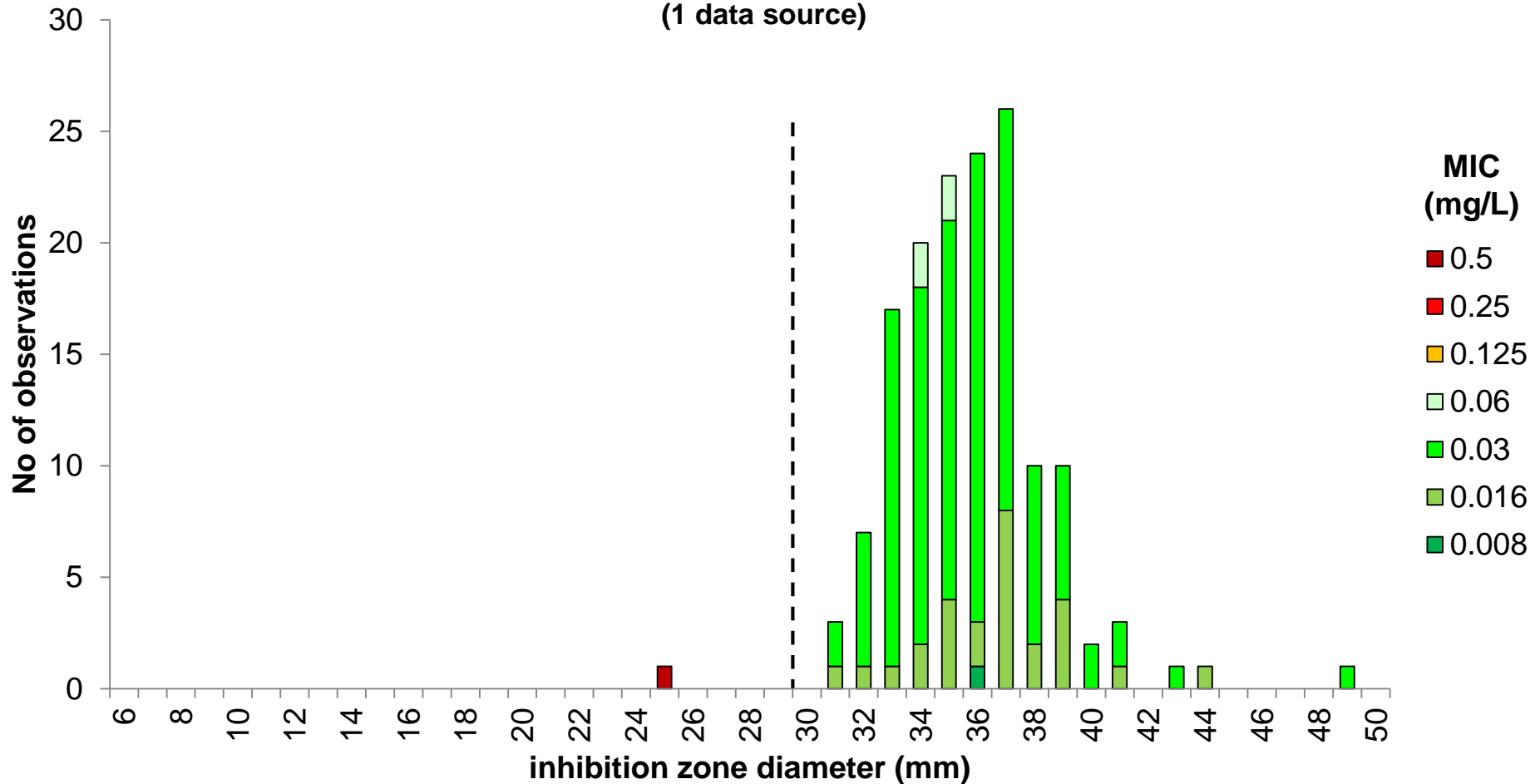
## Breakpoints

MIC  $S \leq 0.125$ ,  $R > 0.125$  mg/L

Zone diameter  $S \geq 28$ ,  $R < 28$  mm

# Ofloxacin 5 µg vs. MIC *H. influenzae*, 149 isolates

(1 data source)



## Breakpoints

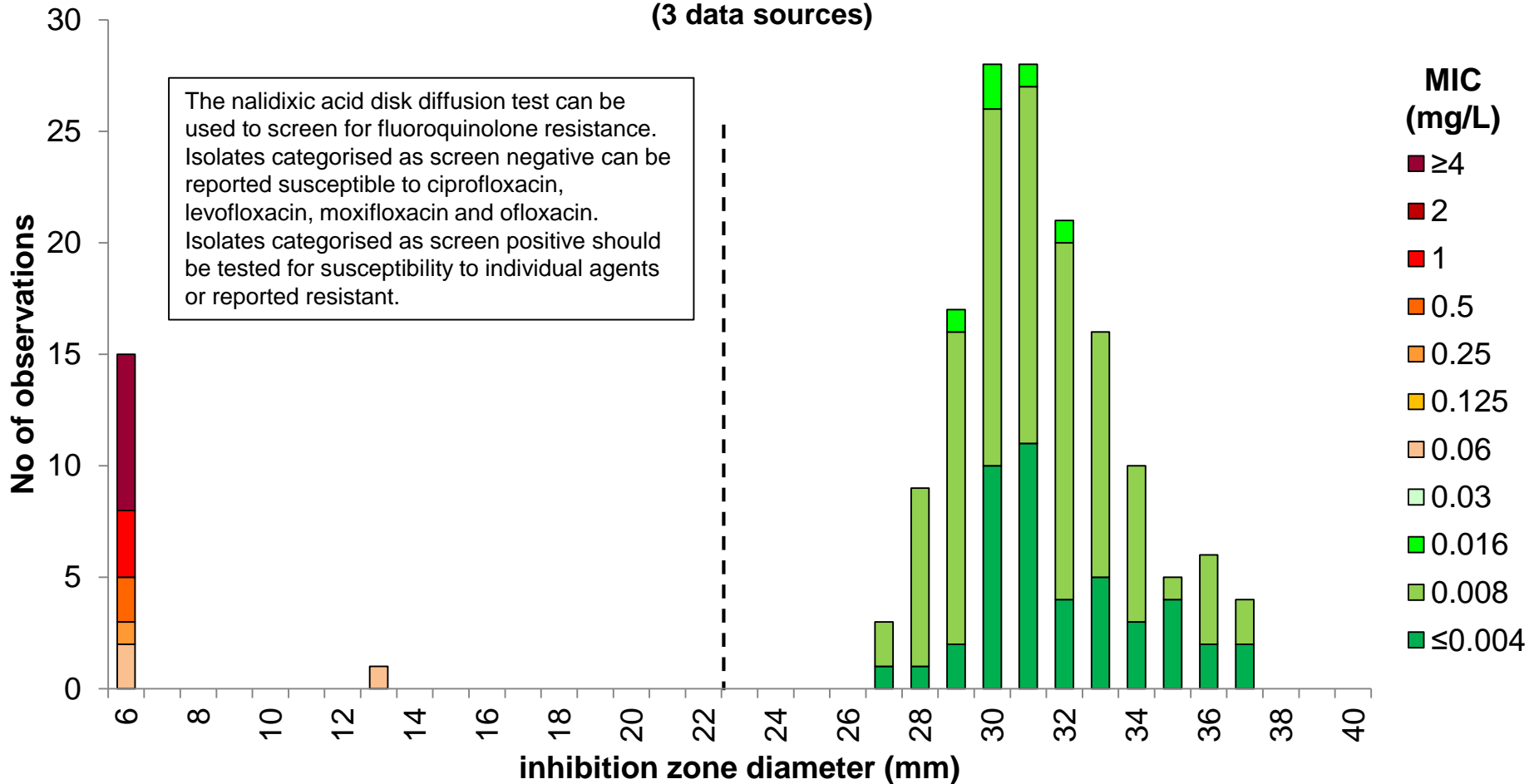
MIC  $S \leq 0.06$ ,  $R > 0.06$  mg/L

Zone diameter  $S \geq 30$ ,  $R < 30$  mm

# Nalidixic acid 30 µg vs. Ciprofloxacin MIC

## *H. influenzae*, 163 isolates

(3 data sources)



### Breakpoints

Ciprofloxacin MIC

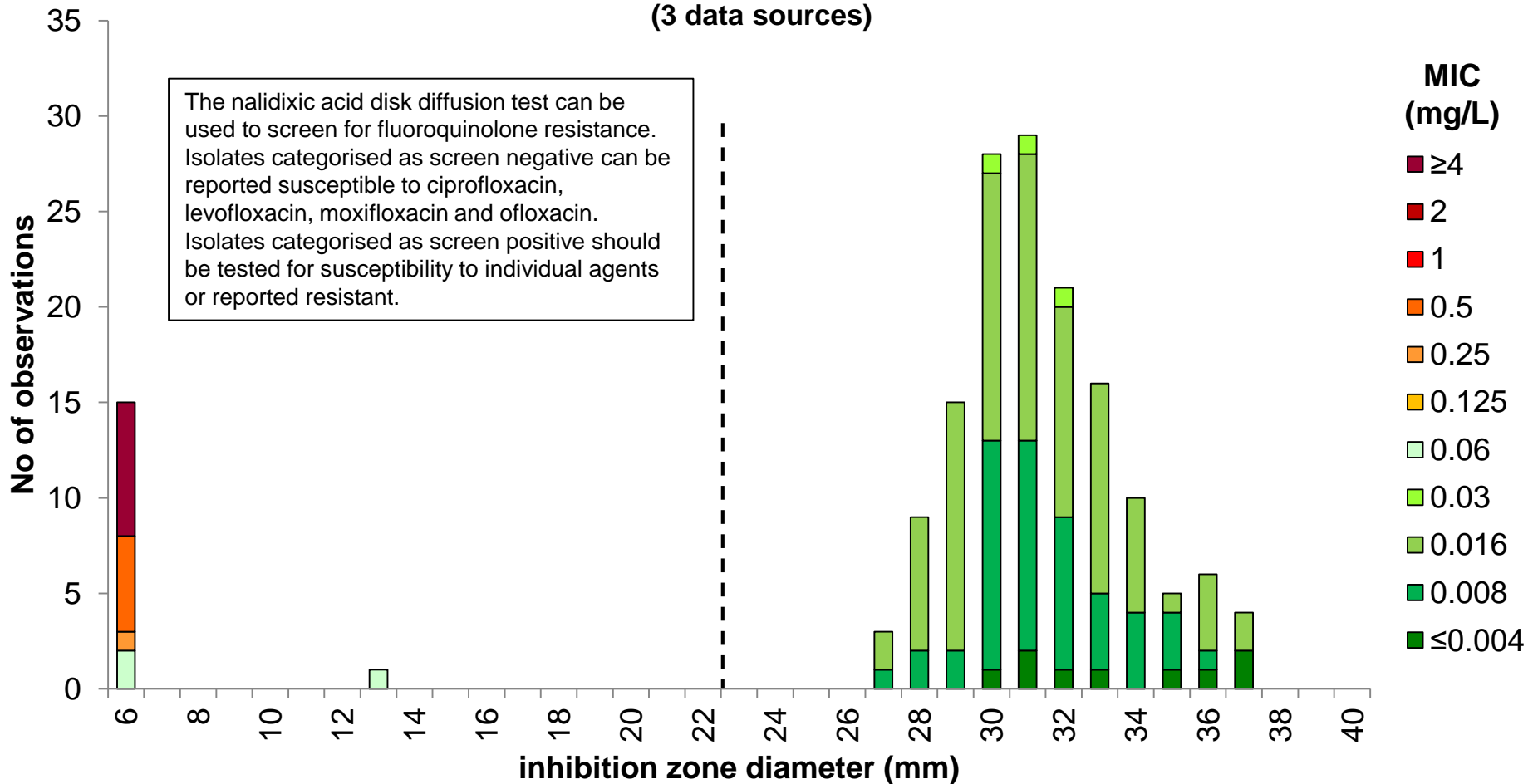
$S \leq 0.03$ ,  $R > 0.03$  mg/L

Nalidixic acid zone diameter (screen)

$S \geq 23$ ,  $R < 23$  mm

# Nalidixic acid 30 µg vs. Levofloxacin MIC *H. influenzae*, 162 isolates

(3 data sources)



## Breakpoints

Levofloxacin MIC

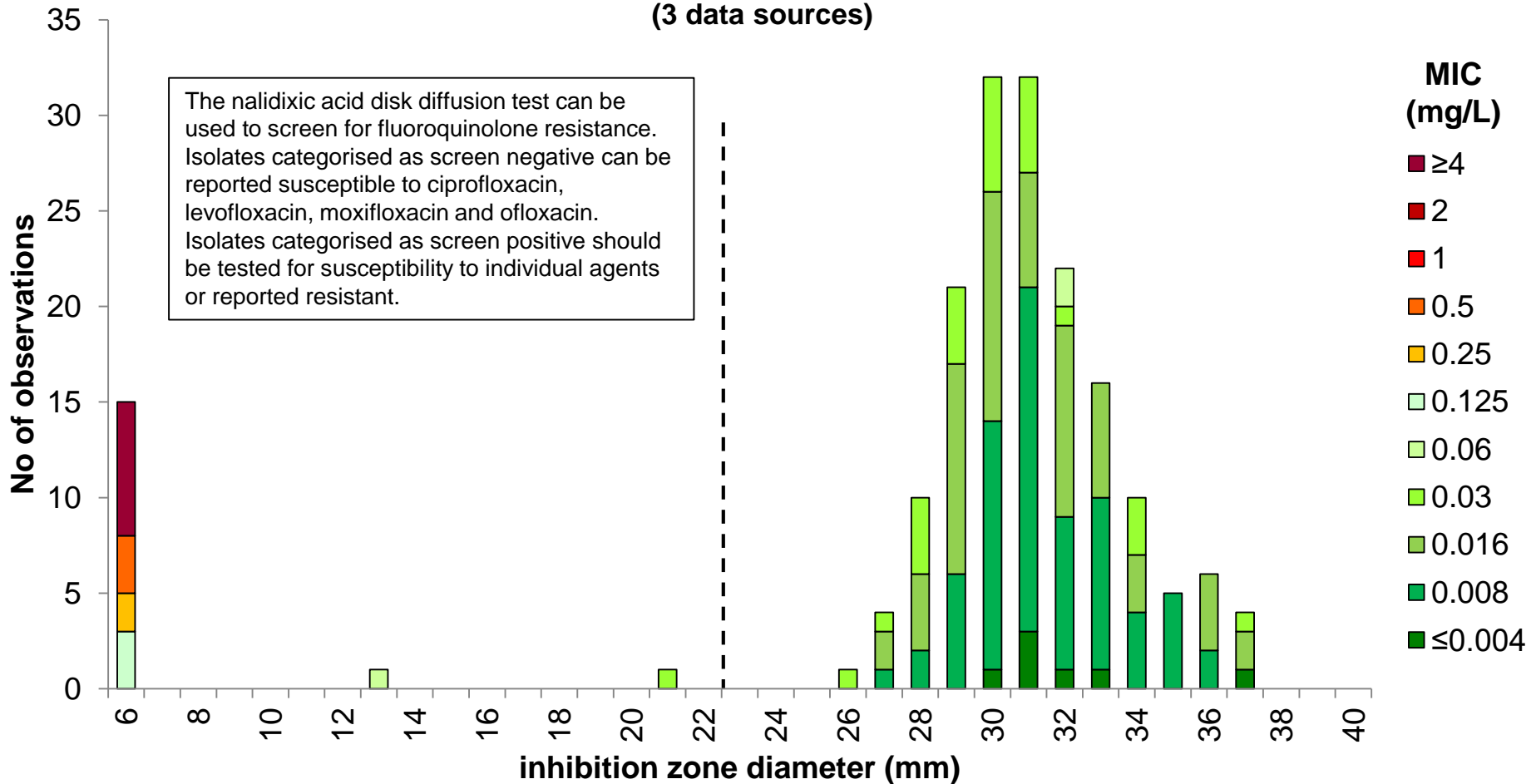
$S \leq 0.06$ ,  $R > 0.06$  mg/L

Nalidixic acid zone diameter (screen)

$S \geq 23$ ,  $R < 23$  mm

# Nalidixic acid 30 µg vs. Moxifloxacin MIC *H. influenzae*, 180 isolates

(3 data sources)



## Breakpoints

Moxifloxacin MIC

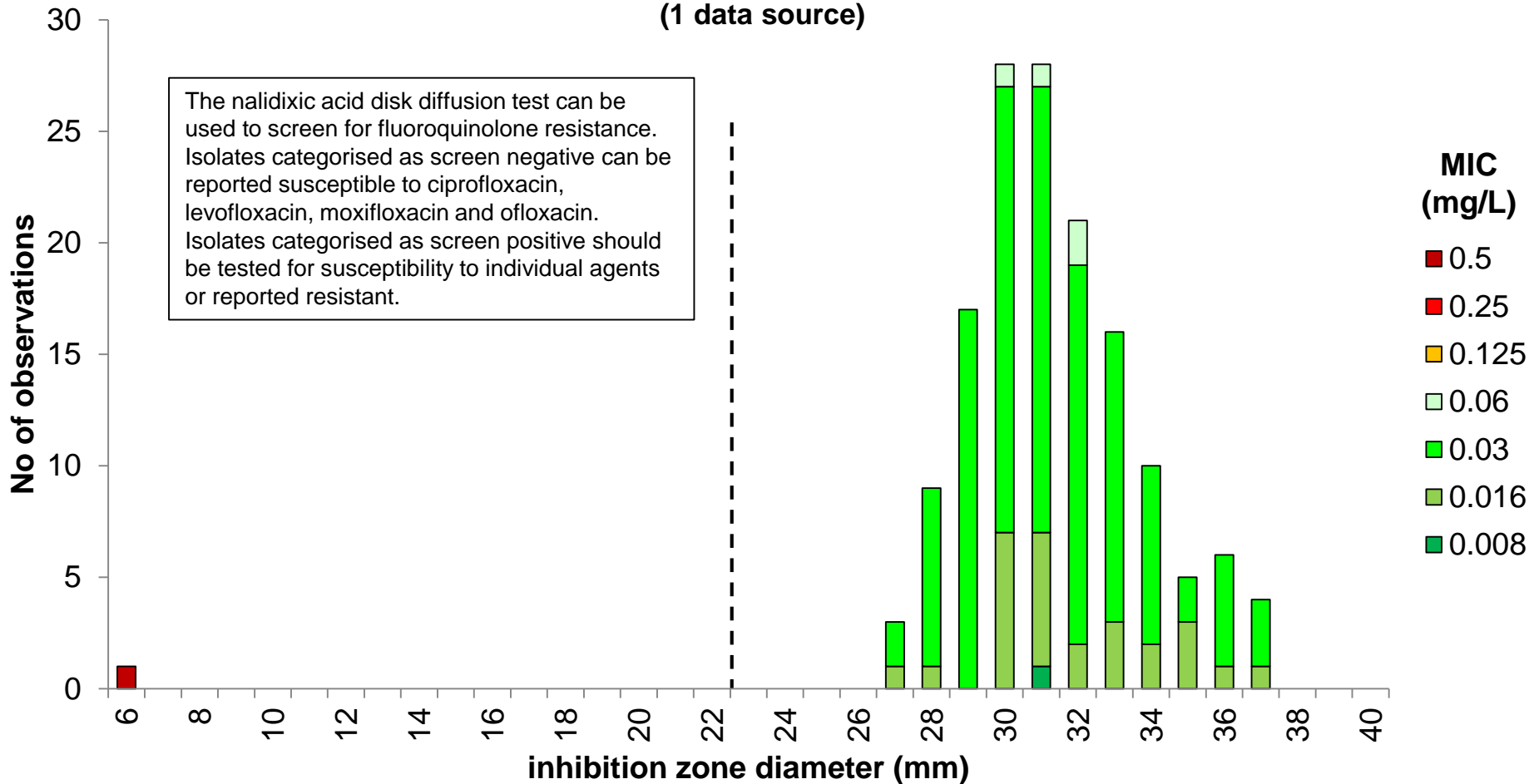
S ≤ 0.125, R > 0.125 mg/L

Nalidixic acid zone diameter (screen)

S ≥ 23, R < 23 mm

# Nalidixic acid 30 µg vs. Ofloxacin MIC *H. influenzae*, 148 isolates

(1 data source)



## Breakpoints

Ofloxacin MIC

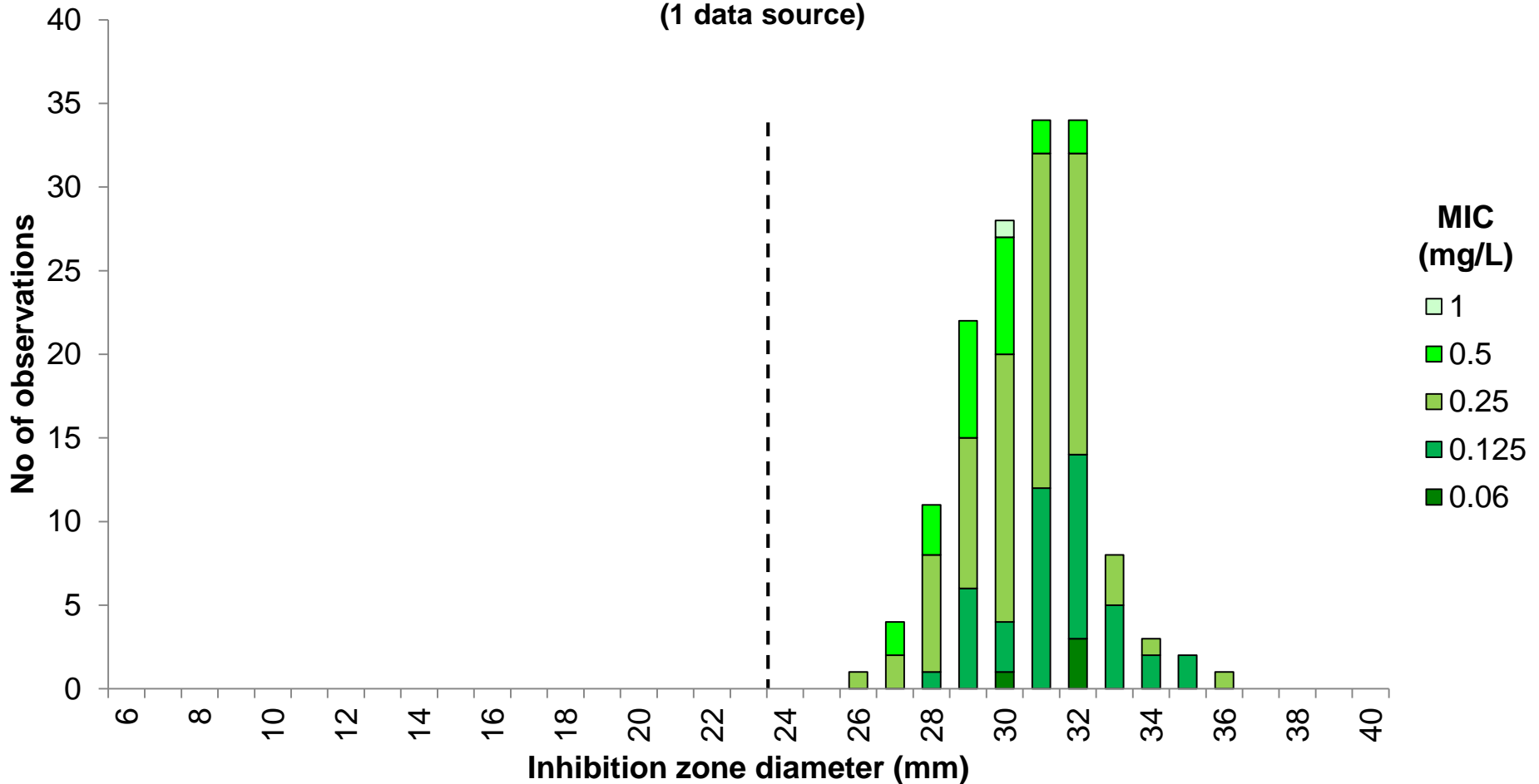
$S \leq 0.06$ ,  $R > 0.06$  mg/L

Nalidixic acid zone diameter (screen)

$S \geq 23$ ,  $R < 23$  mm

# Minocycline 30 µg vs. MIC *H. influenzae*, 148 isolates

(1 data source)



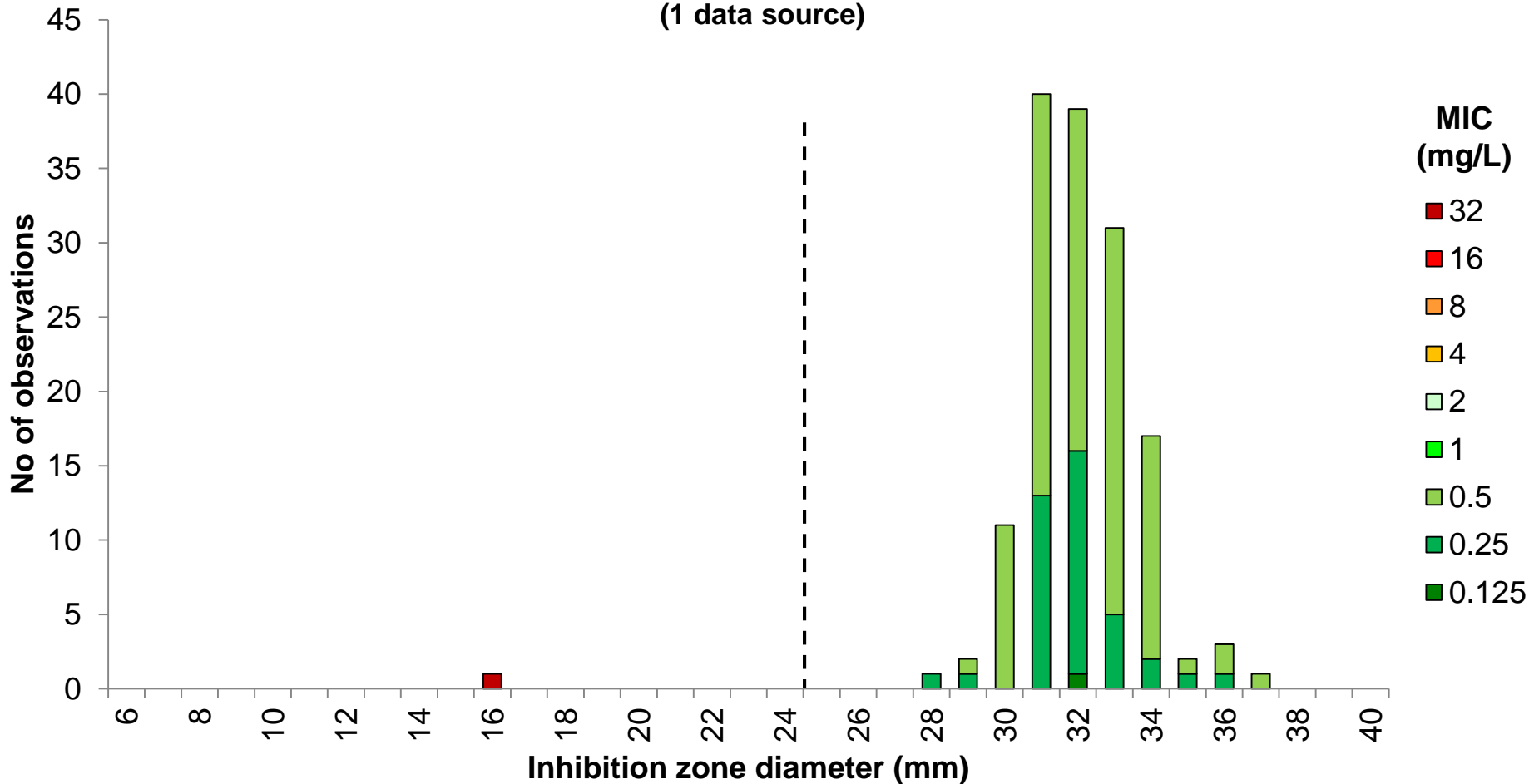
## Breakpoints

MIC  $S \leq 1$ ,  $R > 1$  mg/L

Zone diameter  $S \geq 24$ ,  $R < 24$  mm

# Tetracycline 30 µg vs. MIC *H. influenzae*, 148 isolates

(1 data source)



## Breakpoints

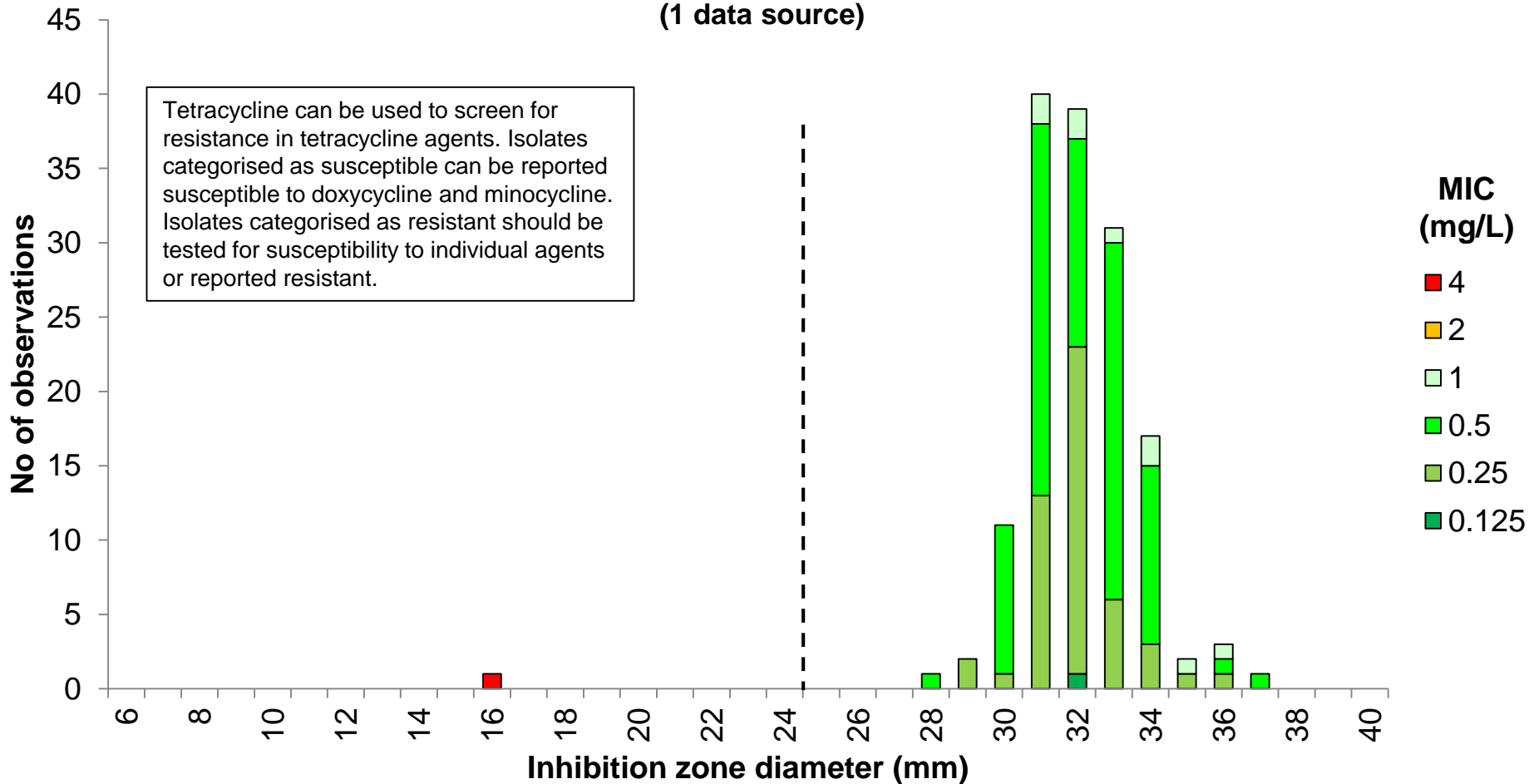
MIC  $S \leq 2$ ,  $R > 2$  mg/L

Zone diameter  $S \geq 25$ ,  $R < 25$  mm

# Tetracycline 30 µg vs. Doxycycline MIC

## *H. influenzae*, 148 isolates

(1 data source)



### Breakpoints

Doxycycline MIC

$S \leq 1$ ,  $R > 1$  mg/L

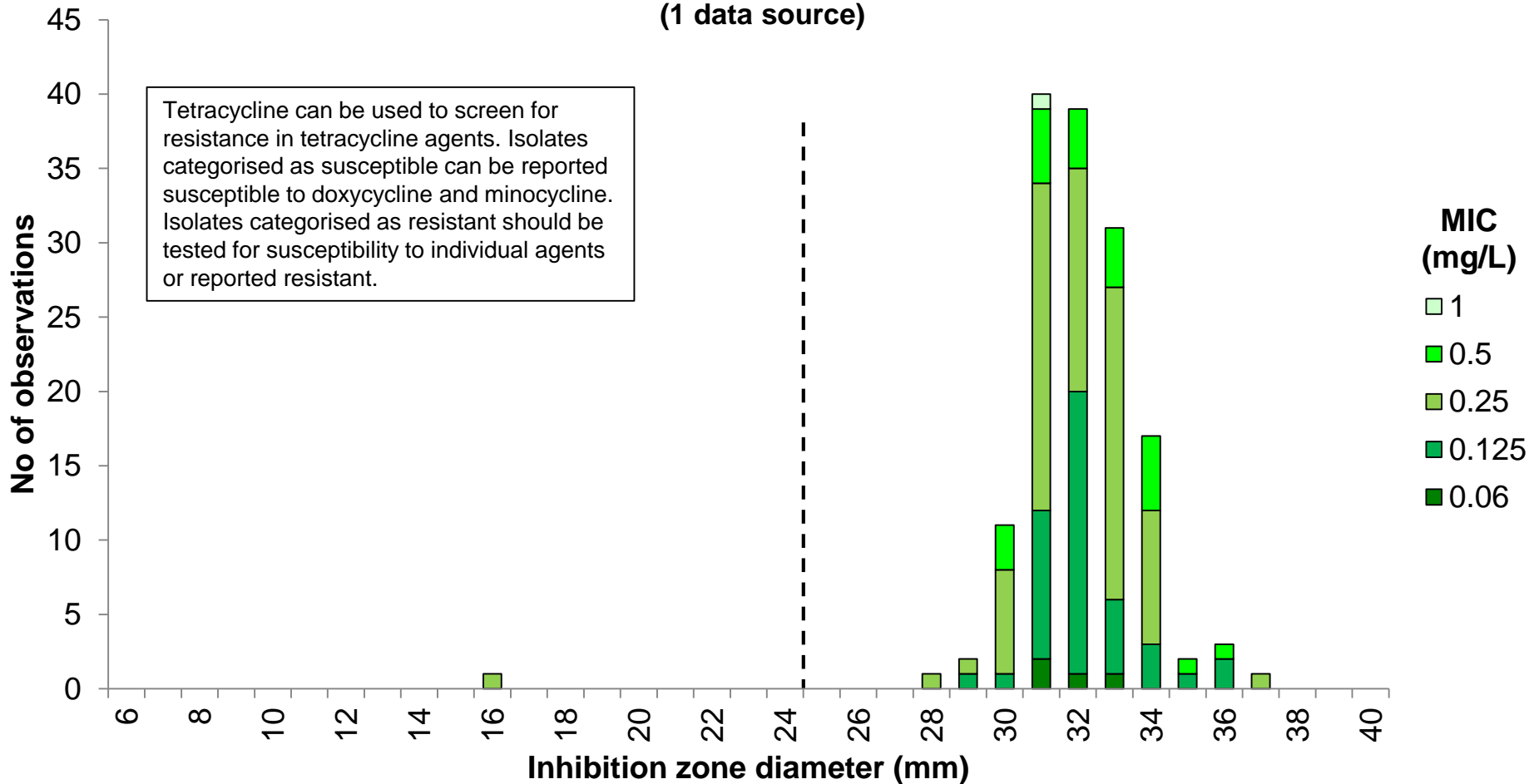
Tetracycline zone diameter

$S \geq 25$ ,  $R < 25$  mm

# Tetracycline 30 µg vs. Minocycline MIC

## *H. influenzae*, 148 isolates

(1 data source)



### Breakpoints

Minocycline MIC

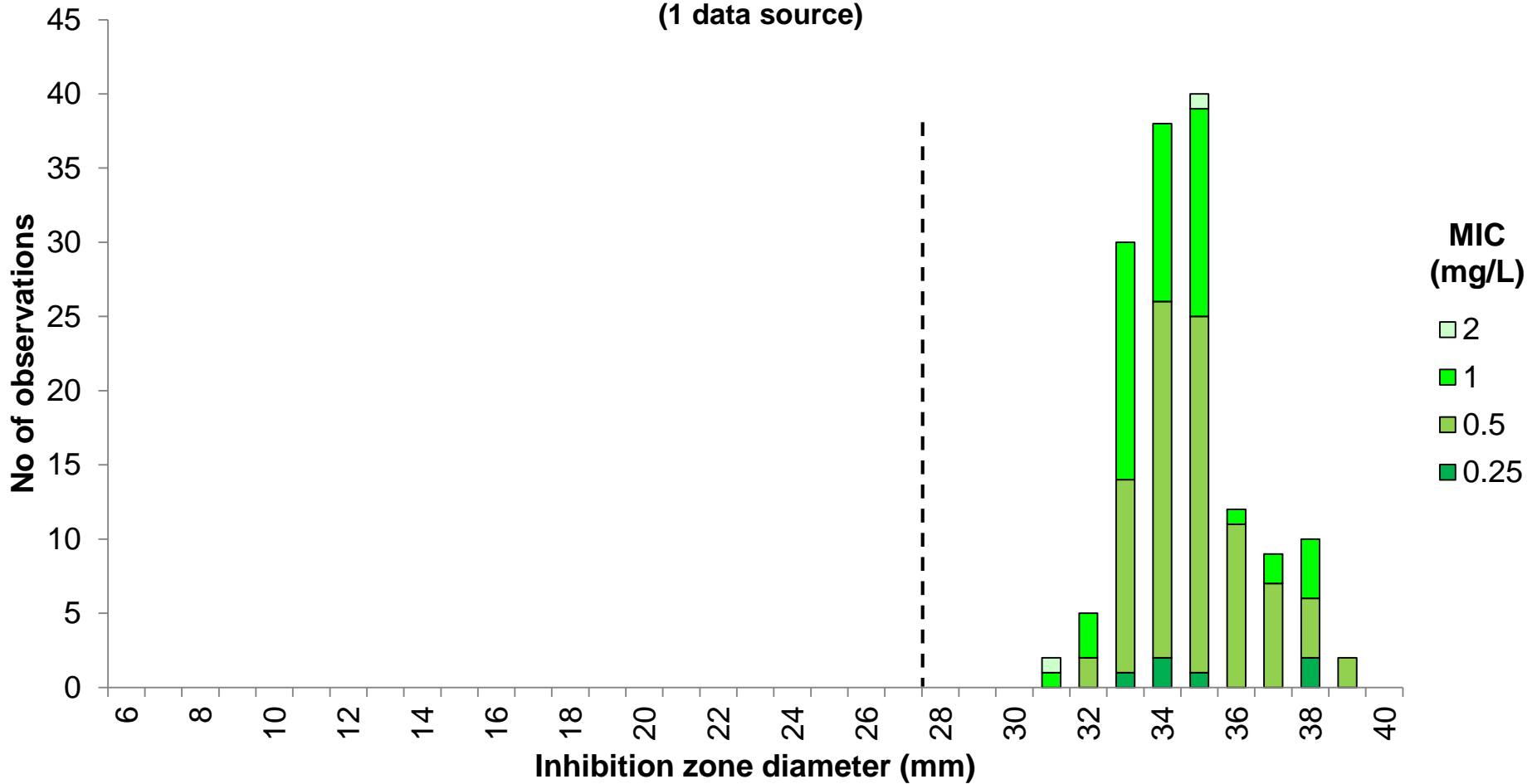
$S \leq 1$ ,  $R > 1$  mg/L

Tetracycline zone diameter

$S \geq 25$ ,  $R < 25$  mm

# Chloramphenicol 30 µg vs. MIC *H. influenzae*, 148 isolates

(1 data source)



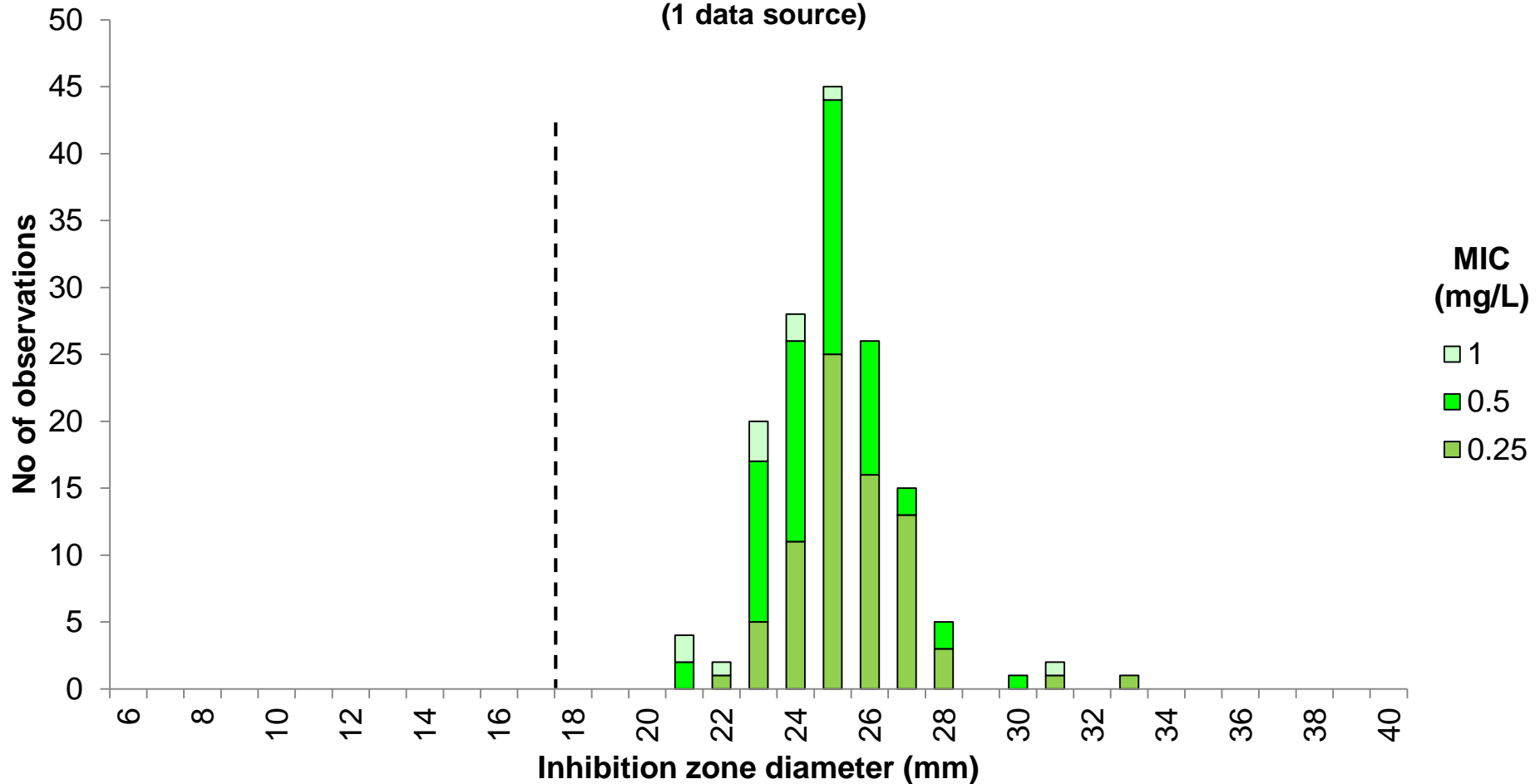
## Breakpoints

MIC  $S \leq 2$ ,  $R > 2$  mg/L

Zone diameter  $S \geq 28$ ,  $R < 28$  mm

# Rifampicin 5 µg vs. MIC *H. influenzae*, 149 isolates

(1 data source)



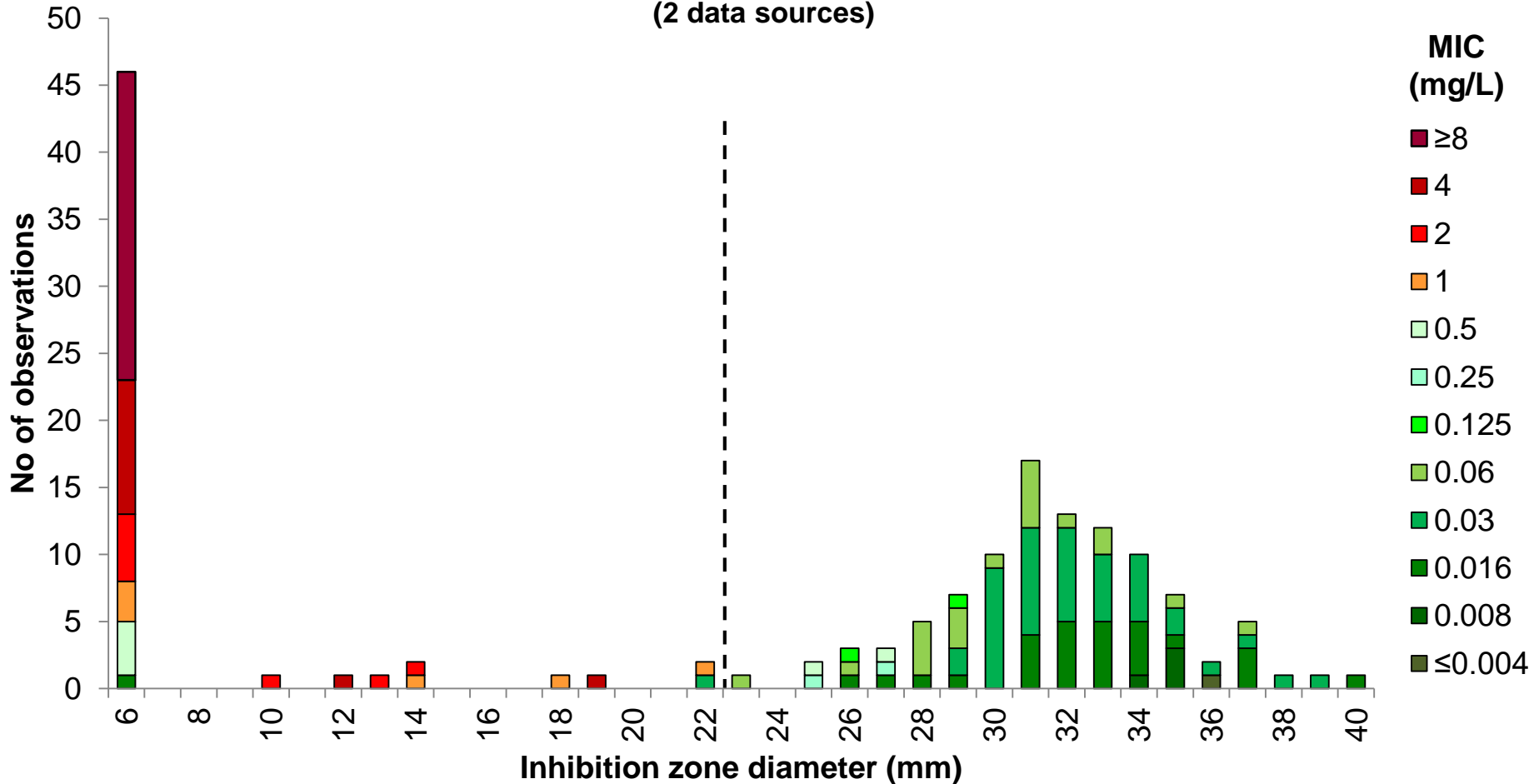
## Breakpoints

MIC  $S \leq 1$ ,  $R > 1$  mg/L

Zone diameter  $S \geq 18$ ,  $R < 18$  mm

# Trimethoprim-sulfamethoxazole 1.25-23.75 µg vs. MIC *H. influenzae*, 155 isolates

(2 data sources)



## Breakpoints

MIC S ≤ 0.5, R > 0.5 mg/L

Zone diameter S ≥ 23, R < 23 mm



**EUCAST**

European Committee  
on Antimicrobial  
Susceptibility Testing