



EUCAST

European Committee
on Antimicrobial
Susceptibility Testing

Streptococcus dysgalactiae

Calibration of zone diameter
breakpoints to MIC values

Version 2.0
January 2026

Streptococcus dysgalactiae

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.

Streptococcus dysgalactiae

Materials and methods

- Antimicrobial susceptibility testing was performed on clinical isolates of *Streptococcus dysgalactiae*, including isolates with known resistance mechanisms. 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.
- The distributions in this presentation are the result of a collaboration between EUCAST and HUS Diagnostic Center, Helsinki, Finland.
- This presentation is based on EUCAST Clinical Breakpoint Tables v. 16.0.

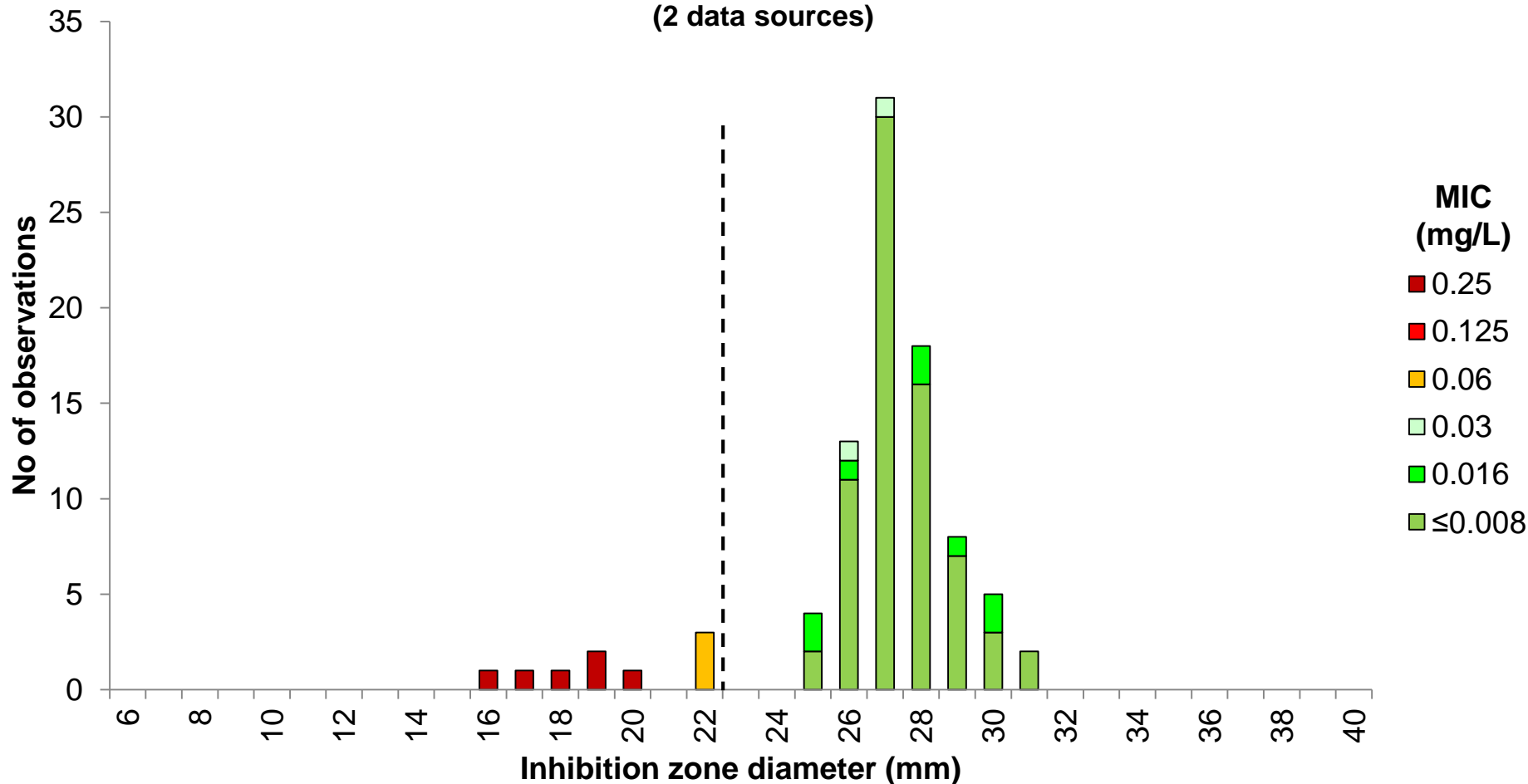
Changes from previous version (1.0)

Changes
<ul style="list-style-type: none">• Data added for benzylpenicillin, erythromycin, erythromycin vs. azithromycin, erythromycin vs. clarithromycin, clindamycin, tetracycline and tetracycline vs. doxycycline.

Benzylpenicillin 1 unit vs. MIC

S. dysgalactiae, 44 isolates (90 correlates)

(2 data sources)



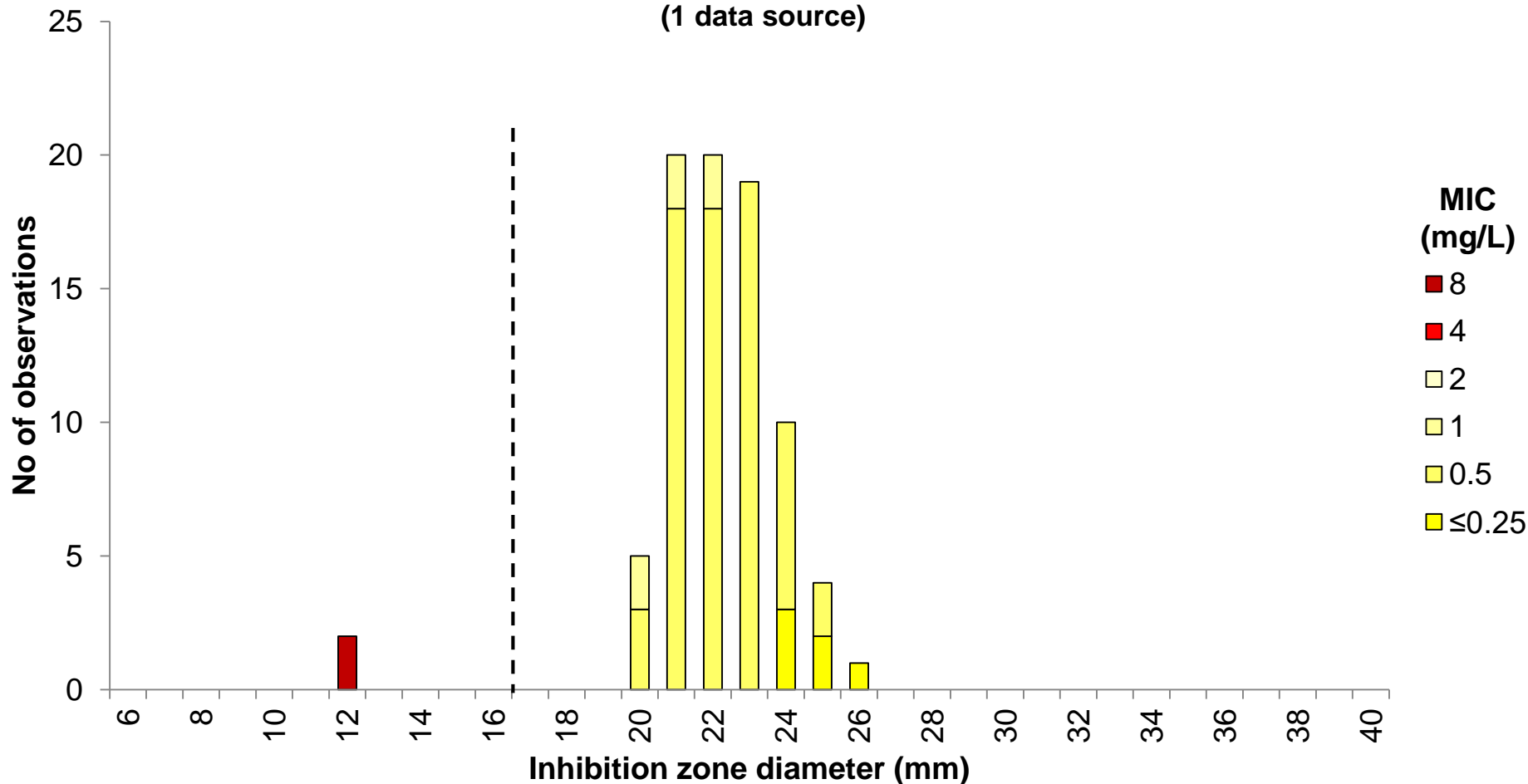
Breakpoints

MIC	S ≤ 0.03, R > 0.03 mg/L
Zone diameter	S ≥ 23, R < 23 mm

Levofloxacin 5 µg vs. MIC

S. dysgalactiae, 41 isolates (81 correlates)

(1 data source)



Breakpoints

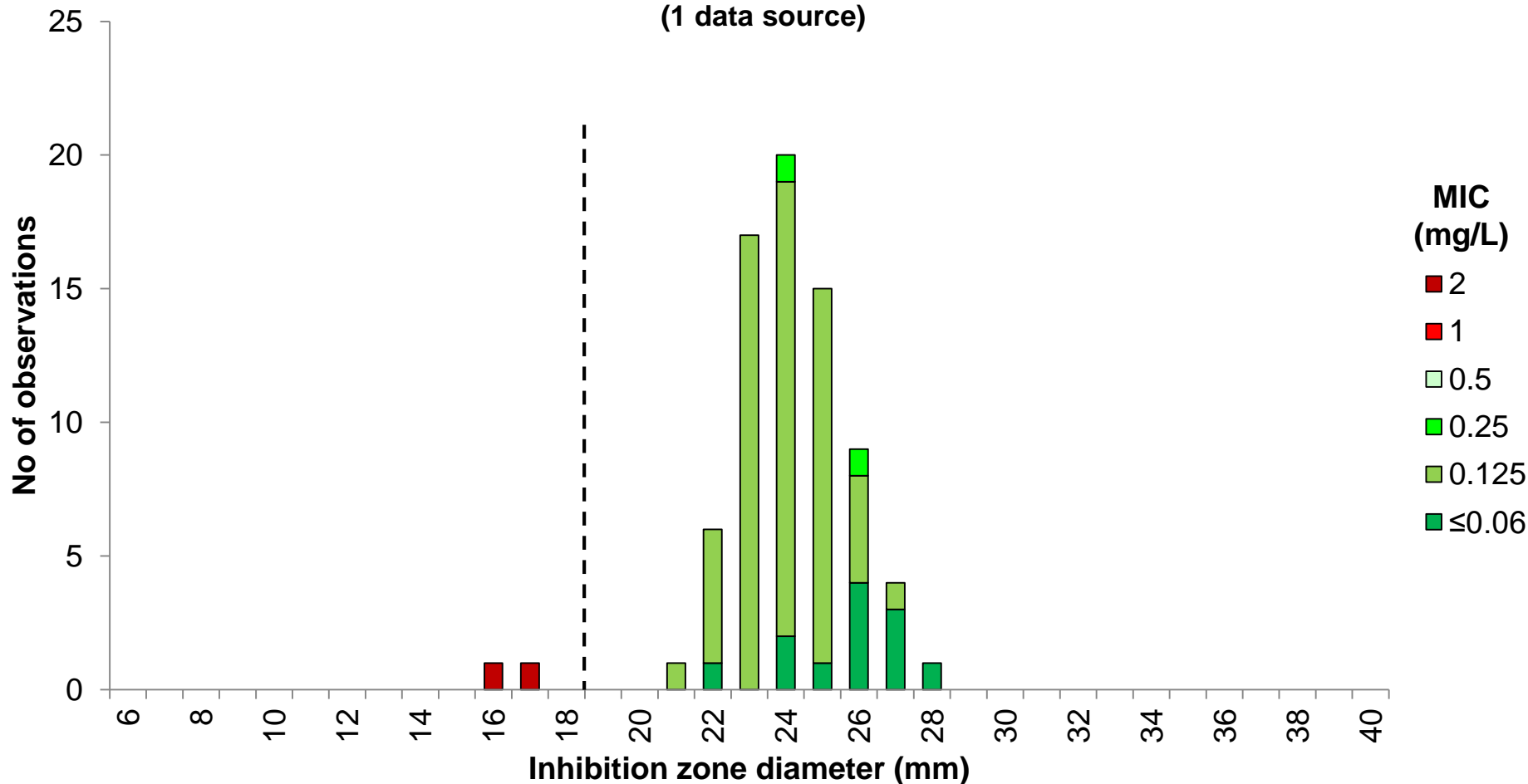
MIC $S \leq 0.001$, $R > 2$ mg/L

Zone diameter $S \geq 50$, $R < 17$ mm

Moxifloxacin 5 µg vs. MIC

S. dysgalactiae, 38 isolates (75 correlates)

(1 data source)



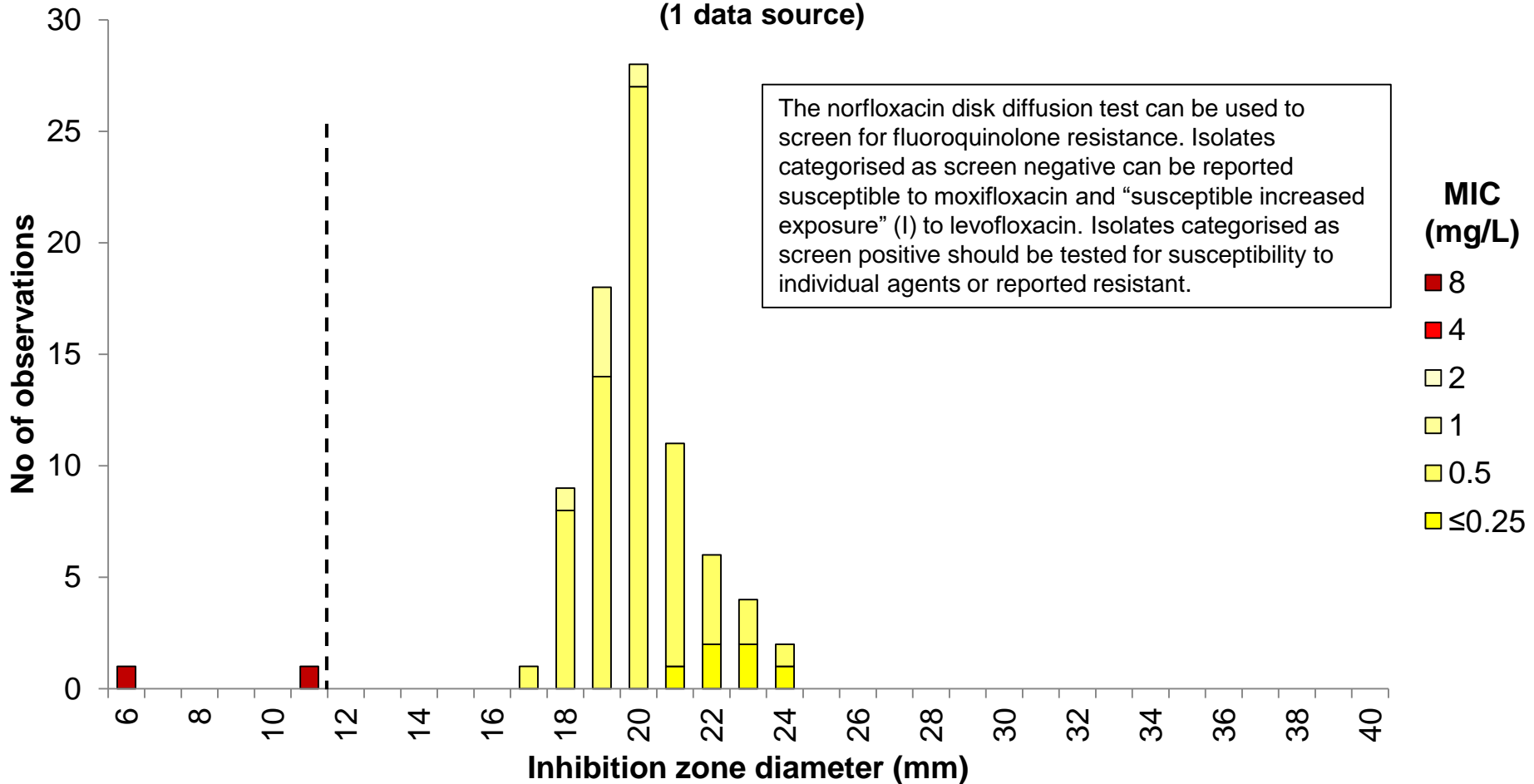
Breakpoints

MIC S ≤ 0.5, R > 0.5 mg/L

Zone diameter S ≥ 19, R < 19 mm

Norfloxacin 10 µg vs. Levofloxacin MIC *S. dysgalactiae*, 41 isolates (81 correlates)

(1 data source)



Breakpoints

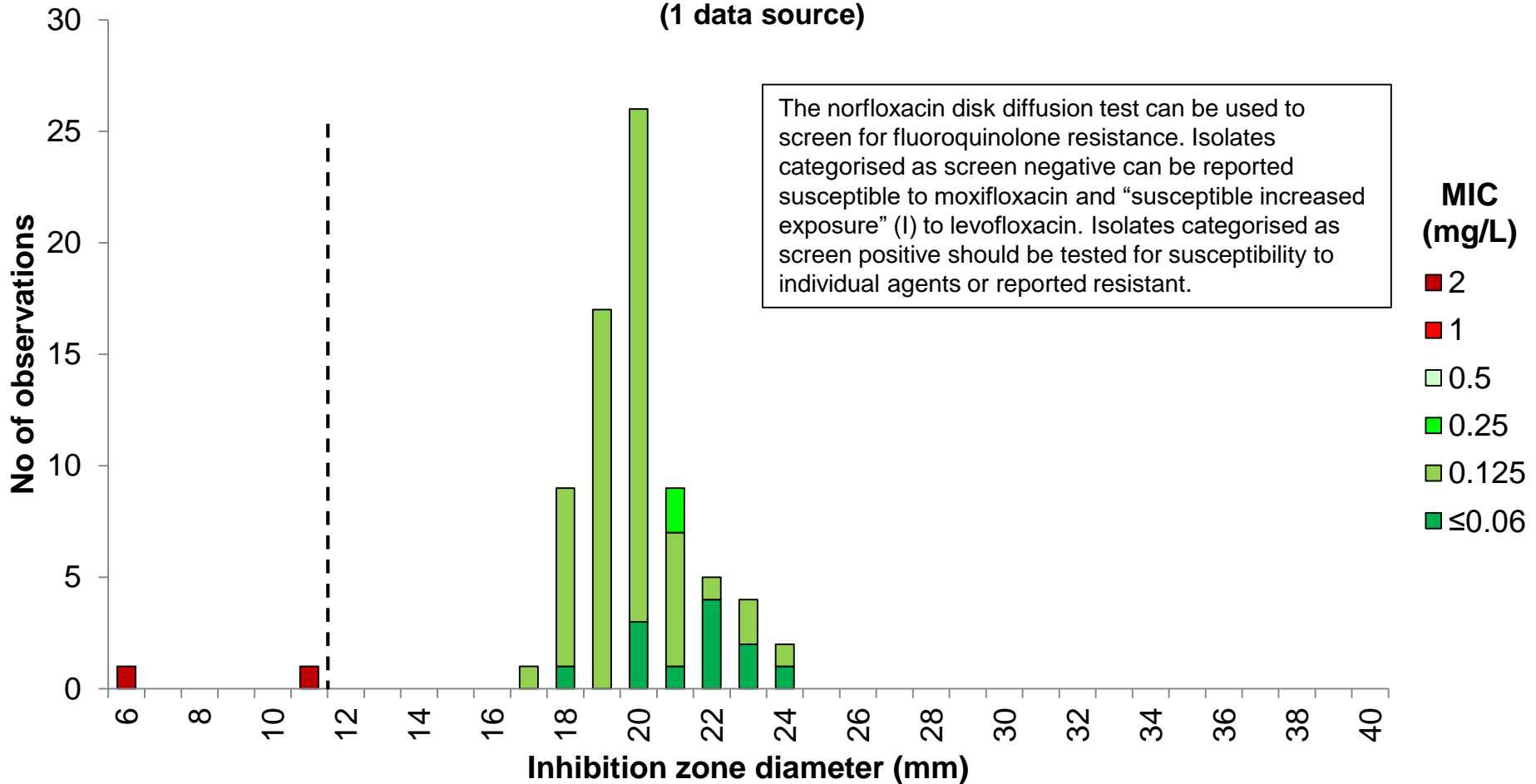
Levofloxacin MIC

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

Norfloxacin zone diameter (screen) $S \geq 12$, $R < 12$ mm

Norfloxacin 10 µg vs. Moxifloxacin MIC *S. dysgalactiae*, 48 isolates (75 correlates)

(1 data source)



Breakpoints

Moxifloxacin MIC

S ≤ 0.5, R > 0.5 mg/L

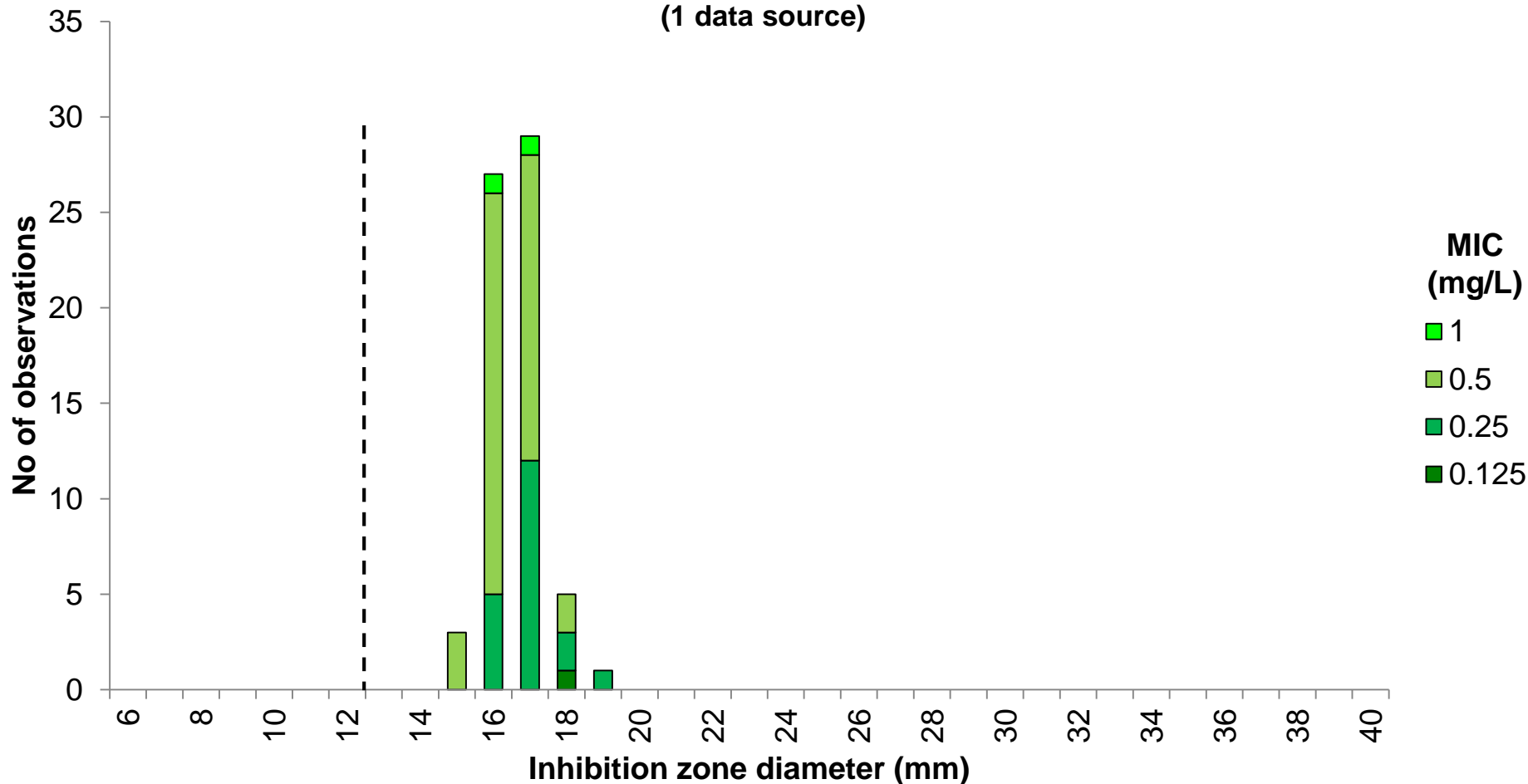
Norfloxacin zone diameter (screen)

S ≥ 12, R < 12 mm

Vancomycin 5 µg vs. MIC

S. dysgalactiae, 33 isolates (65 correlates)

(1 data source)



Breakpoints

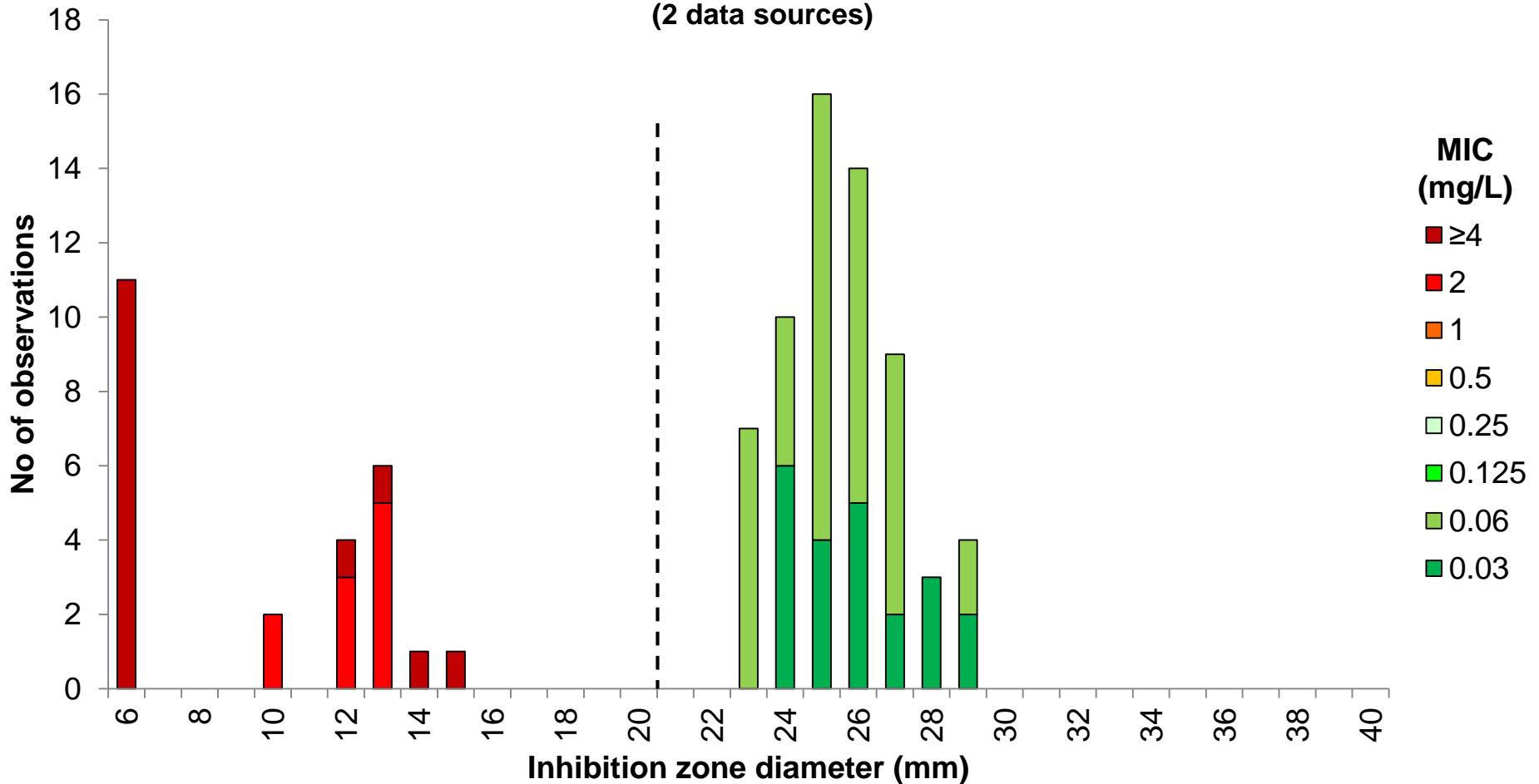
MIC $S \leq 2$, $R > 2$ mg/L

Zone diameter $S \geq 13$, $R < 13$ mm

Erythromycin 15 µg vs. MIC

S. dysgalactiae, 43 isolates (88 correlates)

(2 data sources)



Breakpoints

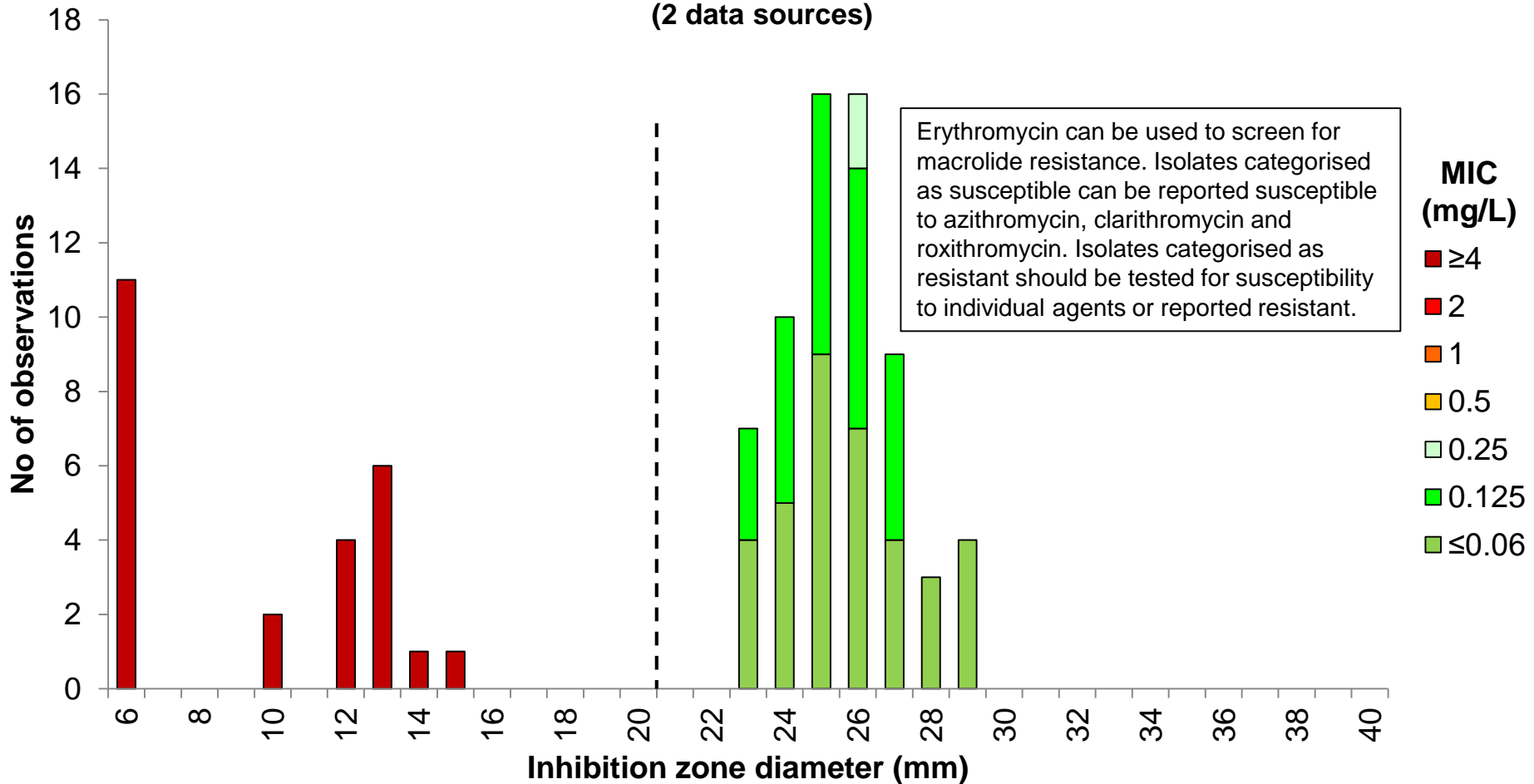
MIC S ≤ 0.25, R > 0.25 mg/L

Zone diameter S ≥ 21, R < 21 mm

Erythromycin 15 µg vs. Azitromycin MIC

S. dysgalactiae, 44 isolates (90 correlates)

(2 data sources)



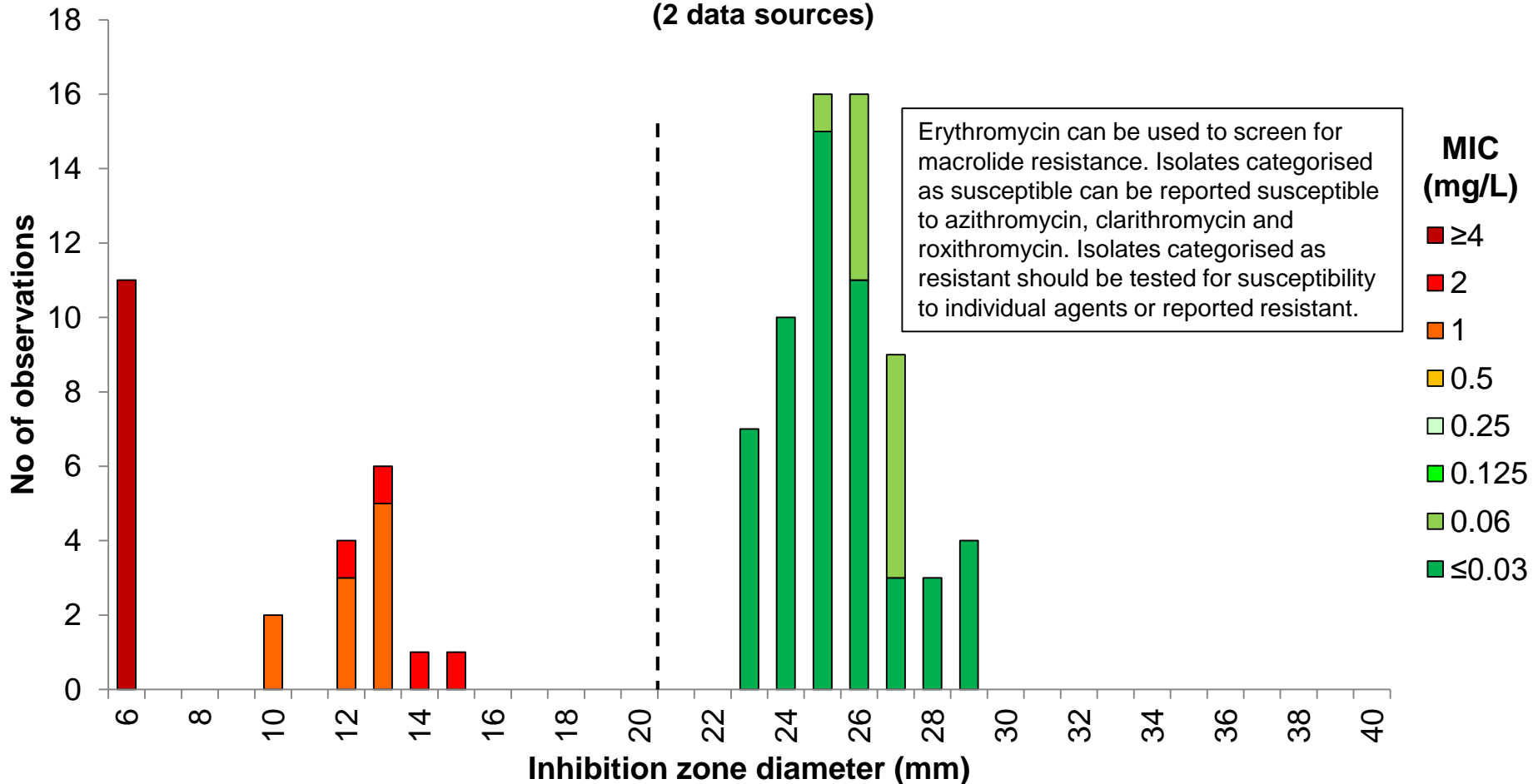
Erythromycin can be used to screen for macrolide resistance. Isolates categorised as susceptible can be reported susceptible to azithromycin, clarithromycin and roxithromycin. Isolates categorised as resistant should be tested for susceptibility to individual agents or reported resistant.

Breakpoints

Azithromycin MIC	S ≤ 0.25, R > 0.25 mg/L
Erythromycin zone diameter	S ≥ 21, R < 21 mm

Erythromycin 15 µg vs. Clarithromycin MIC *S. dysgalactiae*, 44 isolates (90 correlates)

(2 data sources)



Breakpoints

Clarithromycin MIC

S ≤ 0.25, R > 0.25 mg/L

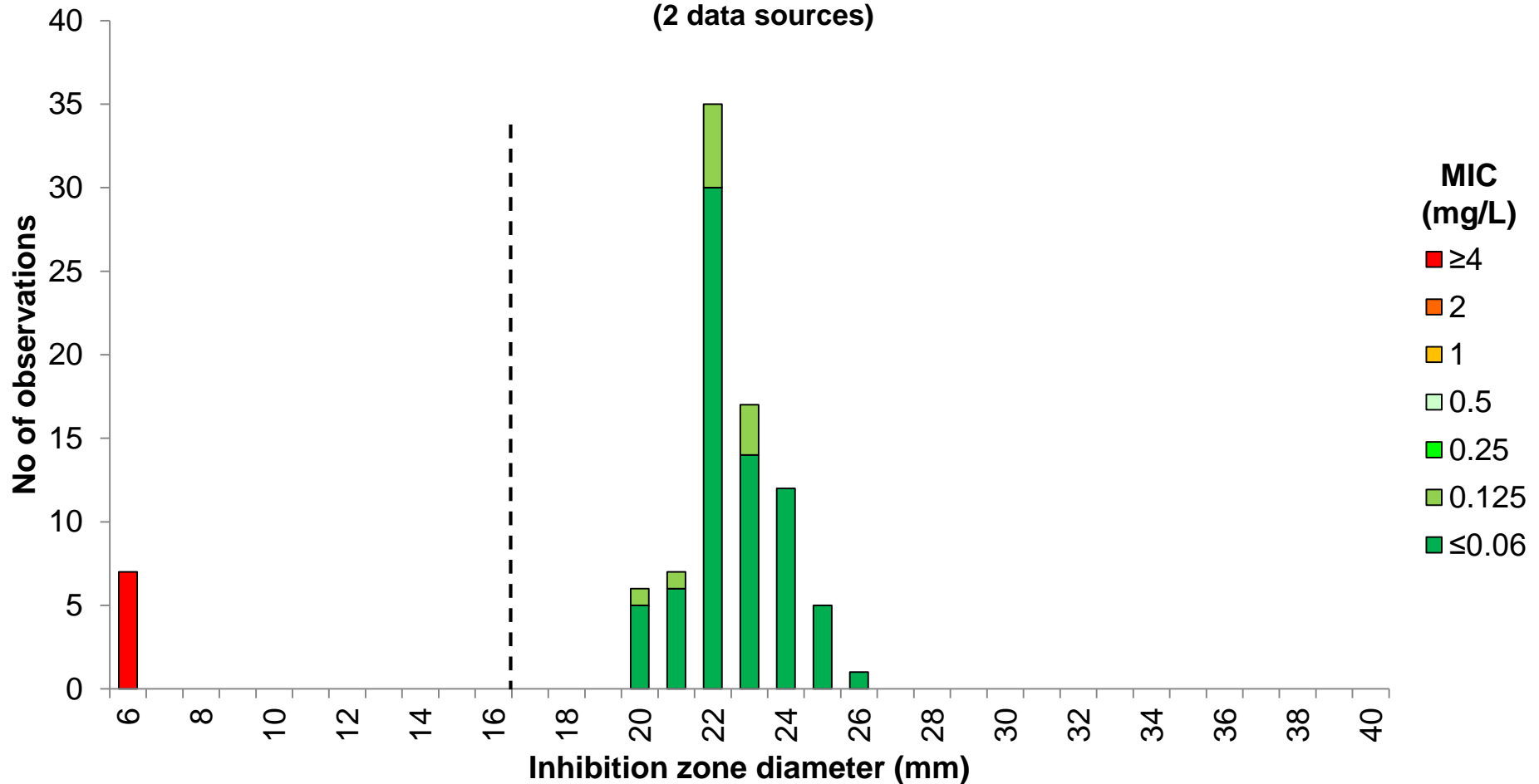
Erythromycin zone diameter

S ≥ 21, R < 21 mm

Clindamycin 2 µg vs. MIC

S. dysgalactiae, 44 isolates (90 correlates)

(2 data sources)



Breakpoints

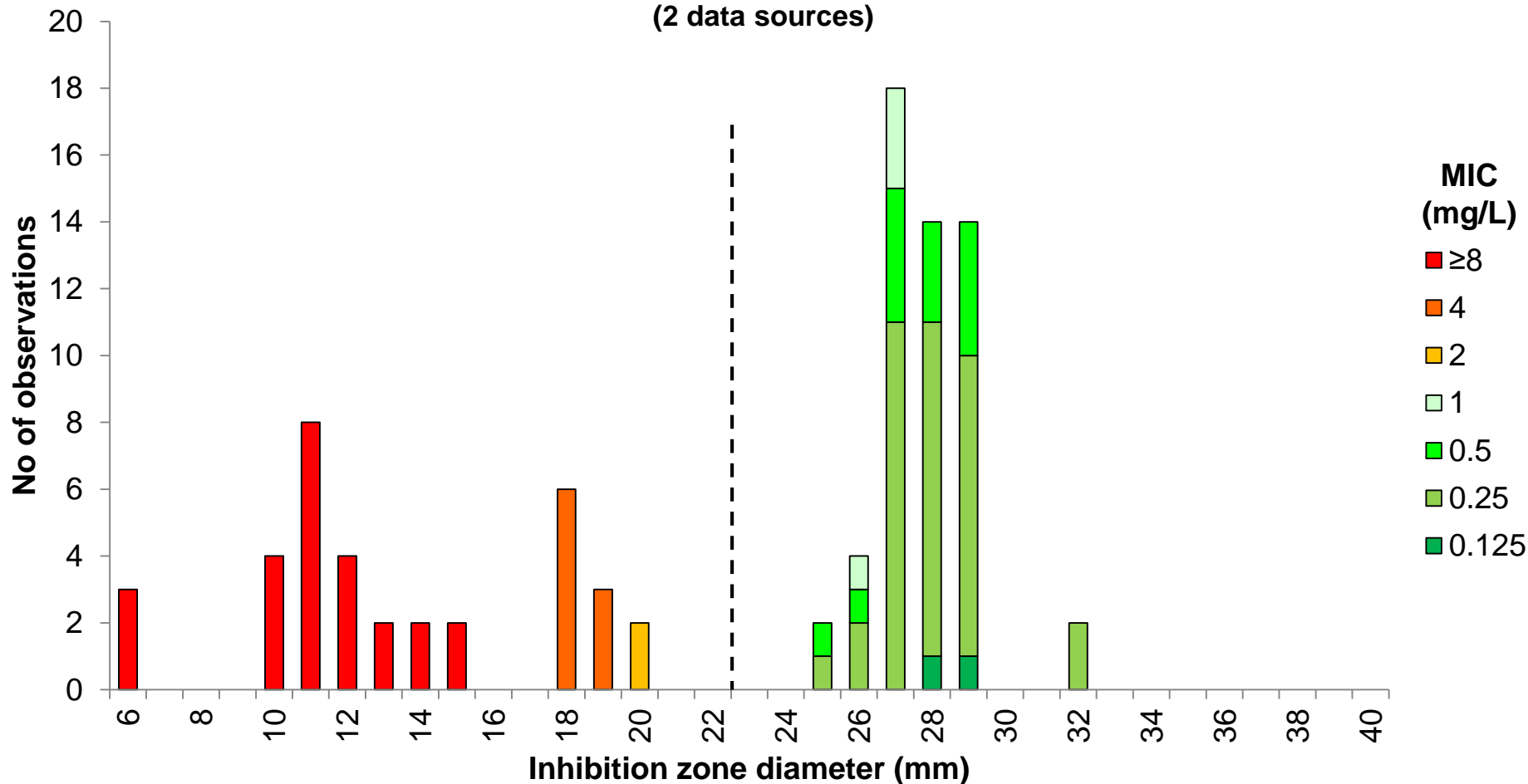
MIC $S \leq 0.5$, $R > 0.5$ mg/L

Zone diameter $S \geq 17$, $R < 17$ mm

Tetracycline 30 µg vs. MIC

S. dysgalactiae, 44 isolates (90 correlates)

(2 data sources)



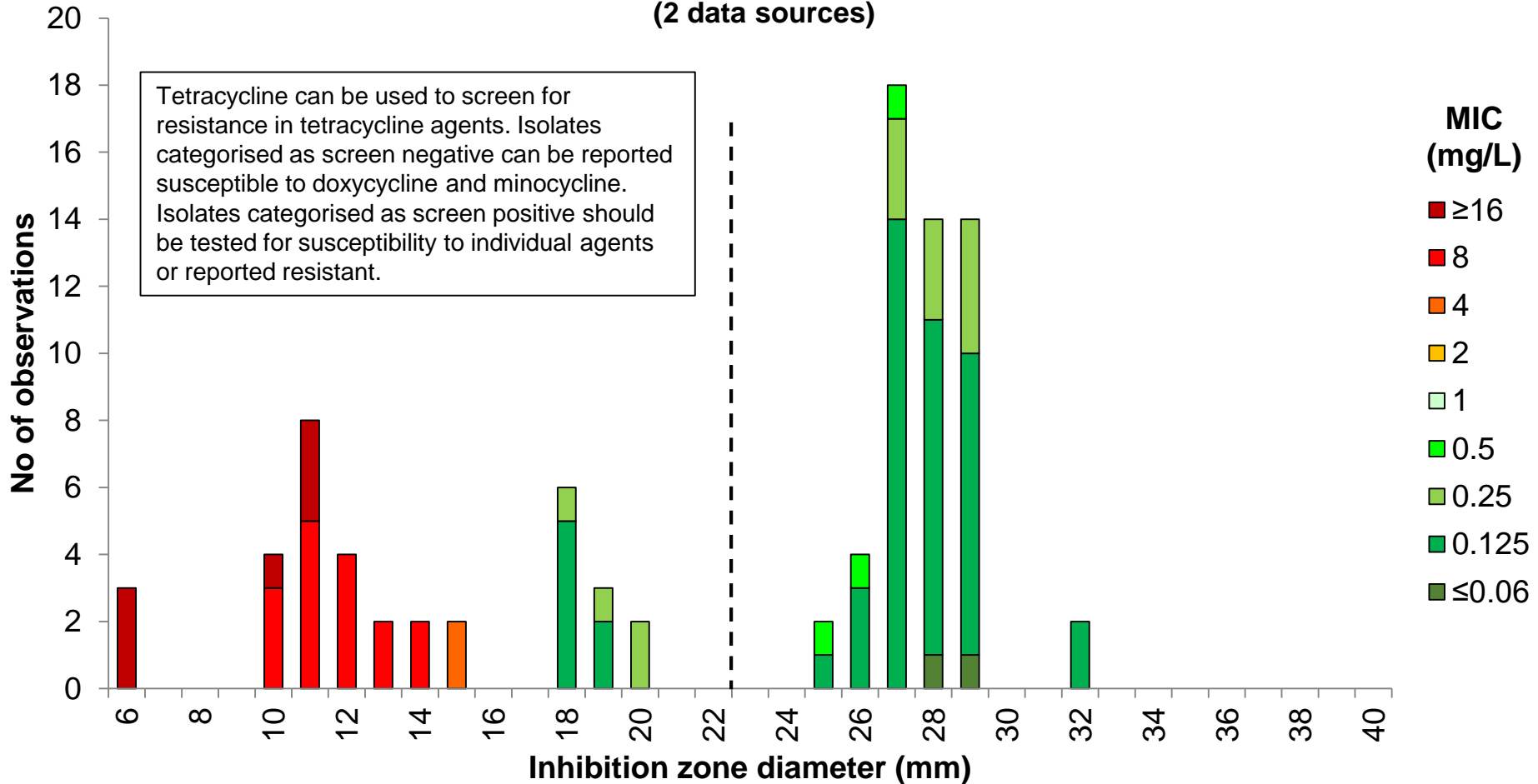
Breakpoints

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

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

Tetracycline 30 µg vs. Doxycycline MIC *S. dysgalactiae*, 44 isolates (90 correlates)

(2 data sources)



Breakpoints

Doxycycline MIC

S ≤ 1, R > 1 mg/L

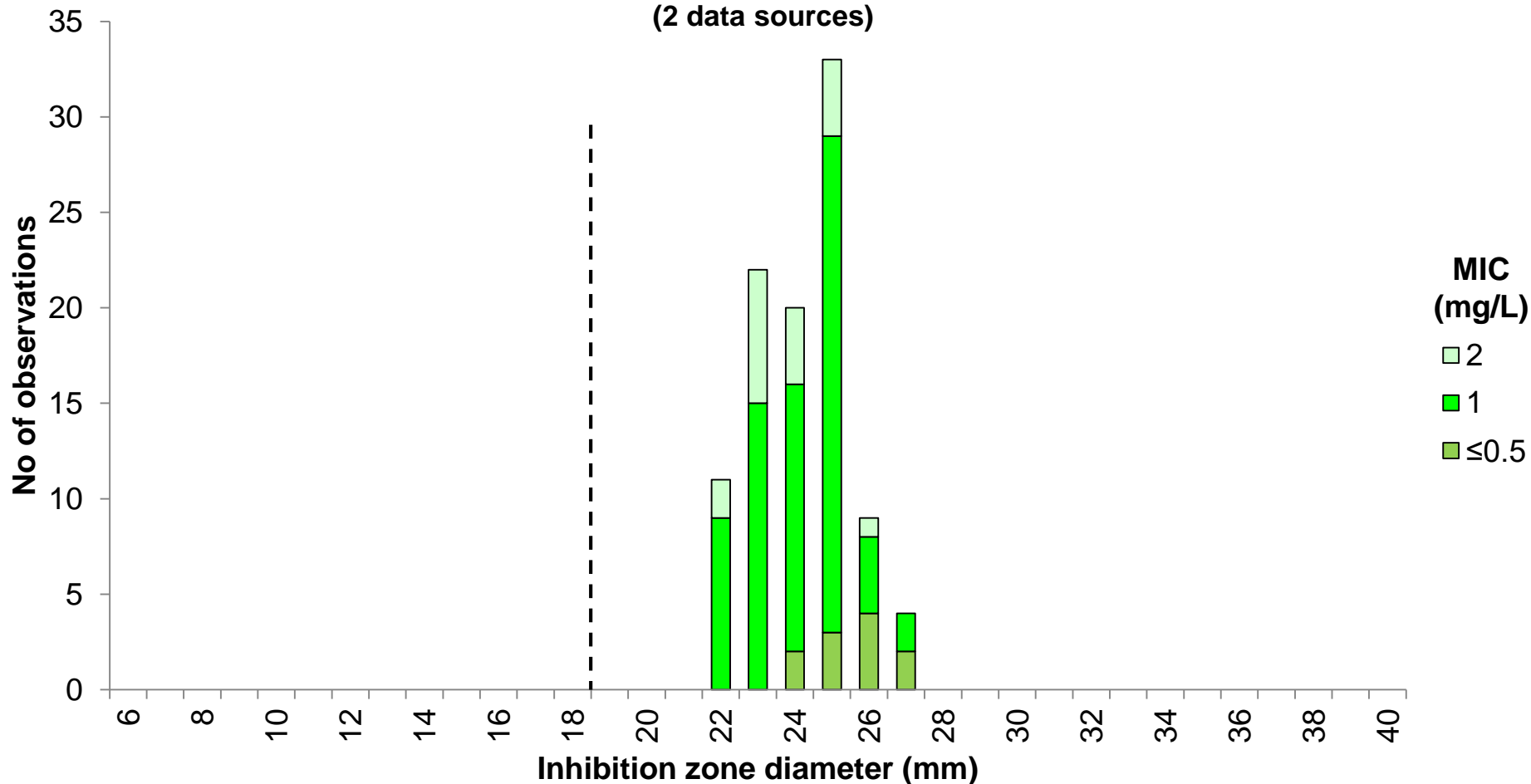
Tetracycline zone diameter

S ≥ 23, R < 23 mm

Linezolid 10 µg vs. MIC

S. dysgalactiae, 43 isolates (99 correlates)

(2 data sources)



Breakpoints

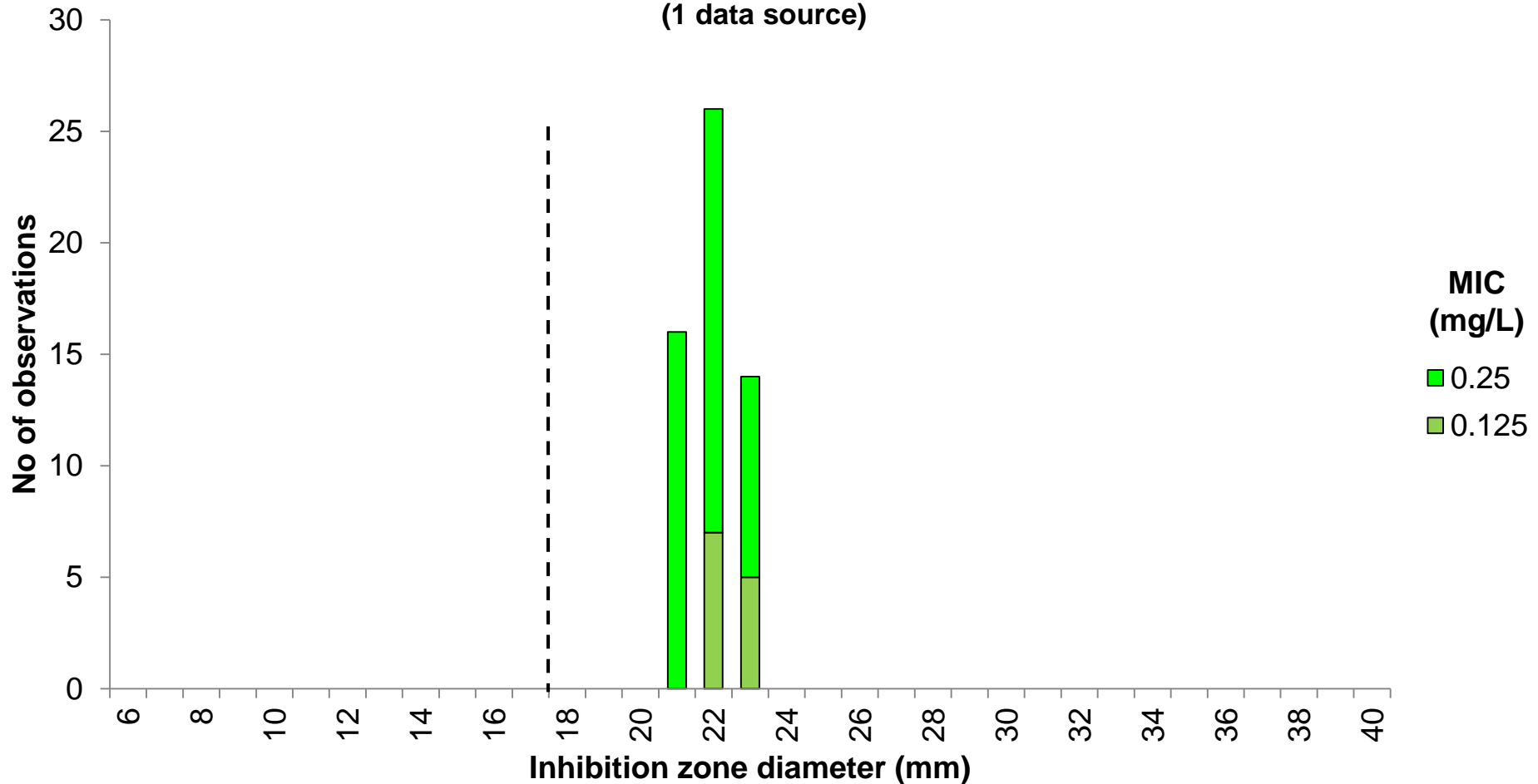
MIC S ≤ 2, R > 2 mg/L

Zone diameter S ≥ 19, R < 19 mm

Tedizolid 2 µg vs. MIC

S. dysgalactiae, 7 isolates (56 correlates)

(1 data source)



Breakpoints

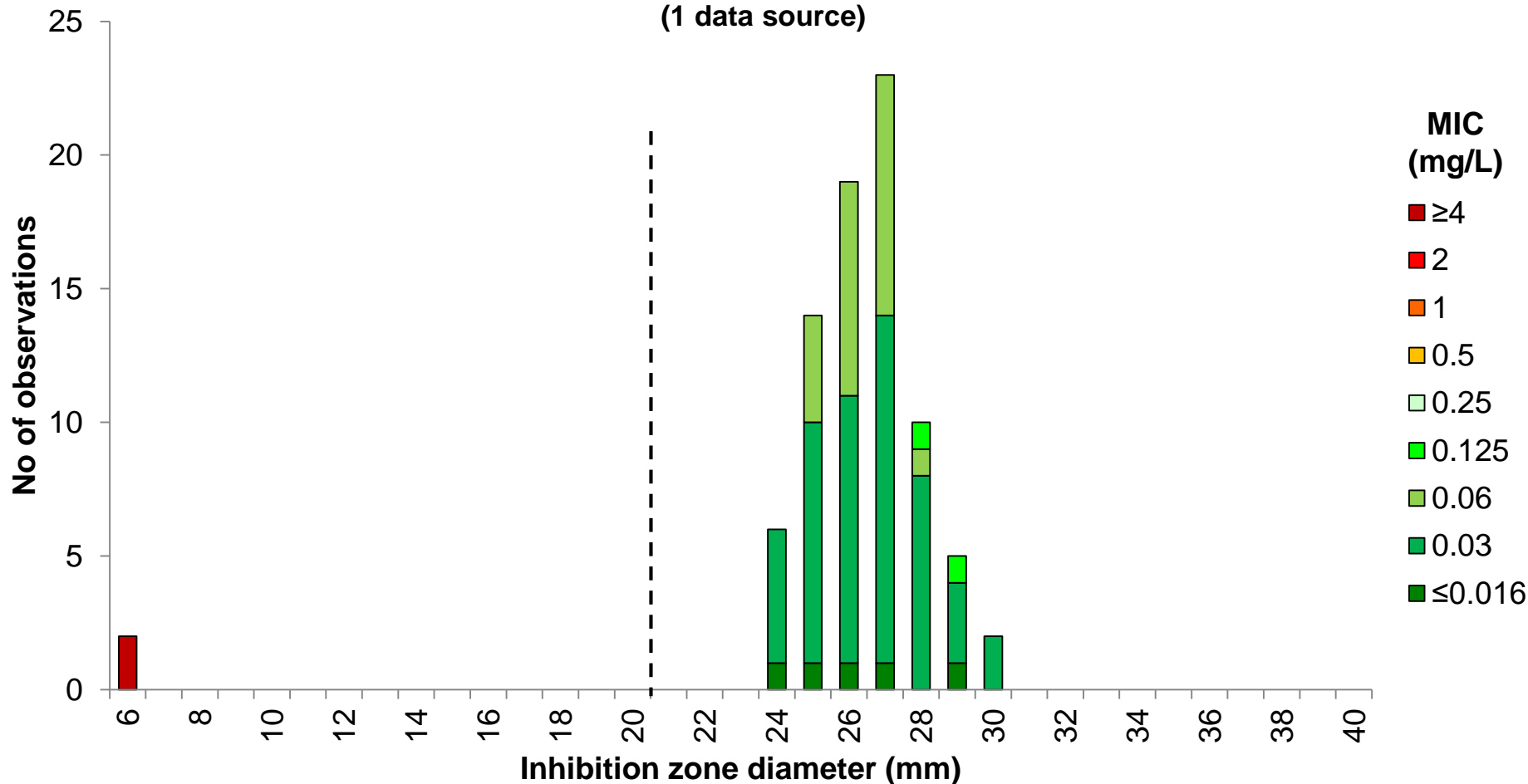
MIC $S \leq 0.5$, $R > 0.5$ mg/L

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

Rifampicin 5 µg vs. MIC

S. dysgalactiae, 41 isolates (81 correlates)

(1 data source)



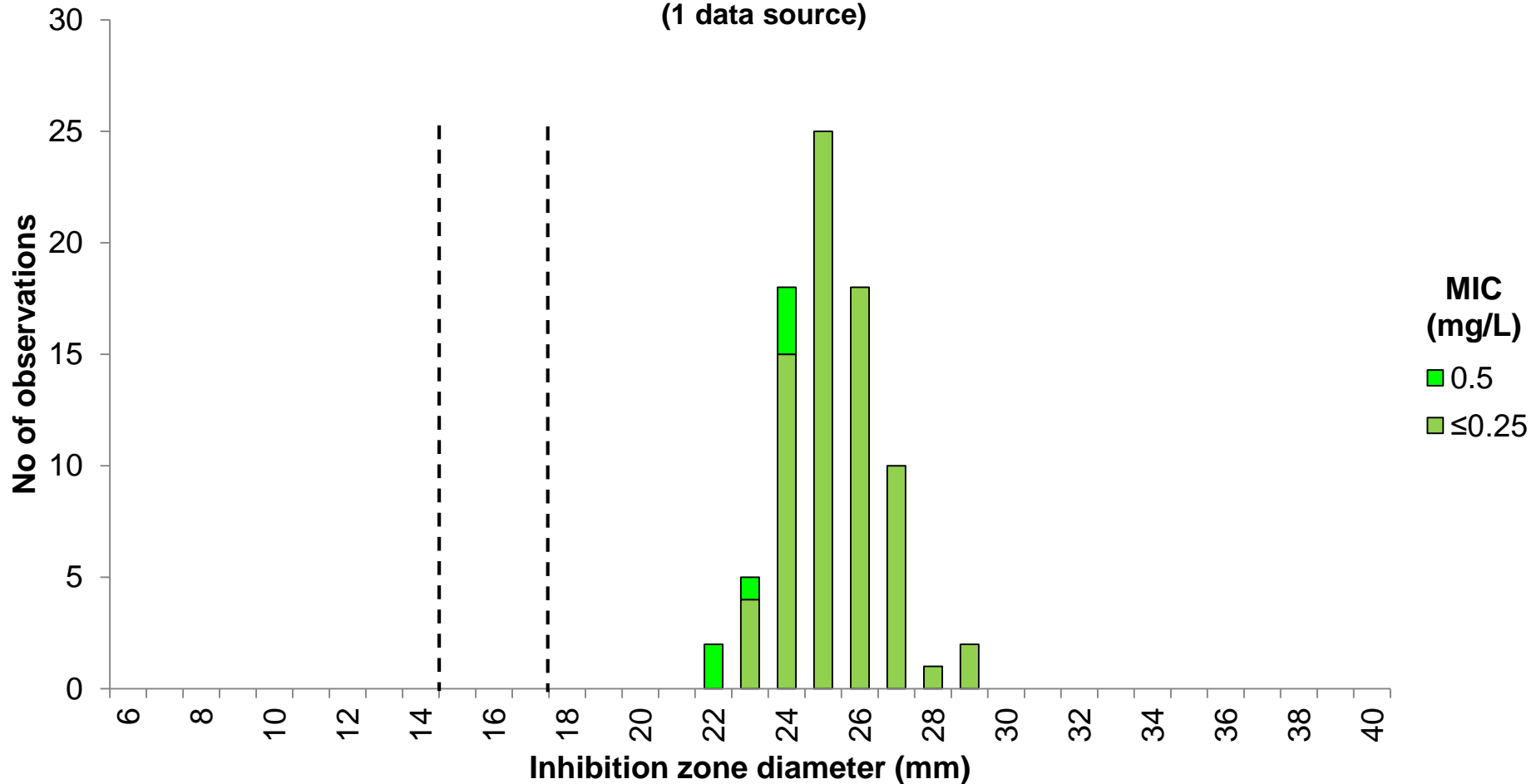
Breakpoints

MIC S ≤ 0.25, R > 0.25 mg/L

Zone diameter S ≥ 21, R < 21 mm

Trimethoprim-sulfamethoxazole 1.25-23.75 μg vs. MIC *S. dysgalactiae*, 41 isolates (81 correlates)

(1 data source)



Breakpoints

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

Zone diameter $S \geq 18, R < 15$ mm



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