

# Susceptibility testing of micro-organisms without breakpoints

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# Antibiotics without breakpoints

## “IE” and “-”

- Dash (“-”) is a breakpoint
  - If needed, report “R” without testing
- “IE” – insufficient evidence to determine breakpoint
  - Can be reported with an MIC and no interpretation

# Micro-organisms without breakpoints

## 1. organisms with family members in table

- *H. parainfluenzae*, *H. paraphrophilus* ...
- *Pseudomonas fluorescens*, *Ps. putida* ...
- *Pasteurella canis*, ...

## 2. organisms with no family or friends in table

- *Corynebacterium* spp.
- *Aerococcus* spp.
- *Vibrio* spp.
- *Alcaligenes* spp.
- ...

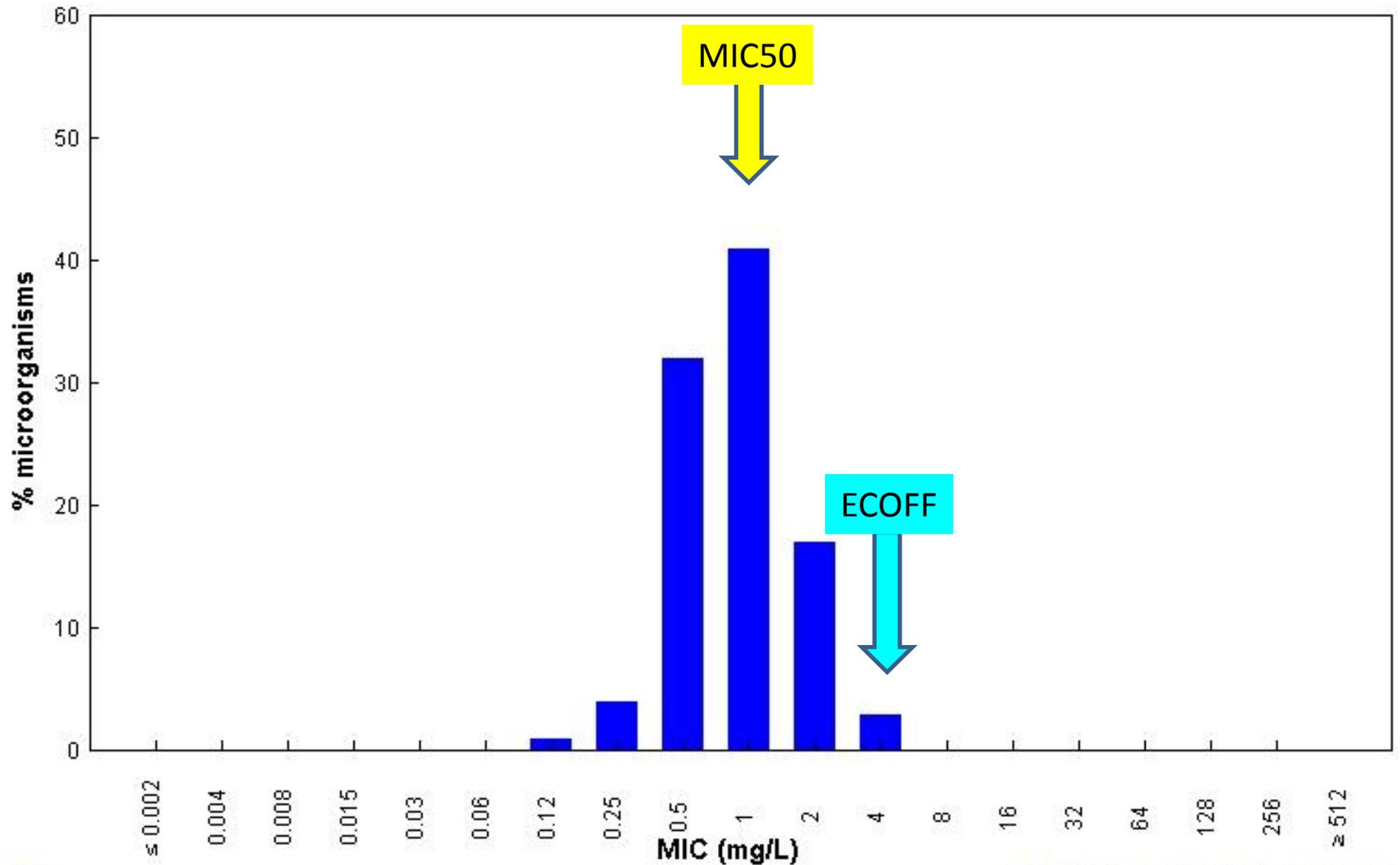
# Micro-organisms without breakpoints

## Strategies

- Growth characteristics
  - MH / MH-F, temperature, incubation time
- Clinical symptoms and relevans? Recurring finding?
- Clinical study or case reports available?
- A colleague with experience at hand?
- Clinical breakpoints for related organism?
- Pk/Pd-breakpoints for drug available?
- MIC distributions available? ECOFF defined?
  - Otherwise look for MIC50-values (mode concentration of wild type distribution; add two dilution steps (=approximate ECOFF))

**Daptomycin / *Enterococcus faecalis***  
**EUCAST MIC Distribution - Reference Database 2012-05-30**

MIC distributions include collated data from multiple sources, geographical areas and time periods and can never be used to infer rates of resistance



MIC  
Epidemiological cut-off: WT ≤ 4 mg/L

9698 observations (11 data sources)  
Clinical breakpoints: IE