

# 7 November 2025

To whom it may concern,

I am writing to you as the President of the Australian Society for Microbiology.

Following consultation on the manual reading of antimicrobial disc diffusion susceptibilities and aligned with the NATA GAC ISO 15189:2022 Standard Application Document (clause 8.4.1), as well as considering the three antimicrobial disc diffusion methods utilised in Australia, the Australian Society of Microbiology (ASM) have established the following guidelines.

**Note:** As of 01/01/2026 the Calibrated Dichotomous Susceptibility Testing (CDS Method) of antibiotic susceptibility testing will no longer be supported, it is advised that all laboratories transition to either the European Committee on Antimicrobial Susceptibility Testing (EUCAST) or Clinical and Laboratory Standards Institute (CLSI) methodology.

## **General Requirement:**

Laboratories must not rely on visual estimation (eyeballing) when interpreting susceptibility plates.

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## Calibrated Dichotomous Susceptibility Testing (CDS Method)

Aligning NATA GAC ISO 15189:2022 Standard Application Document (clause 8.4.1) with The Antibiotic Susceptibility Testing by the CDS method, Nineth edition (2018), Chapter 2

- · Zone sizes must be measured from the back of the plate whenever possible.
- · Measurements must be documented.
- · Interpretation is based on standard criteria as follows:
  - o Annular radius ≥ 6 mm = Susceptible
  - o Annular radius < 6 mm = Resistant

Further information may be found here: The CDS Antibiotic Susceptibility Test

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### **European Committee on Antimicrobial Susceptibility Testing (EUCAST)**

According to the EUCAST disk diffusion method version 13.0 (January 2025), section 8 (Measurement of zones and interpretation of susceptibility), there are three acceptable methods listed below. The preferred methods are manual measurement or the use of an automated reader; however, a template may be used if these options are not feasible.

- · Manual measurement and documentation of the zone diameter from the back of the plate where possible.
- · Use of an automated zone reader.
- · Use of a template, with documentation when zone size is close to the cut-off.
- · Interpretation is based on the current breakpoint tables.

Further information may be found here: Manual EUCAST Disk Test

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# Clinical and Laboratory Standards Institute (CLSI)

According to CLSI M02<sup>™</sup> – Performance Standards for Antimicrobial Disk Susceptibility Tests, Fourteenth edition (March 19, 2024) along with the introduction of CLSI M67<sup>™</sup> - Verification of Laboratory Automation in Microbiology, First edition (September 2025):

- $\cdot$  The diameter of zones showing complete inhibition (judged by the unaided eye), including the disc diameter, must be measured to the nearest whole number.
- $\cdot$  This is performed using sliding calipers or a ruler held against the back of the inverted petri plate, with all measurements documented or
- · Use of an automated zone reader.
- $\cdot$  Interpretation is based on the current breakpoint tables as documented in CLSI M100 $^{\text{TM}}$  Performance Standards for Antimicrobial Susceptibility Testing.

Should you wish to contact me directly for further clarification, please email me on <a href="mailto:m.schembri@uq.edu.au">m.schembri@uq.edu.au</a>.

Yours sincerely,

Professor Mark Schembri ASM President