

ASTar - the Essentials

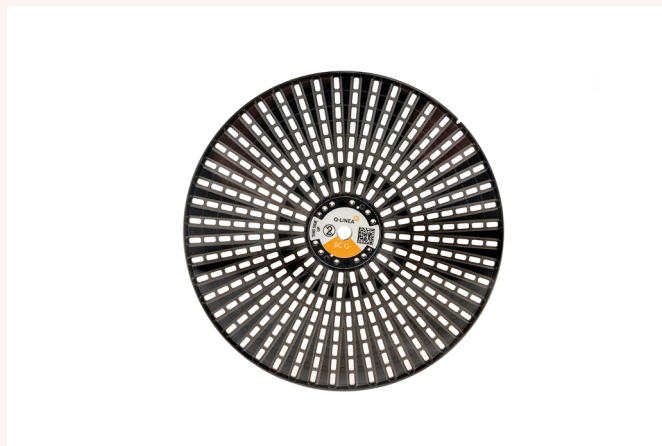
The Cartridge & Frozen insert



The Cartridge is a mini-lab that contains all reagents and disposable articles needed for sample preparation, concentration determination, dilution, and growth medium adaptation.

- Contains pre-deposited reagents.
- Generates controlled inoculum for AST.
- A Frozen insert is added to the Cartridge before use.
- Has barcodes for identifying and linking the Cartridge and patient sample.
- Cartridge stored at room temperature, frozen insert stored at -15°C to -25°C .

The Disc

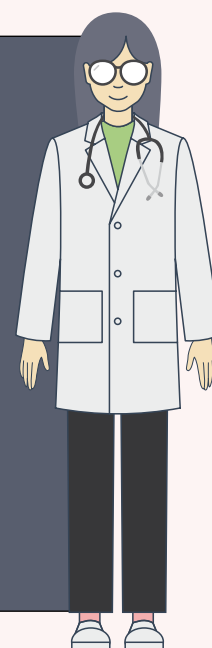
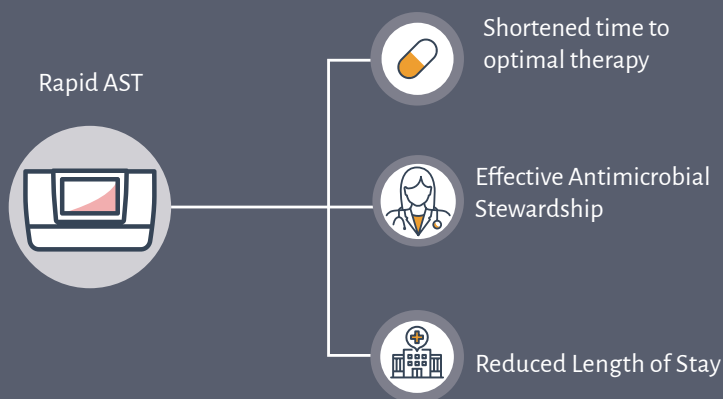


The AST Disc is used for AST and concentration determination.

- The AST Disc contains more than 330 culturing chambers pre-filled with antimicrobials in various concentration ranges, as well as chambers for growth controls, and chambers used to determine bacterial concentration for inoculum preparation.
- Contains a unique barcode for identification and linking to each respective sample preparation Cartridge and patient.
- Stored at room temperature.

Health Economic Impact of Rapid AST

All these components of ASTar come together to form a comprehensive rapid AST system that, when strategically integrated into critical points of healthcare, could potentially enhance patient care and reduce costs, aligning with the core goals of healthcare policies and clinical decision-making¹⁻³.



References:

1. J. H. Kim et al. Clin Microbiol Infect 27, 69-75 (2021). PMID: 32272171.
2. V. Anton-Vazquez, C. Suarez, T. Planche. J Antimicrob Chemother 77, 771-781 (2022). PMID: 34928343
3. K. Ehren et al. Clin Infect Dis 70, 1285-1293 (2020). PMID: 31094414.