

ABSTRACT TEMPLATE: CHECKLIST AND INSTRUCTIONS

Please complete the ABSTRACT TEMPLATE online, for Biomed 2026 Company Presentations

All items marked with an * are mandatory to complete

The maximum number of words for this abstract is 400

Please be sure to complete the following:

Company name **NanoSynex** * Website: **www.nanosynex.com** *

CEO name: **Diane Abensur** ***diane.abensur@nanosynex.com** *

Presenter will be the Co-founder/COO – details below:

Co-founder/COO name: **Michelle Heymann** *

Select a CATEGORY: **Medical Devices**

Select one SESSION per abstract from the list below *

“The Next Pandemic: Are We Ready? Innovation in Infectious Diseases.”

**You may delete the section instructions, leaving only the bolded bullet title
Answers below should not exceed 60 words per question:**

- Executive Summary / Investment Rational: Briefly describe the company's technology or therapeutic focus; the market opportunity, progress made to date, key partnerships or joint ventures, investment to date; and management strengths.

NanoSynex is a MedTech company addressing antimicrobial resistance, a global health crisis responsible for ~1.3M deaths annually. Its antimicrobial susceptibility testing (AST) diagnostic platform delivers same-day (~5-hour) results to enable personalized antibiotic therapy. Based on Technion (Levenberg Lab) research, the company has developed an MVP, raised over \$11M, and conducted pilot studies with clinical partners in Israel and Europe.

- Core Technology: What is the technology, its uniqueness, and its value proposition?

NanoSynex's core technology is a novel microfluidic phenotypic AST platform using a ~2,000-well chip requiring extremely small sample and reagent volumes. It delivers same-day results (~5 hours) in an affordable, multiplexed format by fluorescently tracking bacterial metabolic responses to antibiotic treatment. This enables rapid determination of the most effective therapy, improving patient outcomes, reducing AMR, and lowering healthcare costs.

- Product Profile/Pipeline: Briefly describe the company's product/pipeline, status, and market potential. Discuss milestones, potential collaborations, and partnerships.

NanoSynex has developed a first-generation MVP for rapid AST on clinical isolates and is advancing a second-generation platform for direct-from-sample testing from urine, positive blood cultures, and potentially whole blood. The fully integrated platform (microfluidic test card, hardware, and software) is progressing toward clinical validation and planned commercialization within 2–3 years. Global AST market potential: \$4.7B by 2027.

- Business Strategy: Briefly describe how the company will apply its core technology, generate short-term and long-term revenues.

NanoSynex's B2B2B model relies on distributors to sell its diagnostic platform to clinical microbiology labs, NanoSynex's final customers, which conduct testing for patients. The commercialization strategy follows the IVD industry's leasing model for dual-component platforms (hardware/software and disposables). Cumulative revenues exceeding \$50M are projected by 2031, following two years of commercialization.

- What's Next? R&D, Preclinical / Clinicals, Organizational Plans, Financial Plans

Next steps, according to our product development and business and financial roadmaps, include: securing a Series A round to finalize product development with strategic partners; conducting multisite clinical studies; preparing technical files and obtaining regulatory approval for market entry; expanding the team; and initiating commercial sales.