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(54) **Title:** MULTI-STEP METHODS FOR DETECTING NUCLEIC ACIDS

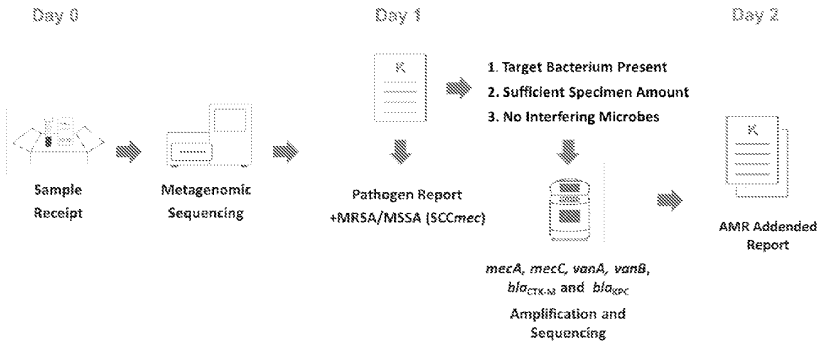


FIG. 1

(57) **Abstract:** Provided herein are improved methods and systems for detecting AMR genetic markers using multi-step sequencing assays. Also disclosed are methods and systems for preparing samples for use in high-throughput sequencing assays to detect AMR genetic markers.

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