

**QSM Diagnostics, Inc.**

***Quantitative Electrochemical Measurement of Bacterial Colonization Levels***

The proposed solution is intended for use in outpatient settings to provide caregivers with an immediate distinction between a viral and a bacterial infection. Further, the technology will provide immediate information regarding the targeted antibiotic therapy that should be administered to the patient by identifying the bacterial species that are present in the sample. The technology works with all clinically relevant samples. The diagnostic platform will accomplish this by instantly measuring the concentration of a set of chemical compounds present in the sample that are produced and excreted by all living bacterial cells. The bacterial species will be identified based on the subset of chemical compounds that are positively detected in the sample. The time from sample loading to test result is less than 2 minutes. The diagnostic instrument is handheld and only requires a single disposable cartridge per test. The technology has the potential to significantly curb unnecessary use of antibiotics by ruling out pathogens immediately during the diagnosis.