

## Spectral Labs, Inc.

### *Rapid AMR Test using Spectral Platforms' Technology*

We propose **InSpector-01** (~ a rapid test for characterizing the presence/absence of pathogenic microorganisms in blood and urine samples) and **InSpector-02** (~ a rapid test for characterizing the *functional MIC* minimum inhibitory concentration of a candidate antimicrobial required to suppress the growth of the causative pathogen, even prior to that pathogen being isolated and identified). **InSpector-01** would be used to test blood and urine samples, both in the outpatient and in the inpatient setting, and would identify patients for whom antimicrobial therapy is inappropriate. Thus, InSpector-01 can reduce inappropriate antimicrobial use for the vast majority of patients who are currently treated with antimicrobials, but who are uninfected. InSpector-02 would be used to characterize blood samples in the inpatient setting for the functional MIC of the causative pathogen, so as to guide subsequent antimicrobial therapy (from the 2nd antimicrobial dose on). Both InSpector-01 and InSpector-02 offer unique capabilities ~ we are not aware of any other current/emerging methods that can identify patients for whom antimicrobial therapy is inappropriate (as InSpector-01 does) or current/emerging methods that can provide the functional MIC (as InSpector-02 does; other methods provide markers of specific resistance mechanisms). Both InSpector-01 and InSpector-02 are at an advanced stage of development, and are currently being field tested to develop a quality system necessary for distribution.