

Executive Summary

Streck has developed FDA-cleared external positive controls for the BIOFIRE® Blood Culture Identification 2 (BCID2) Panel that are designed to closely resemble a patient sample in terms of appearance, composition and performance. Containing intact red blood cells and bacteria as well as culture media, MDx-Chex™ for BCID2 will verify the full range of the instrument, effects of PCR inhibitors and preanalytical variables. These features offer increased compliance with CAP and CLSI guidelines when compared to controls currently available on the market.

The following table displays the differences between the Streck control versus currently available controls.

Benefits of MDx-Chex for BCID2 over other available controls

| | Streck | Competitor A | Competitor Z |
|--|--------|--------------|--------------|
| Preanalytical Variables | | | |
| Sample tracking (via barcode)* | Yes | No | No |
| Controls technician sample handling | Yes | No | No† |
| Instrument Variables | | | |
| Lysis | | | |
| Contains non-infectious intact organisms | Yes | No | Yes |
| Contains human RBCs and WBCs | Yes | No | No |
| Lyses all panel organisms | Yes | No | Yes* |
| Nucleic Acid Isolation and Purification | Yes | No | No |
| Patient-like sample matrix | Yes | No | No |
| PCR Inhibitors | | | |
| RBCs (i.e., hemoglobin) | Yes | No | No |
| WBCs (i.e., interleukin, human genomic DNA) | Yes | No | No |
| Culture media chemicals | Yes | No | No |
| PCR Amplification Specificity | | | |
| All targets present | Yes | Yes | Yes* |
| Off target (human gDNA) present | Yes | No | No |
| Detection | | | |
| All DNA targets | Yes‡ | Yes | Yes* |

† Requires pooling of multiple components, not part of patient sample testing workflow

* If all panel organisms are pooled

◆ Barcode allows the control lot number, expiration date and level to be captured in the software

❖ Streck control will contain all DNA targets for the new BIOFIRE BCID2 panel available now