**Title:** Differences in the comparative stability of Ebola virus Makona-C05 and Yambuku Mayinga in blood

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## **Supporting Information - Raw Data Tables**

**Data Key**

* GMEM = cell culture media matrix
* Blood = human whole blood matrix
* SGFM = simulated gastric fluid with 2% milk (simulated vomit matrix)
* Feces = pooled human feces matrix from healthy patients
* R1-3 = replicates 1-3
* Numerical values in each table represent the virus Log TCID50/mL for each replicate recovered from surface coupons.
* Numbers in red indicate values at the microtitration assay limit of detection of 0.7 (for GMEM, Blood, or SGFM) or 1.2 Log TCID50/mL (for Feces).

Table A. EBOV/Mak-C05 Surface Persistence Study Performed at 22 °C/41% RH – Raw Data.

Table B. EBOV/Mak-C05 Surface Persistence Study 1 Performed at 28 °C/90% RH – Raw Data.

Table C. EBOV/Mak-C05 Surface Persistence Study 2 Performed at 28 °C/90% RH – Raw Data.

Table D. EBOV/Mak-C05 Surface Persistence Study Performed at 22 °C/17% RH – Raw Data.

Table E. EBOV/Yam-May Surface Persistence Study Performed at 22 °C/41% RH – Raw Data.

Table F. EBOV/Yam-May Surface Persistence Study 1 Performed at 28 °C/90% RH – Raw Data.

**Table G. EBOV/Yam-May Surface Persistence Study 2 Performed at 28 °C/90% RH – Raw Data.**

**Table H. Summary of Prior EBOV Persistence Studies and Comparison to this Study.**

Table A. EBOV/Mak-C05 Surface Persistence Study Performed at 22 °C/41% RH – Raw Data.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | |  |  |  |  | **Time (h)** | |  |  |  |  |  |
|  |  | **0** | | | **1** | | | **24** | | | **48** | | | **96** | | |
| **Matrix** | **Surface** | **R1** | **R2** | **R3** | **R1** | **R2** | **R3** | **R1** | **R2** | **R3** | **R1** | **R2** | **R3** | **R1** | **R2** | **R3** |
| **GMEM** | Stainless Steel | 4.3 | 4.2 | 3.6 | 3.0 | 3.2 | 3.2 | 3.1 | 2.3 | 3.1 | 2.1 | 1.8 | 1.8 | 0.7 | 0.7 | 0.7 |
| TyChemTM QC | 4.3 | 4.1 | 4.0 | 3.2 | 3.1 | 3.3 | 2.6 | 2.6 | 2.5 | 1.2 | 1.3 | 1.3 | 0.7 | 0.7 | 0.7 |
| Polypropylene | 4.1 | 4.3 | 4.3 | 3.3 | 3.0 | 2.8 | 2.8 | 3.2 | 2.3 | 1.3 | 1.3 | 1.1 | 0.7 | 0.7 | 0.7 |
| Nitrile | 4.1 | 4.3 | 4.2 | 3.3 | 2.9 | 2.6 | 2.5 | 2.6 | 2.5 | 1.4 | 1.1 | 0.7 | 0.7 | 0.7 | 0.7 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Blood** | Stainless Steel | 4.1 | 3.4 | 3.3 | 3.1 | 3.4 | 3.3 | 2.0 | 1.8 | 1.6 | 2.1 | 1.3 | 1.8 | 0.7 | 0.7 | 0.7 |
| TyChemTM QC | 4.1 | 4.3 | 4.5 | 3.2 | 3.4 | 3.2 | 2.0 | 2.2 | 3.1 | 1.6 | 2.1 | 2.3 | 0.7 | 0.9 | 0.7 |
| Polypropylene | 4.2 | 4.5 | 4.1 | 3.3 | 3.5 | 3.3 | 2.1 | 2.6 | 2.1 | 2.1 | 2.1 | 2.2 | 0.7 | 0.8 | 0.7 |
| Nitrile | 4.9 | 4.5 | 4.2 | 3.4 | 3.9 | 3.3 | 3.0 | 2.6 | 2.6 | 0.7 | 1.6 | 0.7 | 0.7 | 0.7 | 0.7 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **SGFM** | Stainless Steel | 2.6 | 2.5 | 2.2 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| TyChemTM QC | 0.7 | 3.2 | 3.4 | 1.0 | 1.2 | 1.1 | 0.7 | 0.7 | 0.8 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| Polypropylene | 3.6 | 3.5 | 3.4 | 2.0 | 1.7 | 1.6 | 0.9 | 0.8 | 1.2 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| Nitrile | 2.6 | 4.1 | 4.0 | 2.4 | 2.9 | 1.3 | 2.1 | 0.8 | 0.7 | 1.3 | 1.2 | 1.4 | 0.7 | 0.7 | 0.8 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Feces** | Stainless Steel | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| TyChemTM QC | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| Polypropylene | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| Nitrile | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Table B. EBOV/Mak-C05 Surface Persistence Study 1 Performed at 28 °C/90% RH – Raw Data.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | |  |  |  |  | **Time (h)** | |  |  |  |  |  |  |  |
|  |  | **0** | | | **4** | | | **12** | | | **24** | | | **48** | | | **72** | | |
| **Matrix** | **Surface** | **R1** | **R2** | **R3** | **R1** | **R2** | **R3** | **R1** | **R2** | **R3** | **R1** | **R2** | **R3** | **R1** | **R2** | **R3** | **R1** | **R2** | **R3** |
| **GMEM** | Stainless Steel | 4.1 | 3.9 | 3.8 | 2.6 | 2.3 | 2.2 | 0.7 | 1.3 | 1.3 | 1.0 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| TyChemTM QC | 4.0 | 4.0 | 3.8 | 3.3 | 3.3 | 3.7 | 1.8 | 2.0 | 1.3 | 1.7 | 1.3 | 1.5 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| Polypropylene | 4.0 | 3.8 | 3.8 | 2.8 | 3.0 | 3.1 | 2.2 | 2.3 | 2.3 | 2.1 | 2.1 | 2.2 | 0.9 | 1.3 | 0.8 | 1.2 | 0.8 | 0.7 |
| Nitrile | 4.1 | 4.1 | 4.2 | 3.2 | 3.3 | 3.2 | 1.8 | 1.6 | 1.3 | 0.7 | 1.1 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Blood** | Stainless Steel | 3.8 | 3.6 | 4.3 | 3.9 | 3.3 | 3.4 | 3.8 | 3.8 | 4.1 | 3.7 | 3.8 | 3.9 | 3.2 | 3.3 | 3.2 | 2.8 | 2.2 | 2.2 |
| TyChemTM QC | 3.8 | 3.8 | 4.1 | 4.2 | 3.6 | 4.5 | 3.9 | 4.1 | 3.8 | 3.6 | 4.0 | 4.2 | 3.8 | 3.4 | 3.3 | 2.8 | 3.1 | 2.6 |
| Polypropylene | 3.4 | 4.2 | 3.3 | 3.7 | 4.1 | 3.8 | 3.9 | 4.1 | 4.0 | 4.0 | 4.1 | 3.7 | 3.6 | 3.7 | 3.8 | 3.0 | 2.1 | 2.8 |
| Nitrile | 4.0 | 4.0 | 3.6 | 4.1 | 3.9 | 4.1 | 4.3 | 3.6 | 4.0 | 4.2 | 3.6 | 4.3 | 4.1 | 3.6 | 3.6 | 3.0 | 2.9 | 2.8 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **SGFM** | Stainless Steel | 3.6 | 3.4 | 4.0 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| TyChemTM QC | 4.1 | 3.4 | 3.6 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| Polypropylene | 4.0 | 4.0 | 4.1 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| Nitrile | 3.4 | 3.7 | 3.8 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Feces** | Stainless Steel | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| TyChemTM QC | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| Polypropylene | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| Nitrile | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Table C. EBOV/Mak-C05 Surface Persistence Study 2 Performed at 28 °C/90% RH – Raw Data.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | |  |  |  |  |  |  |  | **Time (h)** | |  |  |  |  |  |  |  |  |  |  |
|  |  | **0** | | | **4** | | | **24** | | | **48** | | | **72** | | | **120** | | | **168** | | | **240** | | |
| **Matrix** | **Surface** | **R1** | **R2** | **R3** | **R1** | **R2** | **R3** | **R1** | **R2** | **R3** | **R1** | **R2** | **R3** | **R1** | **R2** | **R3** | **R1** | **R2** | **R3** | **R1** | **R2** | **R3** | **R1** | **R2** | **R3** |
| **GMEM** | Stainless Steel | 3.4 | 4.0 | 3.6 | 3.2 | 2.6 | 2.2 | 1.1 | 0.8 | 0.7 | 2.3 | 0.7 | 1.2 | 0.7 | 0.7 | 1.1 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| TyChemTM QC | 3.4 | 3.8 | 4.2 | 3.3 | 3.3 | 3.7 | 2.2 | 2.6 | 1.3 | 1.0 | 0.7 | 1.3 | 0.7 | 0.7 | 1.3 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| Polypropylene | 3.5 | 3.4 | 3.6 | 3.2 | 3.4 | 3.4 | 2.2 | 2.5 | 2.2 | 1.6 | 1.5 | 1.1 | 0.7 | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| **Blood** | Stainless Steel | 3.8 | 4.0 | 3.4 | 3.6 | 3.5 | 2.6 | 3.6 | 3.8 | 3.3 | 4.0 | 4.1 | 3.8 | 3.0 | 2.2 | 2.6 | 2.9 | 3.2 | 2.8 | 1.8 | 1.8 | 2.2 | 1.3 | 0.7 | 0.7 |
| TyChemTM QC | 3.8 | 4.2 | 3.3 | 4.0 | 4.2 | 4.4 | 3.1 | 3.3 | 3.3 | 2.8 | 2.4 | 2.8 | 2.3 | 2.9 | 2.8 | 1.9 | 2.4 | 2.3 | 1.3 | 1.3 | 0.7 | 1.3 | 0.7 | 1.2 |
| Polypropylene | 4.1 | 4.2 | 4.1 | 4.1 | 4.2 | 3.6 | 2.6 | 3.6 | 3.0 | 3.8 | 3.8 | 3.9 | 2.3 | 3.1 | 3.2 | 2.6 | 3.1 | 3.2 | 2.3 | 2.3 | 1.1 | 1.3 | 1.5 | 1.8 |

Table D. EBOV/Mak-C05 Surface Persistence Study Performed at 22 °C/17% RH – Raw Data.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | |  |  |  |  |  | **Time (h)** | |  |  |  |  |  |  |  |
|  |  | **0** | | | **1** | | | **12** | | | **24** | | | **48** | | | **72** | | |
| **Matrix** | **Surface** | **R1** | **R2** | **R3** | **R1** | **R2** | **R3** | **R1** | **R2** | **R3** | **R1** | **R2** | **R3** | **R1** | **R2** | **R3** | **R1** | **R2** | **R3** |
| **GMEM** | Stainless Steel | 3.5 | 3.2 | 3.4 | 2.8 | 2.8 | 2.4 | 2.6 | 2.4 | 2.1 | 2.0 | 1.8 | 2.1 | 1.5 | 1.3 | 1.4 | 1.7 | 1.7 | 1.5 |
| Polypropylene | 3.8 | 3.6 | 3.4 | 3.3 | 2.7 | 2.9 | 2.2 | 2.3 | 2.6 | 2.1 | 2.3 | 2.4 | 1.3 | 1.2 | 1.4 | 2.1 | 1.5 | 1.8 |
| **Blood** | Stainless Steel | 3.7 | 3.4 | 3.7 | 2.6 | 2.7 | 3.3 | 2.1 | 2.1 | 2.2 | 1.8 | 2.3 | 1.5 | 0.7 | 0.9 | 0.7 | 0.7 | 0.7 | 0.7 |
| Polypropylene | 3.4 | 3.8 | 4.2 | 3.5 | 3.2 | 3.0 | 2.1 | 2.2 | 2.3 | 2.2 | 1.9 | 2.0 | 0.7 | 0.7 | 0.8 | 0.7 | 0.7 | 0.7 |
| **SGFM** | Stainless Steel | 3.1 | 3.6 | 3.2 | 0.7 | 1.3 | 1.1 | 0.7 | 0.7 | 0.7 | 0.7 | 1.0 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| Polypropylene | 3.2 | 3.4 | 3.6 | 1.5 | 1.4 | 1.1 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| **Feces** | Stainless Steel | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| Polypropylene | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |

Table E. EBOV/Yam-May Surface Persistence Study Performed at 22 °C/41% RH – Raw Data.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | |  |  |  | **Time (h)** | |  |  |  |  |  |
|  |  | **0** | | | **1** | | | **24** | | | **48** | | | **72** | | |
| **Matrix** | **Surface** | **R1** | **R2** | **R3** | **R1** | **R2** | **R3** | **R1** | **R2** | **R3** | **R1** | **R2** | **R3** | **R1** | **R2** | **R3** |
| **Blood** | Stainless Steel | 3.4 | 3.2 | 3.3 | 2.0 | 1.6 | 1.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| TyChemTM QC | 3.3 | 3.6 | 3.7 | 2.0 | 2.1 | 1.9 | 0.8 | 1.0 | 1.6 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| Polypropylene | 3.6 | 3.6 | 3.4 | 2.2 | 2.1 | 1.3 | 0.7 | 1.0 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| **Feces** | Stainless Steel | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| TyChemTM QC | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| Polypropylene | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| **GMEM** | Stainless Steel | 3.2 | 3.6 | 3.3 | 2.4 | 2.2 | 2.3 | 1.5 | 1.9 | 2.1 | 1.1 | 0.9 | 1.1 | 0.7 | 0.7 | 0.7 |
| TyChemTM QC | 3.3 | 3.9 | 3.3 | 2.5 | 3.0 | 2.7 | 1.9 | 1.3 | 1.9 | 1.0 | 0.9 | 0.9 | 0.7 | 0.7 | 0.7 |
| Polypropylene | 3.2 | 4.1 | 3.3 | 2.4 | 2.3 | 2.4 | 1.4 | 1.3 | 1.6 | 0.8 | 1.1 | 1.2 | 0.7 | 0.7 | 0.7 |
| **SGFM** | Stainless Steel | 1.2 | 1.2 | 2.6 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| TyChemTM QC | 2.8 | 2.4 | 2.4 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| Polypropylene | 3.1 | 2.3 | 2.2 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |

Table F. EBOV/Yam-May Surface Persistence Study 1 Performed at 28 °C/90% RH – Raw Data.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | |  |  |  |  | **Time (h)** | |  |  |  |  |  |  |  |
|  |  | **0** | | | **4** | | | **12** | | | **24** | | | **48** | | | **72** | | |
| **Matrix** | **Surface** | **R1** | **R2** | **R3** | **R1** | **R2** | **R3** | **R1** | **R2** | **R3** | **R1** | **R2** | **R3** | **R1** | **R2** | **R3** | **R1** | **R2** | **R3** |
| **Blood** | Stainless Steel | 3.3 | 3.3 | 3.1 | 1.7 | 2.3 | 2.3 | 2.2 | 2.3 | 2.2 | 1.3 | 1.8 | 1.2 | 2.1 | 2.0 | 2.1 | 1.2 | 1.2 | 1.2 |
| TyChemTM QC | 3.3 | 3.6 | 3.2 | 2.6 | 2.4 | 2.3 | 2.4 | 2.2 | 2.4 | 1.5 | 1.3 | 2.0 | 1.8 | 1.9 | 1.7 | 1.7 | 1.8 | 1.9 |
| Polypropylene | 3.4 | 3.5 | 3.1 | 2.6 | 2.3 | 2.8 | 2.4 | 2.3 | 2.6 | 2.0 | 2.1 | 1.8 | 1.6 | 1.9 | 2.1 | 1.3 | 1.4 | 1.9 |
| **Feces** | Stainless Steel | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| TyChemTM QC | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| Polypropylene | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| **GMEM** | Stainless Steel | 3.3 | 3.4 | 3.4 | 2.2 | 2.4 | 1.7 | 0.8 | 1.2 | 1.2 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| TyChemTM QC | 4.0 | 3.5 | 3.6 | 2.2 | 2.2 | 2.6 | 1.6 | 1.4 | 2.1 | 0.8 | 0.7 | 0.9 | 1.7 | 1.2 | 0.9 | 0.7 | 0.7 | 0.7 |
| Polypropylene | 3.4 | 3.9 | 3.5 | 2.3 | 2.3 | 2.3 | 1.9 | 1.3 | 2.0 | 1.3 | 1.2 | 1.3 | 1.5 | 0.8 | 0.7 | 0.7 | 0.7 | 0.7 |
| **SGFM** | Stainless Steel | 2.2 | 2.4 | 2.3 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| TyChemTM QC | 2.8 | 2.2 | 2.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| Polypropylene | 2.7 | 2.6 | 2.8 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |

Table G. EBOV/Yam-May Surface Persistence Study 2 Performed at 28 °C/90% RH – Raw Data.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | |  |  |  |  |  | **Time (h)** | |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | **0** | | | **4** | | | **24** | | | **48** | | | **72** | | | **120** |  |  | **168** | | | **240** | | |
| **Matrix** | **Surface** | **R1** | **R2** | **R3** | **R1** | **R2** | **R3** | **R1** | **R2** | **R3** | **R1** | **R2** | **R3** | **R1** | **R2** | **R3** | **R1** | **R2** | **R3** | **R1** | **R2** | **R3** | **R1** | **R2** | **R3** |
| **GMEM** | Stainless Steel | 3.4 | 3.9 | 3.8 | 2.3 | 2.2 | 2.8 | 1.3 | 0.7 | 1.1 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| TyChemTM QC | 3.3 | 3.6 | 3.6 | 3.4 | 3.8 | 3.4 | 1.2 | 0.7 | 0.9 | 0.7 | 0.8 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| Polypropylene | 3.4 | 3.6 | 3.3 | 2.4 | 3.0 | 2.8 | 1.4 | 1.4 | 1.3 | 0.9 | 0.8 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| **Blood** | Stainless Steel | 3.7 | 3.4 | 3.9 | 3.3 | 4.0 | 2.4 | 2.3 | 2.2 | 2.6 | 2.2 | 2.3 | 2.2 | 1.1 | 1.2 | 1.5 | 0.7 | 0.7 | 0.7 | 1.3 | 1.3 | 0.7 | 0.7 | 0.7 | 0.7 |
| TyChemTM QC | 3.8 | 3.7 | 3.4 | 2.2 | 2.2 | 3.1 | 2.4 | 2.3 | 1.8 | 2.2 | 2.6 | 2.5 | 1.6 | 1.3 | 1.2 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| Polypropylene | 3.6 | 3.8 | 4.0 | 3.2 | 2.9 | 3.1 | 2.2 | 2.3 | 2.3 | 3.0 | 2.5 | 2.4 | 1.5 | 2.2 | 1.6 | 1.0 | 0.7 | 0.7 | 1.2 | 1.2 | 0.7 | 0.7 | 0.7 | 0.7 |

**Table H. Summary of Prior EBOV Persistence Studies and Comparison to this Study.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Reference | Virus | Matrix | Surface | Environment | Decay (Log titer/day) |
| Fisher *et al.* | EBOV/Mak-WPGC07 | Cell culture media | Stainless steel | 27 °C/80% RH | 2.22 |
| 21 °C/40% RH | 0.77 |
| Plastic | 27 °C/80% RH | 2.22 |
| 21 °C/40% RH | 0.55 |
| Tyvek | 27 °C/80% RH | 1.59 |
| 21 °C/40% RH | 0.45 |
| Drying human blood | Plastic | 27 °C/80% RH | 0.67 |
| 21 °C/40% RH | 0.67 |
| Piercy *et al.* | EBOV/ Yambuku-Ecran | Cell culture media | Stainless steel | 4 °C | No recovery |
| PVC | ~0.29\* |
| Glass | ~0.07\* |
| Guinea pig sera | Glass | ~0.29\* |
| Sagripanti *et al.* | EBOV/Kikwit | Cell culture media | Glass | 20-25 °C/30-40% RH | 0.68 |
| Cook *et al.* | EBOV/Mak-C05 | Simulated organic soil load | Stainless steel | 21 °C/30% RH | 0.22 |
| Surgical mask | 0.27 |
| Cotton gown | 15.35 |
| Plastic gown | 0.28 |
| Schuit *et al.* | EBOV/Mak-C05 | Cell culture media | Multiple non-porous surfaces# | 22 °C/17% RH | 0.41 |
| 22 °C/41% RH | 0.62 |
| 28 °C/90% RH | 0.45 |
| Dried human blood | 22 °C/17% RH | 0.79 |
| 22 °C/41% RH | 0.63 |
| 28 °C/90% RH | 0.29 |
| EBOV/Yam-May | Cell culture media | 22 °C/41% RH | 0.59 |
| 28 °C/90% RH | 0.57 |
| Dried human blood | 22 °C/41% RH | 0.62 |
| 28 °C/90% RH | 0.24 |

\* Calculated from Log titer loss over 14 days

# Because ANOVA indicated no surface-dependent effects on EBOV decay, values on different surfaces were combined to calculate surface-independent decay rates