### Panel Composition

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<tbody>
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<td>Log₁₀</td>
<td>n</td>
<td>Log₁₀</td>
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<td>Plasma</td>
<td>DS1_1</td>
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<td>Adenovirus (Type 1)</td>
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<td>3.111-5.790</td>
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<td>TRANS22S-07</td>
<td>Cytomegalovirus (AD169)</td>
<td>Plasma</td>
<td>D1</td>
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<td>59</td>
<td>3.535-5.113</td>
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<tr>
<td>TRANS22S-08</td>
<td>Adenovirus (type 14)</td>
<td>Transport Medium</td>
<td></td>
<td>3.228</td>
<td>75</td>
<td>2.076-4.814</td>
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<td>TRANS22S-09</td>
<td>B19 Virus (Type 1)</td>
<td>Plasma</td>
<td></td>
<td>3.309</td>
<td>29</td>
<td>2.766-4.498</td>
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<tr>
<td>TRANS22S-10</td>
<td>Negative</td>
<td>Plasma</td>
<td></td>
<td></td>
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</tbody>
</table>

[1] **Sample Relationships**: Indicates the relationships of the samples within this challenge. The highest titre member of dilution series DS1 is indicated by DS1_1 and further members of the series as DS1_2, DS1_3 etc. in order of reducing titre. Additional dilution series are indicated by DS2 (e.g. DS2_1, DS2_2 etc.), DS3 (e.g. DS3_1, DS3_2 etc.). If one duplicate pair is present this is indicated by ‘D1’. Further duplicate pairs are indicated by ‘D2’, ‘D3’ etc.

[2] **Consensus (IU/ml or Copies/ml)**: Mean consensus in IU/ml or Copies/ml for this sample as determined across 2022 datasets with outliers removed and the number of quantitative results (n) used to calculate this consensus (where there are a minimum of five available quantitative results).

[3] **Range**: Minimum and maximum quantitative values in IU/ml or Copies/ml for each panel member within the included datasets without outliers removed.
Your Summary Results (Core Samples)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>TRANS22S-01</td>
<td>IU/ml</td>
<td>4.061</td>
<td>0.325</td>
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<td>Epstein-Barr virus</td>
<td>Epstein-Barr virus</td>
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<tr>
<td>TRANS22S-02</td>
<td>Copies/ml</td>
<td>4.065</td>
<td>0.468</td>
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<td>TRANS22S-03</td>
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<td>Human herpes virus 6</td>
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<tr>
<td>TRANS22S-04</td>
<td>Copies/ml</td>
<td>4.361</td>
<td>0.331</td>
<td>4.679</td>
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<td>Cytomegalovirus</td>
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<tr>
<td>TRANS22S-05</td>
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<td>Epstein-Barr virus</td>
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<tr>
<td>TRANS22S-06</td>
<td>IU/ml</td>
<td>3.734</td>
<td>0.439</td>
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<td>Yes</td>
<td>BK virus</td>
<td>BK virus</td>
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<tr>
<td></td>
<td>IU/ml</td>
<td>3.734</td>
<td>0.439</td>
<td>4.472</td>
<td>Yes</td>
<td>BK virus</td>
<td>BK virus</td>
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<td>TRANS22S-07</td>
<td>Copies/ml</td>
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<td>0.331</td>
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<td>Yes</td>
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<td>Cytomegalovirus</td>
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<td>TRANS22S-08</td>
<td>Copies/ml</td>
<td>3.228</td>
<td>0.462</td>
<td>3.813</td>
<td>Yes</td>
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<td>Adenovirus</td>
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<td>TRANS22S-09</td>
<td>IU/ml</td>
<td>3.113</td>
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<td>B19 virus</td>
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<tr>
<td>TRANS22S-10</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

[1] Unitage: The unitage (IU/ml or Copies/ml) you used to report your quantitative value.
[2] EQA Consensus: The mean consensus in your chosen unitage for this sample as determined across n 2020 datasets with outliers removed (refer to Panel Composition table above for the number and range of these values).
[3] SD: The standard deviation of results included in this group (refer to panel composition above).
[4] Your Quantitative Result: The quantitative result you returned for each sample within this EQA challenge.
[5] Target included in workflows yes/no: Yes / No answer to whether the expected pathogen was tested for.
[7] Reported Pathogen ID: The final pathogen(s) identification you reported for each sample within this EQA challenge / distribution.

For further details please refer to the current participant manual.
Multiple Pathogen Programme - Qualitative Assessment of Results

Results are categorised based on the workflow used and the pathogen(s) targeted as shown in the table below.

<table>
<thead>
<tr>
<th>Expected Qualitative Result</th>
<th>Laboratory Reported Results</th>
<th>Sample Weighting</th>
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<tbody>
<tr>
<td></td>
<td>Expected pathogen(s) detected</td>
<td>Expected pathogen(s) not included in workflow(s)</td>
</tr>
<tr>
<td></td>
<td>Positive</td>
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<tr>
<td>Positive</td>
<td>✓</td>
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My Workflow Details:

Name: BK Virus (BKV) PCR Kit (v4)

Targets: V BK virus
### Assays

#### Extraction - Manual Extraction Process
- Commercial
  - Kit Manufacturer: GeneProof
  - Kit Type: *PathogenFree DNA Isolation Kit*

#### Amplification - GeneProof - croBEE Real-Time PCR System
- Commercial
  - Kit Manufacturer: GeneProof
  - Kit Type: *BK Virus (BKV) PCR Kit*
  - Kit Version: GP

#### Used to test samples:
- TRANS22S-01, TRANS22S-02, TRANS22S-03, TRANS22S-04, TRANS22S-05, TRANS22S-06, TRANS22S-07, TRANS22S-08, TRANS22S-09, TRANS22S-10

---

### Name
Adenovirus PCR Kit (v4)

### Description

### Targets
- Adenovirus

### Assays

#### Extraction - Manual Extraction Process
- Commercial
  - Kit Manufacturer: GeneProof
  - Kit Type: *PathogenFree DNA Isolation Kit*

#### Amplification - GeneProof - croBEE Real-Time PCR System
- Commercial
  - Kit Manufacturer: GeneProof
  - Kit Type: *Adenovirus PCR Kit*
  - Kit Version: GP

#### Used to test samples:
- TRANS22S-01, TRANS22S-02, TRANS22S-03, TRANS22S-04, TRANS22S-05, TRANS22S-06, TRANS22S-07, TRANS22S-08, TRANS22S-09, TRANS22S-10

---

### Name
GeneProof Cytomegalovirus (CMV) PCR Kit (v6)

### Description

### Targets
- Cytomegalovirus

---

QCMD, Technology Terrace, Todd Campus, West of Scotland Science Park, Glasgow, G20 0XA Tel: +44 (0) 141 945 6474, Fax: +44 (0) 141 945 5795 Web: www.qcmd.org
<table>
<thead>
<tr>
<th>Assays</th>
<th>Extraction - Manual Extraction Process</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Commercial</td>
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<tr>
<td></td>
<td>Kit Manufacturer: GeneProof</td>
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<tr>
<td></td>
<td>Kit Type: PathogenFree DNA Isolation Kit</td>
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<tr>
<td></td>
<td>Amplification - GeneProof - croBEE Real-Time PCR System</td>
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<tr>
<td></td>
<td>Commercial</td>
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<tr>
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<td>Kit Manufacturer: GeneProof</td>
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<td>Kit Type: GeneProof Cytomegalovirus (CMV) PCR Kit</td>
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Used to test samples: TRANS22S-01, TRANS22S-02, TRANS22S-03, TRANS22S-04, TRANS22S-05, TRANS22S-06, TRANS22S-07, TRANS22S-08, TRANS22S-09, TRANS22S-10

<table>
<thead>
<tr>
<th>Name</th>
<th>GeneProof Epstein-Barr Virus (EBV) PCR Kit (v5)</th>
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<tr>
<td>Description</td>
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<tr>
<td>Targets</td>
<td>Epstein-Barr virus</td>
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Assays

<table>
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<tr>
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<td>Kit Manufacturer: GeneProof</td>
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<td>Kit Type: PathogenFree DNA Isolation Kit</td>
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<tr>
<td>Amplification - GeneProof - croBEE Real-Time PCR System</td>
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<td>Commercial</td>
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<tr>
<td>Kit Manufacturer: GeneProof</td>
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<td>Kit Type: GeneProof Epstein-Barr Virus (EBV) PCR kit</td>
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<td>Kit Version: GP</td>
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Used to test samples: TRANS22S-01, TRANS22S-02, TRANS22S-03, TRANS22S-04, TRANS22S-05, TRANS22S-06, TRANS22S-07, TRANS22S-08, TRANS22S-09, TRANS22S-10

<table>
<thead>
<tr>
<th>Name</th>
<th>GeneProof Human Herpes Virus 6/7 (HHV-6/7) PCR kit (v3)</th>
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</thead>
<tbody>
<tr>
<td>Description</td>
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<tr>
<td>Targets</td>
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</table>
### Assays

<table>
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<tbody>
<tr>
<td>Commercial</td>
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<tr>
<td>Kit Manufacturer: GeneProof</td>
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<tr>
<td>Kit Type: PathogenFree DNA Isolation Kit</td>
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</table>

**Amplification - GeneProof - croBEE Real-Time PCR System**

- Commercial
- Kit Manufacturer: GeneProof
- Kit Type: Human Herpes Virus 6/7 (HHV-6/7) PCR Kit
- Kit Version: GP

**Used to test samples:**

TRANS22S-01, TRANS22S-02, TRANS22S-03, TRANS22S-04, TRANS22S-05, TRANS22S-06, TRANS22S-07, TRANS22S-08, TRANS22S-09, TRANS22S-10

### Name

**GeneProof BK/JC Virus (BK/JC) PCR Kit (v3)**

### Description

**Targets**

- BK virus
- JC virus

### Assays

- Extraction - Manual Extraction Process
  - Commercial
  - Kit Manufacturer: GeneProof
  - Kit Type: PathogenFree DNA Isolation Kit

- Amplification - GeneProof - croBEE Real-Time PCR System
  - Commercial
  - Kit Manufacturer: GeneProof
  - Kit Type: GeneProof BK/JC Virus (BK/JC) PCR Kit
  - Kit Version: GP

**Used to test samples:**

TRANS22S-01, TRANS22S-02, TRANS22S-03, TRANS22S-04, TRANS22S-05, TRANS22S-06, TRANS22S-07, TRANS22S-08, TRANS22S-09, TRANS22S-10

### Name

**GeneProof Parvovirus B19 PCR Kit (v6)**

### Description

**Targets**

- B19 virus
## Assays

### Extraction - Manual Extraction Process
- Commercial
  - Kit Manufacturer: GeneProof
  - Kit Type: PathogenFree DNA Isolation Kit

### Amplification - GeneProof - croBEE Real-Time PCR System
- Commercial
  - Kit Manufacturer: GeneProof
  - Kit Type: GeneProof Parvovirus B19 PCR Kit
  - Kit Version: Not Applicable

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</tr>
</thead>
</table>

### Used to test samples:

| TRANS2S-01, TRANS2S-02, TRANS2S-03, TRANS2S-04, TRANS2S-05, TRANS2S-06, TRANS2S-07, TRANS2S-08, TRANS2S-09, TRANS2S-10 |

## Further Programme Details

<table>
<thead>
<tr>
<th>Number of Participants</th>
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</thead>
<tbody>
<tr>
<td>Number of Countries</td>
<td>18</td>
</tr>
<tr>
<td>Number of Respondents</td>
<td>37</td>
</tr>
<tr>
<td>Number of Datasets Submitted</td>
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</tbody>
</table>

## EQA Programme Aims

The viral transplant EQA programme focuses on the molecular detection and determination of various cytomegalovirus, Epstein-Barr virus, human herpes virus 6, BK virus, B19 virus and adenovirus strains.

## Feedback and Enquiries

Participants are encouraged to read the QCMD Participants' Manual, which can be downloaded from the QCMD website.

Any enquiries should be submitted through the ‘Contact Us’ form that you can find in the ‘Help’ section of your QCMD (ITEMS) Participant Profile Area.

Panel member analysis is separated into CORE samples followed by EDUCATIONAL samples.
Individual Panel Member Analysis (Core Samples)

Qualitative analysis for each panel member is provided in relation to your EQA assessment group. EQA assessment groups are established using the molecular workflow information reported by all participants within this EQA challenge / distribution.

To allow meaningful assessment at the individual method level the EQA assessment group must consist of 5 or more datasets. If there are not sufficient datasets at the individual method level then your results will be included within a higher EQA assessment group based on whether it is a commercial or in house technology/method. The highest level assessment grouping is “All” participant reported qualitative results.

A breakdown of qualitative results reported for all workflows used by participants on each of the panel members within this EQA challenge / distribution is provided below. Note: participants may use multiple workflows for each sample.

The final laboratory result indicates the final reported result which may be based on one or more workflows used to test each panel member.
<table>
<thead>
<tr>
<th>Sample Code</th>
<th>Sample Content</th>
<th>Matrix</th>
<th>Sample Relationships</th>
<th>Expected targets</th>
<th>Detected / Determined</th>
<th>Not Detected / Not Determined</th>
<th>Not Tested</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRANS22S-01</td>
<td>Epstein-Barr virus</td>
<td>Plasma</td>
<td>DS1_1</td>
<td>Epstein-Barr virus</td>
<td>83.7</td>
<td>7</td>
<td>9.3</td>
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</table>

**Score Breakdown**

- **Detected / Determined**
- **Not Detected / Not Determined**
- **Not Tested**

**Groups below n=5:** Abbott (n=2), Abbott - Abbott Alinity m (n=2), Anatolia Geneworks (n=3), Anatolia Geneworks - Anatolia Geneworks Bosphore (n=3), Diagenode (n=2), Diagenode - Diagenode Real Time kit (n=2), PathoFinder (n=1), PathoFinder - PathoFinder Real Time PCR (n=1), QIAGEN (n=2), QIAGEN - QIAGEN Artus Real Time (n=1), QIAGEN - QIAGEN NeuMoDx (n=1), Roche - Roche Cobas 4800 (n=3), Roche - Roche Cobas 8800/8800 (n=4), Sacace (n=1), Sacace - Sacace Real TM (n=1), TIB MOLBIOL (n=1), TIB MOLBIOL - TIB-MolBiol LightMix (n=1), Vela Diagnostics (n=2), Vela Diagnostics - Vela Dx Sentosa (n=2), bioMerieux - bioMerieux Primers/Probes (n=2), In-House - Conventional In-House PCR (n=1)

**Groups Rolled Up:** Certest - Certest Real Time PCR (n=8), ELITech Group - Elitech Elite Real Time kit (n=13), Seegene - Seegene Allplex (n=5)
**Sample Code: TRANS22S-02**

**Sample Content:** Adenovirus (Type 1)  
**Matrix:** Transport Medium  
**Sample Relationships:** Adenovirus  
**Expected targets:** Adenovirus  
**Detected / Determined:** 74.4  
**Not Detected / Not Determined:** N/A  
**Not Tested:** 25.6

---

**Score Breakdown**

- **Detected / Determined**
  - Commercial: 128 (98%)
  - Altona Diagnostics: 98 (100%)
  - Altona Diagnostics AltoStar: 15 (100%)
  - Altona Diagnostics RealStar: 10 (100%)
  - Certest: 5 (100%)
  - ELITech Group: 8 (100%)
  - GeneProof: 15 (100%)
  - GeneProof Real Time PCR kit: 13 (100%)
  - Roche: 7 (100%)
  - Seegene: 5 (100%)
  - bioMerieux: 21 (100%)
  - bioMerieux R-gene Quant Kit: 19 (100%)
  - In-House: 30 (100%)
  - Real-time In-House PCR: 29 (100%)

- **Not Detected / Not Determined**
  - Commercial: 98 (20%)
  - Altona Diagnostics: 15 (15%)
  - Altona Diagnostics AltoStar: 10 (10%)
  - Altona Diagnostics RealStar: 5 (5%)
  - Certest: 8 (8%)
  - ELITech Group: 13 (13%)
  - GeneProof: 13 (13%)
  - GeneProof Real Time PCR kit: 13 (13%)
  - Roche: 7 (7%)
  - Seegene: 5 (5%)
  - bioMerieux: 19 (19%)
  - bioMerieux R-gene Quant Kit: 19 (19%)
  - In-House: 30 (30%)
  - Real-time In-House PCR: 29 (29%)

- **Not Tested**
  - Commercial: 25.6 (25.6%)
  - Altona Diagnostics: 11 (11%)
  - Altona Diagnostics AltoStar: 0 (0%)
  - Altona Diagnostics RealStar: 0 (0%)
  - Certest: 0 (0%)
  - ELITech Group: 0 (0%)
  - GeneProof: 0 (0%)
  - GeneProof Real Time PCR kit: 0 (0%)
  - Roche: 0 (0%)
  - Seegene: 0 (0%)
  - bioMerieux: 0 (0%)
  - bioMerieux R-gene Quant Kit: 0 (0%)
  - In-House: 0 (0%)
  - Real-time In-House PCR: 0 (0%)

**Groups below n=5:** Abbott (n=2), Abbott - Abbott Alinity m (n=2), Anatolia Geneworks (n=3), Anatolia Geneworks - Anatolia Geneworks Bosphore (n=3), Diagenode (n=2), Diagenode - Diagenode Real Time kit (n=2), PathoFinder (n=1), PathoFinder - PathoFinder Real Time PCR (n=1), QIAGEN (n=2), QIAGEN - QIAGEN Artus Real Time (n=1), QIAGEN - QIAGEN NeuMoDx (n=1), Roche - Roche Cobas 4800 (n=3), Roche - Roche Cobas 6800/8800 (n=4), Sacace (n=1), Sacace - Sacace Real TM (n=1), Tib MOLBIOL (n=1), Tib MOLBIOL - Tib-MolBiol LightMix (n=1), Vela Diagnostics (n=2), Vela Diagnostics - Vela Dx Sentosa (n=2), bioMerieux - bioMerieux Primers/Probes (n=2), In-House - Conventional In-House PCR (n=1)

**Groups Rolled Up:** Certest - Certest Real Time PCR (n=8), ELITech Group - Elitech Elite Real Time kit (n=15), Seegene - Seegene Allplex (n=5)
<table>
<thead>
<tr>
<th>Sample Code</th>
<th>Sample Content</th>
<th>Matrix</th>
<th>Sample Relationships</th>
<th>Expected targets</th>
<th>Detected / Determined</th>
<th>Not Detected / Not Determined</th>
<th>Not Tested</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRANS22S-03</td>
<td>Human herpes virus 6 (type A)</td>
<td>Plasma</td>
<td></td>
<td>Human herpes virus 6</td>
<td>67.4</td>
<td>7</td>
<td>25.6</td>
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</tbody>
</table>

**Score Breakdown**
- Detected / Determined
- Not Detected / Not Determined
- Not Tested

**Number of Values in Groups**
- Commercial:
  - Altona Diagnostics
  - Altona Diagnostics AltoStar
  - Altona Diagnostics RealStar
  - Certest
  - ELITech Group
  - GeneProof
    - GeneProof Real Time PCR kit
  - Roche
  - Seegene
  - bioMerieux
    - bioMerieux R-gene Quant Kit
- In-House
  - Real-time In-House PCR

**Final laboratory result (All)**
- 43 values

**Challenge:** S
**Analysis Type:** Multiple Pathogen Quantitative
**Dataset:** 620762
**Report UID:** 2677/65663/5346

**Laboratory**
CZO23

**Individual Report**

**QCMD 2022 Transplantation EQA Programme**

Catalogue Code: QAM174198
Ref Code: TRANS22
Challenge: S
Analysis Type: Multiple Pathogen Quantitative
Dataset: 620762
Report UID: 2677/65663/5346
Laboratory CZO23

**Score Breakdown**
- Detected / Determined
- Not Detected / Not Determined
- Not Tested

**Number of Values in Groups**

**QCMD, Technology Terrace, Todd Campus, West of Scotland Science Park, Glasgow, G20 0XA Tel: +44 (0) 141 945 6474, Fax: +44 (0) 141 945 5795 Web: www.qcmd.org**

**Page 11 of 21**

**Issue Date: 17 Jan 2023**

**Report authorised by the QCMD Executive (1)**

A UKAS accredited proficiency testing provider No.4385
### Groups below n=5:
- Abbott (n=2), Abbott - Abbott Alinity m (n=2), Anatolia Geneworks (n=3), Anatolia Geneworks - Anatolia Geneworks Bosphore (n=3), Diagenode (n=2), Diagenode - Diagenode Real Time kit (n=2), PathoFinder (n=1), PathoFinder - PathoFinder Real Time PCR (n=1), QIAGEN (n=2), QIAGEN - QIAGEN Artus Real Time (n=1), QIAGEN - Qiagen NeuMoDx (n=1), Roche - Roche Cobas 4800 (n=3), Roche - Roche Cobas 6800/8800 (n=4), Sacace (n=1), Sacace - Sacace Real TM (n=1), TIB MOLBIOL (n=1), TIB MOLBIOL - TIB-MolBiol LightMix (n=1), Vela Diagnostics (n=2), Vela Diagnostics - Vela Dx Sentosa (n=2), bioMerieux - bioMerieux Primers/Probes (n=2), In-House - Conventional In-House PCR (n=1)

### Groups Rolled Up:
- Certest - Certest Real Time PCR (n=8), ELITech Group - Elitech Elite Real Time kit (n=13), Seegene - Seegene Allplex (n=5)
### Sample Code: TRANS22S-04

**Sample Content:** Cytomegalovirus (AD169)

**Matrix:** Plasma

**Sample Relationships:** D1

**Expected targets:** Cytomegalovirus

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<th>Not Detected / Not Determined</th>
<th>Not Tested</th>
</tr>
</thead>
<tbody>
<tr>
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<td>(%)</td>
<td>(%)</td>
</tr>
<tr>
<td>97.7</td>
<td>2.3</td>
<td>N/A</td>
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**Number of Values in Groups:**

- **Detected / Determined:** 126
- **Not Detected / Not Determined:** 96
- **Not Tested:** 15

**Score Breakdown:**

- **Detected / Determined:** 86
- **Not Detected / Not Determined:** 10
- **Not Tested:** 5

### Commercial

- **Altona Diagnostics**
  - **Altona Diagnostics AltoStar**: 13
  - **Altona Diagnostics RealStar**: 13

- **CerTest**: 8

- **ELITech Group**: 13

- **GeneProof**
  - **GeneProof Real Time PCR kit**: 13

- **Roche**
  - **Roche Cobas 6800/8800**: 8

- **Seegene**: 5

- **bioMerieux**
  - **bioMerieux R-gene Quant Kit**: 20

### In-House

- **Real-time In-House PCR**: 30

### Score Breakdown:

- **Detected / Determined:** 86
- **Not Detected / Not Determined:** 10
- **Not Tested:** 5
Groups below n=5: Abbott (n=2), Abbott - Abbott Alinity m (n=2), Anatolia Geneworks (n=3), Anatolia Geneworks - Anatolia Geneworks Bosphore (n=3), Diagenode (n=2), Diagenode - Diagenode Real Time kit (n=2), PathoFinder (n=1), PathoFinder - PathoFinder Real Time PCR (n=1), QIAGEN (n=2), QIAGEN - QIAGEN Artus Real Time (n=1), QIAGEN - Qiagen NeuMoDx (n=1), Roche - Roche Cobas 4800 (n=3), Sacace (n=1), Sacace - Sacace Real TM (n=1), TIB MOLBIOL (n=1), TIB MOLBIOL - TIB-MolBiol LightMix (n=1), Vela Diagnostics (n=2), Vela Diagnostics - Vela Dx Sentosa (n=2), bioMerieux - bioMerieux Primers/Probes (n=2), In-House - Conventional In-House PCR (n=1)

Groups Rolled Up: Certest - Certest Real Time PCR (n=8), ELITech Group - Elitech Elite Real Time kit (n=13), Seegene - Seegene Allplex (n=5)

<table>
<thead>
<tr>
<th>Sample Code</th>
<th>Sample Content</th>
<th>Matrix</th>
<th>Sample Relationships</th>
<th>Expected targets</th>
<th>Detected / Determined</th>
<th>Not Detected / Not Determined</th>
<th>Not Tested</th>
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</thead>
<tbody>
<tr>
<td>TRANS22S-05</td>
<td>Epstein-Barr virus</td>
<td>Plasma</td>
<td>DS1_2</td>
<td>Epstein-Barr virus</td>
<td>81.4</td>
<td>7</td>
<td>3</td>
</tr>
</tbody>
</table>

Final laboratory result (All)

0% 20% 40% 60% 80% 100% 43

All

- Commercial
  - Altona Diagnostics
    - Altona Diagnostics AltoStar
    - Altona Diagnostics RealStar
  - Certest
  - ELITech Group
  - GeneProof
    - GeneProof Real Time PCR kit
  - Roche
  - Seegene
  - bioMerieux
    - bioMerieux R-gene Quant Kit
  - In-House
    - Real-time In-House PCR

Number of Values in Groups

Score Breakdown

- Detected / Determined
- Not Detected / Not Determined
- Not Tested

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Page 14 of 21

Issue Date: 17 Jan 2023
Report authorised by the QCMD Executive (1)
A UKAS accredited proficiency testing provider No.4385
### Groups below n=5:
- Abbott (n=2), Abbott - Abbott Alinity m (n=2), Anatolia Geneworks (n=3), Anatolia Geneworks - Anatolia Geneworks Bosphore (n=3), Diagenode (n=2), Diagenode - Diagenode Real Time kit (n=2), PathoFinder (n=1), PathoFinder - PathoFinder Real Time PCR (n=1), QIAGEN (n=2), QIAGEN - QIAGEN Artus Real Time (n=1), QIAGEN - Qiagen NeuMoDx (n=1), Roche - Roche Cobas 4800 (n=3), Roche - Roche Cobas 6800/8800 (n=4), Sacace (n=1), Sacace - Sacace Real TM (n=1), TIB MOLBiOL (n=1), TIB MOLBiOL - TiB-MolBiol LightMix (n=1), Vela Diagnostics (n=2), Vela Diagnostics - Vela Dx Sentosa (n=2), BioMerieux - BioMerieux Primers/Probes (n=2), In-House - Conventional In-House PCR (n=1)

### Groups Rolled Up:
- Certest - Certest Real Time PCR (n=8), ELITech Group - Elitech Elite Real Time kit (n=13), Seegene - Seegene Allplex (n=5)

---

### Sample Code | Sample Content | Matrix | Sample Relationships | Expected targets | Detected / Determined (%) | Not Detected / Not Determined (%) | Not Tested (%) |
--- | --- | --- | --- | --- | --- | --- | --- |
TRANS22S-06 | BK virus (type 1b-2) | Plasma | BK virus | 74.4 | N/A | 0 | 25.6 |

---

### Final laboratory result (All)

![Score Breakdown Diagram](image)

- **Score Breakdown**
  - Detected / Determined
  - Not Detected / Not Determined
  - Not Tested

- **Number of Values in Groups**
  - Score Breakdown: 127
  - Not Detected / Not Determined: 95
  - Not Tested: 15

---

### Individual Report

**QCMD 2022 Transplantation EQA Programme**

**Catalogue Code:** QAM174198  
**Ref Code:** TRANS22  
**Challenge:** S  
**Analysis Type:** Multiple Pathogen Quantitative  
**Dataset:** 620762  
**Report UID:** 2677/65663/5346  
**Laboratory:** CZ023

---

**Groups below n=5:**
Abbott (n=2), Abbott - Abbott Alinity m (n=2), Anatolia Geneworks (n=3), Anatolia Geneworks - Anatolia Geneworks Bosphore (n=3), Diagenode (n=2), Diagenode - Diagenode Real Time kit (n=2), PathoFinder (n=1), PathoFinder - PathoFinder Real Time PCR (n=1), QIAGEN (n=2), QIAGEN - QIAGEN Artus Real Time (n=1), QIAGEN - Qiagen NeuMoDx (n=1), Roche - Roche Cobas 4800 (n=3), Roche - Roche Cobas 6800/8800 (n=4), Sacace (n=1), Sacace - Sacace Real TM (n=1), TIB MOLBiOL (n=1), TIB MOLBiOL - TiB-MolBiol LightMix (n=1), Vela Diagnostics (n=2), Vela Diagnostics - Vela Dx Sentosa (n=2), BioMerieux - BioMerieux Primers/Probes (n=2), In-House - Conventional In-House PCR (n=1)

**Groups Rolled Up:**
Certest - Certest Real Time PCR (n=8), ELITech Group - Elitech Elite Real Time kit (n=13), Seegene - Seegene Allplex (n=5)
Groups below n=5: Abbott (n=2), Abbott - Abbott Alinity m (n=2), Anatolia Geneworks (n=3), Anatolia Geneworks - Anatolia Geneworks Bosphore (n=3), Diagenode (n=2), Diagenode - Diagenode Real Time kit (n=2), PathoFinder (n=1), PathoFinder - PathoFinder Real Time PCR (n=1), QIAGEN (n=2), QIAGEN - QIAGEN Artus Real Time (n=1), QIAGEN - Qiagen NeuMoDx (n=1), Roche - Roche Cobas 4800 (n=3), Roche - Roche Cobas 6800/8800 (n=4), Sacace (n=1), Sacace - Sacace Real TM (n=1), TIB MOLBIOL (n=1), TIB MOLBIOL - TIB-MolBiol LightMix (n=1), Vela Diagnostics (n=2), Vela Diagnostics - Vela Dx Sentosa (n=2), bioMerieux - bioMerieux Primers/Probes (n=2), In-House - Conventional In-House PCR (n=1)

Groups Rolled Up: Certest - Certest Real Time PCR (n=8), ELITech Group - Elitech Elite Real Time kit (n=13), Seegene - Seegene Allplex (n=5)
Sample Code  | Sample Content  | Matrix  | Expected relationships  | Expected targets  | Detected / Determined  | Not Detected / Not Determined  | Not Tested  |
--- | --- | --- | --- | --- | --- | --- | --- |
TRANS22S-07  | Cytomegalovirus (AD169)  | Plasma  | D1  | Cytomegalovirus  | 95.3  | 41  | 4.7  | 2  | N/A  | 0  |

Final laboratory result (All)

Score Breakdown

- **Detected / Determined**
- **Not Detected / Not Determined**
- **Not Tested**
Groups below n=5: Abbott (n=2), Abbott - Abbott Alinity m (n=2), Anatolia Geneworks (n=3), Anatolia Geneworks - Anatolia Geneworks Bosphore (n=3), Diagenode (n=2), Diagenode - Diagenode Real Time kit (n=2), PathoFinder (n=1), PathoFinder - PathoFinder Real Time PCR (n=1), QIAGEN (n=2), QIAGEN - QIAGEN Artus Real Time (n=1), QIAGEN - Qiagen NeuMoDx (n=1), Roche - Roche Cobas 4800 (n=2), Roche - Roche Cobas TaqMan (n=1), Sacace (n=1), Sacace - Sacace Real TM (n=1), TIB MOLBIOL (n=1), TIB MOLBIOL - TIB-MolBiol LightMix (n=1), Vela Diagnostics (n=2), Vela Diagnostics - Vela Dx Sentosa (n=2), bioMerieux - bioMerieux Primers/Probes (n=2), In-House - Conventional In-House PCR (n=1)

Groups Rolled Up: Certest - Certest Real Time PCR (n=8), ELITech Group - Elitech Elite Real Time kit (n=13), Seegene - Seegene Allplex (n=5)

<table>
<thead>
<tr>
<th>Sample Code</th>
<th>Sample Content</th>
<th>Matrix</th>
<th>Sample Relationships</th>
<th>Expected targets</th>
<th>Detected / Determined (%)</th>
<th>Not Detected / Not Determined (%)</th>
<th>Not Tested (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRANS22S-08</td>
<td>Adenovirus (type 14)</td>
<td>Transport Medium</td>
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<td>Adenovirus</td>
<td>69.8</td>
<td>4.7</td>
<td>25.6</td>
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</tbody>
</table>

Final laboratory result (All)

Score Breakdown

Detected / Determined | Not Detected / Not Determined | Not Tested

Number of Values in Groups

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Page 18 of 21 Issue Date: 17 Jan 2023 Report authorised by the QCMD Executive (1) A UKAS accredited proficiency testing provider No.4385
Groups below n=5: Abbott (n=2), Abbott - Abbott Alinity m (n=2), Anatolia Geneworks (n=3), Anatolia Geneworks - Anatolia Geneworks Bosphore (n=3), Diagenode (n=2), Diagenode - Diagenode Real Time kit (n=2), PathoFinder (n=1), PathoFinder - PathoFinder Real Time PCR (n=1), QIAGEN (n=2), QIAGEN - QIAGEN Artus Real Time (n=1), QIAGEN - Qiagen NeuMoDx (n=1), Roche - Roche Cobas 4800 (n=3), Roche - Roche Cobas 6800/8800 (n=4), Sacace (n=1), Sacace - Sacace Real TM (n=1), TIB MOLBIOL (n=1), TIB MOLBIOL - TIB-MolBiol LightMix (n=1), Vela Diagnostics (n=2), Vela Diagnostics - Vela Dx Sentosa (n=2), bioMerieux - bioMerieux Primers/Probes (n=2), In-House - Conventional In-House PCR (n=1)

Groups Rolled Up: Certest - Certest Real Time PCR (n=8), ELITech Group - EliTech Elite Real Time kit (n=15), Seegene - Seegene Allplex (n=5)

<table>
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<tr>
<th>Sample Code</th>
<th>Sample Content</th>
<th>Matrix</th>
<th>Sample Relationships</th>
<th>Expected targets</th>
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<th>Not Tested</th>
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<tbody>
<tr>
<td>TRANS22S-09</td>
<td>B19 Virus (Type 1)</td>
<td>Plasma</td>
<td>B19 virus</td>
<td></td>
<td>58.1% 25</td>
<td>4.7% 2</td>
<td>37.2% 16</td>
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Final laboratory result (All)

Score Breakdown:

- **Detected / Determined**
- **Not Detected / Not Determined**
- **Not Tested**

Number of Values in Groups:

- All: 125
- Commercial: 95
- Certest: 16
- ELITech Group: 10
- GeneProof: 6
- GeneProof Real Time PCR kit: 8
- Roche: 13
- Seegene: 13
- bioMerieux: 13
- bioMerieux R-gene Quant Kit: 7
- In-House: 5
- Real-time In-House PCR: 20
- In-House: 18
- In-House: 30
- In-House: 29
Groups below n=5: Abbott (n=2), Abbott - Abbott Alinity m (n=2), Anatolia Geneworks (n=3), Anatolia Geneworks - Anatolia Geneworks Bosphore (n=3), Diagenode (n=2), Diagenode - Diagenode Real Time kit (n=2), PathoFinder (n=1), PathoFinder - PathoFinder Real Time PCR (n=1), QIAGEN (n=1), QIAGEN - Qiagen NeuMoDx (n=1), Roche - Roche Cobas 4800 (n=3), Roche - Roche Cobas 6800/8800 (n=4), Sacace (n=1), Sacace - Sacace Real TM (n=1), TIB MOLBIOL (n=1), TIB MOLBIOL - TIB-MolBiol LightMix (n=1), Vela Diagnostics (n=2), Vela Diagnostics - Vela Dx Sentosa (n=2), bioMerieux - bioMerieux Primers/Probes (n=2), In-House - Conventional In-House PCR (n=1)

Groups Rolled Up: Certest - Certest Real Time PCR (n=8), ELITech Group - Elitech Elite Real Time kit (n=13), Seegene - Seegene Allplex (n=5)

<table>
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<th>Sample Code</th>
<th>Sample Content</th>
<th>Matrix</th>
<th>Sample Relationships</th>
<th>Expected targets</th>
<th>Detected / Determined (%)</th>
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<tr>
<td>TRANS22S-10</td>
<td>Negative</td>
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<td></td>
<td>95.3</td>
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Final laboratory result (All)

<table>
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<tr>
<th>Score Breakdown</th>
<th>Detected / Determined (%)</th>
<th>Not Detected / Not Determined (%)</th>
<th>Not Tested (%)</th>
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</thead>
<tbody>
<tr>
<td>0%</td>
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<tr>
<td>100%</td>
<td>5</td>
<td>13</td>
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</table>

- Commercial
  - Altona Diagnostics
    - Altona Diagnostics AltoStar
    - Altona Diagnostics RealStar
  - Certest
  - ELITech Group
  - GeneProof
    - GeneProof Real Time PCR kit
  - Roche
  - Seegene
  - bioMerieux
    - bioMerieux R-gene Quant Kit
  - In-House
    - Real-time In-House PCR

Number of Values in Groups

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Groups below n=5: Abbott (n=2), Abbott - Abbott Alinity m (n=2), Anatolia Geneworks (n=3), Anatolia Geneworks - Anatolia Geneworks Bosphore (n=3), Diagenode (n=2), Diagenode - Diagenode Real Time kit (n=2), PathoFinder (n=1), PathoFinder - PathoFinder Real Time PCR (n=1), QiAGEN (n=2), QiAGEN - QiAGEN Artus Real Time (n=1), QiAGEN - Qiagen NeuMoDx (n=1), Roche - Roche Cobas 4800 (n=3), Roche - Roche Cobas 6800/8800 (n=4), Sacace (n=1), Sacace - Sacace Real TM (n=1), TIB MOLBIOL (n=1), TIB MOLBIOL - TIB-MolBiol LightMix (n=1), Vela Diagnostics (n=2), Vela Diagnostics - Vela Dx Sentosa (n=2), bioMerieux - bioMerieux Primers/Probes (n=2), In-House - Conventional In-House PCR (n=1)

Groups Rolled Up: Certest - Certest Real Time PCR (n=8), ELITech Group - Elitech Elite Real Time kit (n=13), Seegene - Seegene Allplex (n=5)

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