Intended Results / Panel Composition

---|---|---|---|---|---|---
NGDNA16C2-01 | N. gonorrhoeae (St 49226) | Urine | DS2_2 | Frequently Detected | CORE | 98.0 (255)
NGDNA16C2-02 | N. gonorrhoeae (St 49226) | Simulated Swab | DS1_1 | Frequently Detected | CORE | 96.9 (255)
NGDNA16C2-03 | N. gonorrhoeae (St 49226) | Simulated Swab | DS1_2 | Detected | EDUCATIONAL | 78.4 (255)
NGDNA16C2-04 | N. gonorrhoeae (St 49226) | Urine | DS2_1 | Frequently Detected | CORE | 99.6 (255)

[1] Sample Relationships: Indicates the relationships of the samples within this challenge. Dilution series are indicted by 'DS1' with each panel member in the dilution series represented by a number in order of titre, where DS1_1 represents the highest titre within that dilution series. Further dilution series are indicated by 'DS2', 'DS3' etc. If one duplicate pair is present this is indicated by 'D1'. Further duplicate pairs are indicated by 'D2', 'D3' etc.

[2] Detection Frequency: To aid qualitative analysis each panel member is assigned a frequency of detection. This is based on the peer group consensus of all qualitative results returned from participants within the EQA challenge / distribution.

[3] Sample Status: EQA samples are defined as "CORE" or "EDUCATIONAL". Core proficiency samples are reviewed by the QCMD Scientific Expert(s). This is on the basis of scientific information, clinical relevance, current literature and, where appropriate, professional clinical guidelines. Participating laboratories are expected to report core proficiency samples correctly within the EQA challenge / distribution.

[4] Percentage Correct (All): Percentage of datasets (%) reporting the correct qualitative result and the total number of datasets (n) reported for each panel member.

For further details please refer to the current participant manual.

Your Summary Results

EQA Assessment Group [1] | Commercial
---|---
Core Panel Detection (Qualitative) Score [2] | 3
<table>
<thead>
<tr>
<th>Sample Code</th>
<th>Qualitative Results</th>
<th>Your Quantitative Data (for information only) [2]</th>
</tr>
</thead>
<tbody>
<tr>
<td>NGDNA16C2-01</td>
<td>98.0 Positive 0</td>
<td>N/A</td>
</tr>
<tr>
<td>NGDNA16C2-02</td>
<td>96.9 Positive 0</td>
<td>N/A</td>
</tr>
<tr>
<td>NGDNA16C2-03</td>
<td>98.8 Positive 0</td>
<td>N/A</td>
</tr>
<tr>
<td>NGDNA16C2-04</td>
<td>78.4 Positive 0</td>
<td>N/A</td>
</tr>
<tr>
<td>NGDNA16C2-05</td>
<td>99.6 Positive 0</td>
<td>N/A</td>
</tr>
</tbody>
</table>

[1] EQA Assessment Group: To aid data analysis, participant results are grouped according to the molecular amplification/detection method specified within their molecular workflow for this challenge / distribution. For further details refer to the Additional Information: Individual Panel Member Analysis section of this report.

[2] Core Panel Detection (Qualitative) Score: An overall core panel detection score provided per challenge / distribution.

[3] Quantitative Data (for information only): This is the quantitative value, unitage and cycle threshold you provided when you submitted your results. For qualitative programmes this information is not used as part of your formal EQA assessment.

[4] Percentage Correct (All) Percentage of datasets (%) reporting the correct qualitative results for each panel member.

[5] Your Result: The qualitative result you reported for each sample within this EQA challenge / distribution.

[6] Detection Score: Your detection (qualitative) scores are based on the assigned detection frequency of each panel members, where 0 (zero) is “highly satisfactory” and 3 (three) is “highly unsatisfactory”. Scores are provided for individual panel members. For further details please refer to the current participant manual.

Core Panel Member Score Breakdown

![Core Panel Member Score Breakdown](https://example.com/core_panel_breakdown.png)
Core Panel Member Score Breakdown - Detection: This figure gives you a breakdown of the qualitative detection scores for all qualitative datasets returned within this EQA challenge / distribution independent of the EQA assessment group. Panel detection scores are generated from only those panel members that are defined as “CORE”.

For further details please refer to the current participant manual.

My Workflow Details

The details of the workflow used to submit your results for this challenge.

<table>
<thead>
<tr>
<th>Name</th>
<th>Neisseria gonorrhoeae (v3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>Targets</td>
<td>Neisseria gonorrhoeae</td>
</tr>
<tr>
<td>Assays</td>
<td>Amplification - Shanghai Hongshi Medical Technology - SLAN</td>
</tr>
<tr>
<td></td>
<td>Commercial</td>
</tr>
<tr>
<td></td>
<td>Kit Manufacturer: GeneProof</td>
</tr>
<tr>
<td></td>
<td>Kit Type: GeneProof Neisseria gonorrhoeae PCR Kit</td>
</tr>
<tr>
<td></td>
<td>Kit Version: ISEX</td>
</tr>
</tbody>
</table>

Further Programme Details

- Number of Participants: 220
- Number of Countries: 32
- Number of Respondents: 213
- Number of Datasets Submitted: 255
- Qualitative Results Returned: 255 (100.0%)

EQA Programme Aims

To determine the qualitative performance of participants’ testing for Neisseria gonorrhoeae using molecular technologies.

Feedback and Enquiries

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

Any queries about this report should be addressed to the QCMD Neutral Office (neutraloffice@qcmd.org).
Additional Information: Individual Panel Member Analysis (Qualitative)

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. The principal level of assessment is at the individual method level which is defined based on your reported “amplification/detection method” and other laboratories using the same or similar amplification/detection methods.

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 by participants on each of the panel members within this EQA challenge / distribution is provided below. You can compare your results to those within your EQA assessment group and those obtained within other EQA assessment groups or to the overall consensus for each sample within this EQA challenge / distribution.
**NGDNA16C2-01 - Qualitative Results Breakdown**

<table>
<thead>
<tr>
<th>Sample Code</th>
<th>Sample Content</th>
<th>Matrix</th>
<th>Sample Relationships</th>
<th>Detection Frequency</th>
<th>Sample Status</th>
<th>Percentage Correct All</th>
</tr>
</thead>
<tbody>
<tr>
<td>NGDNA16C2-01</td>
<td>N. gonorrhoeae (St 49226)</td>
<td>Urine</td>
<td>DS2_2</td>
<td>Frequently Detected</td>
<td>CORE</td>
<td>98.0</td>
</tr>
</tbody>
</table>

Number of Values in Groups

- **All**: 255 values
- **Commercial**:
  - Hologic: 226 values
  - BD Molecular Diagnostics: 35 values
  - BD MAX: 19 values
  - BD ProbeTec: 9 values
  - fast-track DIAGNOSTICS: 10 values
  - Abbott: 42 values
  - Cepheid: 21 values
  - Roche: 47 values
  - Seegene: 14 values
  - Seegene Real Time PCR: 13 values
  - Diagenode: 7 values
  - Siemens: 5 values
- **In-House**:
  - Real-time In-House PCR: 29 values
  - In-House: 28 values

**Incorrect**: 35 values

**Correct**: 220 values
|----------------|-----------|-----------|---------|------------|-------|---------------|------------|----------|-------|-----------|----------------|--------------|---------|

**Groups below n=5:** Seegene - Seegene Seeplex (n=1), Meridian Bioscience (n=1), Meridian Bioscience - Meridian Bioscience illumigene (n=1), BIORON (n=1), BIORON - BIORON RealLine (n=1), AB Analitica (n=4), AB Analitica - AB Analitica REALQUALITY RQ (n=4), EuroClone Diagnostica (n=2), EuroClone Diagnostica - EuroClone Duplica Real-time (n=2), Goffin Molecular Technologies (n=2), Goffin Molecular Technologies - Goffin Presto (n=2), Sacace (n=3), Sacace - Sacace Real TM (n=3), InterLabService (n=2), InterLabService - InterLabService AmpliSens (n=2), Hong Kong CH Gene (n=1), Hong Kong CH Gene - HK CH Gene Real Time PCR (n=1), PrimerDesign (n=1), PrimerDesign - PrimerDesign Genesig (n=1), TIB MOLBIOL (n=2), TIB MOLBIOL - TIB-MolBiol LightMix (n=2), Randox (n=1), Randox - Randox Multiplex Array (n=1), GeneProof (n=2), GeneProof - GeneProof Real Time PCR kit (n=2), QIAGEN (n=4), QIAGEN - QiaGen Artus Real Time (n=4), In-House - Conventional In-House PCR (n=1)

**Groups Rolled Up:** Hologic - Hologic Aptima (n=35), fast-track DIAGNOSTICS - FTD Real Time PCR (n=10), Abbott - Abbott RealTime (n=42), Cepheid - Cepheid Xpert kit (n=21), Roche - Roche Cobas 4800 (n=47), Diagenode - Diagenode Real Time kit (n=7), Siemens - Siemens Versant (n=5)
## NGDNA16C2-02 - Qualitative Results Breakdown

<table>
<thead>
<tr>
<th>Sample Code</th>
<th>Sample Content</th>
<th>Matrix</th>
<th>Sample Relationships</th>
<th>Detection Frequency</th>
<th>Sample Status</th>
<th>Percentage Correct All</th>
</tr>
</thead>
<tbody>
<tr>
<td>NGDNA16C2-02</td>
<td>N. gonorrhoeae (ST 49226)</td>
<td>Simulated Swab</td>
<td>DS1_1</td>
<td>Frequently Detected</td>
<td>CORE</td>
<td>96.9</td>
</tr>
</tbody>
</table>

![Bar chart showing percentage correct for all and by commercial and in-house values](chart.png)

- **All**: 255
- **Commercial**: 226
  - Hologic: 35
  - BD Molecular Diagnostics: 19
  - BD MAX: 9
  - BD ProbeTec: 10
  - fast-track DIAGNOSTICS: 10
  - Abbott: 42
  - Cepheid: 21
  - Roche: 47
  - Seegene: 13
  - Seegene Real Time PCR: 7
  - Diagenode: 5
  - Siemens: 29
  - In-House: 28
- **In-House Real-time In-House PCR**: 28

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

Issue Date: 23 Sep 2016

Report authorised by the QCMD Executive (1)

A UKAS accredited proficiency testing provider No.4385
**Individual Report**

**QCMD 2016 Neisseria gonorrhoeae DNA EQA Programme**


**Groups below n=5:** Seegene - SeeGene Seeplex (n=1), Meridian Bioscience (n=1), Meridian Bioscience - Meridian Bioscience illumigene (n=1), BIORON (n=1), BIORON - BIORON RealLine (n=1), AB Analitica (n=4), AB Analitica - AB Analitica REALQUALITY RQ (n=4), EuroClone Diagnostica (n=2), EuroClone Diagnostica - EuroClone Duplica Real-time (n=2), Goffin Molecular Technologies (n=2), Goffin Molecular Technologies - Goffin Presto (n=2), Sacace (n=3), Sacace - Sacace Real TM (n=3), InterLabService (n=2), InterLabService - InterLabService AmpliSens (n=2), Hong Kong CH Gene (n=1), Hong Kong CH Gene - HK CH Gene Real Time PCR (n=1), PrimerDesign (n=1), PrimerDesign - PrimerDesign Genesig (n=1), TIB MOLBIOL (n=2), TIB MOLBIOL - TIB-MolBiol LightMix (n=2), Randox (n=1), Randox - Randox Multiplex Array (n=1), GeneProof (n=2), GeneProof - GeneProof Real Time PCR kit (n=2), Qiagen (n=4), Qiagen - Qiagen Artus Real Time (n=4), In-House - Conventional In-House PCR (n=1)

**Groups Rolled Up:** Hologic - Hologic Aptima (n=35), fast-track DIAGNOSTICS - FTD Real Time PCR (n=10), Abbott - Abbott Realtime (n=42), Cepheid - Cepheid Xpert kit (n=21), Roche - Roche Cobas 4800 (n=47), Diagenode - Diagenode Real Time kit (n=7), Siemens - Siemens Versant (n=5)
NGDNA16C2-03 - Qualitative Results Breakdown

<table>
<thead>
<tr>
<th>Sample Code</th>
<th>Sample Content</th>
<th>Matrix</th>
<th>Sample Relationships</th>
<th>Detection Frequency</th>
<th>Sample Status</th>
<th>Percentage Correct All</th>
</tr>
</thead>
<tbody>
<tr>
<td>NGDNA16C2-03</td>
<td>N. gonorrhoeae (St 49226)</td>
<td>Simulated Swab</td>
<td>Frequently Detected</td>
<td>CORE</td>
<td>98.8</td>
<td>255</td>
</tr>
</tbody>
</table>

![Bar chart showing the percentage of incorrect and correct results for different sample codes and matrices.](chart.png)
<table>
<thead>
<tr>
<th>Groups below n=5:</th>
<th>Groups Rolled Up:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seegene - Seegene Seeplex (n=1), Meridian Bioscience (n=1), Meridian Bioscience illumigene (n=1), BIORON (n=1), BIORON - BIORON RealLine (n=1), AB Analitica (n=4), AB Analitica - AB Analitica REALQUALITY RQ (n=4), EuroClone Diagnostica (n=2), EuroClone Diagnostica - EuroClone Duplica Real-time (n=2), Goffin Molecular Technologies (n=2), Goffin Molecular Technologies - Goffin Presto (n=2), Sacace (n=3), Sacace - Sacace Real TM (n=3), InterLabService (n=2), InterLabService - InterLabService AmpliSens (n=2), Hong Kong CH Gene (n=1), Hong Kong CH Gene - HK CH Gene Real Time PCR (n=1), PrimerDesign (n=1), PrimerDesign - PrimerDesign Genesig (n=1), TIB MOLBIOL (n=2), TIB MOLBIOL - TIB-MolBiol LightMix (n=2), Randox (n=1), Randox - Randox Multiplex Array (n=1), GeneProof (n=2), GeneProof - GeneProof Real Time PCR kit (n=2), QIAGEN (n=4), QIAGEN - QiaGen Artus Real Time (n=4), In-House - Conventional In-House PCR (n=1)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Catalogue Code:</th>
<th>QAB034126</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ref Code:</td>
<td>NgDNA16</td>
</tr>
<tr>
<td>Challenge:</td>
<td>2 of 2</td>
</tr>
<tr>
<td>Analysis Type:</td>
<td>Qualitative</td>
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<tr>
<td>Dataset:</td>
<td>98360</td>
</tr>
<tr>
<td>Report UID:</td>
<td>2677/98360/615</td>
</tr>
<tr>
<td>Participant:</td>
<td>CZ023-01</td>
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</tbody>
</table>
NGDNA16C2-04 - Qualitative Results Breakdown

<table>
<thead>
<tr>
<th>Sample Code</th>
<th>Sample Content</th>
<th>Matrix</th>
<th>Sample Relationships</th>
<th>Detection Frequency</th>
<th>Sample Status</th>
<th>Percentage Correct All</th>
</tr>
</thead>
<tbody>
<tr>
<td>NGDNA16C2-04</td>
<td>N. gonorrhoeae</td>
<td>Simulated Swab</td>
<td>DS1_2</td>
<td>Detected</td>
<td>EDUCATIONAL</td>
<td>78.4%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Incorrect</th>
<th>Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>255</td>
<td>226</td>
</tr>
</tbody>
</table>

- **All**
  - **Commercial**
    - Hologic
    - BD Molecular Diagnostics
    - BD MAX
    - BD ProbeTec
    - fast-track DIAGNOSTICS
    - Abbott
    - Cepheid
    - Roche
    - Seegene
    - Seegene Real Time PCR
    - Diagenode
    - Siemens
  - **In-House**
    - Real-time In-House PCR

- Number of Values in Groups:
  - 255
  - 226
  - 35
  - 19
  - 9
  - 10
  - 10
  - 42
  - 21
  - 47
  - 14
  - 13
  - 7
  - 5
  - 29
  - 28
Groups below n=5:
- Seegene - Seegene Seeplex (n=1), Meridian Bioscience (n=1), Meridian Bioscience - Meridian Bioscience illumigene (n=1), BIORON (n=1), BIORON - BIORON RealLine (n=1), AB Analitica (n=4), AB Analitica - AB Analitica REALQUALITY RQ (n=4), EuroClone Diagnostica (n=2), EuroClone Diagnostica - EuroClone Duplita Real-time (n=2), Goffin Molecular Technologies (n=2), Goffin Molecular Technologies - Goffin Presto (n=2), Sacace (n=3), Sacace - Sacace Real TM (n=3), InterLabService (n=2), InterLabService - InterLabService AmpliSens (n=2), Hong Kong CH Gene (n=1), Hong Kong CH Gene - HK CH Gene Real Time PCR (n=1), PrimerDesign (n=1), PrimerDesign - PrimerDesign Genesig (n=1), TIB MOLBIOL (n=2), TIB MOLBIOL - TIB-MolBiol LightMix (n=2), Randox (n=1), Randox - Randox Multiplex Array (n=1), GeneProof (n=2), GeneProof - GeneProof Real Time PCR kit (n=2), QIAGEN (n=4), QIAGEN - QIagen Artus Real Time (n=4), In-House - Conventional In-House PCR (n=1)

Groups Rolled Up:
- Hologic - Hologic Aptima (n=35), fast-track DIAGNOSTICS - FTD Real Time PCR (n=10), Abbott - Abbott Realtime (n=42), Cepheid - Cepheid Xpert kit (n=21), Roche - Roche Cobas 4800 (n=47), Diagenode - Diagenode Real Time kit (n=7), Siemens - Siemens Versant (n=5)
## NGDNA16C2-05 - Qualitative Results Breakdown

<table>
<thead>
<tr>
<th>Sample Code</th>
<th>Sample Content</th>
<th>Matrix</th>
<th>Sample Relationships</th>
<th>Detection Frequency</th>
<th>Sample Status</th>
<th>Percentage Correct All</th>
</tr>
</thead>
<tbody>
<tr>
<td>NGDNA16C2-05</td>
<td>N. gonorrhoeae (St 49226)</td>
<td>Urine</td>
<td>DS2_1</td>
<td>Frequently Detected</td>
<td>CORE</td>
<td>99.6%</td>
</tr>
</tbody>
</table>

**All**
- **Commercial**
  - Hologic
  - BD Molecular Diagnostics
  - BD MAX
  - BD ProbeTec
  - fast-track DIAGNOSTICS
  - Abbott
  - Cepheid
  - Roche
  - Seegene
    - Seegene Real Time PCR
    - Diagenode
    - Siemens
- **In-House**
  - Real-time In-House PCR

**Number of Values in Groups**
- Incorrect: 0%
- Correct: 100%

**Number of Values in Groups**
- Incorrect: 0%
- Correct: 100%
Groups below n=5:
- Seegene - Seegene Seeplex (n=1), Meridian Bioscience (n=1), Meridian Bioscience - Meridian Bioscience illumigene (n=1), BIORON (n=1), BIORON - BIORON RealLine (n=1), AB Analitica (n=4), AB Analitica - AB Analitica REALQUALITY RQ (n=4), EuroClone Diagnostica (n=2), EuroClone Diagnostica - EuroClone Duplica Real-time (n=2), Goffin Molecular Technologies (n=2), Goffin Molecular Technologies - Goffin Presto (n=2), SACACE - SACACE Real TM (n=3), InterLabService (n=2), InterLabService - InterLabService AmpliSens (n=2), Hong Kong CH Gene (n=1), Hong Kong CH Gene - HK CH Gene Real Time PCR (n=1), PrimerDesign (n=1), PrimerDesign - PrimerDesign Genesig (n=1), TIB MOLBIOL (n=2), TIB MOLBIOL - TIB-MolBiol LightMix (n=2), Randox (n=1), Randox - Randox Multiplex Array (n=1), GeneProof (n=2), GeneProof - GeneProof Real Time PCR kit (n=2), QIAGEN (n=4), QIAGEN - Qiagen Artus Real Time (n=4), In-House - Conventional In-House PCR (n=1)

Groups Rolled Up:
- Hologic - Hologic Aptima (n=35), fast-track DIAGNOSTICS - FTD Real Time PCR (n=10), Abbott - Abbott Realtime (n=42), Cepheid - Cepheid Xpert kit (n=21), Roche - Roche Cobas 4800 (n=47), Diagenode - Diagenode Real Time kit (n=7), Siemens - Siemens Versant (n=5)

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