2020 EQA

Collaboration between CEQAS and UK NEQAS Molecular Genetics
Members of UK NEQAS consortium

Preimplantation Genetic Testing

- Various sample types
- Technical, analysis and Interpretation required
- Various technique can be used
- 4-6 weeks to submit results
- All EQA samples validated
- Detailed instructions provided
- Results assessed by expert panel
- Marking criteria based on professional guidelines
- ISO17043 accredited

<table>
<thead>
<tr>
<th>EQA</th>
<th>Type of EQA</th>
<th>Sample Type</th>
<th>Testing</th>
<th>Techniques</th>
<th>ISO17043 Accredited</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trophectoderm and/or blastomere testing for monogenic disorders (Stage 1 &amp; 2)</td>
<td>Technical, analytical and interpretation</td>
<td>DNA and cells</td>
<td>Monogenic disorders</td>
<td>Any molecular technique</td>
<td>✓</td>
</tr>
<tr>
<td>Trophectoderm and/or blastomere testing for aneuploidies</td>
<td>Technical, analytical and interpretation</td>
<td>DNA</td>
<td>Aneuploidies</td>
<td>Array/NGS</td>
<td>x</td>
</tr>
<tr>
<td>Trophectoderm and/or blastomere testing for chromosomal rearrangements</td>
<td>Technical, analytical and interpretation</td>
<td>DNA</td>
<td>Structural rearrangements</td>
<td>Array/NGS</td>
<td>x</td>
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<tr>
<td>Blastomere testing by FISH (Stage 1 &amp; 2)</td>
<td>Technical, analytical and interpretation</td>
<td>Online images</td>
<td>Aneuploidy and structural rearrangements</td>
<td>FISH</td>
<td>✓</td>
</tr>
<tr>
<td>Polar bodies testing by NGS and/or arrays</td>
<td>Technical, analytical and interpretation</td>
<td>DNA</td>
<td>Aneuploidy and structural rearrangements</td>
<td>Array/NGS</td>
<td>x</td>
</tr>
</tbody>
</table>

For further information on these EQAs contact us at info@genqa.org
Please see overleaf for more EQA information
Email: info@genqa.org
2020 EQA

GenQA EQA Specialties

- Molecular Genetic Disorders
- Variant Classification and Interpretation
- Molecular Pathology
- Sample Handling: DNA extraction & quantification
- Newborn Screening
- Preimplantation Genetic Testing (PGT)
- Haematological Neoplasms
- Technical: Next Generation Sequencing
- Constitutional Postnatal Testing
- Prenatal (including Non-Invasive) Testing
- Clinical Genetics
- Individual Competency Assessment (G-TACT / Tissue-i)

For further information, please contact us at info@genqa.org

The EQA Cycle

1. Receive validated EQA material plus clinical questions
2. Analyse material using routine procedures
3. Upload results
4. Expert evaluation of submissions
5. Compare laboratory performance (benchmark)
6. Education/Internal review/Quality improvement

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