# SUPPLEMENTARY TABLE 2.

<table>
<thead>
<tr>
<th>Gene with mutation</th>
<th>Contig in reference</th>
<th>Locus in reference</th>
<th>Mutational effect</th>
<th>Mutation class</th>
<th>Evolved isolate (condition)</th>
<th>PGD functional classification*</th>
<th>Pathways*</th>
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<tbody>
<tr>
<td><strong>Signal transduction</strong></td>
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<td>bifA cyclic-Di-GMP phosphodiesterase</td>
<td>PAO1_108</td>
<td>PAO1_04439</td>
<td>missense_variant c.1796A&gt;T p.Lys599Met</td>
<td>Non-synonymous; missense</td>
<td>C6a, C9a, C3b, C5b</td>
<td>Cell wall/LPS/capsule; Motility and attachment</td>
<td>Biofilm formation</td>
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<tr>
<td>yfiR protein</td>
<td>PAO1_93</td>
<td>PAO1_03876</td>
<td>missense_variant c.404T&gt;A p.Val135Glu</td>
<td>Non-synonymous; missense</td>
<td>C12a</td>
<td>Cell wall/LPS/capsule</td>
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<td>missense_variant c.281T&gt;A p.Val94Glu</td>
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<td>C11a</td>
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<td>wspA probable chemotaxis inducer</td>
<td>PAO1_30</td>
<td>PAO1_01217</td>
<td>missense_variant c.992C&gt;T p.Ser331Leu</td>
<td>Non-synonymous; missense</td>
<td>C1a, C2a, C2b</td>
<td>Motility and attachment; Adaptation, protection; chemotaxis</td>
<td>Two-component system; Chemotactic transducer (MCP); Chemosensory; Biofilm formation</td>
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<td>wspF probable methyl esterase</td>
<td>PAO1_30</td>
<td>PAO1_01222</td>
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<td>C3a, C4a, C6b, C4b, O3a</td>
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<td>frameshift_variant c.445delG p.Ala149fs</td>
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<td>C1b, C7b</td>
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<td>missense_variant c.61G&gt;C p.Ala21Pro</td>
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<td>O5a, O12a, O7a, O2b</td>
<td>Chemotaxis; transcriptional regulators; motility and attachment</td>
<td>Two-component system; Chemotaxis; Chemosensory; Biofilm formation</td>
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<td>missense_variant c.842C&gt;A p.Ala281Asp</td>
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<td>stop_gained c.418C&gt;T p.Gln140*</td>
<td>Non-synonymous; stop</td>
<td>O3b, O1b</td>
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<td>Motility regulator morA</td>
<td>PAO1_108</td>
<td>PAO1_04681</td>
<td>missense_variant c.3464T&gt;A p.Leu1155Gln</td>
<td>Non-synonymous; missense</td>
<td>O11a, O10a, O4b, O5b</td>
<td>Membrane proteins</td>
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<td>Glucose transport sensor gtrS</td>
<td>PAO1_36</td>
<td>PAO1_01743</td>
<td>missense_variant c.1014C&gt;G p.His338Gln</td>
<td>Non-synonymous; missense</td>
<td>O5b</td>
<td>Two-component regulatory systems</td>
<td>Two-component system</td>
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<td>Secretion</td>
<td>tssL membrane protein</td>
<td>PAO1_11</td>
<td>PAO1_00042</td>
<td>synonymous_variant c.1137G&gt;A p.Pro379Pro</td>
<td>Synonymous</td>
<td>C3b</td>
<td>Hypothetical, unclassified, unknown; Protein</td>
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### Translation

<table>
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<tr>
<th>Elongation factor GfusA1</th>
<th>PAO1_21</th>
<th>PAO1_00659</th>
<th>missense variant c.953C&gt;T p.Ser318Leu</th>
<th>Non-synonymous; missense</th>
<th>C3a</th>
<th>Translation, post-translational modification, degradation</th>
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<tbody>
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<td>PAO1_21</td>
<td>PAO1_00659</td>
<td>missense variant c.1546G&gt;A p.Gly516Ser</td>
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<td>C8a, C10b</td>
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### Transcription

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<tr>
<th>Transcriptional regulator mvyR</th>
<th>PAO1_93</th>
<th>PAO1_04000</th>
<th>conservative_inframe_deletion c.109_120delTCGGCGGTACGC p.Ser37_Ser40del</th>
<th>Deletion</th>
<th>O11a, O10s, O4b, O5b</th>
<th>Transcriptional regulators; Biosynthesis of cofactors, prosthetic groups and carriers</th>
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<tbody>
<tr>
<td></td>
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<td>frameshift_variant c.782_785dupGGGGG p.Ile263fs</td>
<td>Duplication</td>
<td>C3b, C5b</td>
<td>Quorum sensing; biofilm formation</td>
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<td>missense_variant c.101C&gt;T p.Ala34Val</td>
<td>Non-synonymous; missense</td>
<td>O9a</td>
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<td>missense_variant c.112G&gt;A p.Ala38Thr</td>
<td>Non-synonymous; missense</td>
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<td>missense_variant c.440T&gt;C p.Ile147Thr</td>
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<td>C4a, C4b</td>
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<td>missense_variant c.527A&gt;C p.His176Pro</td>
<td>Non-synonymous; missense</td>
<td>C6b</td>
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</tbody>
</table>

| Transcriptional regulator mexT | PAO1_41 | PAO1_02477 | conservative_inframe_insertion c.389_390insCCT p.Val130_Leu131insLeu | Insertion | C12a, C6a, C2a, C13a, C7a, C5a, C5b, C2b, C9b, C6b, C4b, C1b, C7b, O5a, O7a, O8a, O1a, O2a, O11a, O10a, O4a, O2b, O3b, O1b, O4b | Transcriptional regulators |

| Glycerol-3-phosphate regulon | PAO1_30 | PAO1_01342 | missense_variant c.169G>A p.Ala57Thr | Non-synonymous; missense | C8b | Transcriptional regulators |

| Transcriptional regulator lasR | PAO1_93 | PAO1_03564 | missense_variant c.628T>C p.Phe210Leu | Non-synonymous; missense | C6b | Transcriptional regulators; Adaptation; protection |

| Transcriptional regulator vfr | PAO1_20 | PAO1_00624 | frameshift_variant c.594dupG p.Leu200fs | Duplication | O5b | Transcriptional regulators; Two-component system; Quorum sensing; Biofilm formation |

### Motility

<table>
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<tr>
<th>fimL protein</th>
<th>PAO1_88</th>
<th>PAO1_03161</th>
<th>stop_gained c.1528C&gt;T p.Gln510*</th>
<th>Non-synonymous; stop</th>
<th>O4b</th>
<th>Motility and attachment</th>
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<tbody>
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<td>conservative_inframe_insertion c.1340_1341insCCTGGC p.Gly447_Leu448insLeuAla</td>
<td>Insertion</td>
<td>C5b</td>
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<td>Type 4 fimbrial biogenesis protein pilY1</td>
<td>PAO1_108</td>
<td>PAO1_04632</td>
<td>stop_gained c.2993C&gt;A p.Ser998*</td>
<td>Non-synonymous; stop</td>
<td>C6b</td>
<td>Motility and attachment</td>
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<tr>
<td>Type 4 fimbrial biogenesis protein pilM</td>
<td>PAO1_122</td>
<td>PAO1_05151</td>
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<td>Deletion</td>
<td>C4b</td>
<td>Motility and attachment</td>
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<td>Twitching motility protein pilT</td>
<td>PAO1_19</td>
<td>PAO1_00365</td>
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<td>Cell wall/LPS/capsule; Motility and attachment</td>
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<tr>
<td>Hypothetical protein</td>
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<td>PAO1_02747</td>
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<td>PAO1_88</td>
<td>PAO1_03081</td>
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<td>Hypothetical protein from bacteriophage Pf1</td>
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<td>PAO1_04289</td>
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<td>C2b, C1b</td>
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<td>C2b, C1b</td>
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</table>

**Footnotes:** PDG, Pseudomonas Genome database; * Functional classifications and pathways according to the Pseudomonas Genome Database