Supplementary Information for ‘Vaccine escape, increased breakthrough and reinfections in infliximab-treated patients with IBD during the Omicron wave of the SARS-CoV-2 pandemic.’

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## Supplementary Table 1: Contributors to the CLARITY IBD study

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<td>Jeannie</td>
<td>Bishop</td>
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## Supplementary Table 2: Univariable factors associated with time to breakthrough infection

<table>
<thead>
<tr>
<th>Variable</th>
<th>Level</th>
<th>Hazard ratio (95% CI)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infliximab (vs vedolizumab)</td>
<td>TRUE</td>
<td>1.83 (1.44 - 2.33)</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Thiopurine</td>
<td>TRUE</td>
<td>1.52 (1.24 - 1.85)</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Methotrexate</td>
<td>TRUE</td>
<td>0.77 (0.50 - 1.20)</td>
<td>0.25</td>
</tr>
<tr>
<td>Vaccine</td>
<td>BNT162b2</td>
<td>Reference</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ChAdOx1 nCoV-19</td>
<td>0.89 (0.73 - 1.09)</td>
<td>0.26</td>
</tr>
<tr>
<td>Steroids</td>
<td>TRUE</td>
<td>0.52 (0.30 - 0.90)</td>
<td>0.021</td>
</tr>
<tr>
<td>Age &gt;= 60</td>
<td>TRUE</td>
<td>0.26 (0.18 - 0.38)</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Crohn's disease (vs UC or IBDU)</td>
<td>TRUE</td>
<td>0.98 (0.81 - 1.22)</td>
<td>0.96</td>
</tr>
<tr>
<td>Non-white ethnicity</td>
<td>TRUE</td>
<td>1.19 (0.83 - 1.69)</td>
<td>0.34</td>
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<tr>
<td>Current smoker</td>
<td>TRUE</td>
<td>0.90 (0.62 - 1.29)</td>
<td>0.55</td>
</tr>
<tr>
<td>Anti-spike (S) receptor binding domain antibody concentrations (overall)</td>
<td></td>
<td>0.98 (0.82 - 1.18)</td>
<td>0.85</td>
</tr>
</tbody>
</table>

Abbreviations: UC = ulcerative colitis, IBDU = IBD unclassified
Supplementary Figure 1: Antibody concentrations following a third vaccine dose in patients with a prior history of SARS-CoV-2 infection.
Supplementary Figure 2: Multivariable factors associated with hospitalisation with COVID-19

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Odds ratio</th>
<th>OR (95% CI)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (per decade)</td>
<td>2125</td>
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<td>1.69 (1.28, 2.25)</td>
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<td>Cancer</td>
<td>5</td>
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<td>113.63 (14.12, 1125.64)</td>
<td>&lt;0.0001</td>
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<tr>
<td>Diabetes</td>
<td>71</td>
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<td>1.38 (0.31, 4.71)</td>
<td>0.64</td>
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<tr>
<td>Heart disease</td>
<td>43</td>
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<td>0.89 (0.13, 3.77)</td>
<td>0.88</td>
</tr>
<tr>
<td>BMI</td>
<td>2125</td>
<td></td>
<td>1.02 (0.99, 1.04)</td>
<td>0.028</td>
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<tr>
<td>Biologic: infliximab</td>
<td>1576</td>
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<td>0.48 (0.20, 1.15)</td>
<td>0.097</td>
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<tr>
<td>At least two vaccine doses</td>
<td>1506</td>
<td></td>
<td>0.24 (0.10, 0.56)</td>
<td>0.0011</td>
</tr>
</tbody>
</table>

Abbreviations: BMI = body mass index, CI = confidence interval