• Diarrhea is the most frequently reported on-target side effect associated with neratinib and is
• Adverse events were graded according to NCI CTCAE v4.0.
• Primary endpoint: incidence of grade ≥3 diarrhea.

Patients ≥18 years of age with stage I–IIIc HER2+ breast cancer with trastuzumab-based adjuvant–

Objective

This poster focuses on the final data for the 4-week escalation cohort (DE2) alongside the previously presented data for the 2-week escalation cohort (DE1).

Study design

Neratinib (NERLYNX®), an irreversible pan-HER tyrosine kinase inhibitor, is approved:1

Figure 1. CONTROL trial DE cohorts: study schema

Table 1. Patient disposition: CONTROL trial DE cohorts

![Figure 1](image1.png)

<table>
<thead>
<tr>
<th>Treatment groups</th>
<th>Grade 1</th>
<th>Grade 2</th>
<th>Grade 3</th>
<th>Grade 4</th>
<th>Dose-related discontinuations due to diarrhea</th>
</tr>
</thead>
<tbody>
<tr>
<td>DE cohort 1 (n=60)</td>
<td>24 (40.0)</td>
<td>23 (38.3)</td>
<td>22 (36.7)</td>
<td>5 (8.3)</td>
<td>1 (1.7)</td>
</tr>
<tr>
<td>DE cohort 2 (n=62)</td>
<td>27 (43.8)</td>
<td>23 (37.1)</td>
<td>15 (24.2)</td>
<td>3 (4.8)</td>
<td>2 (3.2)</td>
</tr>
</tbody>
</table>

Conclusions

Adoption of neratinib DE1 + loperamide PRN was associated with the lowest rate of grade 3 diarrhea during the trial compared with all other anti-diarrheal strategies investigated in CONTROL. The DE cohort also had the lowest rate of diarrhea-related discontinuations (3.3%) and dose holds (11.7%) compared with all previously managed prophylactic strategies investigated in CONTROL, the subsequent DE2 strategy, and also when compared with the neratinib arm in ExteNET.5

These final findings from the CONTROL study show improved tolerability of neratinib with all diarhoea prophylaxis strategies and suggest that neratinib DE1 + loperamide PRN allows patients to stay on treatment longer and receive the full benefit of neratinib therapy.

The US package label for neratinib includes loperamide prophylaxis and has recently been amended to include the DE1 strategy from CONTROL.2

References

1. U.S. Food and Drug Administration. NERLYNX® (neratinib) Prescribing Information.
2. U.S. Food and Drug Administration. NERLYNX® (neratinib) Prescribing Information.

Acknowledgements and Disclosures

The authors would like to thank investigators, patients, and other participating for their support in the CONTROL study. We also acknowledge the support of Puma Biotechnology Inc. for editorial programming.

CONTROL was sponsored by Puma Biotechnology Inc.

Puma Biotechnology Inc. funded medical writing and editorial assistance for this poster, which was provided under a contract with Medical Communications AG.

The presenting author, Arlene Chan, has no financial conflicts of interest to disclose.