

## **Chemotherapy-Induced Diarrhea Evaluation Table 2023: Crofelemer**

## **General Evidence**

| Citation  | Design/Method<br>Sample/Setting   | Variables and<br>Intervention  | Outcome Measures  | Results/Analysis  | Limitations   | Quality and Nursing<br>Implications  |
|---|---|--|---|---|---|--|
| Pohlmann, P.R.,<br>Graham, D., Wu,<br>T., Ottaviano, Y.,<br>Mohebtash, M.,<br>Kurian, S.,<br>Swain, S. M.<br>(2022). HALT-D: a<br>randomized open-<br>label phase II study<br>of crofelemer for<br>the prevention of<br>chemotherapy-<br>induced diarrhea in<br>patients with<br>HER2-positive<br>breast cancer<br>receiving<br>trastuzumab, and a<br>taxane. Breast<br>Cancer Research<br>and Treatment,<br>196(3), 571–581.<br>https://doi.org/10.1<br>007/s10549-022-<br>06743-9 | Design: Randomized<br>double-blind controlled trial<br>Method: Crofelemer 125<br>mg delayed-release tablets<br>orally twice daily during<br>cycles 1 and 2 of<br>chemotherapy<br>Sample: 51 patients with<br>HER-2 positive breast<br>cancer receiving taxane<br>therapy with or without<br>carboplatin and<br>trastuzumab and<br>pertuzumab or taxane<br>therapy with trastuzumab<br>and pertuzumab (TCHP/<br>THP chemotherapy<br>regimen<br>(docetaxel or paclitaxel);<br>26 in the intervention group<br>and 25 in the control<br>group.<br>Setting: Not specified | Independent<br>Variable(s):<br>Crofelemer<br>Dependent<br>Variable(s): Diarrhea,<br>rescue medication use<br>for diarrhea, QoL<br>Intervention:<br>Patients who received<br>chemotherapy/HER2-<br>targeted therapy were<br>randomized to<br>crofelemer 125 mg<br>orally twice daily during<br>the first 2 cycles. For<br>the 3rd cycle and<br>subsequent cycles,<br>standard treatment was<br>administered for both<br>groups. | Grade of diarrhea<br>using Common<br>Terminology Criteria<br>for Adverse Events,<br>version 4.0<br>Rescue medication<br>diary used to measure<br>use of standard-of-<br>care breakthrough<br>antidiarrheals<br>Bowel movement<br>diary: used to<br>measure consistency<br>of stool using the<br>Bristol Stool Form<br>Scale,<br>Time to onset and<br>length of diarrhea<br>episodes<br>Functional<br>Assessment of<br>Chronic Illness<br>Therapy for Patients<br>with Diarrhea (FACIT-<br>D) was used to<br>measure patient<br>quality-of-life. | During cycle 1, 68% of patients<br>in the crofelemer arm and 69.6<br>% of patients in the control arm<br>had diarrhea. During Cycle 2,<br>65.2% of patients in the<br>crofelemer arm and 72.2% of<br>patients in the control arm had<br>diarrhea. Results were not<br>statistically different, $p = 0.074$ .<br>During cycle 2, no patients<br>receiving crofelemer reported<br>grade 3-4 diarrhea compared to<br>17.3% in control arm,<br>( $p=0.0196$ ).<br>Patients receiving crofelemer<br>also experienced less watery<br>diarrhea in cycle 1 (odds ratio<br>[OR] = 0.77, 95% CI, [0.6129,<br>0.9774]; $p = 0.03$ ) and were 1.8<br>times as likely to have their<br>diarrhea resolve in cycle 2 (OR<br>= 1.804, 95% CI [1.02, 3.189]; $p$<br>= 0.0425]).<br>Adverse events were similar in<br>both the crofelemer and control<br>groups and included fatigue,<br>nausea, anorexia, mucositis,<br>and constipation.<br>One serious AE in the<br>crofelemer arm (grade 4<br>neutropenia) was attributed to<br>chemotherapy. | Small sample size<br>Possible variability in<br>patient-reported<br>outcomes<br>Narrow population may<br>limit generalizability of<br>findings. | Crofelemer may be a useful<br>prophylactic intervention to<br>reduce grade 2 or greater<br>chemotherapy-induced<br>diarrhea in patients with HER-<br>2 positive breast cancer<br>receiving TCHP or THP<br>(docetaxel or paclitaxel). This<br>study was limited by a small<br>sample size, and only some of<br>the secondary endpoints were<br>met. Further larger studies are<br>needed to validate these<br>findings. |