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| Supplementary Digital Content 2. Changes in constipation symptoms, PAC-QOL scores, CSS scores, and NPI-NH scores at 8 weeks after baseline | | | | | | | | | |
|  | Intervention group | | |  | Control group | | |  | Unpaired  t-test |
|  | Average value | 95% Confidence interval | |  | Average value | 95% Confidence interval | |  | P-value |
|  | Lower limit | Upper limit |  | Lower limit | Upper limit |  |
| Abdominal discomfort scorea | 0.18 | -0.06 | 0.42 |  | -0.07 | -0.30 | 0.16 |  | 0.133 |
| Straining scorea | 0.52 | 0.23 | 0.80 |  | 0.03 | -0.23 | 0.29 |  | 0.016 |
| Feeling of incomplete evacuation scorea | 0.01 | -0.21 | 0.23 |  | -0.18 | -0.39 | 0.03 |  | 0.221 |
| Overall improvement scoreb | 0.30 | 0.12 | 0.47 |  | -0.15 | -0.32 | 0.02 |  | 0.001 |
| PAC-QOLc |  |  |  |  |  |  |  |  |  |
| Worries/concern | -5.61 | -9.32 | -1.91 |  | 1.40 | -2.05 | 4.85 |  | 0.008 |
| Physical | -2.92 | -4.17 | -1.68 |  | -0.06 | -1.23 | 1.09 |  | 0.002 |
| Phychosocial | -4.84 | -8.02 | -1.67 |  | 1.07 | -1.89 | 4.02 |  | 0.009 |
| Satisfaction | -5.00 | -6.94 | -3.06 |  | 0.46 | -1.34 | 2.27 |  | ＜0.001 |
| Total score | -18.38 | -24.87 | -11.90 |  | 2.86 | -3.17 | 8.91 |  | ＜0.001 |
| CSS scored | -7.78 | -9.67 | -5.91 |  | -0.56 | -2.32 | 1.20 |  | ＜0.001 |
| NPI-NH total scoree | -30.35 | -40.11 | -20.60 |  | 1.56 | -7.56 | 10.69 |  | ＜0.001 |
| NPI-NH caregiver distress scoree | -12.64 | -17.76 | -7.53 |  | 1.25 | -3.54 | 6.04 |  | ＜0.001 |

PAC-QOL, Patient Assessment of Constipation Quality of Life Questionnaire; CSS, Constipation Scoring System; NPI-NH, Neuropsychiatric Inventory Nursing Home Version.

aAssessed using a scale of 1-5: 1 = extremely strong and 5 = none.

bAssessed using a scale of 1-5: 1 = worse and 5 = significantly improved.

cAssessed using a scale of 0-4: 0 = none and 4 = extremely; the higher the score, the lower the quality of life (QOL).

dAssessed using a scale of 0-4; the higher the score, the more severe the constipation.

eAssessed using 10 psychiatric items; the higher the score, the worse the behavioral and psychiatric symptoms of dementia (BPSD), and caregiver distress.