**Supplementary Table 1. SIP scores of patients in each group at baseline and 8 weeks**

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| --- | --- | --- | --- | --- | --- | --- |
| 　 | **Control group** | **Low-dose rifaximin group** | **High-dose rifaximin group** | **\**p*-value** | **\*\**p*-value** | **\*\*\**p-*value** |
| 　 | **Baseline (*n*=14)** | **8 weeks (*n*=14)** | **Baseline (*n*=12)** | **8 weeks (*n*=12)** | **Baseline (*n*=14)** | **8 weeks (*n*=14)** |
| **Physical** |  |  |  |  |  |  |  |  |  |
|  Body care and movement | 0.00 (0.00–11.23) | 2.90 (0.00–14.83) | 0.00 (0.00–8.90) | 0.00 (0.00–7.49) | 2.44 (0–5.74) | 0.00 (0.00–5.10) | 0.511 | 0.717 | 0.334 |
|  Ambulation | 4.15 (0.00–17.63) | 0.00 (0.00–18.76) | 5.40 (0.00–28.80) | 0.00 (0.00–13.36) | 2.07 (0.00–6.65) | 0.00 (0.00–4.78) | 0.801 | 0.273 | 0.347 |
|  Mobility | 0.00 (0.00–14.32) | 0.00 (0.00–23.50) | 14.81 (0.00–38.56) | 0.00 (0.00–23.37) | 11.96 (0.00–27.23) | 0.00 (0.00–14.85) | 0.977 | 0.351 | 0.161 |
|  Total subscore | 3.37 (0.00–13.99) | 1.85 (0.00–19.47) | 6.91 (0.79–14.25) | 3.45 (0.00–10.56) | 4.33 (0.74–8.56) | 0.00 (0.00–4.93) | 0.712 | 0.379 | 0.075 |
| **Psychosocial** |  |  |  |  |  |  |  |  |  |
|  Emotional | 0.00 (0.00–18.23) | 0.00 (0.00–18.09) | 4.40 (0.00–16.38) | 6.52 (0.00–12.55) | 3.26 (0.00–12.34) | 0.00 (0.00–9.04) | 0.797 | 0.869 | 0.414 |
|  Alertness behavior | 8.62 (0.00–23.75) | 11.58 (0.00–36.49) | 0.00 (0.00–24.42) | 7.59 (0.00–17.89) | 10.16 (0.00–31.63) | 0.00 (0.00–14.77) | 0.646 | 0.696 | 0.144 |
|  Social interaction | 0.00 (0.00–10.52) | 0.00 (0.00–16.21) | 9.17 (0.00–20.83) | 5.51 (0.00–9.28) | 9.76 (2.64–32.98) | 0.00 (0.00–11.64) | 0.823 | 0.154 | 0.075 |
|  Communication | 0.00 (0.00–11.45) | 11.45 (0.00–19.01) | 0.00 (0.00–18.38) | 0.00 (0.00–20.89) | 11.45 (0.00–37.83) | 0.00 (0.00–23.31) | 0.385 | 0.933 | 0.294 |
|  Total subscore | 4.95 (0.00–14.15) | 7.22 (0.00–15.70) | 8.70 (0.89–13.50) | 8.45 (4.39–10.02) | 10.12 (3.75–22.98) | 4.27 (0.00–11.27) | 0.532 | 0.758 | 0.083 |
| **Independent scales** |  |  |  |  |  |  |  |  |  |
|  Sleep and rest | 12.22 (0.00–40.38) | 12.22 (0.00–50.20) | 30.96 (12.88–58.57)57) | 28.26 (6.11–44.19) | 12.22 (0.00–34.92) | 12.22 (0.00–26.15) | 0.653 | 0.836 | 0.888 |
|  Eating | 0.00 (0.00–5.67） | 0 (0–6.09) | 11.35 (0–16.17) | 6.10 (0–11.35) | 5.25 (0–7.41) | 0 (0–6.10） | 0.778 | 0.437 | 0.430 |
|  Home management | 10.33 (0–25.52) | 0.00 (0.00–35.55) | 33.46 (1.65–49.93)3) | 8.08 (0.00–18.79) | 9.80 (4.94–72.08) | 3.29 (0.00–12.31) | 0.528 | 0.126 | 0.069 |
|  Work | 0.00 (0.00–46.41) | 0.00 (0.00–53.59) | 23.30 (0.00–70.10) | 12.04 (0.00–70.10) | 41.07 (0.00–70.10) | 39.90 (0.00–70.10) | 0808 | 0.818 | 0.687 |
|  Recreation and pastimes | 12.09 (0.00–35.43) | 0.00 (0.00–40.76) | 20.26 (0.00–54.56) | 8.53 (0.00–28.91) | 28.32 (0.00–40.52) | 5.09 (0.00–26.18) | 0.655 | 0.297 | 0.123 |
| Total SIP score | 5.68 (3.90–14.44) | 7.69 (3.90–21.20) | 12.09 (5.74–21.25) | 10.17 (5.79–13.48) | 9.47 (7.84–19.62) | 5.63 (1.11–10.20) | 0.739 | 0.317 | 0.084 |

SIP, sickness impact profile. Data are median (interquartile range). \*SIP baseline vs. 8 week control; \*\*SIP baseline vs. 8 week low-dose rifaximin; \*\*\*SIP baseline vs. 8 week high-dose rifaximin.