**Supplementary Table 4. Subgroup analysis of treatment options, treatment cycles, genotype, and study locations in patients with decompensated liver cirrhosis.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Subgroup** | **Study** | **N** | **SVR**  | **95% CI** | ***p*-value** | ***I*2** |
| **L** | **H** |
| DC SOF-based±RBV  | 33 | 5302 | 85.1% | 82.8% | 87.3% | <0.01 | 74% |
| Treatment |
| SOF/LDV±RBV | 14 | 2805 | 86.3% | 84.6% | 87.8% | 0.002 | 8%  |
| SOF/DCV±RBV  | 19 | 1615 | 82.4% | 78.2% | 86.2% | 72% |
| SOF/VEL±RBV  | 8 | 882 | 91.0% | 87.7% | 93.9% | 50% |
| SOF/VEL±RBV  | 8 | 882 | 91.0% | 87.7% | 93.9% | 0.004 | 50% |
| SOF/LDV±RBV | 14 | 2805 | 86.3% | 84.6% | 87.8% | 8% |
| SOF/VEL±RBV  | 8 | 882 | 91.0% | 87.7% | 93.9% | <0.001 | 50% |
| SOF/DCV±RBV  | 19 | 1615 | 82.4% | 78.2% | 86.2% | 72% |
| SOF/LDV±RBV | 14 | 2805 | 86.3% | 84.6% | 87.8% | 0.12 | 8%  |
| SOF/DCV±RBV  | 19 | 1615 | 82.4% | 78.2% | 86.2% | 72% |
| SOF-based  | 14 | 1010 | 83.8% | 76.8% | 89.8% | 0.76 | 84% |
| SOF-based+RBV  | 16 | 1658 | 84.9% | 81.7% | 87.9% | 56% |
| SOF/LDV  | 3 | 86 | 77.4% | 65.2% | 87.8% | 0.24 | 27% |
| SOF/LDV+RBV  | 3 | 703 | 83.0% | 79.9% | 85.6% | 0% |
| SOF/DCV  | 5 | 401 | 73.2% | 62.6% | 82.7% | 0.08 | 60% |
| SOF/DCV+RBV  | 7 | 465 | 82.8% | 76.3% | 88.5% | 57% |
| SOF/VEL  | 5 | 449 | 91.5% | 86.5% | 95.5% | 0.70 | 62% |
| SOF/VEL+RBV  | 3 | 170 | 90.0% | 80.3% | 96.8% | 65% |
| Genotype |
| GT1 SOF-based±RBV | 6 | 1762 | 86.8% | 84.4% | 89.1% | 0.14 | 16% |
| GT3 SOF-based±RBV | 9 | 246 | 82.0% | 76.7% | 86.9% | 0% |
| GT4 SOF-based±RBV | 3 | 122 | 86.3% | 79.4%  | 92.1%  | 0% |
| SOF-based GT1  | 2 | 143 | 86.1% | 79.1% | 92.0% | 0.73 | 20% |
| SOF-based+RBV GT1  | 3 | 98 | 85.1% | 75.9% | 92.7% | 16% |
| GT3 SOF/DCV  | 2 | 37 | 78.5% | 63.2% | 90.9% | 0.42 | 0% |
| GT3 SOF/DCV+RBV | 3 | 65 | 85.6% | 74.4% | 94.3% | 0% |
| GT3 SOF-based  | 2 | 37 | 78.5% | 63.2% | 90.9% | 0.48 | 0% |
| GT3 SOF-based+RBV | 5 | 66 | 86.1% | 75.4% | 94.6% | 0% |
| 12 and 24 weeks |
| SOF-based±RBV 12W  | 12 | 1540 | 86.2% | 81.9% | 90.0% | 0.23 | 76% |
| SOF-based±RBV 24W  | 12 | 1107 | 82.3% | 76.9% | 87.2% | 77% |
| SOF/VEL±RBV 12W  | 6 | 529 | 91.3% | 87.4% | 94.6% | 0.16 | 48% |
| SOF/VEL±RBV 24W  | 1 | 90 | 85.6% | 77.5% | 92.2% | -% |
| SOF/LDV±RBV 12W  | 3 | 571 | 81.9% | 78.6% | 85.0% | 0.46 | 0% |
| SOF/LDV±RBV 24W  | 2 | 132 | 84.9% | 78.1% | 90.6% | 0% |
| SOF/DCV±RBV 12W  | 5 | 440 | 76.9% | 72.7% | 80.8% | 0.27 | 0% |
| SOF/DCV±RBV 24W  | 9 | 885 | 81.4% | 74.3% | 87.7% | 82% |
| SOF-based 12W  | 8 | 553 | 86.9% | 80.1% | 92.5% | 0.46 | 76% |
| SOF-based+RBV 12W  | 8 | 1077 | 83.9% | 79.2% | 88.1% | 77% |
| SOF-based 24W  | 5 | 473 | 78.8% | 67.3% | 88.5% | 0.10 | 84% |
| SOF-based+RBV 24W  | 4 | 175 | 89.0% | 82.9% | 94.1% | 17% |
| SOF-based 12W  | 8 | 553 | 86.9% | 80.1% | 92.5% | 0.18 | 76% |
| SOF-based 24W  | 5 | 473 | 78.8 | 67.3% | 88.5% | 84% |
| SOF-based 12W  | 8 | 553 | 86.9% | 80.1% | 92.5% | 0.70 | 76% |
| SOF-based+RBV 24W  | 4 | 175 | 89.0% | 82.9% | 94.1% | 17% |
| SOF-based +RBV 12W  | 8 | 1077 | 83.9% | 79.2% | 88.1% | 0.36 | 77% |
| SOF-based 24W  | 5 | 473 | 78.8% | 67.3% | 88.5% | 84% |
| SOF-based+RBV 12W  | 8 | 1077 | 83.9% | 79.2% | 88.1% | 0.22 | 77% |
| SOF-based+RBV 24W  | 4 | 175 | 89.0% | 82.9% | 94.1% | 17% |
| SOF/LDV 12W  | 2 | 36 | 69.5% | 53.0% | 84.0% | 0.05 | 0% |
| SOF/LDV+RBV 12W  | 3 | 535 | 82.7% | 79.4% | 85.8% | 0% |
| SOF/LDV 24W  | 1 | 50 | 84.0% | 72.4% | 93.0% | 0.81 | -% |
| SOF/LDV+RBV 24W  | 1 | 82 | 85.4% | 76.8% | 92.3% | -% |
| SOF/LDV 12W  | 2 | 36 | 69.5% | 53.0% | 84.0% | 0.10 | 0% |
| SOF/LDV 24W  | 1 | 50 | 84.0% | 72.4% | 93.0% | -% |
| SOF/LDV 12W  | 2 | 36 | 69.5% | 53.0% | 84.0% | 0.04 | 0% |
| SOF/LDV+RBV 24W  | 1 | 82 | 85.4% | 76.8% | 92.3% | -% |
| SOF/LDV+RBV 12W  | 3 | 535 | 82.7% | 79.4% | 85.8% | 0.88 | 0% |
| SOF/LDV 24W  | 1 | 50 | 84.0% | 72.4% | 93.0% | -% |
| SOF/LDV+RBV 12W  | 3 | 535 | 82.7% | 79.4% | 85.8% | 0.57 | 0% |
| SOF/LDV+RBV 24W  | 1 | 82 | 85.4% | 76.8% | 92.3% | -% |
| SOF/DCV 12W  | 3 | 68 | 76.1% | 62.2% | 87.9% | 0.78 | 20% |
| SOF/DCV+RBV 12W  | 4 | 372 | 76.9% | 72.3% | 81.1% | 0% |
| SOF/DCV 24W  | 3 | 333 | 74.1% | 57.8% | 87.7% | 0.04 | 84% |
| SOF/DCV+RBV 24W  | 3 | 93 | 91.3% | 84.1% | 96.7% | 25% |
| SOF/DCV 12W  | 3 | 68 | 76.1% | 62.2% | 87.9% | 0.91 | 20% |
| SOF/DCV 24W  | 3 | 333 | 74.1% | 57.8% | 87.7% | 84% |
| SOF/DCV 12W  | 3 | 68 | 76.1% | 62.2% | 87.9% | 0.02 | 20% |
| SOF/DCV+RBV 24W  | 3 | 93 | 91.3% | 84.1% | 96.7% | 25% |
| SOF/DCV+RBV 12W  | 4 | 372 | 76.9% | 72.3% | 81.1% | 0.70 | 0% |
| SOF/DCV 24W  | 3 | 333 | 74.1% | 57.8% | 87.7% | 84% |
| SOF/DCV+RBV 12W  | 4 | 372 | 76.9% | 72.3% | 81.1% | <0.001 | 0% |
| SOF/DCV+RBV 24W  | 3 | 93 | 91.3% | 84.1% | 96.7% | 25% |
| GT3 SOF-based±RBV 12W | 2 | 32 | 85.2% | 69.5% | 96.6% | 0.66 | 0% |
| GT3 SOF-based±RBV 24W | 4 | 120 | 80.1% | 72.2% | 87.1% | 0% |
| SOF/VEL 12W  | 5 | 359 | 91.6% | 86.7% | 95.5% | 0.69 | 54% |
| SOF/VEL+RBV 12W  | 3 | 170 | 90.0% | 80.3% | 96.8% | 65% |
| SOF/VEL 12W  | 5 | 359 | 91.6% | 86.7% | 95.5% | 0.16 | 54% |
| SOF/VEL 24W  | 1 | 90 | 85.6% | 77.5% | 92.2% | -% |
| Race |
| Asia  | 11 | 877 | 87.9% | 80.4% | 94.0% | 0.34 | 88% |
| no-Asia  | 22 | 4425 | 84.2% | 82.4% | 86.0% | 47% |
| Asia GT3 | 2 | 50 | 74.3% | 60.9% | 85.8% | 0.13 | 14% |
| no-Asia GT3 | 8 | 405 | 84.1% | 80.1% | 87.7% | 0% |
| Child-Pugh B and C  |
| Child B SOF-based±RBV | 11 | 1106 | 91.2% | 85.9% | 95.4% | 0.05 | 84% |
| Child C SOF-based±RBV | 11 | 198 | 82.7% | 72.0% | 91.5% | 63% |
| Child B SOF/VEL±RBV | 4 | 194 | 97.3% | 94.0% | 99.5% | 0.04 | 0% |
| Child C SOF/VEL±RBV | 4 | 73 | 84.8% | 67.8% | 96.8% | 64% |
| Child B SOF/DCV±RBV | 4 | 413 | 89.7% | 82.7% | 95.1% | 0.76 | 76% |
| Child C SOF/DCV±RBV | 4 | 55 | 89.2% | 65.8% | 100% | 74% |
| Child B SOF/LDV±RBV | 2 | 204 | 86.9% | 77.6% | 94.1% | 0.20 | 31% |
| Child C SOF/LDV±RBV | 2 | 29 | 66.7% | 27.2% | 97.0% | 62% |
| Child A SOF-based±RBV | 14 | 1674 | 95.8% | 94.0% | 97.3% | <0.001 | 51% |
| Child B SOF-based±RBV | 11 | 1106 | 91.2% | 85.9% | 95.4% | 84% |
| Child C SOF-based±RBV | 11 | 198 | 82.7% | 72.0% | 91.5% | 63% |
| RCT use |  |  |  |  |  |  |  |
| RCT | 9 | 1438 | 86.6% | 83.4% | 89.5% | 0.30 | 51% |
| NO-RCT | 24 | 3864 | 84.4% | 81.3% | 87.2% | 78% |
| RCT SOF-based  | 3 | 281 | 86.2% | 81.5% | 90.3% | 0.45 | 7% |
| NO-RCT SOF-based+RBV | 6 | 698 | 88.8% | 83.5% | 93.3% | 66% |
| RCT SOF/VEL±RBV | 4 | 632 | 89.7% | 86.5% | 92.6% | 0.55 | 22% |
| NO-RCT SOF/VEL±RBV  | 4 | 250 | 91.6% | 84.7% | 96.8% | 63% |
| RCT SOF/DCV±RBV | 4 | 233 | 90.4% | 78.1% | 98.4% | 0.16 | 73% |
| No-RCT SOF/DCV±RBV  | 15 | 1382 | 80.8% | 76.2% | 85.0% | 72% |
| RCT SOF/LDV±RBV | 4 | 573 | 83.9% | 80.6% | 86.9% | 0.35 | 0% |
| NO-RCT SOF/LDV±RBV  | 10 | 2232 | 86.7% | 84.5% | 88.8% | 20% |
| Interruption of treatment, % |  |  |  |  |  |  |  |
| DC SOF-based±RBV  | 13 | 1236 | 3.2% | 1.5% | 5.2% | <0.01 | 58% |
| DC SOF-based  | 6 | 463 | 2.0% | 0.7% | 3.7% | 0.41 | 0% |
| DC SOF-based+RBV  | 5 | 344 | 2.8% | 1.1% | 5.2% | 0% |
| SOF/VEL±RBV | 6 | 619 | 2.8% | 1.5% | 4.4% | 0.77 | 0% |
| SOF/LDV±RBV | 4 | 406 | 3.5% | 0.5% | 7.0% | 49% |
| SOF/DCV±RBV | 4 | 169 | 4.3% | 0.0% | 15.4% | 79% |
| SOF/VEL  | 5 | 449 | 2.4% | 1.0% | 4.2% | 0.27 | 0% |
| SOF/VEL+RBV | 3 | 170 | 4.0% | 1.3% | 7.7% | 0% |
| CC SOF-based ±RBV  | 2 | 233 | 0.7% | 0.0% | 2.5% | 0.02 | 0% |
| DC SOF-based ±RBV | 14 | 1236 | 3.2% | 1.3% | 4.6% | 58% |

SOF, sofosbuvir; LDV, ledipasvir; VEL, velpatasvir; DCV, daclatasvir; RBV, ribavirin; RCT, random effects model; GT, genotype; DC, decompensated liver cirrhosis; CC, compensated liver cirrhosis.