*Supplementary Table S1.*

Changes in the disease-related parameters and the RDs treatment of patients before and after DAA therapy

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Patient | RDs | RDs  duration  (Months) | Pretreatment (baseline) | | DAA  regimen | SVR | Posttreatment (EoT24) | |
| Disease-related parameters | Treatment | Disease-related parameters | Treatment |
| 1 | RA | 41 | SDAI 12.01 | sulfasalazine and etanercept | SOF+RBV | Yes | SDAI 9.08 | sulfasalazine and etanercept |
| 2a | RA | 295 | SDAI 14.02 | sulfasalazine | DCV+ASV  →GLE+PIB | No  →Yes | SDAI 9.94 | sulfasalazine and golimumab |
| 3 | RA | 300 | SDAI 20.06 | etanercept | EBR+GZR | Yes | SDAI 23.02 | etanercept |
| 4 | RA | 112 | SDAI 3.81 | bucillamine | SOF+RBV | Yes | SDAI 4.06 | bucillamine |
| 5 | RA | 49 | SDAI 2.02 | bucillamine | DCV+ASV | Yes | SDAI 2.01 | bucillamine |
| 6 | RA | 415 | SDAI 10.51 | methotrexate and golimumab | SOF+LDV | Yes | SDAI 9.01 | methotrexate |
| 7 | RA | 71 | SDAI 4.22 | mizoribine and abatacept and prednisolone | GLE+PIB | Yes | SDAI 3.53 | mizoribine and abatacept |
| 8 | RA | 2 | SDAI 16.09 | none | DCV+ASV | Yes | SDAI 1.53 | methotrexate and tacrolimus |
| 9 | RA | 2 | SDAI 28.23 | mizoribine and prednisolone | SOF+RBV | Yes | SDAI 6.10 | methotrexate |
| 10 | RA | 3 | SDAI 6.06 | bucillamine | SOF+RBV | Yes | SDAI 2.11 | none |
| 11 | RA | 5 | SDAI 11.53 | sulfasalazine | DCV+ASV | Yes | SDAI 2.05 | none |
| 12b | SLE | 30 | C4 5.0 mg/dL  Anti-dsDNA 16 IU/mL | tacrolimus and prednisolone | DCV+ASV  →SOF+LDV | No  →Yes | C4 12.4 mg/dL  Anti-dsDNA (−) | hydroxy-chloroquine and prednisolone |
| 13 | SLE | 33 | C4 25.3 mg/dL  Anti-dsDNA 29 IU/mL | prednisolone | SOF+RBV | Yes | C4 27.2 mg/dL  Anti-dsDNA (−) | prednisolone |
| 14 | Myositis | 2 | CK 1052 U/L | none | SOF+LDV | Yes | CK 462 U/L | none |
| 15 | Myositis | 2 | CK 124 U/L | none | DCV+ASV | Yes | CK 39 U/L | none |
| 16 | APS | 28 | Thrombosis (−)  Anti-β2GP1 17.7 U/mL | none | SOF+LDV | Yes | Thrombosis (−)  Anti-β2GP1 20.2 U/mL | none |
| 17 | EGPA | 163 | Eosinophilia (−)  MPO-ANCA (−) | prednisolone | SOF+RBV | Yes | Eosinophilia (−)  MPO-ANCA (−) | prednisolone |
| 18 | PsA | 7 | PASI 16 | sulfasalazine | GLE+PIB | Yes | PASI 6 | sulfasalazine |

a This patient (No. 2) experienced virological breakthrough during the first course of DAAs, and was later treated with GLE+PIB and achieved SVR.

b This patient (No. 12) experienced virological relapse after the first course of DAAs, and was later treated with SOF+LDV and achieved SVR.

RDs = rheumatic diseases; DAA = direct acting antivirals; SVR = sustained virological response; EoT24 = 24 weeks after the end of DAA therapy; RA = rheumatoid arthritis; SLE = systemic lupus erythematosus; APS = anti-phospholipid antibody syndrome; EGPA = eosinophilic granulomatosis with polyangiitis; PsA = psoriatic arthritis; SDAI = simplified disease activity index; C4 = C4 fraction of complement; Anti-dsDNA = anti-double stranded DNA antibodies; CK = creatine kinase; Anti-β2GP1 = anti-β2 glycoprotein I antibodies; MPO-ANCA = myeloperoxidase-antineutrophil cytoplasmic antibodies; PASI = psoriasis area severity index; SOF+RBV = sofosbuvir + ribavirin; DCV+ASV = daclatasvir + asunaprevir; GLE+PIB = glecaprevir + pibrentasvir; EBR+GZR = elbasvir + grazoprevir; SOF+LDV = sofosbuvir + ledipasvir.