**Table S1.** Details of each enrolled patient

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patient No. | Phrase | Sex | Age(years) | Before-treatment (A) |  | After-treatment (B) |
|  | RPR | TPPA |  | RPR | TPPA |
|  |  |  |  |  |  |  |  |  |  |
| Group1A1/B1 | 1 | Primary  | Male | 28 | 1:4 | 1:1280 |  | - | 1:640 |
| 2 | Secondary | Male | 74 | 1:16 | 1:5120 |  | 1:2 | 1:10240 |
| 3 | Primary | Male | 52 | 1:64 | 1:20480 |  | 1:4 | 1:20480 |
| 4 | Secondary | Female | 23 | 1:32 | 1:160 |  | 1:2 | 1:5120 |
| 5 | Primary | Female | 21 | 1:128 | 1:2560 |  | 1:4 | 1:2560 |
| 6 | Primary | Male | 30 | 1:64 | 1:20480 |  | 1:4 | 1:10240 |
|  |  |  |  |  |  |  |  |  |  |
| Group2A2/B2 | 7 | Early latent | Female | 23 | - | 1:320 |  | - | 1:160 |
| 8 | Early latent | Male | 77 | 1:8 | 1:20480 |  | 1:8 | 1:20480 |
| 9 | Early latent | Female | 19 | - | 1:640 |  | - | 1:320 |
| 10 | Early latent | Male | 23 | 1:2 | 1:2560 |  | 1:1 | 1:2560 |
| 11 | Early latent | Male | 45 | 1:4 | 1:20480 |  | 1:4 | 1:40960 |
| 12 | Early latent | Female | 55 | 1:1 | 1:2560 |  | 1:1 | 1:1280 |
|  |  |  |  |  |  |  |  |  |  |
| Group3A3/B3 | 13 | Primary | Male | 18 | 1:32 | 1:20480 |  | 1:4 | 1:10240 |
| 14 | Secondary | Female | 23 | 1:32 | 1:5120 |  | 1:4 | 1:2560 |
| 15# | Primary  | Male | 65 | 1:16 | 1:81920 |  | 1:16 | >1:163840 |
| 16 | Secondary | Male | 31 | 1:128 | 1:20480 |  | 1:32 | 1:81920 |
| 17 | Primary  | Female | 33 | 1:256 | 1:10240 |  | 1:32 | 1:5120 |
| 18 | Secondary | Female | 52 | 1:256 | 1:81920 |  | 1:32 | 1:20480 |

#The RPR titer in this patient did not have fourfold decrease.