**Supplementary File 1**. Patients and clinical characteristics.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **patient ID** | **gender** | **age** | **BRAFmut** | **HLA-A\*02** | **diagnosis** |
| mp24 | F | 53 | V600E |  | melanoma |
| mp26 | F | 67 | wt | + | melanoma |
| mp32 | F | 65 | V600E |  | melanoma |
| mp34 | F | 55 | V600E |  | melanoma |
| mp35 | F | 54 | V600E |  | melanoma |
| mp36 | F | 61 | V600E |  | melanoma |
| mp39 | F | 61 | wt |  | melanoma |
| mp41 | F | 57 | wt | + | melanoma |
| mp42 | F | 75 | N/A |  | melanoma |
| mp44 | F | 62 | wt | + | melanoma |