**Supplementary Table 2. The built-in immunotherapy datasets in tigeR package**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Dataset** | **Cancer type** | **PMID** | **Therapy** | **Total sample** | **Responder** | **Non-Responder** |
| GBM\_PRJNA482620 | Glioblastoma | 30996326 | anti-PD-1 | 34 | 17 | 17 |
| HNSC\_GSE93157 | Head and Neck Squamous | 28487385 | anti-PD-1 | 5 | 2 | 3 |
| LGG\_E\_MTAB\_6270 | Brain Lower Grade Glioma | 29618666 | Peptide-vaccine | 12 | 5 | 7 |
| MEL\_GSE78220 | Melanoma | 28129544 | anti-PD-1 | 28 | 15 | 13 |
| MEL\_GSE91061 | Melanoma | 29033130 | anti-PD-1 | 109 | 20 | 78 |
| MEL\_GSE93157 | Melanoma | 28487385 | anti-PD-1 | 25 | 9 | 16 |
| MEL\_GSE96619 | Melanoma | 28494868 | anti-PD-1 | 10 | 0 | 0 |
| MEL\_GSE100797 | Melanoma | 29170503 | ACT | 25 | 10 | 15 |
| MEL\_GSE106128 | Melanoma | 29682201 | DCs\_treated | 47 | 21 | 14 |
| MEL\_GSE115821 | Melanoma | 30127394 | anti-CTLA-4  anti-PD-1 anti-CTLA-4+anti-PD-1 | 37 | 3 | 34 |
| MEL\_GSE145996 | Melanoma | 32708981 | anti-PD-1 | 4 | 2 | 2 |
| MEL\_Nathanson\_2017 | Melanoma | 27956380 | anti-CTLA-4 | 24 | 8 | 16 |
| MEL\_phs000452 | Melanoma | 26359337 | anti-PD-1 | 153 | 63 | 90 |
| MEL\_PRJEB23709 | Melanoma | 30753825 | anti-PD-1 anti-CTLA-4+anti-PD-1 | 91 | 49 | 42 |
| nonsqNSCLC\_GSE93157 | Non-small-cell Lung Cancer | 28487385 | anti-PD-1 | 22 | 6 | 16 |
| NSCLC\_GSE126044 | Non-small-cell Lung Cancer | 32879421 | anti-PD-1 | 7 | 2 | 5 |
| NSCLC\_GSE135222 | Non-small-cell Lung Cancer | 31537801 | anti-PD-1 | 27 | 8 | 19 |
| RCC\_Braun\_2020 | Renal Cell Carcinoma | 32472114 | anti-PD-1 EVEROLIMUS | 311 | 44 | 237 |
| RCC\_GSE67501 | Renal Cell Carcinoma | 27491898 | anti-PD-1 | 11 | 4 | 7 |
| STAD\_PRJEB25780 | Stomach Adenocarcinoma | 30013197 | anti-PD-1 | 78 | 21 | 57 |