**TABLE1: GEO Datasets Sources**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **GEO number** | **Platforms** | **Samples** | **Disease** | **Upregulated** | **Downregulated** | **population** |
| 1 | GSE179265 | GPL24676 | 17 patients and 7controls | NP | 1104 | 1411 | Caucasians and Japanese |
| 2 | GSE136825 | GPL20301 | 42 patients and 28 controls | NP | 1321 | 1194 | Chinese |
| 3 | GSE98895 | GPL6947 | 20 patients and 20 controls | MS | 1354 | 1285 | Italians |