**Table S1**: DiffCoEx and DICER meta-module statistics.

|  |  |  |
| --- | --- | --- |
| Dataset | DiffCoEx meta-modules | DICER meta-modules |
|  | Number | Average size | Number | Average size |
| AD | 3 | 48.66 | 50 | 60.1 |
| NDD | 5 | 80.2 | 16 | 37.15 |
| IBD | 2 | 36.5 | 3 | 35.66 |
| Lung cancer | 2 | 278.5 | 20 | 69.2 |
| SLE | 9 | 232 | 24 | 53.16 |