**Table S3 Clinical information of individual in vitro validation**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Group | Number | Age | Gender | Hypertension | Diabetes | Coronary heart disease | Smoking | Drinking | Aneurysm size (mm) | Aneurysm rupture | Number of aneurysms | Location of aneurysm occurrence (Willis circle anterior/posterior circulation) | Hunt-Hess score | Glasgow Coma Scale score |
| Normal control group | 1 | 65 | Male | No | No | No | Yes | No |  |  |  |  |  |  |
| 2 | 47 | Male | Yes | No | No | No | No |  |  |  |  |  |  |
| 3 | 52 | Male | No | No | No | No | Yes |  |  |  |  |  |  |
| 4 | 67 | Male | No | No | No | Yes | No |  |  |  |  |  |  |
| 5 | 49 | Female | No | No | No | No | No |  |  |  |  |  |  |
| 6 | 52 | Female | No | No | No | No | No |  |  |  |  |  |  |
| 7 | 54 | Female | No | No | No | No | No |  |  |  |  |  |  |
| 8 | 67 | Female | Yes | No | No | No | No |  |  |  |  |  |  |
| 9 | 61 | Female | No | No | No | No | No |  |  |  |  |  |  |
| 10 | 52 | Female | Yes | No | No | No | No |  |  |  |  |  |  |
| IA group | 1 | 52 | Male | Yes | No | No | No | Yes | 4.0\*3.2 | Yes | 1 | Anterior communicating | 2 | 15 |
| 2 | 48 | Male | No | No | No | No | No | 3.1\*2.8 | Yes | 2 | Anterior communicating / basilar artery | 2 | 15 |
| 3 | 49 | Female | No | No | No | No | No | 3.2\*2.9 | No | 1 | Right internal carotid artery | 0 | 15 |
| 4 | 69 | Male | Yes | No | No | No | No | 2.0\*1.5 | Yes | 1 | Anterior communicating | 1 | 15 |
| 5 | 53 | Female | Yes | No | No | No | No | 3.0\*2.3/1.5\*1.8 | Yes | 2 | Left vertebral artery V4/ Right middle cerebral artery | 3 | 13 |
| 6 | 66 | Female | Yes | No | No | No | No | 4.2\*3.8 | Yes | 1 | Left internal carotid artery posterior traffic segment | 0 | 15 |
| 7 | 50 | Female | No | No | No | No | No | 2.5\*1.5 | Yes | 1 | Left brain anterior A1 | 3 | 10 |
| 8 | 53 | Female | No | No | No | No | No | 3\*4 | Yes | 1 | Anterior communicating | 3 | 10 |