**Supplementary**

**Suppl 1**: Chi-square test results between breast cancer patients of different ages and people without breast cancer

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Age | BMI | Breast cancer | Non-breast cancer | X2，P-value |
| <50 |  |  |  | P<0.0001 |
|  | 18.5~24.9 | 379 | 46 |  |
|  | 25.0~29.9 | 178 | 59 |  |
|  | >=30 | 101 | 82 |  |
| >=50 |  |  |  | P=0.072 |
|  | 18.5~24.9 | 707 | 369 |  |
|  | 25.0~29.9 | 531 | 287 |  |
|  | >=30 | 338 | 224 |  |