

hiBRCApCR, predicting pCR for breast cancer subtypes

Basic information

Version: 1.0.0

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Running environment

The software hiBRCApCR version 1.0.0 was tested on the computer with Windows 10 operating system with 32GB memory. The programming environment was Python version 3.7.4rc1 (X86_64).

The software hiBRCApCR version 1.0.0 relied on the following Python packages to run:

- numpy (version 1.11.1)
- sympy (version 1.0)
- xgboost (version 0.90)
- scipy (version 0.18.1)
- scikit-learn (from sklearn) (version 0.17.1)

Command line syntax

```
python hiBRCApCR-r1 <Subtype> <Size1> <Size2> <Size3>
```

<Subtype> : one of the four subtypes of breast cancers, i.e., TN, HER2, LBP and LBN
<Size1>, <Size2> and <Size3> were the tumor sizes of the first three neoadjuvant chemotherapies in cm² (centimeter squared)

The prediction result 1 suggested that this patient may achieve pCR=1 after a total series of at least 6 neoadjuvant chemotherapies. Otherwise, this patient will have pCR=0 after the totally six or more treatments.