**Supplementary**

Table S1 AUC with different PT using different ML models.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| PT | LR | SVM | RF | MLP |
| 5E-08 | 0.76  | 0.75  | 0.70  | 0.77  |
| 1E-06 | 0.76  | 0.76  | 0.70  | 0.77  |
| 1E-05 | 0.76  | 0.76  | 0.70  | 0.77  |
| 5E-05 | 0.76  | 0.76  | 0.70  | 0.77  |
| 1E-04 | 0.76  | 0.76  | 0.70  | 0.78  |
| 5E-04 | 0.78  | 0.78  | 0.72  | 0.80  |
| 0.001 | 0.79  | 0.79  | 0.74  | 0.81  |
| 0.005 | 0.83  | 0.83  | 0.80  | 0.86  |

Table S2 Sensitivity with different PT using different ML models.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| PT | LR | SVM | RF | MLP |
| 5E-08 | 0.75  | 0.75  | 0.68  | 0.80  |
| 1E-06 | 0.75  | 0.76  | 0.68  | 0.79  |
| 1E-05 | 0.75  | 0.76  | 0.68  | 0.79  |
| 4E-05 | 0.76  | 0.76  | 0.68  | 0.79  |
| 5E-05 | 0.76  | 0.75  | 0.67  | 0.80  |
| 1E-04 | 0.76  | 0.75  | 0.67  | 0.81  |
| 5E-04 | 0.78  | 0.78  | 0.68  | 0.81  |
| 0.001 | 0.79  | 0.80  | 0.70  | 0.83  |
| 0.005 | 0.83  | 0.83  | 0.78  | 0.87  |

Table S3 Specificity with different PT using different ML models.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| PT | LR | SVM | RF | MLP |
| 5E-08 | 0.76  | 0.75  | 0.72  | 0.75  |
| 1E-06 | 0.76  | 0.76  | 0.72  | 0.74  |
| 1E-05 | 0.76  | 0.76  | 0.73  | 0.75  |
| 4E-05 | 0.76  | 0.76  | 0.73  | 0.75  |
| 5E-05 | 0.76  | 0.76  | 0.73  | 0.75  |
| 1E-04 | 0.76  | 0.76  | 0.74  | 0.76  |
| 5E-04 | 0.78  | 0.78  | 0.76  | 0.78  |
| 0.001 | 0.78  | 0.78  | 0.77  | 0.79  |
| 0.005 | 0.83  | 0.83  | 0.81  | 0.85  |