*Table 2: The definition of the initial three factors (i.e., true positive (TP), false positive (FP), and false negative (FN)) of the confusion matrix in our simulation study.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Metric | Actual  (based on A-clustering) | Predicted (by candidate method) | Count from | Definition in our study |
| TP | Positive | Positive | The resultant clusters from the candidate method. | Any kind of overlap of the resultant cluster-region of candidate method with 500 A-clustering cluster-region & p-value of the resultant cluster < 0.05. |
| FP | Negative | Positive | The resultant clusters from the candidate method. | p-value of candidate method < 0.05  No overlap of the resultant cluster-region of candidate method with 500 A-clustering cluster-region & p-value of the resultant cluster < 0.05. |
| FN | Positive | Negative | The clusters from A-clustering. | (i) Any kind of overlap of 500 A-clustering cluster-region with the resultant cluster-region of candidate method & pvalue of the resultant cluster > 0.05, or (ii) No overlap of the 500 A-clustering cluster-region with the resultant cluster-region of candidate method. |

TN is undefined here since it cannot be determined from our study