

**Table S3 Optimal parameters and performance measures of SVM classification**

| Phase | C <sup>1</sup> | R <sup>2</sup> | AUC-ROC | F-measure | Precision | Recall |
|-------|----------------|----------------|---------|-----------|-----------|--------|
| 0     | 0.01           | 4              | 0.64    | 0.22      | 0.24      | 0.20   |
| 3     | 0.1            | 1.5            | 0.62    | 0.21      | 0.14      | 0.39   |
| 6     | 0.1            | 4              | 0.62    | 0.19      | 0.26      | 0.15   |
| 9     | 0.1            | 2.5            | 0.58    | 0.22      | 0.27      | 0.18   |
| 12    | 0.01           | 3.5            | 0.64    | 0.19      | 0.21      | 0.18   |
| 15    | 0.1            | 1.5            | 0.64    | 0.27      | 0.21      | 0.40   |
| 18    | 0.1            | 4              | 0.65    | 0.23      | 0.24      | 0.23   |
| 21    | 0.01           | 3.5            | 0.61    | 0.21      | 0.38      | 0.15   |

1. C = minimum separation

2. R = ratio of negative to positive examples