- Results
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## Results

Generated with RFE on 17 october, 2024 for Shock Review Reply

### 20 features

- Test Accuracy with Updated Random Forest: 0.8846
- Cross-Validation Scores: [0.625 0.875 0.85714286 0.85714286 0.85714286]
- Mean CV Score: 0.8142857142857143
- Confusion Matrix: [[18 1] [ 2 5]]

```
Classification Report:
       precision recall f1-score support
    0.0
          0.90 0.95
                        0.92
                                 19
    1.0
          0.83
                 0.71 0.77
                                 7
                        0.88
                                26
  accuracy
                     0.83
                            0.85
 macro avg
              0.87
                                    26
weighted avg
              0.88 0.88
                                     26
                            0.88
```

	Importance	Feature
2	12.07	Ddimer Conc (ug/mL) (Biomedical)
10	10.63	
		Partial Thromboplastin Time (s)
7	8.56	Fibrinogen (mg/mL) (Biomedical)
3	7.75	Polym Rate (Pa/s)
0	5.80	Max Stiffness (Pa)
17	5.55	Injury Severity Score
11	5.09	Prothrombin Time(s)
8	5.03	Velocity Index
19	4.73	Abbreviated Injury Scale Head
5	4.48	Confocal Area (%)
16	4.36	Glasgow Coma Score
1	4.30	tPA Conc (ng/mL)
15	4.00	Temperature (°C)
6	3.72	Confocal Pore Diameter (μm)
14	3.17	Diastolic BP (mmHg)
13	2.88	Systolic BP (mmHg)
9	2.63	Lactate (mmol/L)
12	2.41	inr
18	1.43	arrest
4	1.41	Lysis (%)

# 10 Features

### random= auto

- Test Accuracy with Updated Random Forest: 0.8462
- Cross-Validation Scores: [0.75 0.875 0.85714286 1. 0.85714286]
- Mean CV Score: 0.8678571428571429
- Confusion Matrix: [[18 1] [ 3 4]]

```
Classification Report:
        precision recall f1-score support
     0.0
            0.86
                   0.95
                                    19
                           0.90
                                    7
     1.0
            0.80
                 0.57
                           0.67
                          0.85
                                   26
  accuracy
               0.83
                       0.76
                              0.78
                                       26
 macro avg
                0.84
                        0.85
                               0.84
weighted avg
                                        26
```

#### feature\_importance\_df\_selected 0.0s Representation of the open of the control of t **Importance Feature** 19.59 Ddimer Conc (ug/mL) (Biomedical) 1 18.89 Partial Thromboplastin Time (s) 6 9 11.46 Abbreviated Injury Scale Head 3 10.51 Polym Rate (Pa/s) 0 9.04 Max Stiffness (Pa) 7 Prothrombin Time(s) 7.68 4 7.60 Fibrinogen (mg/mL) (Biomedical) 2 6.31 Turbidity T to Half Max (s) 5 5.09 Lactate (mmol/L) 8 3.83 Diastolic BP (mmHg)

### 5 features

random\_state=undefined,

- Test Accuracy with Updated Random Forest: 0.8846
- Cross-Validation Scores: [0.75 0.875 0.71428571 1. 1.]
- Mean CV Score: 0.8678571428571429
- Confusion Matrix: [[17 2] [ 1 6]]

```
Classification Report:
        precision
                   recall f1-score support
     0.0
            0.94
                    0.89
                            0.92
                                      19
     1.0
            0.75
                    0.86
                            0.80
                                      7
                            88.0
                                     26
  accuracy
                0.85
                        0.88
                                0.86
                                         26
 macro avg
weighted avg
                 0.89
                         0.88
                                 0.89
                                          26
```

### feature\_importance\_df\_selected

✓ 0.0s \$\overline{1}\$ Open 'feature\_importance\_df\_selected' in Data Wrangler

	Importance	Feature
0	33.76	Ddimer Conc (ug/mL) (Biomedical)
3	20.37	Partial Thromboplastin Time (s)
2	16.27	Fibrinogen (mg/mL) (Biomedical)
1	15.43	Polym Rate (Pa/s)
4	14.17	Abbreviated Injury Scale Head