## Dane bez oversamplingu

#### Decision tree i Naive bayes

|                 |      |      | cision ' | Tree |      | Naive Bayes |      |      |      |      |  |  |
|-----------------|------|------|----------|------|------|-------------|------|------|------|------|--|--|
|                 | Se   | Sp   | F1       | G    | AUC  | Se          | Sp   | F1   | G    | AUC  |  |  |
| abalone0_4      | 0.99 | 0.5  | 0.53     | 0.7  | 0.75 | 0.95        | 0.97 | 0.39 | 0.96 | 0.99 |  |  |
| abalone041629   | 0.93 | 0.37 | 0.34     | 0.59 | 0.65 | 0.92        | 0.3  | 0.27 | 0.52 | 0.68 |  |  |
| $abalone16\_29$ | 0.94 | 0.28 | 0.26     | 0.51 | 0.61 | 0.69        | 0.58 | 0.18 | 0.63 | 0.74 |  |  |
| balance_scale   | 0.92 | 0.04 | 0.04     | 0.19 | 0.48 | 1.0         | 0.0  | 0.0  | 0.0  | 0.31 |  |  |
| breast_cancer   | 0.69 | 0.42 | 0.39     | 0.54 | 0.55 | 0.85        | 0.45 | 0.49 | 0.61 | 0.71 |  |  |
| bupa            | 0.68 | 0.59 | 0.57     | 0.63 | 0.62 | 0.36        | 0.77 | 0.58 | 0.53 | 0.62 |  |  |
| car             | 0.99 | 0.92 | 0.86     | 0.96 | 0.96 | 0.88        | 1.0  | 0.39 | 0.94 | 1.0  |  |  |
| cmc             | 0.82 | 0.34 | 0.34     | 0.52 | 0.59 | 0.7         | 0.6  | 0.46 | 0.65 | 0.7  |  |  |
| ecoli           | 0.94 | 0.54 | 0.52     | 0.71 | 0.74 | 0.75        | 0.94 | 0.46 | 0.84 | 0.87 |  |  |
| german          | 0.75 | 0.52 | 0.49     | 0.62 | 0.63 | 0.78        | 0.62 | 0.58 | 0.69 | 0.75 |  |  |
| glass           | 0.94 | 0.35 | 0.34     | 0.58 | 0.65 | 0.43        | 0.76 | 0.18 | 0.57 | 0.71 |  |  |
| haberman        | 0.7  | 0.3  | 0.28     | 0.45 | 0.51 | 0.95        | 0.21 | 0.31 | 0.45 | 0.65 |  |  |
| heart_cleveland | 0.88 | 0.26 | 0.24     | 0.48 | 0.59 | 0.82        | 0.66 | 0.43 | 0.73 | 0.82 |  |  |
| hepatitis       | 0.87 | 0.38 | 0.4      | 0.57 | 0.62 | 0.63        | 0.78 | 0.49 | 0.7  | 0.8  |  |  |
| horse_colic     | 0.79 | 0.74 | 0.7      | 0.76 | 0.76 | 0.81        | 0.76 | 0.73 | 0.78 | 0.83 |  |  |
| ionosphere      | 0.91 | 0.79 | 0.8      | 0.84 | 0.85 | 0.96        | 0.74 | 0.82 | 0.84 | 0.93 |  |  |
| new_thyroid     | 0.98 | 0.9  | 0.89     | 0.94 | 0.94 | 0.99        | 0.87 | 0.9  | 0.93 | 0.99 |  |  |
| postoperative   | 0.76 | 0.17 | 0.18     | 0.36 | 0.45 | 0.94        | 0.12 | 0.19 | 0.34 | 0.45 |  |  |
| seeds           | 0.93 | 0.87 | 0.87     | 0.9  | 0.9  | 0.91        | 0.94 | 0.89 | 0.92 | 0.98 |  |  |
| solar_flare     | 0.97 | 0.14 | 0.16     | 0.37 | 0.7  | 0.66        | 0.93 | 0.19 | 0.78 | 0.88 |  |  |
| transfusion     | 0.75 | 0.24 | 0.23     | 0.42 | 0.5  | 0.92        | 0.17 | 0.24 | 0.4  | 0.66 |  |  |
| vehicle         | 0.96 | 0.83 | 0.84     | 0.89 | 0.89 | 0.61        | 0.83 | 0.54 | 0.71 | 0.81 |  |  |
| vertebal        | 0.85 | 0.69 | 0.69     | 0.77 | 0.77 | 0.73        | 0.88 | 0.72 | 0.8  | 0.85 |  |  |
| yeastME1        | 0.99 | 0.75 | 0.68     | 0.86 | 0.87 | 0.65        | 1.0  | 0.15 | 0.81 | 0.99 |  |  |
| yeastME2        | 0.97 | 0.39 | 0.36     | 0.62 | 0.68 | 0.14        | 0.96 | 0.07 | 0.36 | 0.81 |  |  |
| yeastME3        | 0.95 | 0.69 | 0.67     | 0.81 | 0.81 | 0.24        | 0.98 | 0.24 | 0.49 | 0.9  |  |  |

kNN i SVM

|                 |      |      | kNN  |      |      |      |      | SVM  |      |      |
|-----------------|------|------|------|------|------|------|------|------|------|------|
|                 | Se   | Sp   | F1   | G    | AUC  | Se   | Sp   | F1   | G    | AUC  |
| $abalone0\_4$   | 0.99 | 0.54 | 0.56 | 0.73 | 0.91 | 1.0  | 0.43 | 0.54 | 0.66 | 0.89 |
| abalone041629   | 0.98 | 0.24 | 0.33 | 0.49 | 0.76 | 0.99 | 0.11 | 0.19 | 0.33 | 0.82 |
| abalone16_29    | 0.99 | 0.15 | 0.22 | 0.38 | 0.75 | 1.0  | 0.03 | 0.06 | 0.18 | 0.77 |
| balance_scale   | 0.99 | 0.0  | 0.0  | 0.0  | 0.68 | 1.0  | 0.0  | 0.0  | 0.0  | 0.94 |
| breast_cancer   | 0.87 | 0.32 | 0.39 | 0.52 | 0.63 | 0.95 | 0.24 | 0.34 | 0.47 | 0.67 |
| bupa            | 0.7  | 0.45 | 0.48 | 0.56 | 0.62 | 0.84 | 0.45 | 0.54 | 0.62 | 0.73 |
| car             | 1.0  | 0.82 | 0.84 | 0.9  | 1.0  | 0.99 | 0.78 | 0.79 | 0.88 | 1.0  |
| cmc             | 0.88 | 0.27 | 0.32 | 0.49 | 0.65 | 0.98 | 0.07 | 0.12 | 0.26 | 0.68 |
| ecoli           | 0.96 | 0.37 | 0.44 | 0.6  | 0.87 | 0.96 | 0.57 | 0.61 | 0.74 | 0.95 |
| german          | 0.87 | 0.35 | 0.42 | 0.55 | 0.71 | 0.92 | 0.41 | 0.51 | 0.61 | 0.78 |
| glass           | 0.99 | 0.0  | 0.0  | 0.0  | 0.72 | 1.0  | 0.0  | 0.0  | 0.0  | 0.81 |
| haberman        | 0.85 | 0.26 | 0.31 | 0.47 | 0.62 | 0.94 | 0.2  | 0.29 | 0.43 | 0.67 |
| heart_cleveland | 0.98 | 0.03 | 0.05 | 0.17 | 0.67 | 1.0  | 0.0  | 0.0  | 0.0  | 0.61 |
| hepatitis       | 0.93 | 0.56 | 0.62 | 0.73 | 0.86 | 0.93 | 0.47 | 0.55 | 0.66 | 0.85 |
| horse_colic     | 0.87 | 0.74 | 0.76 | 0.8  | 0.86 | 0.92 | 0.74 | 0.79 | 0.83 | 0.9  |
| ionosphere      | 0.98 | 0.59 | 0.72 | 0.76 | 0.92 | 0.98 | 0.88 | 0.92 | 0.93 | 0.98 |
| new_thyroid     | 1.0  | 0.77 | 0.87 | 0.88 | 0.93 | 1.0  | 0.8  | 0.89 | 0.89 | 0.99 |
| postoperative   | 0.91 | 0.0  | 0.0  | 0.0  | 0.38 | 1.0  | 0.0  | 0.0  | 0.0  | 0.47 |
| seeds           | 0.94 | 0.94 | 0.91 | 0.94 | 0.99 | 0.95 | 0.93 | 0.92 | 0.94 | 0.98 |
| solar_flare     | 0.99 | 0.07 | 0.1  | 0.26 | 0.75 | 0.99 | 0.02 | 0.04 | 0.15 | 0.63 |
| transfusion     | 0.76 | 0.3  | 0.29 | 0.48 | 0.54 | 0.91 | 0.13 | 0.19 | 0.35 | 0.61 |
| vehicle         | 0.96 | 0.9  | 0.88 | 0.93 | 0.98 | 0.98 | 0.94 | 0.93 | 0.96 | 1.0  |
| vertebal        | 0.83 | 0.72 | 0.7  | 0.77 | 0.86 | 0.85 | 0.74 | 0.72 | 0.79 | 0.9  |
| yeastME1        | 0.99 | 0.73 | 0.76 | 0.85 | 0.97 | 1.0  | 0.45 | 0.56 | 0.67 | 0.98 |
| yeastME2        | 1.0  | 0.24 | 0.35 | 0.48 | 0.78 | 1.0  | 0.0  | 0.0  | 0.0  | 0.85 |
| yeastME3        | 0.98 | 0.71 | 0.75 | 0.83 | 0.92 | 0.98 | 0.74 | 0.78 | 0.85 | 0.97 |

# Dane z oversampling, z blednie zrobiona CV

#### Decision tree

|                 |      | De   | cision ' | Tree |      |      | Decisi | on Tree | e TEST | 1    |       |
|-----------------|------|------|----------|------|------|------|--------|---------|--------|------|-------|
|                 | Se   | Sp   | F1       | G    | AUC  | Se   | Sp     | F1      | G_t    | AUC  | G-G_t |
| abalone0_4      | 0.98 | 0.99 | 0.99     | 0.99 | 0.99 | 0.99 | 0.75   | 0.59    | 0.86   | 0.87 | 0.13  |
| abalone041629   | 0.89 | 0.92 | 0.9      | 0.9  | 0.9  | 0.88 | 0.49   | 0.34    | 0.65   | 0.68 | 0.25  |
| abalone16_29    | 0.9  | 0.93 | 0.92     | 0.92 | 0.92 | 0.89 | 0.53   | 0.34    | 0.69   | 0.71 | 0.23  |
| balance_scale   | 0.9  | 0.93 | 0.92     | 0.92 | 0.92 | 0.93 | 0.01   | 0.01    | 0.1    | 0.47 | 0.82  |
| breast_cancer   | 0.72 | 0.74 | 0.73     | 0.73 | 0.74 | 0.75 | 0.44   | 0.43    | 0.58   | 0.59 | 0.15  |
| bupa            | 0.68 | 0.71 | 0.7      | 0.69 | 0.69 | 0.68 | 0.61   | 0.59    | 0.64   | 0.64 | 0.05  |
| car             | 1.0  | 1.0  | 1.0      | 1.0  | 1.0  | 1.0  | 0.92   | 0.96    | 0.96   | 0.96 | 0.04  |
| cmc             | 0.81 | 0.8  | 0.8      | 0.8  | 0.81 | 0.78 | 0.38   | 0.36    | 0.55   | 0.6  | 0.25  |
| ecoli           | 0.94 | 0.94 | 0.94     | 0.94 | 0.94 | 0.93 | 0.83   | 0.67    | 0.88   | 0.88 | 0.06  |
| german          | 0.77 | 0.78 | 0.77     | 0.77 | 0.77 | 0.73 | 0.45   | 0.43    | 0.57   | 0.59 | 0.2   |
| glass           | 0.93 | 0.96 | 0.94     | 0.94 | 0.94 | 0.96 | 0.6    | 0.58    | 0.76   | 0.78 | 0.18  |
| haberman        | 0.78 | 0.76 | 0.77     | 0.77 | 0.77 | 0.75 | 0.38   | 0.36    | 0.53   | 0.56 | 0.24  |
| heart_cleveland | 0.88 | 0.91 | 0.9      | 0.89 | 0.89 | 0.95 | 0.13   | 0.17    | 0.35   | 0.54 | 0.54  |
| hepatitis       | 0.81 | 0.9  | 0.86     | 0.85 | 0.85 | 0.84 | 0.57   | 0.51    | 0.69   | 0.71 | 0.16  |
| horse_colic     | 0.83 | 0.89 | 0.86     | 0.86 | 0.86 | 0.83 | 0.69   | 0.69    | 0.75   | 0.76 | 0.11  |
| ionosphere      | 0.87 | 0.87 | 0.87     | 0.87 | 0.87 | 0.88 | 0.8    | 0.79    | 0.84   | 0.84 | 0.03  |
| new_thyroid     | 0.95 | 0.99 | 0.97     | 0.97 | 0.97 | 0.98 | 1.0    | 0.94    | 0.99   | 0.99 | -0.02 |
| postoperative   | 0.77 | 0.72 | 0.74     | 0.74 | 0.74 | 0.73 | 0.26   | 0.27    | 0.44   | 0.5  | 0.3   |
| seeds           | 0.96 | 0.96 | 0.96     | 0.96 | 0.96 | 0.99 | 0.61   | 0.75    | 0.78   | 0.8  | 0.18  |
| solar_flare     | 0.97 | 0.96 | 0.96     | 0.96 | 0.97 | 0.99 | 0.08   | 0.11    | 0.28   | 0.62 | 0.68  |
| transfusion     | 0.78 | 0.71 | 0.74     | 0.75 | 0.76 | 0.77 | 0.41   | 0.38    | 0.56   | 0.59 | 0.19  |
| vehicle         | 0.95 | 0.92 | 0.93     | 0.94 | 0.94 | 0.96 | 0.82   | 0.85    | 0.89   | 0.89 | 0.05  |
| vertebal        | 0.86 | 0.89 | 0.88     | 0.87 | 0.88 | 0.82 | 0.74   | 0.7     | 0.78   | 0.78 | 0.09  |
| yeastME1        | 0.99 | 0.99 | 0.99     | 0.99 | 0.99 | 0.98 | 0.76   | 0.67    | 0.86   | 0.87 | 0.13  |
| yeastME2        | 0.95 | 0.98 | 0.96     | 0.96 | 0.96 | 0.95 | 0.5    | 0.34    | 0.69   | 0.72 | 0.27  |
| yeastME3        | 0.96 | 0.96 | 0.96     | 0.96 | 0.96 | 0.96 | 0.7    | 0.68    | 0.82   | 0.83 | 0.14  |

#### Naive bayes

|                 |      | Na   | aive Ba | yes  |      |      | Naive | Bayes | TEST |      |       |
|-----------------|------|------|---------|------|------|------|-------|-------|------|------|-------|
|                 | Se   | Sp   | F1      | G    | AUC  | Se   | Sp    | F1    | G_t  | AUC  | G-G_t |
| abalone0_4      | 0.95 | 1.0  | 0.98    | 0.98 | 0.99 | 0.95 | 0.93  | 0.42  | 0.94 | 0.99 | 0.04  |
| abalone041629   | 0.77 | 0.55 | 0.62    | 0.65 | 0.71 | 0.76 | 0.5   | 0.24  | 0.62 | 0.7  | 0.03  |
| abalone16_29    | 0.56 | 0.79 | 0.71    | 0.66 | 0.76 | 0.57 | 0.79  | 0.19  | 0.67 | 0.75 | -0.01 |
| balance_scale   | 1.0  | 0.6  | 0.75    | 0.77 | 0.78 | 1.0  | 0.0   | 0.0   | 0.0  | 0.46 | 0.77  |
| breast_cancer   | 0.8  | 0.47 | 0.57    | 0.62 | 0.71 | 0.75 | 0.76  | 0.64  | 0.76 | 0.82 | -0.14 |
| bupa            | 0.32 | 0.84 | 0.67    | 0.52 | 0.67 | 0.35 | 0.74  | 0.56  | 0.51 | 0.63 | 0.01  |
| car             | 0.86 | 1.0  | 0.94    | 0.93 | 1.0  | 0.87 | 1.0   | 0.37  | 0.93 | 1.0  | 0.0   |
| cmc             | 1.0  | 0.55 | 0.71    | 0.74 | 0.76 | 1.0  | 0.0   | 0.0   | 0.0  | 0.54 | 0.74  |
| ecoli           | 0.78 | 0.97 | 0.89    | 0.87 | 0.94 | 0.75 | 1.0   | 0.48  | 0.87 | 0.96 | 0.0   |
| german          | 1.0  | 0.55 | 0.71    | 0.74 | 0.79 | 1.0  | 0.0   | 0.0   | 0.0  | 0.58 | 0.74  |
| glass           | 0.52 | 0.92 | 0.77    | 0.69 | 0.87 | 0.5  | 0.33  | 0.08  | 0.41 | 0.6  | 0.28  |
| haberman        | 0.98 | 0.5  | 0.66    | 0.7  | 0.76 | 0.93 | 0.06  | 0.1   | 0.24 | 0.7  | 0.46  |
| heart_cleveland | 0.77 | 0.91 | 0.85    | 0.83 | 0.88 | 0.83 | 0.44  | 0.32  | 0.61 | 0.84 | 0.22  |
| hepatitis       | 0.68 | 0.96 | 0.84    | 0.81 | 0.91 | 0.59 | 0.95  | 0.52  | 0.75 | 0.89 | 0.06  |
| horse_colic     | 0.74 | 0.78 | 0.76    | 0.76 | 0.86 | 0.74 | 0.63  | 0.61  | 0.69 | 0.72 | 0.07  |
| ionosphere      | 0.98 | 0.74 | 0.84    | 0.85 | 0.92 | 0.98 | 0.79  | 0.86  | 0.88 | 0.96 | -0.03 |
| new_thyroid     | 0.99 | 0.83 | 0.9     | 0.91 | 0.99 | 1.0  | 1.0   | 1.0   | 1.0  | 1.0  | -0.09 |
| postoperative   | 0.62 | 0.6  | 0.61    | 0.61 | 0.6  | 0.69 | 0.44  | 0.39  | 0.55 | 0.69 | 0.06  |
| seeds           | 0.92 | 1.0  | 0.96    | 0.96 | 1.0  | 0.94 | 0.82  | 0.85  | 0.88 | 0.98 | 0.08  |
| solar_flare     | 0.64 | 0.97 | 0.83    | 0.79 | 0.93 | 0.68 | 1.0   | 0.22  | 0.83 | 0.91 | -0.04 |
| transfusion     | 1.0  | 0.38 | 0.55    | 0.62 | 0.67 | 0.99 | 0.06  | 0.1   | 0.23 | 0.52 | 0.39  |
| vehicle         | 0.98 | 0.61 | 0.75    | 0.77 | 0.84 | 0.99 | 0.03  | 0.05  | 0.16 | 0.55 | 0.61  |
| vertebal        | 0.73 | 0.9  | 0.83    | 0.81 | 0.9  | 0.73 | 0.82  | 0.69  | 0.78 | 0.88 | 0.03  |
| yeastME1        | 0.74 | 1.0  | 0.88    | 0.86 | 0.99 | 0.78 | 1.0   | 0.22  | 0.88 | 0.99 | -0.02 |
| yeastME2        | 0.24 | 0.99 | 0.72    | 0.48 | 0.91 | 0.22 | 0.9   | 0.07  | 0.45 | 0.81 | 0.03  |
| yeastME3        | 0.37 | 0.99 | 0.75    | 0.6  | 0.97 | 0.38 | 0.97  | 0.28  | 0.61 | 0.93 | -0.01 |

## kNN

|                 |      |      | kNN  |      |      |      | k]   | NN TE | ST   |      |       |
|-----------------|------|------|------|------|------|------|------|-------|------|------|-------|
|                 | Se   | Sp   | F1   | G    | AUC  | Se   | Sp   | F1    | G_t  | AUC  | G-G_t |
| abalone0_4      | 0.96 | 1.0  | 0.98 | 0.98 | 0.99 | 0.97 | 0.87 | 0.5   | 0.92 | 0.92 | 0.06  |
| abalone041629   | 0.83 | 0.98 | 0.91 | 0.9  | 0.96 | 0.81 | 0.7  | 0.36  | 0.75 | 0.8  | 0.15  |
| abalone16_29    | 0.84 | 0.99 | 0.92 | 0.91 | 0.97 | 0.82 | 0.75 | 0.34  | 0.79 | 0.83 | 0.12  |
| balance_scale   | 0.84 | 0.98 | 0.92 | 0.91 | 0.96 | 0.81 | 0.06 | 0.04  | 0.22 | 0.54 | 0.69  |
| breast_cancer   | 0.63 | 0.83 | 0.76 | 0.72 | 0.8  | 0.56 | 0.56 | 0.43  | 0.56 | 0.64 | 0.16  |
| bupa            | 0.64 | 0.73 | 0.7  | 0.68 | 0.75 | 0.55 | 0.61 | 0.54  | 0.58 | 0.63 | 0.1   |
| car             | 0.98 | 1.0  | 0.99 | 0.99 | 1.0  | 0.99 | 0.93 | 0.84  | 0.96 | 1.0  | 0.03  |
| cmc             | 0.82 | 0.81 | 0.81 | 0.81 | 0.88 | 0.84 | 0.51 | 0.5   | 0.65 | 0.74 | 0.16  |
| ecoli           | 0.85 | 0.99 | 0.92 | 0.91 | 0.97 | 0.87 | 1.0  | 0.64  | 0.93 | 0.97 | -0.02 |
| german          | 0.86 | 0.65 | 0.73 | 0.75 | 0.83 | 0.86 | 0.3  | 0.37  | 0.51 | 0.68 | 0.24  |
| glass           | 0.8  | 0.99 | 0.91 | 0.89 | 0.96 | 0.92 | 0.9  | 0.6   | 0.91 | 0.95 | -0.02 |
| haberman        | 0.75 | 0.69 | 0.71 | 0.72 | 0.81 | 0.78 | 0.41 | 0.4   | 0.57 | 0.62 | 0.15  |
| heart_cleveland | 0.74 | 0.99 | 0.88 | 0.86 | 0.94 | 0.84 | 0.5  | 0.36  | 0.65 | 0.8  | 0.21  |
| hepatitis       | 0.81 | 0.98 | 0.9  | 0.89 | 0.95 | 0.88 | 0.88 | 0.74  | 0.88 | 0.92 | 0.01  |
| horse_colic     | 0.79 | 0.9  | 0.85 | 0.84 | 0.9  | 0.77 | 0.67 | 0.65  | 0.72 | 0.81 | 0.12  |
| ionosphere      | 0.98 | 0.8  | 0.88 | 0.89 | 0.98 | 0.96 | 0.67 | 0.76  | 0.8  | 0.94 | 0.09  |
| new_thyroid     | 0.99 | 0.99 | 0.99 | 0.99 | 1.0  | 0.97 | 1.0  | 0.92  | 0.99 | 1.0  | 0.0   |
| postoperative   | 0.53 | 0.74 | 0.67 | 0.62 | 0.69 | 0.6  | 0.52 | 0.41  | 0.56 | 0.51 | 0.06  |
| seeds           | 0.94 | 1.0  | 0.97 | 0.97 | 0.99 | 0.98 | 0.86 | 0.9   | 0.92 | 0.99 | 0.05  |
| solar_flare     | 0.94 | 0.92 | 0.93 | 0.93 | 0.97 | 0.93 | 0.29 | 0.2   | 0.52 | 0.67 | 0.41  |
| transfusion     | 0.81 | 0.73 | 0.76 | 0.77 | 0.84 | 0.68 | 0.42 | 0.35  | 0.54 | 0.6  | 0.23  |
| vehicle         | 0.95 | 0.91 | 0.93 | 0.93 | 0.98 | 0.95 | 0.87 | 0.85  | 0.91 | 0.97 | 0.02  |
| vertebal        | 0.77 | 0.95 | 0.87 | 0.86 | 0.93 | 0.7  | 0.86 | 0.7   | 0.78 | 0.85 | 0.08  |
| yeastME1        | 0.96 | 1.0  | 0.98 | 0.98 | 0.99 | 0.97 | 0.92 | 0.66  | 0.95 | 0.99 | 0.03  |
| yeastME2        | 0.89 | 1.0  | 0.95 | 0.94 | 0.98 | 0.93 | 0.87 | 0.46  | 0.9  | 0.92 | 0.04  |
| yeastME3        | 0.92 | 1.0  | 0.96 | 0.96 | 0.99 | 0.92 | 0.77 | 0.64  | 0.84 | 0.9  | 0.12  |

#### SVM

|                 |      |      | SVM  |      |      |      | S                   | VM TE | ST   |      |       |
|-----------------|------|------|------|------|------|------|---------------------|-------|------|------|-------|
|                 | Se   | Sp   | F1   | G    | AUC  | Se   | $\operatorname{Sp}$ | F1    | G_t  | AUC  | G-G_t |
| abalone0_4      | 0.95 | 1.0  | 0.98 | 0.98 | 0.99 | 0.96 | 0.93                | 0.43  | 0.94 | 0.99 | 0.04  |
| abalone041629   | 0.83 | 0.9  | 0.87 | 0.86 | 0.93 | 0.81 | 0.81                | 0.41  | 0.81 | 0.91 | 0.05  |
| abalone16_29    | 0.83 | 0.92 | 0.88 | 0.87 | 0.94 | 0.82 | 0.92                | 0.4   | 0.87 | 0.93 | 0.0   |
| balance_scale   | 1.0  | 0.56 | 0.72 | 0.75 | 0.76 | 1.0  | 0.0                 | 0.0   | 0.0  | 0.51 | 0.75  |
| breast_cancer   | 0.74 | 0.72 | 0.73 | 0.73 | 0.83 | 0.71 | 0.52                | 0.47  | 0.61 | 0.7  | 0.12  |
| bupa            | 0.71 | 0.69 | 0.69 | 0.7  | 0.79 | 0.71 | 0.65                | 0.64  | 0.68 | 0.74 | 0.02  |
| car             | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0                 | 0.96  | 1.0  | 1.0  | 0.0   |
| cmc             | 1.0  | 0.51 | 0.68 | 0.72 | 0.73 | 1.0  | 0.0                 | 0.0   | 0.0  | 0.5  | 0.72  |
| ecoli           | 0.86 | 0.98 | 0.93 | 0.92 | 0.97 | 0.92 | 1.0                 | 0.75  | 0.96 | 0.97 | -0.04 |
| german          | 0.99 | 0.52 | 0.68 | 0.72 | 0.84 | 0.99 | 0.03                | 0.05  | 0.16 | 0.75 | 0.56  |
| glass           | 0.84 | 0.98 | 0.92 | 0.91 | 0.98 | 1.0  | 0.33                | 0.5   | 0.58 | 0.75 | 0.33  |
| haberman        | 0.99 | 0.42 | 0.59 | 0.65 | 0.79 | 0.98 | 0.06                | 0.11  | 0.25 | 0.62 | 0.4   |
| heart_cleveland | 0.87 | 0.99 | 0.94 | 0.93 | 0.97 | 0.94 | 0.27                | 0.31  | 0.5  | 0.77 | 0.43  |
| hepatitis       | 0.91 | 0.96 | 0.94 | 0.93 | 0.98 | 0.94 | 0.67                | 0.7   | 0.79 | 0.94 | 0.14  |
| horse_colic     | 0.89 | 0.91 | 0.9  | 0.9  | 0.95 | 0.91 | 0.67                | 0.74  | 0.79 | 0.86 | 0.11  |
| ionosphere      | 0.97 | 0.94 | 0.96 | 0.96 | 0.99 | 0.95 | 0.92                | 0.91  | 0.94 | 0.97 | 0.02  |
| new_thyroid     | 0.98 | 1.0  | 0.99 | 0.99 | 1.0  | 1.0  | 1.0                 | 1.0   | 1.0  | 1.0  | -0.01 |
| postoperative   | 0.64 | 0.79 | 0.74 | 0.71 | 0.77 | 0.77 | 0.22                | 0.24  | 0.41 | 0.51 | 0.3   |
| seeds           | 0.96 | 1.0  | 0.98 | 0.98 | 1.0  | 1.0  | 0.86                | 0.92  | 0.93 | 0.98 | 0.05  |
| solar_flare     | 0.91 | 0.95 | 0.93 | 0.93 | 0.98 | 0.94 | 0.53                | 0.37  | 0.71 | 0.78 | 0.22  |
| transfusion     | 1.0  | 0.35 | 0.52 | 0.59 | 0.73 | 0.99 | 0.06                | 0.1   | 0.23 | 0.66 | 0.36  |
| vehicle         | 0.94 | 0.73 | 0.81 | 0.83 | 0.96 | 0.92 | 0.39                | 0.46  | 0.59 | 0.91 | 0.24  |
| vertebal        | 0.83 | 0.95 | 0.89 | 0.88 | 0.95 | 0.76 | 0.93                | 0.76  | 0.84 | 0.92 | 0.04  |
| yeastME1        | 0.97 | 1.0  | 0.99 | 0.99 | 1.0  | 0.98 | 0.82                | 0.63  | 0.9  | 0.99 | 0.09  |
| yeastME2        | 0.89 | 0.97 | 0.93 | 0.93 | 0.98 | 0.9  | 0.76                | 0.32  | 0.83 | 0.92 | 0.1   |
| yeastME3        | 0.95 | 0.98 | 0.96 | 0.96 | 0.99 | 0.94 | 0.78                | 0.69  | 0.86 | 0.96 | 0.1   |

# Cross validation z poprawnie zrobionym oversamplingiem

#### Decision tree

|                 |      | De   | cision [ | Tree |      |      | Decisi | on Tree | e TEST | ٠    |       |
|-----------------|------|------|----------|------|------|------|--------|---------|--------|------|-------|
|                 | Se   | Sp   | F1       | G    | AUC  | Se   | Sp     | F1      | G_t    | AUC  | G-G_t |
| abalone0_4      | 0.99 | 0.71 | 0.56     | 0.84 | 0.85 | 0.98 | 0.75   | 0.58    | 0.86   | 0.87 | -0.02 |
| abalone041629   | 0.89 | 0.44 | 0.33     | 0.62 | 0.66 | 0.89 | 0.46   | 0.33    | 0.64   | 0.67 | -0.02 |
| abalone16_29    | 0.91 | 0.39 | 0.28     | 0.59 | 0.65 | 0.9  | 0.49   | 0.33    | 0.66   | 0.69 | -0.07 |
| balance_scale   | 0.88 | 0.0  | 0.0      | 0.0  | 0.44 | 0.9  | 0.01   | 0.01    | 0.09   | 0.45 | -0.09 |
| breast_cancer   | 0.68 | 0.38 | 0.36     | 0.51 | 0.55 | 0.77 | 0.49   | 0.48    | 0.61   | 0.63 | -0.1  |
| bupa            | 0.58 | 0.54 | 0.51     | 0.56 | 0.56 | 0.67 | 0.61   | 0.59    | 0.64   | 0.64 | -0.08 |
| car             | 1.0  | 0.98 | 0.98     | 0.99 | 0.99 | 1.0  | 0.91   | 0.95    | 0.95   | 0.95 | 0.04  |
| cmc             | 0.78 | 0.38 | 0.36     | 0.55 | 0.59 | 0.78 | 0.36   | 0.34    | 0.53   | 0.58 | 0.02  |
| ecoli           | 0.93 | 0.71 | 0.62     | 0.82 | 0.82 | 0.93 | 0.73   | 0.63    | 0.83   | 0.83 | -0.01 |
| german          | 0.78 | 0.51 | 0.5      | 0.63 | 0.64 | 0.75 | 0.47   | 0.46    | 0.59   | 0.61 | 0.04  |
| glass           | 0.93 | 0.5  | 0.44     | 0.68 | 0.71 | 0.95 | 0.43   | 0.41    | 0.64   | 0.69 | 0.04  |
| haberman        | 0.79 | 0.43 | 0.43     | 0.58 | 0.6  | 0.74 | 0.33   | 0.32    | 0.49   | 0.53 | 0.09  |
| heart_cleveland | 0.87 | 0.36 | 0.31     | 0.56 | 0.62 | 0.94 | 0.2    | 0.24    | 0.43   | 0.57 | 0.13  |
| hepatitis       | 0.87 | 0.54 | 0.53     | 0.68 | 0.7  | 0.85 | 0.55   | 0.51    | 0.68   | 0.7  | 0.0   |
| horse_colic     | 0.84 | 0.72 | 0.72     | 0.78 | 0.78 | 0.83 | 0.68   | 0.69    | 0.75   | 0.76 | 0.03  |
| ionosphere      | 0.91 | 0.84 | 0.84     | 0.87 | 0.87 | 0.85 | 0.85   | 0.8     | 0.85   | 0.85 | 0.02  |
| new_thyroid     | 0.96 | 0.83 | 0.8      | 0.89 | 0.9  | 0.98 | 0.98   | 0.94    | 0.98   | 0.98 | -0.09 |
| postoperative   | 0.74 | 0.21 | 0.22     | 0.39 | 0.48 | 0.76 | 0.28   | 0.29    | 0.46   | 0.51 | -0.07 |
| seeds           | 0.97 | 0.89 | 0.92     | 0.93 | 0.93 | 0.99 | 0.59   | 0.73    | 0.77   | 0.79 | 0.16  |
| solar_flare     | 0.97 | 0.24 | 0.24     | 0.48 | 0.64 | 0.98 | 0.16   | 0.2     | 0.39   | 0.63 | 0.09  |
| transfusion     | 0.76 | 0.34 | 0.32     | 0.51 | 0.58 | 0.75 | 0.39   | 0.35    | 0.54   | 0.58 | -0.03 |
| vehicle         | 0.93 | 0.84 | 0.81     | 0.88 | 0.88 | 0.96 | 0.79   | 0.81    | 0.87   | 0.87 | 0.01  |
| vertebal        | 0.9  | 0.7  | 0.73     | 0.79 | 0.8  | 0.8  | 0.7    | 0.66    | 0.75   | 0.75 | 0.04  |
| yeastME1        | 0.98 | 0.66 | 0.6      | 0.8  | 0.82 | 0.99 | 0.73   | 0.69    | 0.85   | 0.86 | -0.05 |
| yeastME2        | 0.95 | 0.46 | 0.33     | 0.66 | 0.71 | 0.95 | 0.39   | 0.28    | 0.61   | 0.67 | 0.05  |
| yeastME3        | 0.96 | 0.79 | 0.75     | 0.87 | 0.88 | 0.96 | 0.7    | 0.69    | 0.82   | 0.83 | 0.05  |

#### Naive bayes

|                 |      | Na   | aive Ba | yes  |      |      | Naive | Bayes | TEST |      |       |
|-----------------|------|------|---------|------|------|------|-------|-------|------|------|-------|
|                 | Se   | Sp   | F1      | G    | AUC  | Se   | Sp    | F1    | G_t  | AUC  | G-G_t |
| abalone0_4      | 0.95 | 0.98 | 0.43    | 0.97 | 0.99 | 0.95 | 0.93  | 0.42  | 0.94 | 0.99 | 0.03  |
| abalone041629   | 0.78 | 0.55 | 0.27    | 0.65 | 0.71 | 0.76 | 0.51  | 0.24  | 0.62 | 0.7  | 0.03  |
| abalone16_29    | 0.56 | 0.78 | 0.19    | 0.66 | 0.75 | 0.57 | 0.78  | 0.19  | 0.67 | 0.75 | -0.01 |
| balance_scale   | 1.0  | 0.0  | 0.0     | 0.0  | 0.5  | 1.0  | 0.0   | 0.0   | 0.0  | 0.45 | 0.0   |
| breast_cancer   | 0.78 | 0.54 | 0.52    | 0.65 | 0.68 | 0.74 | 0.78  | 0.65  | 0.76 | 0.81 | -0.11 |
| bupa            | 0.33 | 0.83 | 0.6     | 0.52 | 0.62 | 0.36 | 0.76  | 0.57  | 0.52 | 0.64 | 0.0   |
| car             | 0.87 | 1.0  | 0.37    | 0.93 | 1.0  | 0.87 | 1.0   | 0.38  | 0.93 | 1.0  | 0.0   |
| cmc             | 1.0  | 0.0  | 0.0     | 0.0  | 0.51 | 1.0  | 0.0   | 0.0   | 0.0  | 0.54 | 0.0   |
| ecoli           | 0.76 | 0.93 | 0.47    | 0.84 | 0.86 | 0.75 | 1.0   | 0.48  | 0.86 | 0.95 | -0.02 |
| german          | 1.0  | 0.0  | 0.0     | 0.0  | 0.59 | 1.0  | 0.0   | 0.0   | 0.0  | 0.58 | 0.0   |
| glass           | 0.53 | 0.79 | 0.22    | 0.64 | 0.69 | 0.49 | 0.33  | 0.08  | 0.41 | 0.6  | 0.23  |
| haberman        | 0.98 | 0.11 | 0.19    | 0.33 | 0.58 | 0.93 | 0.06  | 0.1   | 0.24 | 0.7  | 0.09  |
| heart_cleveland | 0.79 | 0.68 | 0.42    | 0.73 | 0.78 | 0.84 | 0.46  | 0.34  | 0.62 | 0.83 | 0.11  |
| hepatitis       | 0.69 | 0.77 | 0.53    | 0.73 | 0.8  | 0.56 | 0.83  | 0.45  | 0.68 | 0.85 | 0.05  |
| horse_colic     | 0.75 | 0.72 | 0.68    | 0.74 | 0.83 | 0.76 | 0.64  | 0.62  | 0.69 | 0.74 | 0.05  |
| ionosphere      | 0.97 | 0.82 | 0.88    | 0.89 | 0.94 | 0.98 | 0.8   | 0.87  | 0.88 | 0.95 | 0.01  |
| new_thyroid     | 0.99 | 0.83 | 0.87    | 0.91 | 0.99 | 1.0  | 1.0   | 1.0   | 1.0  | 1.0  | -0.09 |
| postoperative   | 0.53 | 0.32 | 0.24    | 0.41 | 0.37 | 0.58 | 0.66  | 0.48  | 0.62 | 0.64 | -0.21 |
| seeds           | 0.93 | 1.0  | 0.93    | 0.96 | 0.99 | 0.93 | 0.81  | 0.84  | 0.87 | 0.97 | 0.09  |
| solar_flare     | 0.64 | 0.85 | 0.16    | 0.74 | 0.85 | 0.68 | 1.0   | 0.22  | 0.82 | 0.92 | -0.08 |
| transfusion     | 1.0  | 0.03 | 0.07    | 0.19 | 0.52 | 0.99 | 0.06  | 0.1   | 0.23 | 0.53 | -0.04 |
| vehicle         | 0.98 | 0.03 | 0.06    | 0.18 | 0.59 | 0.99 | 0.03  | 0.05  | 0.16 | 0.55 | 0.02  |
| vertebal        | 0.73 | 0.89 | 0.72    | 0.81 | 0.88 | 0.71 | 0.84  | 0.69  | 0.77 | 0.88 | 0.04  |
| yeastME1        | 0.75 | 0.94 | 0.18    | 0.84 | 0.96 | 0.78 | 1.0   | 0.22  | 0.88 | 0.99 | -0.04 |
| yeastME2        | 0.22 | 0.93 | 0.08    | 0.45 | 0.79 | 0.2  | 0.9   | 0.07  | 0.43 | 0.75 | 0.02  |
| yeastME3        | 0.34 | 0.98 | 0.27    | 0.58 | 0.92 | 0.36 | 0.96  | 0.27  | 0.59 | 0.9  | -0.01 |

### kNN

|                 |      |      | kNN  |      |      |      | k.   | NN TE | ST   |      |       |
|-----------------|------|------|------|------|------|------|------|-------|------|------|-------|
|                 | Se   | Sp   | F1   | G    | AUC  | Se   | Sp   | F1    | G_t  | AUC  | G-G_t |
| abalone0_4      | 0.97 | 0.86 | 0.46 | 0.91 | 0.93 | 0.97 | 0.86 | 0.51  | 0.91 | 0.93 | 0.0   |
| abalone041629   | 0.83 | 0.7  | 0.39 | 0.76 | 0.8  | 0.81 | 0.69 | 0.36  | 0.75 | 0.82 | 0.01  |
| abalone16_29    | 0.84 | 0.66 | 0.33 | 0.74 | 0.8  | 0.82 | 0.72 | 0.33  | 0.77 | 0.84 | -0.03 |
| balance_scale   | 0.84 | 0.1  | 0.07 | 0.29 | 0.53 | 0.83 | 0.07 | 0.05  | 0.24 | 0.54 | 0.05  |
| breast_cancer   | 0.66 | 0.49 | 0.42 | 0.56 | 0.62 | 0.58 | 0.61 | 0.46  | 0.59 | 0.68 | -0.03 |
| bupa            | 0.62 | 0.62 | 0.57 | 0.62 | 0.63 | 0.56 | 0.61 | 0.55  | 0.58 | 0.64 | 0.04  |
| car             | 0.98 | 0.96 | 0.8  | 0.97 | 1.0  | 0.99 | 0.93 | 0.86  | 0.96 | 1.0  | 0.01  |
| cmc             | 0.82 | 0.38 | 0.38 | 0.56 | 0.67 | 0.84 | 0.48 | 0.48  | 0.64 | 0.73 | -0.08 |
| ecoli           | 0.87 | 0.79 | 0.54 | 0.83 | 0.89 | 0.87 | 0.99 | 0.63  | 0.93 | 0.96 | -0.1  |
| german          | 0.86 | 0.33 | 0.39 | 0.53 | 0.66 | 0.86 | 0.33 | 0.39  | 0.53 | 0.67 | 0.0   |
| glass           | 0.8  | 0.71 | 0.36 | 0.76 | 0.79 | 0.94 | 0.7  | 0.58  | 0.81 | 0.92 | -0.05 |
| haberman        | 0.79 | 0.4  | 0.41 | 0.56 | 0.66 | 0.81 | 0.4  | 0.41  | 0.57 | 0.64 | -0.01 |
| heart_cleveland | 0.76 | 0.57 | 0.34 | 0.66 | 0.7  | 0.85 | 0.5  | 0.38  | 0.65 | 0.81 | 0.01  |
| hepatitis       | 0.81 | 0.77 | 0.62 | 0.79 | 0.86 | 0.88 | 0.85 | 0.72  | 0.86 | 0.92 | -0.07 |
| horse_colic     | 0.78 | 0.82 | 0.75 | 0.8  | 0.86 | 0.8  | 0.71 | 0.69  | 0.75 | 0.81 | 0.05  |
| ionosphere      | 0.97 | 0.75 | 0.84 | 0.86 | 0.9  | 0.96 | 0.71 | 0.79  | 0.82 | 0.93 | 0.04  |
| new_thyroid     | 0.98 | 0.92 | 0.9  | 0.95 | 0.96 | 0.97 | 1.0  | 0.92  | 0.99 | 1.0  | -0.04 |
| postoperative   | 0.42 | 0.32 | 0.21 | 0.36 | 0.33 | 0.53 | 0.68 | 0.47  | 0.6  | 0.64 | -0.24 |
| seeds           | 0.95 | 1.0  | 0.95 | 0.97 | 0.99 | 0.97 | 0.86 | 0.9   | 0.92 | 0.99 | 0.05  |
| solar_flare     | 0.93 | 0.59 | 0.37 | 0.74 | 0.83 | 0.93 | 0.37 | 0.24  | 0.58 | 0.68 | 0.16  |
| transfusion     | 0.81 | 0.41 | 0.4  | 0.57 | 0.66 | 0.72 | 0.47 | 0.4   | 0.58 | 0.62 | -0.01 |
| vehicle         | 0.95 | 0.9  | 0.88 | 0.93 | 0.98 | 0.94 | 0.88 | 0.85  | 0.91 | 0.98 | 0.02  |
| vertebal        | 0.75 | 0.85 | 0.72 | 0.8  | 0.88 | 0.69 | 0.83 | 0.67  | 0.76 | 0.82 | 0.04  |
| yeastME1        | 0.96 | 0.89 | 0.55 | 0.92 | 0.94 | 0.97 | 0.93 | 0.67  | 0.95 | 0.99 | -0.03 |
| yeastME2        | 0.89 | 0.49 | 0.22 | 0.66 | 0.76 | 0.92 | 0.78 | 0.39  | 0.85 | 0.89 | -0.19 |
| yeastME3        | 0.92 | 0.85 | 0.69 | 0.88 | 0.92 | 0.92 | 0.78 | 0.64  | 0.85 | 0.89 | 0.03  |

#### SVM

|                 |      |      | SVM  |      |      |      | S    | VM TE | ST   |      |       |
|-----------------|------|------|------|------|------|------|------|-------|------|------|-------|
|                 | Se   | Sp   | F1   | G    | AUC  | Se   | Sp   | F1    | G_t  | AUC  | G-G_t |
| abalone0_4      | 0.96 | 0.95 | 0.43 | 0.95 | 0.99 | 0.95 | 0.93 | 0.42  | 0.94 | 0.99 | 0.01  |
| abalone041629   | 0.83 | 0.81 | 0.43 | 0.82 | 0.89 | 0.81 | 0.81 | 0.41  | 0.81 | 0.91 | 0.01  |
| abalone16_29    | 0.84 | 0.76 | 0.36 | 0.8  | 0.89 | 0.83 | 0.9  | 0.41  | 0.87 | 0.93 | -0.07 |
| balance_scale   | 1.0  | 0.0  | 0.0  | 0.0  | 0.49 | 1.0  | 0.0  | 0.0   | 0.0  | 0.51 | 0.0   |
| breast_cancer   | 0.76 | 0.41 | 0.41 | 0.56 | 0.67 | 0.7  | 0.53 | 0.47  | 0.61 | 0.71 | -0.05 |
| bupa            | 0.71 | 0.63 | 0.62 | 0.67 | 0.73 | 0.7  | 0.72 | 0.67  | 0.71 | 0.75 | -0.04 |
| car             | 1.0  | 0.98 | 0.94 | 0.99 | 1.0  | 1.0  | 0.98 | 0.94  | 0.99 | 1.0  | 0.0   |
| cmc             | 1.0  | 0.0  | 0.0  | 0.0  | 0.48 | 1.0  | 0.0  | 0.0   | 0.0  | 0.49 | 0.0   |
| ecoli           | 0.88 | 0.86 | 0.59 | 0.87 | 0.94 | 0.93 | 0.99 | 0.77  | 0.96 | 0.97 | -0.09 |
| german          | 0.99 | 0.01 | 0.02 | 0.11 | 0.73 | 1.0  | 0.03 | 0.05  | 0.16 | 0.76 | -0.05 |
| glass           | 0.84 | 0.64 | 0.38 | 0.74 | 0.8  | 1.0  | 0.33 | 0.5   | 0.58 | 0.69 | 0.16  |
| haberman        | 0.99 | 0.03 | 0.06 | 0.17 | 0.62 | 0.95 | 0.07 | 0.12  | 0.27 | 0.66 | -0.1  |
| heart_cleveland | 0.86 | 0.39 | 0.32 | 0.58 | 0.76 | 0.95 | 0.23 | 0.29  | 0.47 | 0.76 | 0.11  |
| hepatitis       | 0.9  | 0.5  | 0.53 | 0.67 | 0.84 | 0.95 | 0.6  | 0.67  | 0.76 | 0.93 | -0.09 |
| horse_colic     | 0.9  | 0.75 | 0.78 | 0.82 | 0.91 | 0.92 | 0.66 | 0.73  | 0.78 | 0.86 | 0.04  |
| ionosphere      | 0.98 | 0.9  | 0.93 | 0.94 | 0.98 | 0.95 | 0.92 | 0.92  | 0.93 | 0.97 | 0.01  |
| new_thyroid     | 0.98 | 0.96 | 0.92 | 0.97 | 1.0  | 0.99 | 1.0  | 0.98  | 1.0  | 1.0  | -0.03 |
| postoperative   | 0.68 | 0.05 | 0.05 | 0.19 | 0.32 | 0.82 | 0.28 | 0.32  | 0.48 | 0.56 | -0.29 |
| seeds           | 0.96 | 1.0  | 0.96 | 0.98 | 1.0  | 1.0  | 0.86 | 0.92  | 0.92 | 0.98 | 0.06  |
| solar_flare     | 0.91 | 0.65 | 0.33 | 0.77 | 0.89 | 0.93 | 0.52 | 0.33  | 0.7  | 0.79 | 0.07  |
| transfusion     | 0.99 | 0.03 | 0.07 | 0.19 | 0.63 | 0.99 | 0.06 | 0.1   | 0.23 | 0.64 | -0.04 |
| vehicle         | 0.95 | 0.3  | 0.41 | 0.54 | 0.92 | 0.92 | 0.32 | 0.41  | 0.54 | 0.91 | 0.0   |
| vertebal        | 0.83 | 0.85 | 0.77 | 0.84 | 0.93 | 0.74 | 0.89 | 0.73  | 0.81 | 0.9  | 0.03  |
| yeastME1        | 0.97 | 0.83 | 0.62 | 0.9  | 0.98 | 0.98 | 0.82 | 0.64  | 0.9  | 0.98 | 0.0   |
| yeastME2        | 0.9  | 0.56 | 0.25 | 0.71 | 0.85 | 0.9  | 0.74 | 0.33  | 0.82 | 0.91 | -0.11 |
| yeastME3        | 0.95 | 0.88 | 0.76 | 0.91 | 0.97 | 0.94 | 0.77 | 0.69  | 0.85 | 0.96 | 0.06  |