APPENDIX: Classification results from complete-case analysis for both binary classifiers

Table 7: Classification tables from un-imputed data

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Binary Logistic Regression** | | | | | |
| Observed | | Predicted group membership | | | |
| Breast cancer recurrence | | | % correct classification |
| Yes | No | Total |
| Breast cancer recurrence | Yes | 53 | 66 | 119 | 44.5 |
| No | 38 | 88 | 126 | 69.8 |
| Total | | 91 | 154 | 245 | 57.6 |
| **Linear Discriminant Analysis** | | | | | |
| Observed | | Predicted group membership | | | |
| Breast cancer recurrence | | | % correct classification |
| Yes | No | Total |
| Breast cancer recurrence | Yes | 45 | 74 | 119 | 37.8 |
| No | 28 | 98 | 126 | 77.8 |
| Total | | 73 | 172 | 245 | 58.4 |

Table 8: Areas under the ROC curves: Null the hypothesis ‘true area = 0.5’

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variable used in classifiers | Area | S.E | P-value | 95% C.I | |
| Lower | Upper |
| Age of patient  Respiratory rate  Body Mass Index  Body surface area | 0.543  0.482  0.509  0.520 | 0.037  0.037  0.037  0.037 | 0.240  0.633  0.811  0.587 | 0.470  0.410  0.436  0.448 | 0.617  0.555  0.581  0.592 |

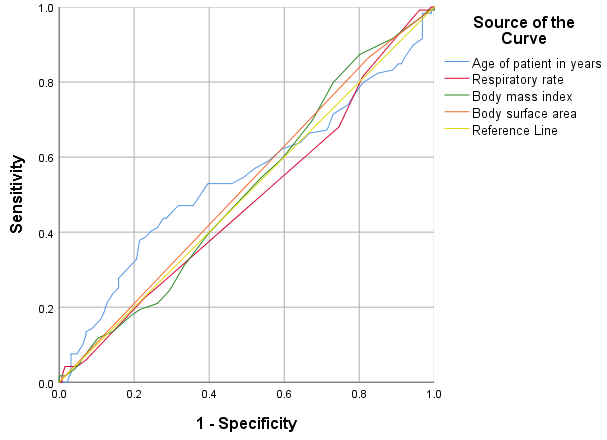


Figure 4: ROC curve from complete-case analysis