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 rateBody Mass Index Body surface area  | 0.5430.4820.5090.520 | 0.0370.0370.0370.037 | 0.2400.6330.811 0.587 | 0.4700.4100.4360.448 | 0.6170.5550.5810.592 |



Figure 4: ROC curve from complete-case analysis