**Supporting Information**

Study on the Prediction of Congenital Heart Abnormalities Using Various Machine Learning Models

**Table S1.** TP, TN, FP, and FN Values for All Models (Total Images: 100)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Model** | **TP** | **TN** | **FP** | **FN** |
| **MLBDP** | 29 | 36 | 24 | 11 |
| **PACHD** | 26 | 37 | 23 | 14 |
| **CDLM** | 37 | 54 | 6 | 3 |
| **NHF** | 28 | 43 | 17 | 12 |
| **DSSEP** | 32 | 49 | 11 | 8 |



Figure S1. Confusion matrix and Accuracy of model prediction for 100 images.



Figure S2. ROC (AUC) curves for all models (images=100)

**Table S2:** A sample of data collected from ultrasound images

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Area | Perimeter | Eccentricity | Mean Intensity | Solidity | Centroid |
| 856 | 191.83 | 0.993 | 0.749 | 0.971 | (68.39, 9.43) |
| 470 | 122.86 | 0.985 | 0.755 | 0.916 | (51.51, 20.99) |
| 462 | 119.24 | 0.984 | 0.776 | 0.935 | (164.93, 20.99) |
| 2218 | 182.47 | 0.614 | 0.705 | 0.965 | (337.47, 498.21) |
| 453 | 102.39 | 0.905 | 0.547 | 0.901 | (409.58, 349.29) |
| 1074 | 286.75 | 0.864 | 0.535 | 0.559 | (337.65, 370.64) |
| 627 | 127.7 | 0.969 | 0.603 | 0.956 | (216.06, 225.83) |
| 182 | 68.56 | 0.974 | 0.544 | 0.929 | (355.79, 303.19) |