

## Supplementary material

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Supplementary Table 1: Table of predictive parameters

<b>Demographic Parameters</b>	<b>Anthropometric Parameters</b>	<b>Clinical Parameters</b>	<b>ECG Parameters</b>
Age	Height	Systolic Blood Pressure	Mean PR interval
	Weight	Diastolic Blood Pressure	Mean PR segment
	Body Fat Percentage	Urine Dipstick Protein	Mean QRS duration
		Urine Dipstick Blood	Mean QTc interval
		Urine Dipstick Glucose	Mean QT interval
		Haemoglobin	Mean ventricular rate
		Pectus Excavatum	QT interval dispersion
			R wave height in avF, avL, avR, I, II, III, V1-6
			S wave height in avF, avL, avR, I, II, III, V1-6
			Ventricular activation time in avL, V5, V6

Supplementary Table 2: Classical criteria for LVH

Classical Model	Description	
Sokolow-Lyon continuous	S in V1 + larger of R in V5 or V6 in mm	
Sokolow-Lyon	Sokolow-Lyon continuous > 35mm	
Cornell continuous	R in aVL + S in V3 in mm	
Cornell thresholded	Cornell continuous > 28mm	
Cornell product continuous	Cornell continuous * mean QRS duration	
Cornell product thresholded	Cornell product continuous > 244	
Romhilt-Estes Continuous	Points based criteria:	
	Voltage Criteria (any of):	3
	• R or S in limb leads $\geq 20$ mm	
	• S in V <sub>1</sub> or V <sub>2</sub> $\geq 30$ mm	
	• R in V <sub>5</sub> or V <sub>6</sub> $\geq 30$ mm	
	ST-T Abnormalities:	
	• ST-T vector opposite to QRS without digitalis	3
	• ST-T vector opposite to QRS with digitalis	1
	Negative terminal P mode in V <sub>1</sub> 1 mm in depth and 0.04 sec in duration	3
	Left axis deviation (QRS of -30° or more)	2
	QRS duration $\geq 0.09$ sec	1
Delayed intrinsicoid deflection in V <sub>5</sub> or V <sub>6</sub> (> 0.05 sec)	1	
Romhilt-Estes thresholded	Romhilt-Estes score 5 or more	

Supplementary Table 3: Additional Model Evaluation Parameters

<b>Predictive Model</b>		<b>Sensitivity</b>	<b>Specificity</b>	<b>NPV<sup>a</sup></b>	<b>PPV<sup>b</sup></b>
Classical criteria (continuous)	Sokolow-Lyon	0.640	0.559	0.994	0.013
	Cornell	0.640	0.531	0.994	0.013
	Cornell product	0.790	0.420	0.994	0.011
	Romhilt-Estes	0.360	0.764	0.993	0.011
Classical criteria (thresholded)	Sokolow-Lyon	0.670	0.503	0.994	0.012
	Cornell	0.920	0.203	0.993	0.021
	Cornell product	0.860	0.322	0.994	0.014
	Romhilt-Estes	0.613	0.500	0.992	0.028
Machine learning models (with ECG parameters only)	Logistic Regression	0.720	0.784	0.998	0.020
	GLMNet	0.816	0.811	0.998	0.031
	Random Forests	0.787	0.811	0.998	0.027
	Gradient Boosting Machines	0.766	0.649	0.997	0.019
Machine learning models (with all predictive parameters)	Logistic Regression	0.806	0.730	0.998	0.026
	GLMNet	0.789	0.865	0.999	0.029
	Random Forests	0.879	0.676	0.997	0.038
	Gradient Boosting Machines	0.701	0.757	0.998	0.018

<sup>a</sup> Negative Predictive Value

<sup>b</sup> Positive Predictive Value