Appendix

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1 Execution time of the RV monitor

In the previous section, we discussed different conventional temporal aspects of an ECG signal. In this section, we discuss the cardiac problems caused by temporal feature deviations and the timed policies considered to monitor and classify ECG.

As previously stated, a typical ECG signal has various temporal aspects, including PR, QT, RR, and P-wave intervals, as well as conventional ranges. Any variations from these normal electrical patterns can suggest a variety of heart conditions. Different ECG waves and intervals, their usual ranges, and abnormalities in the heart when these properties deviate from their safe ranges are presented in 1

Table 1: ECG features and heart abnormalities
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ECG waves and intervals	Normal Range	Abnormal duration	Heart Abnormality	
2*PR interval	2*0.12-0.20s	¡ 0.12 s	Pre-excitation syndromes	
		¿ 0.2 s	First-degree AV block	
2*QRS complex	2*0.08-0.12 s	0.1 - 0.12 s	Incomplete bundle branch block	
		¿ 0.12 s	Complete bundle branch block	
2*QT interval	2*350-480 ms	¿ 480 ms	Abnormal ventricular repolarization	
		¡ 390 ms	Abnormal ventricular depolarization or repolarization	
RR interval	0.6-1.2 s	variable	Irregular heart rhythm	
P-wave	≤ 0.12s	¿ 0.12 s	atrial enlargement	