Wave	Duration	Cause	Clinical Significance
P wave	0.1	atrial depolarization	guide to functional activity of atria
QRS complex	0.08 Q → 0.02, R → 0.04 S → 0.02	Ventricular depolarization Q → depolarization of interventricular septum R → , , ventricular apex and wall S → , , , of , base	Prolongation of QRS complex + M shaped R wave → ventricular hypertrophy, cardiac stress Deep Q wave → myocardial infarction
T wave	0.25	Ventricular repolarization 1/2 R (the wave)	inverted T wave → myocardial ischemia → myocardial infarcation
U wave	0.05	repolarization of papilary muscle in obese	USually absent + has No Pathological Significance
PR interval Start P wave → Start R wave	0.12 - 0.21	AVN Conduction	Prolonged PR interval → β-Blockers, vagal Stimulation, 1st degree heart block Shortened PR interval → sympathetic accelerated AV conduction if prolonged → delay conductivity and Vise Versa
ST Segment end of S → start of T	0.1	Complete depolarization of Ventricle	Normally isoelectric, if displaced above or under the line → ischemia
QT interval start of q → end of T	0.4	Ventricular depolarization and repolarization	Shortened → hypercalcemia Prolonged → hypertension, hypocalcemia