

Medical Research

Electrocardiogram Interpretation Guidelines

These criteria for ECG interpretation are recommended to be the standard used by physicians to decide whether or not to include (or exclude) an individual from a study. These guidelines focus on subject/patient safety and are standard, unless modified by a given protocol or client. The Study Physician has the final say as to the application of these guidelines, which may vary depending on the agent being tested.

Normal Variant or Within Normal Limits (WNL = Normal)

- Sinus dysrhythmia, with or w/o a wandering atrial pacemaker, 18-45 yr.
- Borderline first degree A-V block - PR = .20+
- Premature Ventricular Contractions (PVC) - up to 5/minute
- Premature Atrial Contractions (PAC) - up to 5/minute
- Sinus Bradycardia >45 i.e. 45 to 60 bpm
- Incomplete Right Bundle Branch Block (IRBBB)
- Early transition – RsR in V1 etc.
- Voltage criteria for LVH
- Short P-R interval (without a delta wave)
- Right axis deviation in young adults

Abnormal but usually Not Clinically Significant (Abn/NCS) - usually OK

- First degree heart block (PR > .22 but <.24)
- Right Bundle Branch Block (RBBB) with or without a LAHB
- Sinus Bradycardia less than 45 bpm if asymptomatic
- Borderline axis deviations i.e. just >+90° or >-30°
- Some T wave flattening - ? is it due to hyperventilation
- Tall T waves if voltage is high generally

Abnormal - to be reviewed individually (Abn/CS)- usually excluded

- Left Bundle Branch Block (LBBB) unless proven congenital
- Peaked T waves in subjects > 60 years of age
- Sinus dysrhythmia in subjects > 50 years old
- Second degree A-V block Type I (Wenkebach) < 30 years of age
- Wolf-Parkinson-White (WPW) pre-excitation syndrome
- LBBB with 1st degree A-V block
- Type I or II 2nd degree A-V block
- Complete (3rd degree) heart block
- Left Ventricular Hypertrophy (LVH), with or without strain
- Ventricular Tachycardia (V Tach) i.e. > 3 PVC in succession
- Atrial Flutter (AF) or Atrial Fibrillation (AF)
- ECG evidence of current or old ischemia or infarction