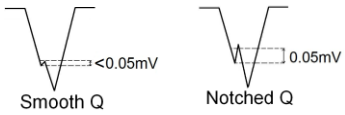
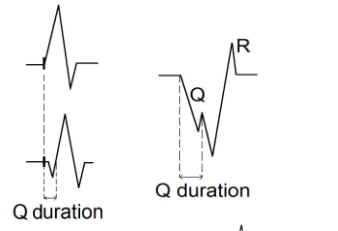
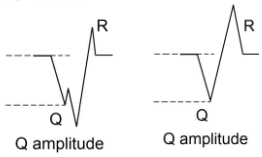
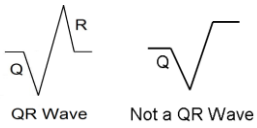
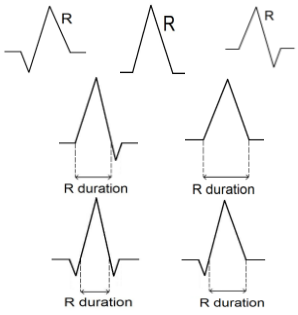
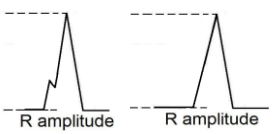
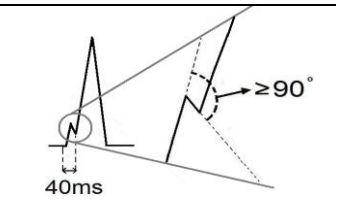
Appendix 1: Glossary for No Confounders, LVH, LAFB, RBBB, RBBB+LAFB

DEFINITIONS	ILLUSTRATIONS
Q-Wave: When the first deflection of the QRS complex is negative, it is termed a "Q wave". It can be seen as "smooth Q" or "notched Q."	
Smooth Q: Present if there is no reversal in direction ≥0.05 mV in the first negative deflection (*left picture).*	
Notched Q: Present when there is a reversal in direction ≥0.05 mV within the initial negative deflection (*right picture*).	
Q-Wave Duration: Taken from the start of the global QRS complex (i.e. if there is an isoelectric segment preceding a Q-wave it contributes to the Q-wave duration *(left picture)* to the point directly above the peak of the notch in a notched Q *(right picture)* or where the tracing re-crosses the PQ baseline in a smooth Q.	
Q-Wave Amplitude: Measured from the nadir of the negative deflection of the notch in a notched Q *(left picture)* or from the most negative deflection *(right picture)*, to the PQ-segment baseline in a smooth Q.	
QR: R-wave must be present following a Q wave.	
Any Q: Any type of Q wave is present.	
In Leads V1-V3 for LVH: • If QR is present, a point is given. • If any Q wave is present a point is only given if ≥4 other QRS points are present in leads I, aVL, V4, V5 or V6. This is done because LVH can cause a Q wave in V1-V3 without the presence of infarction, however if signs of anterior infarct are present in other leads, then the Q wave in V1-V3 is more likely due to infarct/scar.	
R-Wave: The first positive deflection of the QRS complex.	
R-Wave Duration: • <u>No Q-Wave:</u> Measured from beginning of global QRS complex to the point where it re-crosses PQ-segment baseline or the end of the QRS complex (whichever comes first). • <u>Q-Wave Present:</u> The R-wave begins when the Q-wave returns to the PQ-segment baseline and ends when the tracing re-crosses the PQ baseline or the end of the QRS complex (whichever comes first).	
R-Wave Amplitude: Measured from the PQ-segment baseline to the most positive deflection before it re-crosses the baseline (regardless of the presence of a notch). ***Except RBBB, see next page.***	
** In LAFB, lead V2: An R wave must be present to receive ANY points.	

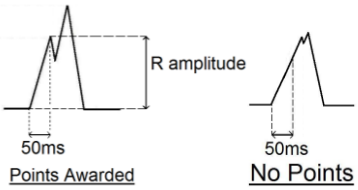
In RBBB:

- When awarding points for large R waves in V1-V2 for posterolateral infarct, a notch (reversal in direction ≥90˚ that peaks within the first 50 ms should be considered the peak of the initial-R wave ("Init R"). The nadir of the notch should be considered the end of the initial-R wave.



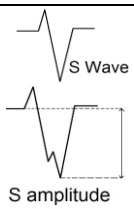
- If the R wave's initial peak occurs after the first 50ms of the global QRS complex, points are not given. This is done because the later part of the R-wave or R' represents the depolarization of the right ventricle.

- The duration of the Initial R wave is measured from where the R wave begins to either the nadir of the notch following the initial peak or where the tracing re-crosses the PQ baseline. Initial R waves refer to the initial peak of the R wave, presence of Q waves preceding the R wave does not discount the "InitR" criteria.

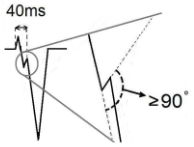


S-Wave: The first negative deflection after an R-wave.

S-Wave Amplitude: Measured from the PQ-segment baseline to the most negative part of the S wave (regardless of presence of notch).

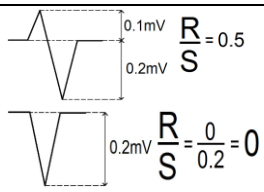


NchInit40: Any reversal of direction ≥ 90° that begins within the first 40 ms of the global QRS complex yields 1 point in V4, V5 and V6 in all conduction types (except LBBB) and also 1 point in V1, V2 and V3 in LVH. Smooth R or Q waves do not satisfy "NchInit40" criteria.



R/Q or R/S Amplitude Ratios:

- Ratio of the R-wave amplitude to the Q- or S-wave amplitude.
- If no R wave is present, then this is considered an R/S or R/Q of 0, which receives the maximum points for the ratio criteria.
- For QRS complexes with multiple R and/or R' waves, only the first R wave is considered for scoring. Similarly, for QRS complexes with multiple S or S' waves, only the first S wave is considered for scoring.

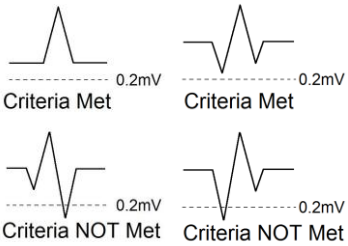


Q ≤ 0.2 & S≤0.2 mV and Q ≤ 0.3 & S≤0.3 mV:

- Points will be awarded for this criteria only if BOTH the Q and the S amplitudes of the lead are less than or equal to 0.x mV (where x=2 for V1 posterior and x=3 for V2 posterior)

- If either the Q or S wave is absent, the wave is regarded as having an amplitude of 0.00 mV.

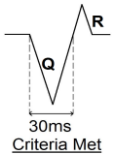
Q≤0.2 & S≤0.2mV



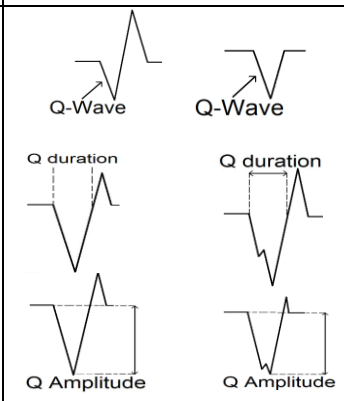
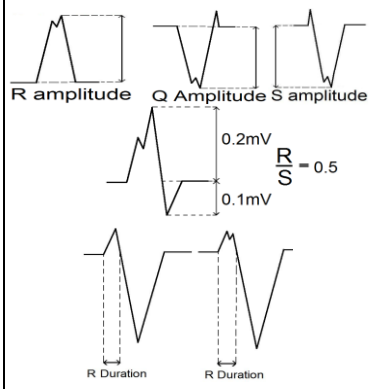
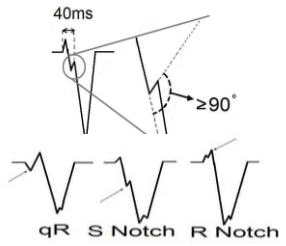
QR & (Q≥30ms):

- Points will be awarded only if BOTH QR morphology is present AND Q-Wave duration is more than or equal to 30ms.

QR&(Q≥30ms)



Appendix 2: Glossary for LBBB

DEFINITION	ILLUSTRATIONS
Q-Wave: When the first deflection of the QRS complex is negative, it is termed a "Q wave" • In contrast to QRS scoring in other conduction/ hypertrophy types, notches are ignored for the purpose of defining the end of the Q wave. **Q-Duration:** Taken from the start of the global QRS complex (i.e. if there is an isoelectric segment preceding a Q-wave it contributes to the Q-wave duration) and proceeds until the tracing re-crosses the PQ-segment baseline (regardless of the presence of a notch). **Q-Amplitude:** Measured from PQ-baseline to the most negative deflection (regardless of the presence of a notch).	
R-Wave Amplitude and Amplitude Ratios (R/Q and R/S): • When considering absolute R-wave amplitude or R/Q or R/S amplitude ratios, the most positive point (R or R') should be considered the R wave (regardless of notch). • The most negative point should be considered the Q or S wave amplitude (regardless of notches). **R-Wave Duration:** R-wave duration is measured from the start of the global QRS complex to the point where it re-crosses the PQ baseline (regardless of presence of notch) or the end of the QRS complex (whichever comes first).	
NchInIt40: A notch (change in direction ≥90º) that begins its change in direction within the initial 40 ms. • A notch on the R wave, or a notch on the S wave within the first 40 ms do count as a NchInIt40. • A smooth R or qR wave does not count as NchInIt40.	
R/R' and S/S' Amplitude Ratios: • These points can be obtained in V1-V2 (S/S' amplitude ratio) and V5-V6 (R/R' amplitude ratio). • The R or S is defined as the first peak/nadir, notch or beginning of the slur. • If no R wave is present, for this criteria treat Q wave as S wave. • The R' or S' is defined as the second peak/nadir, notch or end of the slur. • If there is no identifiable notch/slur, then these criteria should be ignored. • In leads V5 and V6, both peaks/notches/slurs must be above the PQ baseline to receive R/R' points.