Supraventricular tachycardias (SVT) are represented on electrocardiograms (ECG) as narrow QRS tachycardia. They can be wide QRS tachycardia, when functional bundle branch block occurs. Based on ECG appearance, SVT can be classified into short RP tachycardia or long RP tachycardia. According to underlying mechanisms, SVT can be classified into atrioventricular (AV) reciprocating tachycardia (AVRT), AV nodal reentrant tachycardia (AVNRT) or atrial tachycardia (AT). The two most common SVT, including AVNRT and AVRT, are reentrant and include AV node in the tachycardia circuit. In contrast, AT is independent of AV nodal conduction. In the case of AVRT, antegrade conduction proceeds via the AV node while retrograde conduction occurs via the accessory pathway. As ventricles and atria are sequentially activated, the P waves are usually on the ST-T segment. In the case of AVNRT, the presence of dual AV nodal pathways (fast pathway and slow pathway) underlies the mechanism. During common AVNRT, the antegrade limb passes via the slow pathway, while the retrograde limb passes via the fast pathway. As atria and ventricles are activated simultaneously, the P waves are frequently observed as pseudo-R waves in V1 lead. In the case of AT, the mechanism may be abnormal automaticity, triggered activity or reentry. Adenosine (or adenosine triphosphate) is useful to determine the tachycardia as AV nodal dependent or independent. However, a small dose of adenosine peculiarly terminates some AT.

Keywords: atrioventricular reciprocating tachycardia, atrioventricular nodal reentrant tachycardia, atrial tachycardia