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| **Appendix A.** Definitions for Serious Adverse Events | |
| **Type of Serious Adverse Event (SAE)\*** | **Description** |
| **Death** | Because of syncope or unknown causes. |
| **Arrhythmias** | Sustained (>30 seconds) or polymorphic ventricular tachycardia, symptomatic sinus bradycardia less than 40 beats/min; sick sinus with alternating sinus bradycardia and tachycardia; sinus pause greater than 3 seconds; Mobitz type II atrioventricular heart block; complete heart block or junctional/idioventricular rhythm; alternating left and right bundle branch block, symptomatic (light-headedness/dizziness, hypotension—systolic BP <90 mm Hg) supraventricular tachycardia with rate greater than 100 beats/min; symptomatic atrial flutter or fibrillation with fast (>100 beats/min) or slow (RR interval greater than 3 seconds) ventricular rate; pacemaker or implantable cardioverter-defibrillator (ICD) malfunction with cardiac pauses, or an abnormal electrophysiologic study result (corrected sinus node recovery time >550 ms; His-ventricular intervals >100 ms; inducible ventricular tachycardia for greater than 30 seconds; polymorphic ventricular tachycardia or ventricular fibrillation in patients with Brugada or ventricular dysplasia or previous cardiac arrest; symptomatic supraventricular tachycardia, or Infra-Hisian block). |
| **Myocardial infarction** | Defined as a clinically important elevation in troponin or ECG change and must have been confirmed by the emergency physician or cardiologist or the most responsible physician. |
| **Serious Structural Heart Disease** | Aortic stenosis with valve area less than or equal to 1 cm2; hypertrophic cardiomyopathy with outflow tract obstruction; left atrial myxoma or thrombus with outflow tract obstruction; pericardial effusion with ventricular wall motion abnormalities or pericardial tamponade. |
| **Aortic dissection** | Confirmed by CT of the chest, transesophageal echocardiogram, MRI, or angiography. |
| **Pulmonary embolism** | Confirmed by ventilation-perfusion scan, CT scan of the chest, or angiography. |
| **Severe pulmonary artery hypertension** | Detected by cardiac catheterization or echocardiography, with a mean pulmonary arterial pressure greater than 30 mm Hg and was responsible for the syncope |
| **Subarachnoid hemorrhage** | Confirmed by CT/MRI of the brain with or without spinal fluid analysis by lumbar puncture. |
| **Significant hemorrhage** | Defined as syncope associated with detected source of bleeding such as gastrointestinal bleeding, ruptured abdominal aortic aneurysm, or ectopic pregnancy that is clinically significant to cause presyncope in the opinion of the treating physician or that required transfusion. |
| **Any other serious condition** | Includes conditions such as ectopic pregnancy, pneumothorax, sepsis that will require treatment and will cause the patient to return to the emergency department if not detected. |
| **Procedural interventions** | Any interventions used to treat a cause of syncope. The procedural interventions include pacemaker and/or defibrillator insertion, cardioversion for arrhythmias, surgery for valvular heart disease, dialysis for electrolyte abnormalities causing arrhythmia, chest tube/pig tail catheter insertion for pneumothorax or pleural effusion, or surgery for abdominal aortic aneurysm or ruptured spleen. |
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| \*SAE is defined as identification or occurrence of any of the following conditions related to syncope within 30 days of the index visit. | |