

# Medical Coverage Policy



## Signal-Averaged Electrocardiography (SAECG)

Device/Equipment  Drug  Medical  Surgery  Test  Other

Effective Date:	12/1/2001	Policy Last Updated:	7/3/2012
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**Prospective review is recommended/required. Please check the member agreement for preauthorization guidelines.**

**Prospective review is not required.**

### Description:

Signal averaged electrocardiography (SAECG) is a technique involving computerized analysis of small segments of a standard ECG in order to detect abnormalities, termed ventricular late potentials (VLP), that would be otherwise obscured by "background" skeletal muscle activity. VLPs reflect aberrant, asynchronous electrical impulses arising from viable isolated cardiac muscle bordering an infarcted area and are thought to be responsible for ventricular tachyarrhythmias. Therefore, VLPs as measured by signal averaged electrocardiography have been investigated as a risk factor for arrhythmic events in patients with a variety of cardiac conditions, including cardiomyopathy and prior history of myocardial infarction (MI).

Patients considered being at high risk for ventricular arrhythmias and thus sudden death may be treated with drugs to suppress the emergence of arrhythmias with automatic implantable cardiac defibrillators (AICDs) to promptly terminate tachyarrhythmias when they occur. Since sudden cardiac death, whether from arrhythmias or pump failure, is one of the most common causes of death after a myocardial infarction, there is intense interest in risk stratification in order to target therapy. Patient groups are divided into those who have not experienced a life threatening arrhythmia (primary prevention) and those who have (secondary prevention). SAECG is just one of many risk factors that have been investigated. Others include left ventricular ejection fraction, arrhythmias detected on Holter monitor or electrophysiologic studies, heart rate variability, baroreceptor sensitivity and T-wave alternans. T-wave alternans measures beat-to-beat variability while SAECG measures beat-averaged conduction.

The position of the American College of Cardiology consensus states that present methods of analyzing SAECG is promising but currently unproven for assessment of pharmacologic, mechanical or surgical interventions that restore coronary blood flow.<sup>1</sup>

### Medical Criteria:

Not applicable.

**Policy:**

Signal averaged electrocardiography is medically necessary for **BlueCHiP for Medicare members and** not medically necessary for commercial products as there is insufficient medical literature to support the efficacy of this treatment.

*Note: Medicare policy is developed separately from BCBSRI policy. Medicare policy incorporates consideration of governmental regulations from CMS (Centers for Medicare and Medicaid Services), such as national coverage determinations or local coverage determinations. In addition to benefit differences, CMS may reach different conclusions regarding the scientific evidence than does BCBSRI. Medicare and BCBSRI policies may differ. However, BlueCHiP for Medicare members must be offered, at least, the same services as Medicare offers.*

**Coverage:**

Benefits may vary between groups/contracts. Please refer to the appropriate Evidence of Coverage, Subscriber Agreement or Benefit Booklet for applicable speech or not medically necessary coverage/benefits.

**Coding:**

The following code is covered for BlueCHiP for Medicare only:

**93278**

The following code is not medically necessary for all BCBSRI products.

**0206T**

**Also known as:**

Not applicable

**Related topics:**

Not applicable

**Published:**

Professional Bulletin, June 1990  
Policy Update, November 2000  
Policy Update, January 2006  
Policy Update, January 2007  
Provider Update, January 2010  
Provider Update, January 2011  
Provider Update, March 2012  
Provider Update, September 2012

**References:**

Blue Cross and Blue Shield Association. Medical Policy Reference Manual. Policy # 2.02.04 Signal-Averaged Electrocardiography. Accessed 06/07/2012

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