



## ***Stroke Care 2006: Critical Issues in Emergency Medicine***

# **Optimal Emergency Department Neuroprotection Strategies in Acute Ischemic Stroke Patients**

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### **Learning Objectives**

- Review the current state of neuroprotection strategies that limit the extent of secondary injury following acute ischemic stroke.
- Discuss the possible role of neuroprotectants such as NXY-059 in the treatment of ED ischemic stroke patients based on the methods and preliminary results of the SAINT I and SAINT II clinical trials.

### **Background**

Efforts to maximize neuroprotection in the care of patients with CNS illness and injury have yielded variable results. Although some stroke patient clinical guidelines address how secondary injury can be prevented, the development of direct neuroprotectants has remained elusive. This session will review how secondary brain injury can be avoided through the use of strategies such as glucose and blood pressure control, airway and ICP management, as well as the potential role of hypothermia in treating these patients.

The development status of direct neuroprotectants that may be of value in the acute setting such as NXY-059 will also be discussed in this session. The methodology for analyzing the results of the SAINT I and SAINT II clinical trials as well as the preliminary results will be addressed in order to better understand how ED ischemic stroke patient care might be influenced as a result of this work. Examination of number needed to treat data may help to provide perspective on this and other potential CNS neuroprotectants.

### **Key Clinical Questions**

What neuroprotection strategies are useful in preventing secondary brain injury following stroke?

What information can be gleaned from the SAINT I and II clinical trials regarding CNS neuroprotectants such as NXY-059?