

# About This CME Activity

## RATIONALE AND PURPOSE

Over the past 150 years, the definitions, understanding, diagnosis, and treatment of epilepsy have been influenced by clinical and scientific discoveries involving genetic research and the clever use of novel, pharmacologically active compounds, as well as surgery, dietary therapy, and neurostimulation. This edition of *The Neurology Report*, a summary and discussion of some of the more important research presented this past December at the 69<sup>th</sup> Annual Meeting of the American Epilepsy Society in Philadelphia, reviews the results of important clinical trials that have transformed the management of epilepsy and that have led to new investigational directions.

In this issue we take a close look at the clinical management of epilepsy, from diagnosis through treatment of recalcitrant cases. Proposed solutions for overcoming drug resistance and pseudo-resistance are examined, and the value of combining different antiepileptic drug (AED) combinations for maximum therapeutic effectiveness is discussed. One of the newest AEDs—perampanel—is looked at in depth from the viewpoint of recent clinical trials. The consequences of using psychoactive medications in patients with epilepsy are discussed, along with the effects of using various AEDs in patients with preexisting psychiatric symptoms. The issue closes with a discussion of certain current controversies, including the appropriate use of genetic testing, the role of autoimmune-mediated inflammation in seizure disorders, the risks and benefits of using valproate in women of childbearing age, and the potential of cannabis and cannabinoid derivatives for treating epilepsy in children and other patients.

The articles in this issue, written from the academic perspective of physicians-in-training at leading medical institutions, summarize the import of these new findings and place them into clinical context. This activity has been developed and approved by a planning committee of nationally recognized thought leaders to meet a perceived educational need to provide neurologists, neurosurgeons, and other physicians with diagnostic and therapeutic strategies to help them perform their medical roles.

## LEARNING OBJECTIVES

After studying this issue of *The Neurology Report*, participants in this educational activity should be able to:


- Describe the obstacles to diagnosing epilepsy and how to overcome them.
- Review the advantages and disadvantages of using AEDs alone and in combination, along with novel nonpharmacologic interventions, to treat patients with refractory epilepsy.
- Summarize the results of pivotal clinical trials and newer studies evaluating the efficacy and safety of perampanel in different patient populations.
- Identify the problems associated with using psychoactive medications in patients with epilepsy and practical approaches to managing psychiatric comorbidities.
- Discuss the efficacy, cost-effectiveness, and outcomes associated with psychobehavioral interventions in patients with epilepsy.

## TARGET AUDIENCE

Neurologists, neurosurgeons, and other physicians significantly involved

in the management of patients with epilepsy should find participation in this educational activity valuable.

## ACCREDITATION AND CREDIT DESIGNATION

 This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of the University of Cincinnati and Direct One Communications, Inc. The University of Cincinnati is accredited by the ACCME to provide continuing medical education for physicians.

The University of Cincinnati designates this Enduring Material Activity for a maximum of 3.0 *AMA PRA Category 1 Credits*<sup>™</sup>. Physicians should only claim credit commensurate with the extent of their participation in the activity.

## CREDIT AVAILABILITY

Activity release date: February 25, 2016  
Expiration date: February 26, 2017

## METHOD OF PARTICIPATION

This Enduring Material Activity is available in print and online at [www.NeurologyReport.com](http://www.NeurologyReport.com) and consists of an introduction, six articles, a postactivity assessment, and an evaluation. Estimated time to complete the activity is 3.0 hours.

To receive credit, participants must read the CME information on these two pages, including the learning objectives and disclosure statements, as well as the full content of this monograph, and then complete the post test and evaluation form online at [www.NeurologyReport.com](http://www.NeurologyReport.com). Upon successful completion of the post test (80% correct) and evaluation form, a CME certificate of participation will be

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awarded automatically. The certificate may be printed directly from the Web site or e-mailed and printed later.

There are no fees for participating in or receiving credit for this activity.

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### FACULTY DISCLOSURES

All faculty members (or anyone else in a position to control content, such as activity planners) are required to complete a Disclosure of Commercial Interest and Resolution form and to cooperate with identified methods for resolving conflict of interest prior to participating in the activity. The University of Cincinnati requires disclosure to the learners of all relevant financial relationships and adheres strictly to the ACCME Standards for Commercial Support.

**Gregory K. Bergey, MD**, Professor of Neurology, Director of the Johns Hopkins Epilepsy Center, and Co-Director of the Epilepsy Research Laboratory, Johns Hopkins University School of Medicine and Hospital, Baltimore, Maryland, has nothing to disclose.

**Pawan V. Rawal, MD, MHA**, Assistant Professor of Neurology, University of Tennessee Health Science Center, Memphis, Tennessee, has nothing to disclose.

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**Deepti Anbarasan, MD**, a Clinical Neurophysiology Fellow at The Neurological Institute of New York, Columbia University Medical Center, New York, New York, has nothing to disclose.

**Emily L. Johnson, MD**, an Epilepsy Fellow in the Department of Neurology at Johns Hopkins School of Medicine, Baltimore, Maryland, has nothing to disclose.

**Rick Ricer, MD**, has nothing to disclose.

**Susan P. Tyler, MEd, CMP, CHCP**, has nothing to disclose.

**Jacqueline Keenan and Edwin Geffner** of Direct One Communications, Inc., have nothing to disclose.

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Participants in this activity are encouraged to refer to primary references or full prescribing information resources.

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Discussions concerning drugs, dosages, devices, and procedures may reflect the clinical experience of the planning committee or faculty, may be derived from the professional literature or other sources, or may suggest uses that are investigational and not approved labeling or indications.

In this issue of *The Neurology Report*, Dr. Houston discusses the use of stiripentol, which has not been approved by the FDA, in severe myoclonic epilepsy of infancy, and Dr. Johnson presents an algorithm for managing autoantibodies in patients with epilepsy using several FDA-approved drugs off-label.

### CONTACT INFORMATION

We would like to hear your comments regarding this or other educational activities produced by Direct One Communications, Inc. In addition, suggestions for future activities are welcome. Contact us at:

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