

# METHODS OF TREATING EPILEPSY WITH TRANSFORMING GROWTH FACTOR BETA INHIBITORS

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## ABSTRACT

Epilepsy, affecting 0.5-2% of the population worldwide, is one of the most common neurological disorders. While the characteristic electrical activity in the epileptic cortex has been extensively studied, the mechanisms underlying epileptogenesis are poorly understood. Focal neocortical epilepsy often develops following traumatic, ischemic or infectious brain injury. Under these conditions, local compromise of blood-brain barrier (BBB) integrity is common, as revealed by ultrastructural studies of animal and human epileptic tissue in multiple forms of epilepsy, raising the possibility that primary vascular damage, and specifically BBB opening, may serve as an initial event leading to epilepsy.

UC Berkeley researchers have discovered a method of treating epilepsy in an individual, whereby the method comprises administering to the individual an effective amount of a transforming growth factor-beta (TGF- $\beta$ ) pathway blocker that specifically inhibits kinase activity of TGF- $\beta$ I receptor, wherein the blocker is not an interfering nucleic acid.

## SUGGESTED USES

» Therapeutic treatment of epilepsy

## PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	9,468,649	10/18/2016	2009-024

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## OTHER INFORMATION

### KEYWORDS

Epilepsy, traumatic brain injury,  
neurological disorders, therapy,  
treatment

### CATEGORIZED AS

- » Medical
  - » Disease: Central Nervous System
  - » Research Tools
  - » Therapeutics
- » Research Tools
  - » Other

### RELATED CASES

2009-024-0