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Synthesis of Novel Spirohydantoins and Evaluation of their Anticonvulsant Activity

C.S. Ananda Kumar^{1, 2*}, B.Veeresh³, K.C. Ramesha¹, C.S. Ashok Raj⁴, K.M. Mahadevaiah¹, and S.B. Benaka Prasad⁵

- 1. Department of Nanotechnology, Visvesvaraya Technological University CPGS, Muddenahalli, Bengaluru region -562101, INDIA
 - Centre for Materials Science, Vijnana Bhavan, University of Mysore, Manasagangotri, Mysore -570 006, INDIA
- Department of Pharmacology, G Pullareddy College of Pharmacy, Mehdipatnam, Hyderabad-580028, INDIA
 Department of Chemistry, Karnataka State Open University, Mysore 570006, INDIA
 - Department of basic science, School of Engineering and Technology, Jain University Bangalore, INDIA
 Email: csanandakumar@gmail.com

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ABSTRACT

A series of novel triazaspiro anddiazaspiro compounds were synthesized and biologically evaluated for their anticonvulsant activity in the maximal electroshock seizure (MES). Most of the tested compounds exhibited moderate to weak activity in the MES screen test. A few compounds are able to protect seizure effect significantly higher than other derivatives. This effect was similar to standard drug treated rats.

Graphical Abstract

Scheme 2

Keywords: Hydantoins, Triazaspiro hydantoins, Anticonvulsant, Maximal electroshock, Phenytoin