



# Response to “Radiomic Models for Diagnosing Juvenile Myoclonic Epilepsy Should Note Its Genetic Heterogeneity”

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Dr. Finsterer mentioned the importance of genetic consideration in diagnosing juvenile myoclonic epilepsy (JME) using a radiomic model [1]. However, there are points of our study [2] that Dr. Finsterer’s remarks cannot be directly applied.

Currently, the genetic heterogeneity of JME is well-known [3,4]. Moreover, the phenotype of JME differs slightly. However, modes of inheritance are complex and the genetic mechanisms underlying JME are unclear. Additionally, diagnosis and treatment remain focused primarily on the characteristic features of the clinical condition. Numerous earlier studies, including imaging analysis, have been undertaken based on the common clinical characteristic of JME. Although accurate gene studies are not routinely

required for treatment and diagnosis under the present clinical standard, it is worth inquiring about the feasibility and utility of a study that includes genetic variations.

Previously, the possible effects of anticonvulsants on the brain have been focuses. To use data that reflected the actual clinical environment, the decision was to enroll all patients, not only patients with drug-naivety. There may be difficulties in the study’s interpretation; hence, the fraction of drug-free participants was included in the publication.

As described previously, a neurologist and neuroradiologist visually confirmed the normal magnetic resonance imaging findings. The absence of structural abnormalities in 97 cases is a misinterpretation. We agree that it should play a role in differentiating JME from other forms of epilepsies; hence, additional study is currently underway.

## Conflicts of Interest

The authors have no potential conflicts of interest to disclose.

## Author Contributions

Conceptualization: Kyung Min Kim, Beomseok Sohn.  
Data curation: all authors. Formal analysis: all authors.  
Investigation: all authors. Methodology: all authors.  
Project administration: Beomseok Sohn. Resources: all authors. Software: all authors. Supervision: Beomseok Sohn.  
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## Funding Statement

None

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**Received:** December 18, 2022 **Accepted:** December 19, 2022  
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