

# **Interpretable Machine Learning of PET Imaging for Individualized Predictions of Seizure Outcomes after Temporal Lobe Epilepsy Surgery**

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## Introduction

## The Data

## The Model

## The Explanation

## Conclusion

**Introduction**  
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**The Data**  
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**The Model**  
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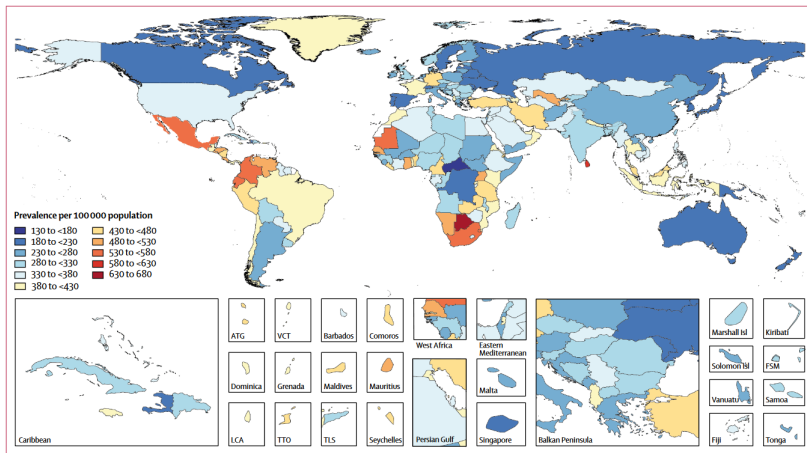
**The Explanation**  
○○

**Conclusion**  
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**References**

# Introduction

# Background



**Figure 1:** Epilepsy epidemiology

# Aims

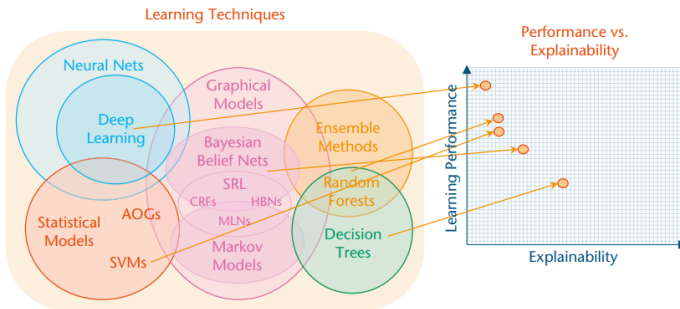
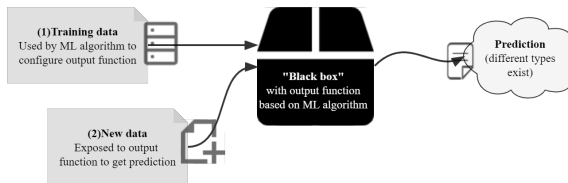
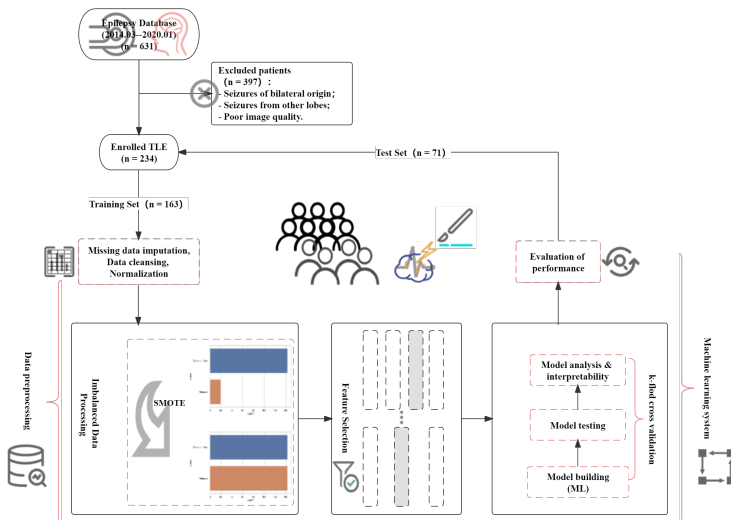


Figure 2: Focuses on interpretability of ML

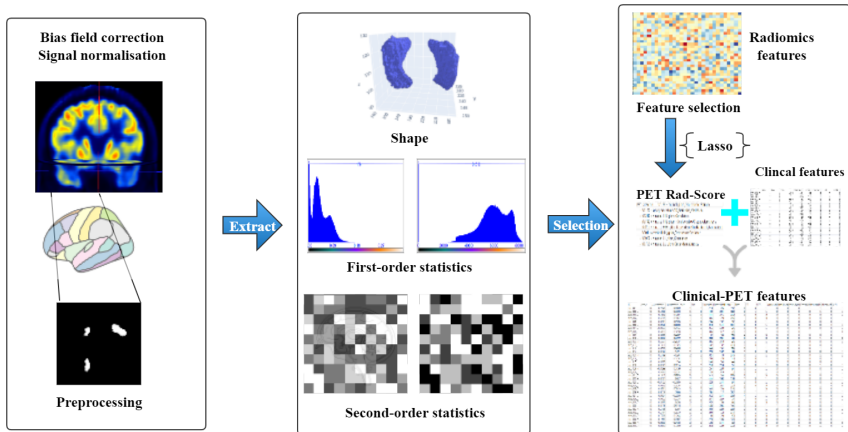
# Scheme



# The Data



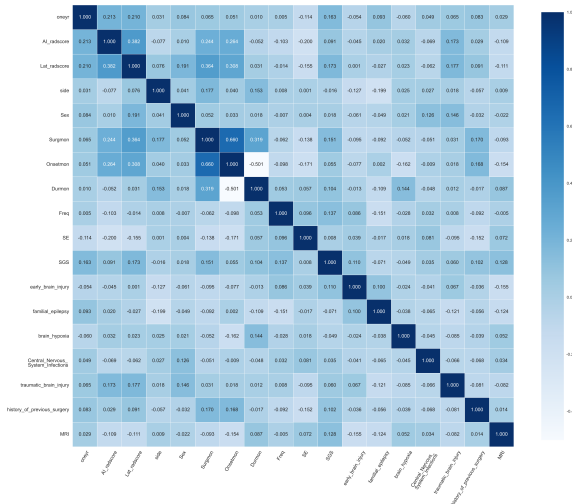
# Combined of PET Radiomics and Clinical Features



**Figure 4:** PET radiomics score and clinical-PET features

# Exploratory Data Analysis

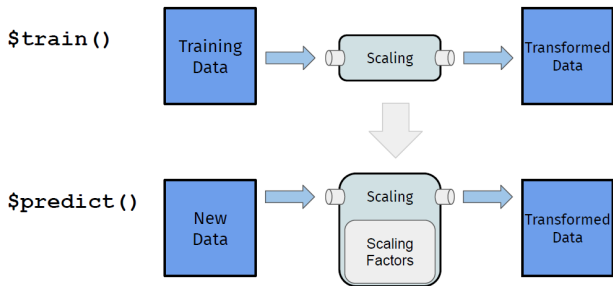
- Heatmap of Clinical-PET Features



# The Model

# Benchmark

# The Explanation



# Conclusion

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For more theoretical approaches to machine learning model explanation, see [Interpretable Machine Learning: A Guide for Making Black Box Models Explainable](#), [What Causes Heart Disease? Explaining the Model](#), refer to [\(Rajpurkar, 2021\)](#), [\(Marc Becker, 2022\)](#), [\(Molnar, 2022\)](#) ☒

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**THANKS !**



# References I

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Molnar, C. (2022). *Interpretable Machine Learning*. 2 edition.

Rajpurkar, P. S. (2021). *Deep Learning for Medical Image Interpretation*. Stanford University.