

# Supplementary materials

## -Features tested for the classifier development

Twenty features were tested for the classifier development:

- **Demographics:** sex
- **Clinical data:** age at onset
- **Medical history:** prematurity; family history of epilepsy; febrile convulsion; head trauma; meningitis or encephalitis

**Seizure semiology:** presence of aura; presence of abdominal aura; presence of psychoaffective aura; presence of autonomic aura ; presence of experiential aura ; presence of visual aura ; presence of sensory aura ; presence of non specific aura ; presence of gestural automatisms ; presence of oroalimentary automatisms ; presence of verbal automatisms ; dystonia of a limb ; occurrence of at least one focal to bilateral tonic-clonic seizure

## -Tutorial: How to download and run our classifier?

-Get to [https://github.com/mhouot/MTLE-HS\\_algorithm](https://github.com/mhouot/MTLE-HS_algorithm)

- You can download the all data and classifier or just run the app to test a patient.

- Testing a patient without R download on: [https://mhouot.shinyapps.io/mtle-hs\\_algorithm/](https://mhouot.shinyapps.io/mtle-hs_algorithm/)

-To get the algorithm on your computer:

-Download the free software R and R studio and install it on your computer from <https://cran.r-project.org> .

-Then, you need to install the shiny package in R: Copy and paste in the R console

```
if (!require('shiny')) install.packages("shiny")
```

-To run the application, you have to load the library and use the function runGitHub().

Copy and paste in the R console:

```
library(shiny)
```

```
shiny::runGitHub("MTLE-HS_algorithm", "mhouot")
```

**-Choose between the two tabs:**

1. *Select one patient's data:* to obtain the probability of being medically seizure-free by entering patient data one by one
2. *Upload a file (.xlsx) of the data patients:* to obtain the probability of being medically seizure-free of several patient at a time. See the data\_test.xlsx file in the datas folder for example.

**-Table 2: Antiseizure medication in the medically-treated seizure-free MTLE-HS group**

	Nb in the medically-treated seizure-free MTLE-HS group (Total number of ASM data collected = 92) §
<b>Anti-seizure medication</b>	
Levetiracetam	24 (26.1%)
Lamotrigine	18 (19.6%)
Valproic acid	9 (9.8%)
Carbamazépine	8 (8.7%)
Lacosamide	8 (8.7%)
Eslicarbazépine	5 (5.4%)
Oxcarbazépine	5 (5.4%)
Perampanel	4 (4.3%)
Phénobarbital	4 (4.3%)
Prégabaline	4 (4.3%)
Clobazam	1 (1.1%)
Gabapentine	1(1.1%)
Zonisamide	1(1.1%)

**Notes:** Data are given as count and percentages for categorical variables.

§ Some patients were under several ASM (1 to 3 ASM).

*Abbreviations: Nb = number, ASM = antiseizure medication,*

*MTLE-HS = mesial temporal lobe epilepsy with hippocampal sclerosis*