

# Preventive treatment of migraine with (100%) aura with lamotrigine



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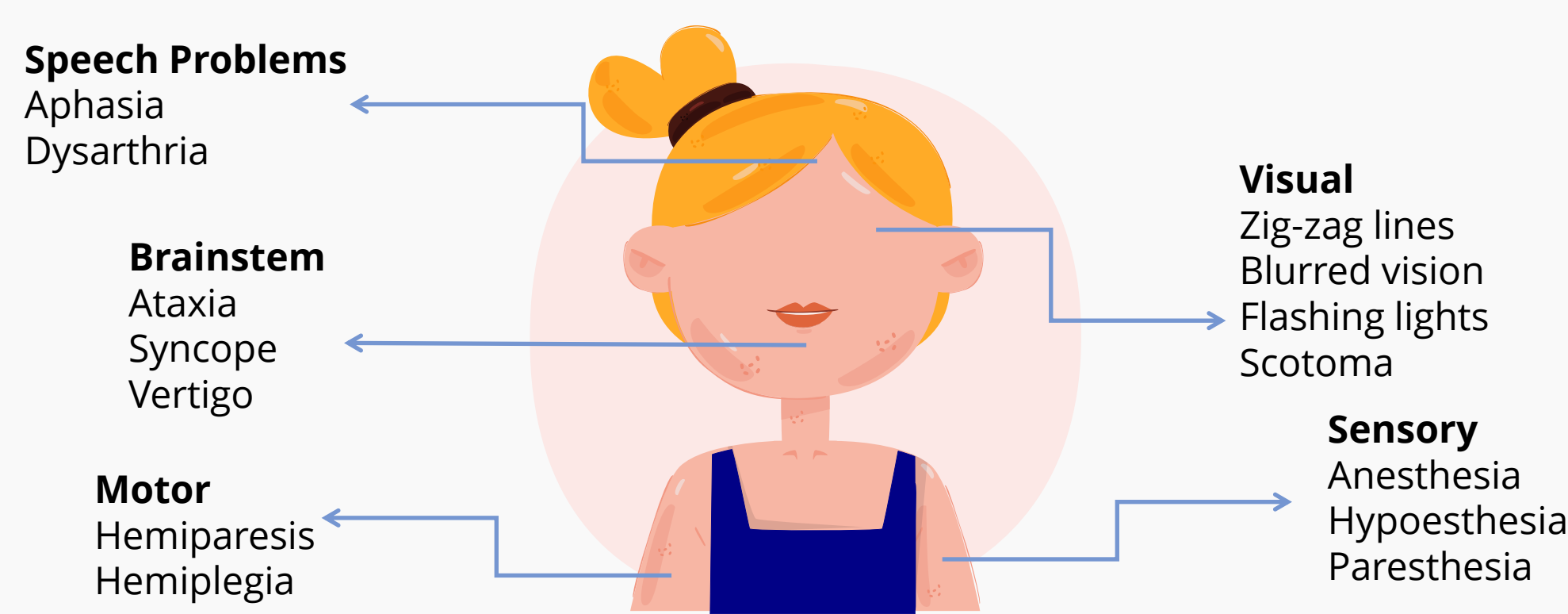


## Objective

- To evaluate the real-world effectiveness of lamotrigine (LMT) in patients with "migraine with (100%) aura"

## Introduction

- A quarter of migraine patients experience aura (1)
- In some, aura is present with every migraine attack
- We named this group as "migraine with 100% aura"
- This subgroup remains understudied and is not classified in ICHD-3 (2)
- The lack of a clear description and characterization of this subgroup may lead to an inadequate prophylactic treatment
- In this study we analyzed the efficacy of LMT which has been used in our clinic based on small case studies (3)



## Methods

- Retrospective analysis of patients with "migraine with 100% aura"
- Primary Outcome: Change from baseline in monthly aura frequency by at least 50% after LMT prophylaxis
- Average LMT dose, time to maximum dosage, and safety profile depicted from patient data
- 79 patients included

### Demographics and baseline clinical characteristics of study population

Gender (M/F)	25/54
Mean age (years)	48.7
Mean age of migraine start (years)	17.7
Mean age at starting treatment (years)	42.1
Heredity (n)	61

## Results

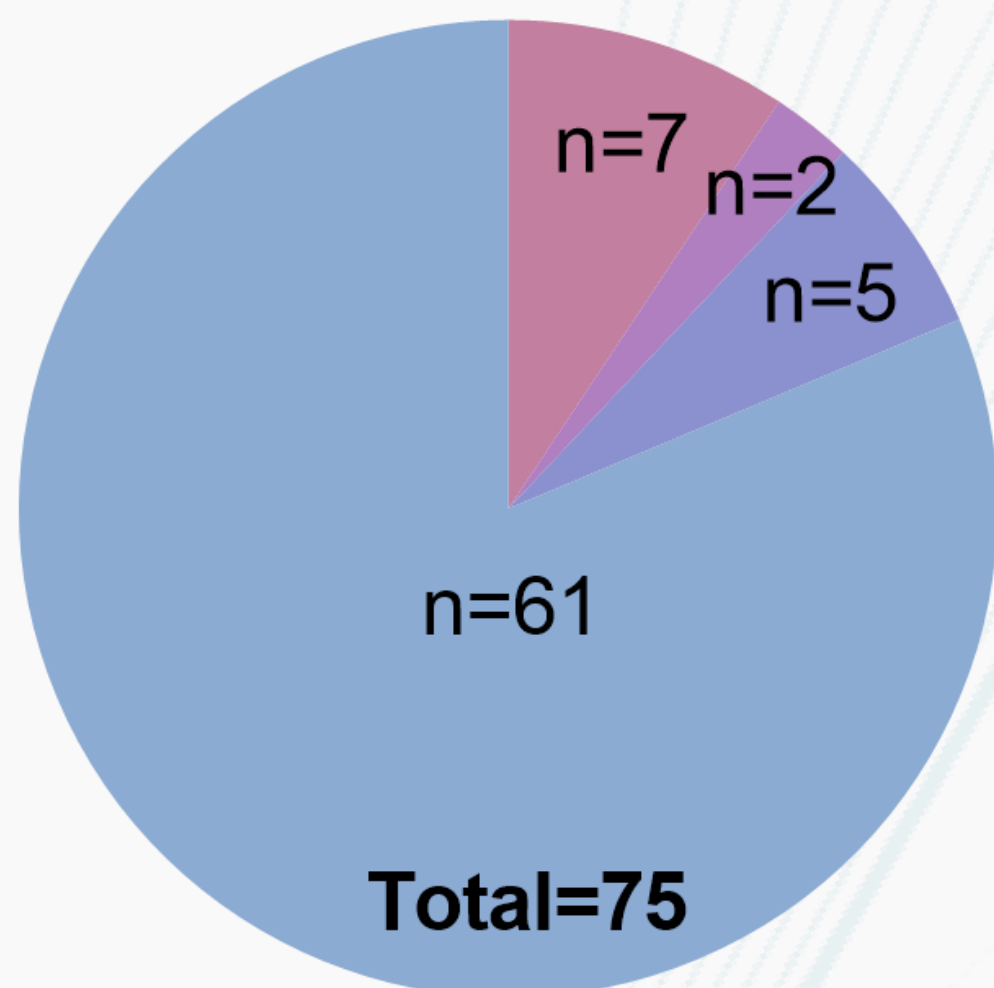
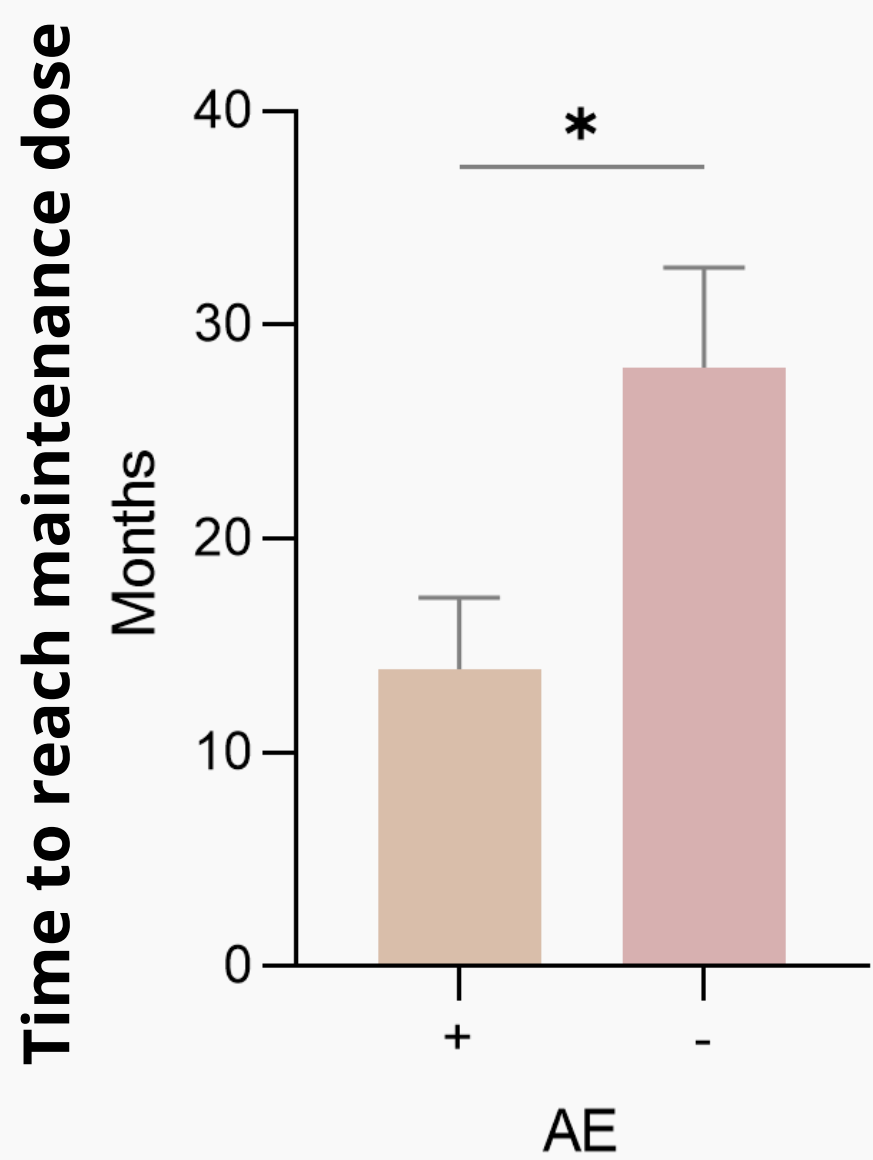
- Efficacy analysis in 75 patients (51 female, 24 male):
  - Responders: 90.7% (n=68)
  - Super-responders: 81.3% (n=61)
  - Non-responders: 9.3% (n=7)
- Monthly aura days (MAD) decreased from 6.9±0.9 days to 1.2±0.4 days (83% improvement)
- Inverse correlation between AE occurrence and time to reach maintenance dose was significant (p<0.05)

### LMT dosing features

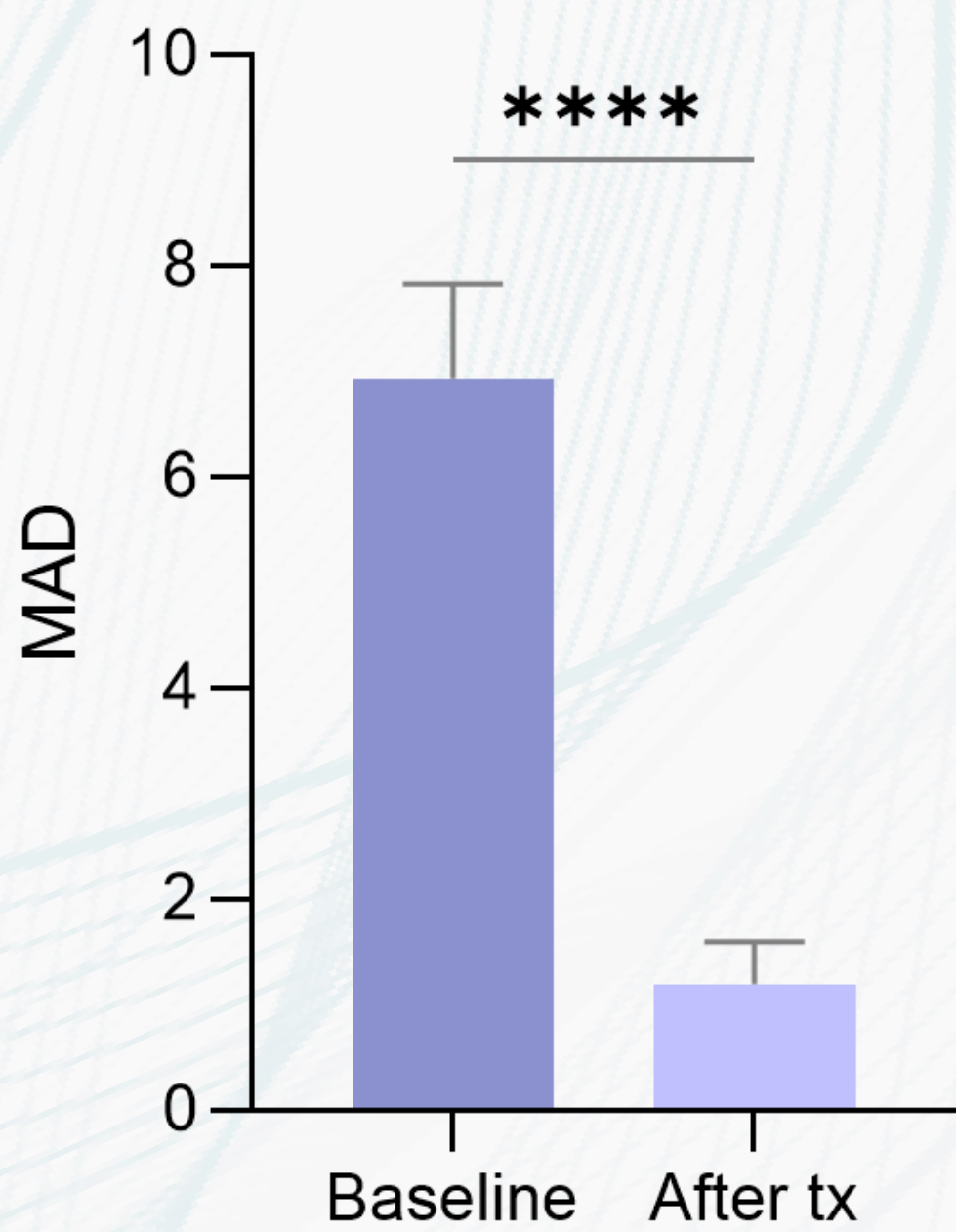
Mean LMT dosage (mg, SEM)	148.8±8.4
Mean duration of LMT treatment (month, SEM)	58.6±4.9
Average time to reach maintenance dose (month, SEM)	22.8±3.2

Characteristics of aura	Visual	Motor	Sensory	Extreme Photosensitivity	Language
N	77/79	13/79	44/79	9/79	27/79
%	97.4	16.4	55.6	11.3	34.1

Adverse Events (AE)	N	%
Overall	29/79	36.7
Dermatologic symptoms	16/79	20.2
Cognitive symptoms	8/79	10.1
Metabolic	3/79	3.7
Other	6/79	7.5
Dropout due to AE or lack of efficacy	7/79	8.8



non-responders (0-24%)  
responders (25-49%)  
good responders (50-74%)  
super responders (75-100%)



## Conclusions

- Lamotrigine is effective in preventing aura in "migraine with 100% aura" patients
- High efficacy and favorable side-effect profile support its consideration as a prescribed treatment option in selected patients

## Discussion

- We propose that migraine with 100% aura should be included as a special subgroup in ICHD-3 (Migraine with typical aura in 100% of attacks, ICD 1.2.1.3?)
- LMT could be included in treatment guidelines for prevention of migraine with (100%) aura

## References

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2. Headache Classification Committee of the International Headache Society (IHS) The International Classification of Headache Disorders, 3rd edition. Cephalalgia. 2018 Jan;38(1):1-211.  
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