

# SERIES #2

Let's gain

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# MOGmomentum

a collaborative series brought to you by The Sumaira Foundation for NMO and The MOG Project



# The **MOG** Antibody:

## The Clue That Changes Everything

- MOG Antibody Disease (MOG-AD) is diagnosed through a blood test and for that reason, the MOG antibody is considered a biomarker for the disease
- Many other neuroimmune diseases such as Multiple Sclerosis (MS) are diagnosed through observations of symptoms and the effects on the body, or diagnosis through symptomatology.
- With the discovery of the MOG antibody, researchers are finding that many people who were thought to have one of these neuroimmune diseases, actually have MOG-AD after finding the antibody in their blood
- The development of the MOG antibody test has opened up a new frontier for exploring the complex inter-relationship between MOG-AD and neurological syndromes



# CHARACTERIZING MOG-AD

MOG-AD can be monophasic or multiphasic

Monophasic refers to a single demyelinating event with no additional occurrences while having tested positive for the MOG antibody

A majority of monophasic patients test negative after a period of time

Multiphasic refers to multiple occurrences of demyelinating events while initially tested positive for the MOG antibody

Future MOG antibody tests may fluctuate in positivity

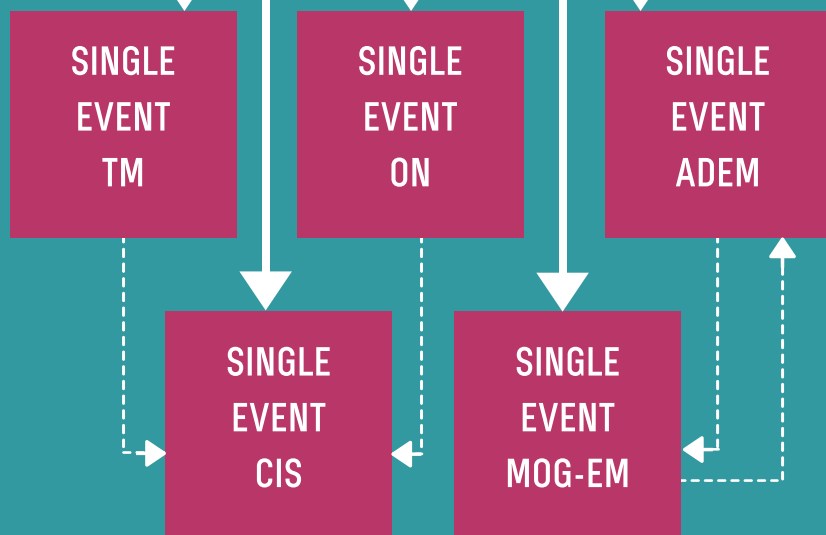
The MOG antibody is present in the blood during observations of many central nervous system autoimmune events and therefore can be implicated in a variety of neuroimmune conditions

A MOG Antibody Disease Diagnostic Relationship Map best describes the relationships between all disorders in which the MOG antibody is implicated



# MOG ANTIBODY DISEASE DIAGNOSTIC RELATIONSHIPS

## MONOPHASIC

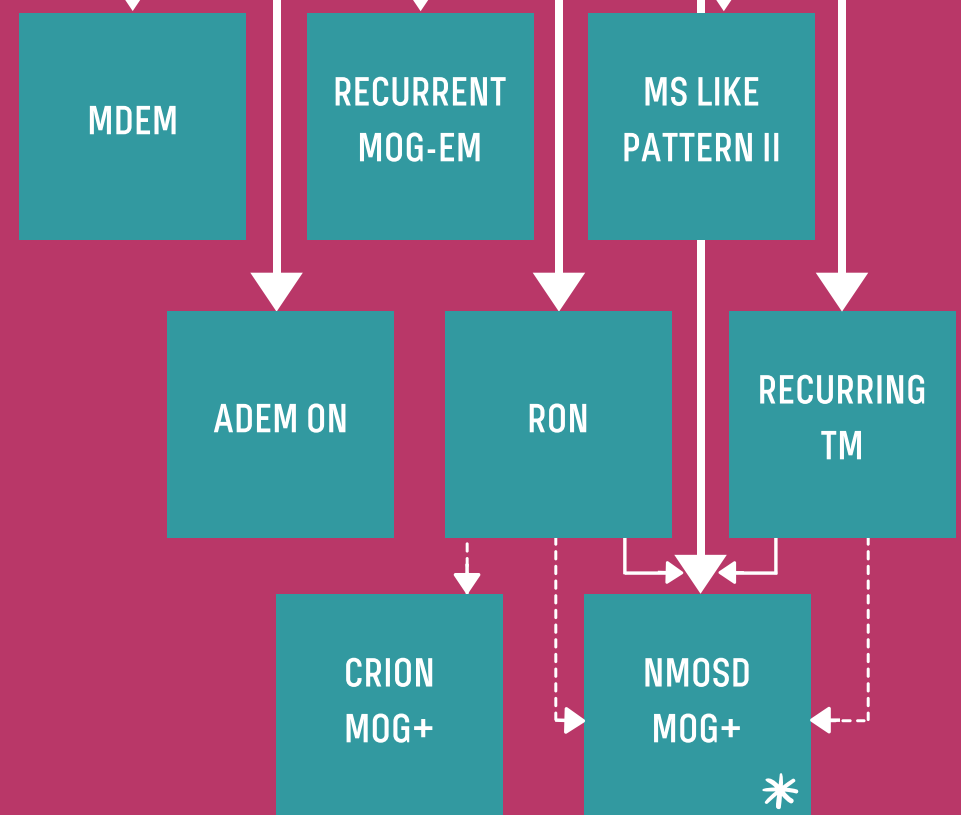


### LEGEND

- Shows diagnosis related to MOG
- Shows possible differential diagnosis due to similar or overlapping symptoms

\* For this diagram, NMOSD is represented as MOG+ and AQP4-negative

## MULTIPHASIC



### GLOSSARY

- ADEM** | Acute disseminated encephalomyelitis
- ADEM ON** | Single event ADEM followed by recurrent ON
- CIS** | Clinically isolated system of focal or multifocal demyelinating lesions without encephalopathy
- CRION** | Chronic recurrent inflammatory optic neuropathy
- MDEM** | Multiphasic acute disseminated encephalomyelitis
- MOG-EM** | MOG encephalomyelitis including meningo-encephalitis and brainstem encephalitis all with or without optic neuritis
- MOG+** | Positive for myelin oligodendrocyte glycoprotein antibodies

- Monophasic** | Single demyelinating event with no additional occurrences while testing MOG+
- Multiphasic** | Multiple occurrences of demyelinating events while initially testing MOG+
- MS Like Pattern II** | Multiple sclerosis-like symptoms (Pattern II is a rare subtype of MS)
- NMOSD** | Neuromyelitis optica spectrum disorder
- ON** | Optic neuritis
- RON** | Recurrent optic neuritis
- TM** | Transverse myelitis



# What if you have a **SECOND ATTACK?**

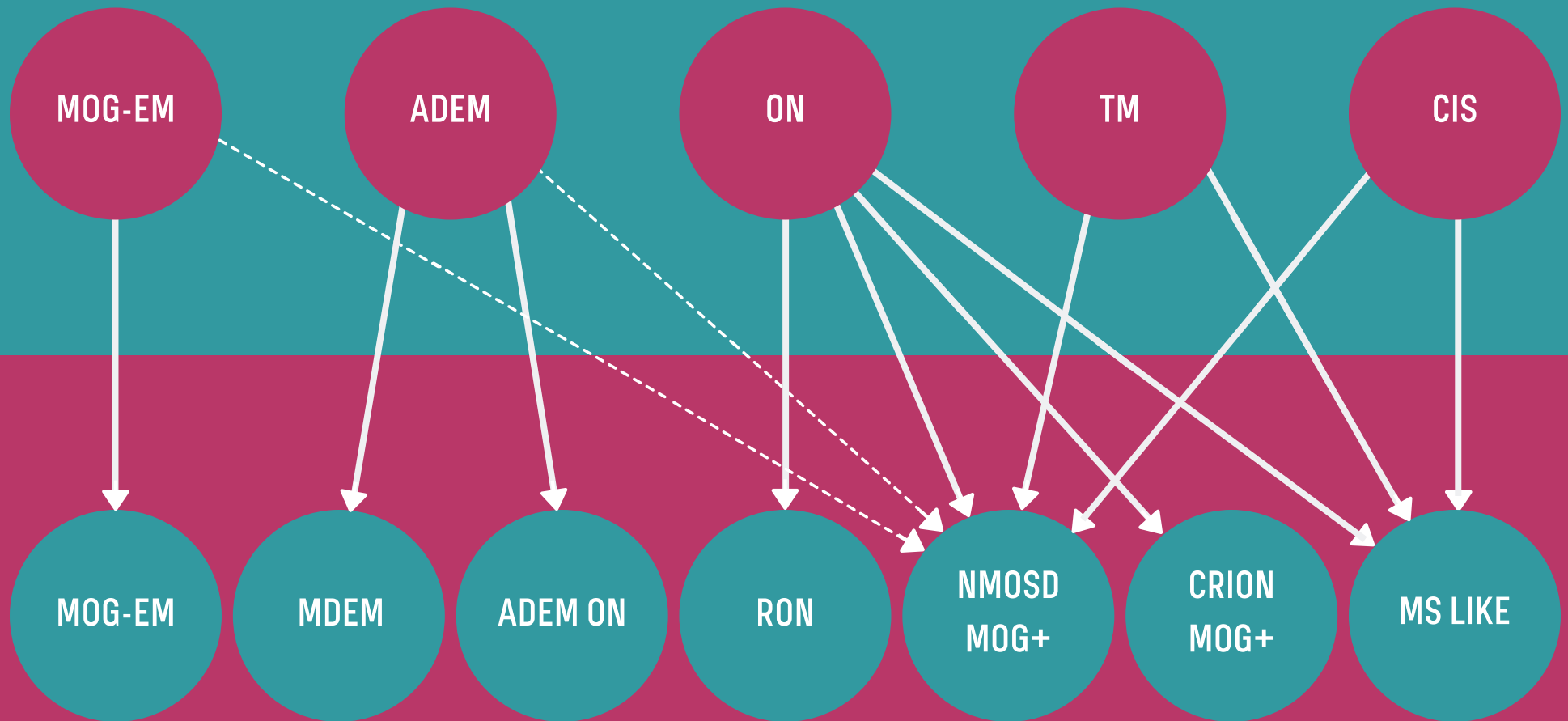
- A diagnosis given after a single attack may not be a patient's final diagnosis
- A second attack can change their diagnosis
- A MOG Antibody Disease Linked Diagnosis  
Progression Map best describes how a diagnosis can progress to a new diagnosis when a patient has more than one attack



# MOG ANTIBODY DISEASE LINKED DIAGNOSIS PROGRESSION: MONOPHASIC TO MULTIPHASIC

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## LEGEND

○ Original diagnosis after single attack

● New diagnosis after multiple attacks

→ Directional flow of diagnosis progression

- - - - - → Differential diagnosis if NMOSD criteria is met [possible]

## GLOSSARY

**ADEM** | Acute disseminated encephalomyelitis

**ADEM ON** | Single event ADEM followed by recurrent ON

**CIS** | Clinically isolated system of focal or multifocal demyelinating lesions without encephalopathy

**CRION** | Chronic recurrent inflammatory optic neuropathy

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**MOG-EM** | MOG encephalomyelitis including meningo-encephalitis and brainstem encephalitis all with or without optic neuritis

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**Monophasic** | Single demyelinating event with no additional occurrences while testing MOG+

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**MS Like Pattern II** | Multiple sclerosis-like symptoms (Pattern II is a rare subtype of MS)

**NMOSD** | Neuromyelitis optica spectrum disorder

**ON** | Optic neuritis

**RON** | Recurrent optic neuritis

**TM** | Transverse myelitis



# FINAL THOUGHTS

- The medical community is learning about this disease in real time
- It is up to us to advocate for ourselves and our loved ones to forge the definition of this disease so that diagnosis can be prompt and accurate
- If you have one of these neurological syndromes, ask your doctor whether you should be tested for the MOG Antibody



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This series is brought to you by



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