

1. Neuromyelitis optica (NMO) and Neuromyelitis optica Spectrum Disorder (NMOSD) are autoimmune diseases that can cause blindness and/or paralysis.
2. Individuals with NMO develop optic neuritis (ON), which causes pain in the eye and vision loss, and transvers myelitis (TM), which causes weakness, numbness, and/or paralysis of the arms and legs, along with sensory disturbances and loss of bladder and bowel control.
3. The cause of NMO is unknown. Like many autoimmune conditions, NMO is likely caused by a combination of factors, and may be caused by different factors in different patients.
4. NMO can be first diagnosed as multiple sclerosis (MS), and until recently was thought to be a type of MS. NMO is now clearly differentiated from MS in terms of causes, effects, diagnosis and clinical care. With many symptoms in common, NMO can be confused with MS or other diseases. Early detection ensures best outcomes.
5. A blood test called NMO-Immunoglobulin G (NMO-IgG), or sometimes referred to as Aquaporin 4 (AQP4), can help diagnose NMO. However, not all patients with NMO have a positive NMO-IgG test. Some may test negative for NMO-IgG, but still have NMO.
6. NMO affects more women than men at a ratio of up to 7:1.
7. In the United States, there are an estimated 15,000 cases of NMO, and up to one-half million worldwide. Ongoing studies suggest the incidence (new cases) and prevalence (total active cases) of NMO are even higher, due in part to confusion with closely related conditions such as MS, lack of awareness in the healthcare community, or under diagnosis of this disease.
8. Clinical trials are underway to find safe and effective new treatments for NMO.
9. In the United States, the National Institutes of Health (NIH) classifies NMO as a rare (orphan) disease (affecting fewer than 200,000 people). As such, government funding for NMO research is marginal.
10. The Guthy-Jackson Charitable Foundation was established in 2008, when Ali Guthy, the daughter of Victoria Jackson and Bill Guthy, was diagnosed with NMO.
11. The foundation has invested \$45 million in over 50 research projects to find a cure for NMO.
12. The Guthy-Jackson Charitable Foundation is dedicated to advancing prevention, treatment, and an ultimate cure for NMO. Our research focus aims to better understand the causes and effects of NMO and NMOSD from the level of molecules and cells to the clinical impact of disease in patients.
13. To advance NMO research, the foundation established the CIRCLES NMO Network, consisting of a biorepository that collects blood samples, biospecimens and clinical health information of NMO patients and controls.
14. Learn about NMO clinical trials, CIRCLES, NMOtion Advocacy Program and more on the foundation's website and get NMOtion for NMO.
15. Through our public entity, The Guthy-Jackson Research Foundation, Inc., 100 percent of all donations to GRFI goes to research for NMO. Donate by check or online at: [guthyjacksonfoundation.org/donate](http://guthyjacksonfoundation.org/donate)