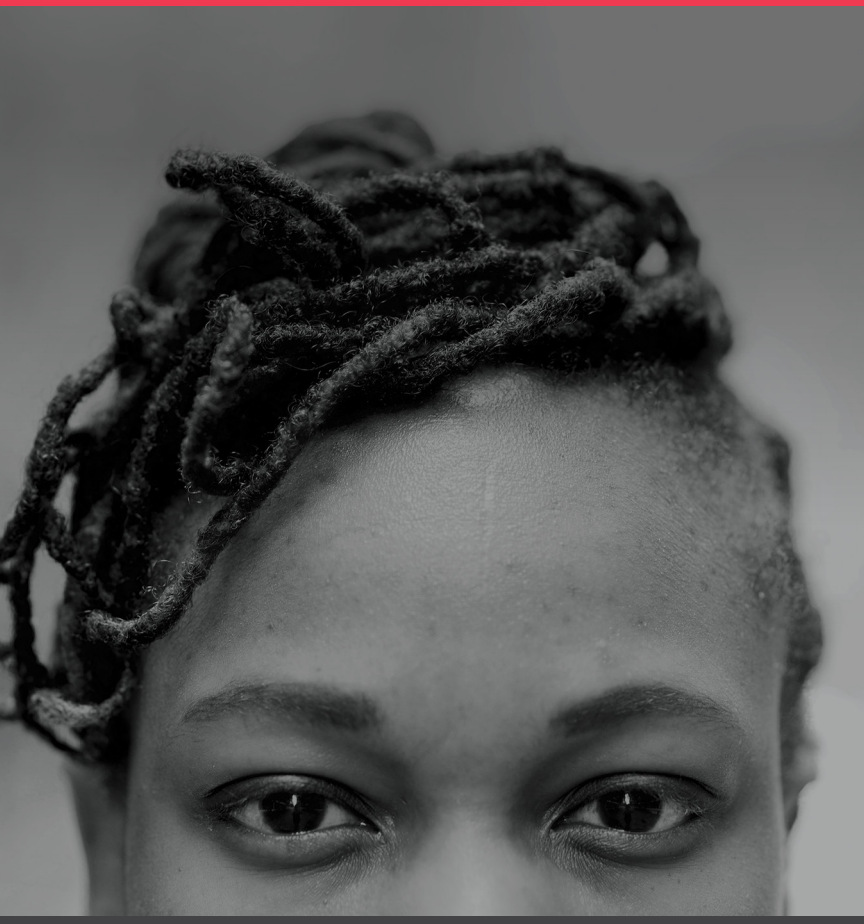


NMOSD patients of African ancestry are at **elevated risk of mortality**[1]

Learn how racial and ethnic factors play a role in the prognosis of certain patients with neuromyelitis optica spectrum disorder (NMOSD)[1]

LOOKING CLOSER INTO NMOSD

NMOSD is a rare autoimmune disease of the central nervous system.[2,3] It is characterized by unpredictable and potentially life-threatening attacks or relapses that may contribute to cumulative disability.[3-6] Race is among several contributing factors that affect the prognosis of the disease.[7,8]

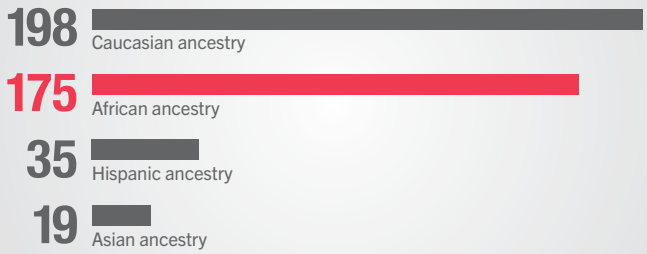
> While population-based studies have shown a higher prevalence of NMOSD in people of African ancestry, recent analyses have also shown a higher mortality rate in this group.[1,2]

The publication "Mortality in Neuromyelitis Optica Is Strongly Associated With African Ancestry" was based on an observational, retrospective study of all patients with NMOSD seen at 2 large clinics in the United States: Johns Hopkins Hospital (Baltimore, Maryland) and New York University (New York, New York). A total of 427 patients with NMOSD (defined by the 2015 International Panel for NMO Diagnosis) were included in the analysis: 328 from Johns Hopkins Hospital and 99 from New York University.[1]

Patients in each race group were similar regarding age, sex, aquaporin-4 serostatus, time to diagnosis, acute treatment care, treatment rates, and access to the clinics. Ninety-four percent to 98% of patients in the study were on immunotherapies that have been shown to decrease relapse rates in observational studies.[1]

SELF-REPORTED RACE GROUPS[1]

Total of 427 patients with NMOSD:



NOTABLE DISPARITIES

Patients of African ancestry presented with symptoms at a younger age (37.1 years old at symptom onset) in comparison to Caucasian patients (42.6 years old). Furthermore, the mortality rate among those of African ancestry was 15.4% compared to the overall mortality rate of 7% ($P<0.0001$). While patients of African ancestry only made up 41% of the studied NMOSD population, they accounted for 90% (27/30) of deaths.[1]

In 22 of the 30 deceased patients (73%), the cause of death was related to NMOSD. In the deceased African ancestry cohort, the cause of death was complications of NMOSD in 70% of patients.[1]

AGE OF SYMPTOM ONSET[1]

37.1 years
African ancestry

42.6 years
Caucasian ancestry

DISPARITY IN DEATHS[1]

Total population

41% African ancestry

59% All other ancestry

Deaths

90% African ancestry

10% All other ancestry

On average, the deceased patients of African ancestry began experiencing symptoms at 43 years old and died at 50 years old. Out of the patients of African ancestry who died, 81% (22/27) experienced a relapse within 12 months of their death.[1]

> If you have patients in your practice who are still relapsing, could it be time to do something different?

MOVING FORWARD

While NMOSD is a rare disease, there may be noticeable patterns in the prognosis of certain patient populations.[1,2] Further research, especially prospective studies addressing factors that affect relapse severity, may shed light on the high risk of death among patients of African ancestry with NMOSD.[1]

POTENTIAL STEPS HEALTHCARE PROVIDERS CAN TAKE

INCREASE awareness of mortality discrepancies[1]

TEST for antibodies associated with NMOSD as soon as clinical characteristics are present[9]

CONSIDER aggressive management strategies in high-risk patients[1,7]

TIME IS OF THE ESSENCE FOR PATIENTS OF AFRICAN ANCESTRY WITH NMOSD[1]

Learn how you can improve awareness within your practice.
Click here to visit NMOSD.com/hcp

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