



## **Title:** Indications for Antinuclear Antibody Testing

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**March 19, 2010**

- Abstract -

Antinuclear antibodies (AAB) are autoantibodies directed against structures in the nucleus of the cell, and increased AAB titers indicate an underlying immunological alteration. Determining AAB can be very useful in the diagnosis of systemic autoimmune diseases (SAD) if they are used in the right clinical context. As we have observed an increase in the requests for AAB testing in recent years despite the low incidence of SAD in the general population, we have decided to review the literature to reach a consensus about the indications for AAB testing.

The best technique for screening for AAB is indirect immunofluorescence on tissues from the HEP-2 cell line. In this presentation we review the different patterns of fluorescence for AAB, their antigenic specificities, and the limitations involved in the interpretation of the results.

The development of more sensitive techniques has revealed that AAB can also be detected in clinical situations other than SAD, such as organ-specific autoimmune diseases, neoplasms, certain infections, or certain drug therapies. Low AAB titers have also been detected in 35% of the general population; therefore, the simple presence of AAB cannot distinguish between healthy patients and those with SAD.

We review the recent literature with the aim of providing information about the usefulness of AAB testing in the diagnosis and prognosis of SAD, ensuring appropriate indications for its use, and helping in the interpretation of the results.