



## ANTI-TOPOISOMERASE 1 ANTIBODIES IN SYSTEMIC LUPUS ERYTHEMATOSUS

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### BACKGROUND

Anti-topoisomerase-I (anti-Scl-70) is found in systemic sclerosis patients mostly in diffuse and aggressive forms of the disease. Anti-Scl-70 may be found in systemic lupus erythematosus (SLE) patients. Gussin et al. detected a prevalence of this autoantibody in 25% of 128 SLE patients associating its presence with disease activity, pulmonary arterial hypertension, glomerulonephritis and anti-dsDNA. Mahler et al. (5) found a prevalence of this autoantibody in 7.7% of 168 SLE patients, usually at low titers using ELISA test, and 0% using immunoassay.

### MATERIALS AND METHODS

We studied anti-Scl-70 in a cohort of 94 Brazilian SLE patients. Disease activity was measured by SELENA-SLEDAI (Safety of Estrogens in Lupus National Assessment-SLE Disease Activity Index). Scl-70 was searched by ELISA commercial kit (Virgo™, Columbia, USA). Values above 20 U/mL were considered positive, according to manufacturer.

### RESULTS

Only two (2.1%) patients were positive for anti-Scl-70, both at low titers (56 U/mL and 68 U/mL). One of them was a 21 year old white male with arthritis, photosensitivity, malar rash and class 4 glomerulonephritis and with SLEDAI of 4 at time of blood collection. This patient had a recurrence of his glomerulonephritis six months later on. Another was a 48 year old afro descendant female with thrombocytopenia, skin and articular manifestations and with SLEDAI of 3. None of them had scleroderma features; the female patient had Raynaud phenomena.

### CONCLUSION

In our sample of lupus patients, the prevalence of anti-Scl-70 was very low and the positive results were at low titer.