

## December 12/10: Diagnostic utility of anti-Ro52

Dugar M, Cox S, Limaye V, Gordon TP, Roberts-Thomson PJ  
**Diagnostic utility for anti-Ro52 detection in systemic autoimmunity**  
*Postgrad Med J 2010; 86:79-82*

**Background:** Autoantibodies to Ro52 are prevalent in many systemic autoimmune diseases including systemic lupus erythematosus (SLE) and primary Sjögren's syndrome, though not disease specific. The diagnostic utility of anti-Ro52 without anti-Ro60 is discussed controversial. In idiopathic inflammatory myopathies anti-Ro52 are the most common immunological markers detected and are associated with a favourable response to prednisone.

The prevalence of anti-Ro52 without anti-Ro60 in ANA positive sera has been reported to be 1%. The aim of the study of Dugar *et al.* is to determine the prevalence and diagnostic utility of detecting anti-Ro52 in the absence of anti-Ro60 in selected systemic autoimmune diseases and its correlation with other serological markers.

**Summary:** 402 stored non-consecutive serum samples obtained from patients with different systemic autoimmune diseases, primary biliary cirrhosis (PBC) and 15 sera from patients with insect venom allergy but with no autoimmune disease as controls were analysed by line immunoassay.

	neg	Anti-Ro52 without anti-Ro60	Anti-Ro60 without anti-Ro52	Anti-Ro52 and anti-Ro60 without anti-La	Anti-Ro52 and anti-Ro60 and anti-La
SLE (n=67)	18	4	11	22	12
Sjögren's syndrome (n=40)	1	5*	0	10	24
Systemic sclerosis (n=106)	91	10	0	3	2
Idiopathic inflammatory myopathies (n=147)	112	23	0	12	0
Rheumatoid arthritis (n=19)	15	2	0	2	0
PBC (n=14)	8	5	0	1	0
mixed essential cryoglobulinemia (n=9)	4	3	0	1	1

**Table:** Anti-Ro and anti-La in different autoimmune diseases. \* 1 of 5 anti-Ro52-positive but anti-Ro60-negative sera was also positive for anti-La.

153 sera (38.1%) were positive for anti-Ro in any constellation. In total, only 11 of 402 (2.8%) sera were 'monospecific' anti-Ro60 and all 11 were found in SLE patients. On the other hand, 52 sera (12.9%) were anti-Ro52 positive and anti-Ro60 negative (1 of them being anti-La positive). These 'monospecific' anti-Ro52 occurred in all disease areas tested but not in the 15 controls.

147 patients with idiopathic inflammatory myopathies were additionally evaluated for anti-Jo-1 (n=18; 12.2%), anti-Pm-Scl (n=10), anti-Mi2 (n=7; 4.8%), anti-Ku (n=4), anti-PL7 (n=3), anti-PL12 (n=1). Anti-Ro52 was the most common autoantibody occurring in 35 of 147 sera of which 12 were in conjunction with anti-Ro60.

**Conclusions:** Anti-Ro52 occurs often without anti-Ro60 in systemic autoimmune diseases. In idiopathic inflammatory myopathies, anti-Ro52 is the most frequent antibody. As anti-Ro52 is more prevalent than anti-Ro60 in certain autoimmune conditions, specific testing for their distinction in clinical practice is recommended.

**Comment:** By the launch of the highly specific EliA Ro52 and EliA Ro60 tests in December 2010 a simple, fully automated testing of anti-Ro52 and anti-Ro60 will be available on the Phadia instruments.

