

CHLAMYDOPHILA PNEUMONIAE:

EVALUATION OF A NEW TOTALLY AUTOMATED IMMUNO-ENZYMATIC DIAGNOSTIC SYSTEM

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Introduction. *Chlamydomphila pneumoniae* is a major causative agent of respiratory infections. Re-infections and chronic conditions seem to be correlated also with numerous pathologies such as atherosclerosis, Alzheimer's disease, lung cancers; serodiagnosis is a simple, fast and reliable method of identification of current infection and is a useful diagnostic tool in the follow-up of the patient.

Materials and Methods. A total of 58 sera from patients with clinical symptoms of respiratory infection was analyzed for the presence of anti-*C. pneumoniae* IgA, IgG, IgM antibodies by means of an automated ELISA test (Chorus-*Chlamydomphila pneumoniae*, DIESSE Diagnostica Senese SpA, Siena). The kits already in use in the laboratory were considered as reference test, (SeroCp Savyon Diagnostics Ltd, Israel); IgM discordant results were confirmed by immunofluorescence assay (Chlamydia MIF IgM, Focus Diagnostics, Cypress, CA USA).

Results. The overall agreement between the two test systems under evaluation was 91.4% (CI95% = 81.3-96.2) for IgA (28 positive and 30 negative sera), 87.9% (CI95% = 77-94) for IgG (29 positive and 29 negative sera) and 93.1% (CI95% = 83.5-97.3) for IgM (7 sera positive and 51 negative), the verification of IgM discordant samples after analysis with immunofluorescence test increased the correlation to a total 94.8% (CI95% = 85.9-98.1).

Conclusions. This study confirms that there is a good correlation between the Chorus *C. pneumoniae* test kits and those used as an internal reference, associated with simplification of the testing procedure and a reduction in handling and reporting time.

Bibliography. Campbell, L.A., C.C. Kuo, S.P. Wang and J.T. Grayston. 1990. Serological Response to *Chlamydia pneumoniae* Infection. *J.Clin.Microbiology.* **28**:1261-4.

		MIF IgM		Total
		POS	NEG	
CHORUS IgM	POS	7	2	9
	NEG	1	48	49
	Total	8	50	58