

**Table 1B.** Selected papers investigating the relationship between leptin (L) and the immune system demonstrating the influence of L on induction, maintenance and clinical manifestations of some autoimmune conditions

Year	Country/ Ref. number	Main findings	Type of study	Disease/Condition	L effect on the immune system
2005	Italy	Involvement of L and IL-6 in the action of interferon-beta in secondary, progressive MS	18 secondary progressive MS patients	MS	The effect of IFN- $\beta$ on MS patients might be associated with the reduced levels of L and reduced IL-6 production by PBMCs
2006	China	L may be involved in the pathogenesis of chronic ITP	PBMCs from 18 chronic ITP patients and 14 controls	Chronic ITP	Ln enhances production of anti-platelet antibodies
2008	Poland <sup>84</sup>	Increased L levels in peritoneal fluid from endometriosis patients may affect local inflammatory/immune reactions, especially infiltration of CD4+ T helper cells.	Peritoneal fluid of 46 patients and 10 control women	Endometriosis	L correlates with inflammatory cytokines (IL-1 $\beta$ , IL-6, IFN- $\gamma$ and TNF- $\alpha$ )
2007	Italy <sup>85</sup>	ObR may be involved in the development of clinical relapses in RRMS patients	CD8+ T cells and monocytes from RRMS patients	RRMS	L-induced IL-6 production can be modulated by SOCS3 expression
2001	UK <sup>45</sup>	L has a direct effect on the generation of an inflammatory response.	Human PBMCs	Endotoxin stimulated and resting human PBMCs	L induces production of TNF- $\alpha$ , IL-6 and IFN- $\gamma$

PBMCs: peripheral blood mononuclear cells, ITP: idiopathic thrombocytopenic purpura, CVD: cardiovascular disease, AA: adjuvant arthritis, AS: ankylosing spondylitis, RA: rheumatoid arthritis, MS: multiple sclerosis, CRP: C reactive protein, RRMS: remitting relapsing multiple sclerosis.