

Chronic lymphocytic leukemia and autoimmunity: a systematic review

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Supplementary Appendix

To identify epidemiological evidence of CLL and autoimmune disease we searched PUBMED (January 1996 to October 2010) using the key words "(chronic lymphocytic leukaemia"[All Fields] OR "leukemia, lymphocytic, chronic, b-cell"[MeSH Terms] OR ("leukemia"[All Fields] AND "lymphocytic"[All Fields] AND "chronic"[All Fields] AND "b-cell"[All Fields]) OR "b-cell chronic lymphocytic leukemia"[All Fields] OR ("chronic"[All Fields] AND "lymphocytic"[All Fields] AND "leukemia"[All Fields]) OR "chronic lymphocytic leukemia"[All Fields] AND "autoimmune"[All Fields] AND ("epidemiology"[Subheading] OR "epidemiology"[All Fields] OR "epidemiology"[MeSH Terms])). To identify case reports and series

regarding CLL and various autoimmune phenomena, we searched PUBMED (January 1996 to October 2010) using the key words "(chronic lymphocytic leukaemia"[All Fields] OR "leukemia, lymphocytic, chronic, bcell"[MeSH Terms] OR ("leukemia"[All Fields] AND "lymphocytic"[All Fields] AND "chronic"[All Fields] AND "b-cell"[All Fields]) OR "b-cell chronic lymphocytic leukemia"[All Fields] OR ("chronic"[All Fields] AND "lymphocytic"[All Fields] AND "leukemia"[All Fields]) OR "chronic lymphocytic leukemia"[All Fields])). We then combined them with a search for each autoimmune phenomenon, using the diseases putatively associated with CLL according to reviews providing a list of them.¹⁻³ The precise terms we used in our search are outlined in *Online Supplementary Table S1*.

References

1. Dearden C. Disease-specific complications of chronic lymphocytic leukemia. *Hematology Am Soc Hematol Educ Program*. 2008;450-6.
2. Hamblin TJ. Autoimmune complications of chronic lymphocytic leukemia. *Semin Oncol*. 2006;33(2):230-9.
3. Crispino P, Pica R, Angelucci E, Consolazio A, Rivera M, Cassieri C, et al. Hematological malignancies in chronic inflammatory bowel diseases: report of five cases and review of the literature. *Int J Colorectal Dis*. 2007;22(5):553-8.
4. Rozman C, Montserrat E. Chronic lymphocytic leukemia. *N Eng J Med*. 1995;333 (16):1052-7.

Online Supplementary Table S1. Autoimmune conditions associated with CLL, with alternative search terms and source of association.

Autoimmune condition	Alternative search terms	Source
Acquired angioedema	1, 3	
Autoimmune hemolytic anemia*	Autoimmune hemolysis, hemolytic anemia	
Churg Strauss syndrome		3
Immune cytopenia*		1, 2, 3
Immune granulocytopenia	Immune neutropenia	1, 2, 3
Immune thrombocytopenia*	Idiopathic thrombocytopenia	1, 2, 3
Immune thyroiditis		2, 3
Nephrotic syndrome	Nephritis, glomerularnephritis	3
Paraneoplastic pemphigus	Bullous pemphigoid	1, 2, 3
Pernicious anemia	PA, autoimmune gastritis, atrophic gastritis	2
Polyneuropathy		3
Pure red cell aplasia	Pure red blood cell aplasia	1, 2, 3
Sjögren's syndrome		2, 3
Systemic lupus erythematosus	SLE, lupus	2, 3
Raynaud's syndrome	Raynaud disease	3
Rheumatoid arthritis	RA	2, 3
Ulcerative colitis	UC	2, 3
Vasculitis		2, 3

*due to large number of citations, only terms in paper title [Title] included 1 = Rozman 1995', 2 = Hamblin 2006', 3 = Dearden 2008'.