within eight to 10 days after the initial inoculation and that an extended incubation period (four to six days) is allowed for recovery of *C. pylori* following cell stress incurred during storage. We emphasise that the medium has been tested using strains which were well adapted to laboratory cultivation and needs to be evaluated with recent clinical isolates as well as reference strains under the more variable conditions likely to be encountered in transportation.

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### References


### Nucleolar organiser regions in lymphocytes of patients with chronic lymphocytic leukaemia

Nucleolar organiser region associated protein sites (AgNORS) are found in the nucleoli of cells which poses genes for ribosomal RNA (rRNA). They can be identified by a simple one step silver colloid method which was first applied to paraffin wax sections to distinguish between low and high grade non-Hodgkin’s lymphoma. This has further been used to investigate melanocytic lesions of the skin, breast lumps, and fibrous proliferations in childhood, among other tumour types. AgNORS probably reflect the activity of the cell and may be related to the degree of malignancy. There is a high correlation in non-Hodgkin’s lymphoma between the numbers of AgNORS in each nucleus and labelling with the monoclonal antibody Ki67 (a proliferation marker) and the number of S phase cells, as measured by DNA flow cytometry. Chronic lymphocytic leukaemia (CLL) is characterised by the presence of increased numbers of small lymphocytes (immunologically MRBC + TUL + SGL + (low density) FMC7 —). A proportion of cases have morphological and immunological features intermediate between CLL and B cell prolymphocytic leukaemia (CLL-Pro). Many patients may present with these features or develop them during the course of the disease and they are associated with a refractory response to treatment and a poor outlook.

We examined the peripheral blood of 30 patients with CLL. One of the authors assessed “blind” the percentage of “prolymphocytoid” cells in each of the smears and the number of AgNORS/100 lymphocytes was calculated as described previously. There was a wide range of AgNOR counts but no correlation was shown to exist between AgNOR numbers and prolymphocytic progression of CLL. Regression analysis gave a correlation coefficient (r) value of 0.23.

Despite its value in the investigation of other tumours we conclude that AgNOR determination is unhelpful in the distinction between CLL and CLL-Pro. As it remains to be seen whether a better correlation exists between AgNOR numbers and cell surface immunological expression that does not necessarily correlate with the morphological appearance.

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Nucleolar organiser regions in lymphocytes of patients with chronic lymphocytic leukaemia.

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J Clin Pathol 1988 41: 1338
doi: 10.1136/jcp.41.12.1338

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