



ABSTRACT # 31

PATIENT-SPECIFIC MOLECULAR MONITORING OF MALT-LYMPHOMA AFTER ANTIBIOTIC TREATMENT

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Histological regression of B-cell extranodal marginal zone B-cell lymphoma (MALT lymphoma) after antibiotic eradication of *Helicobacter pylori* infection has been reported in more than half of the treated patients. However, monoclonality, detected by conventional polymerase chain reaction (PCR) assay directed against the third complementarity determining region (CDR3) of the immunoglobulin heavy chain (IgH) genes, can persist beyond histological lymphoma regression apparently without an increased risk of relapse.

To thoroughly study the fate of the neoplastic B-cell clone after the antibiotic treatment, we developed a patient-specific PCR assay based upon the individual CDR3 sequences.

CDR3 conventional PCR showed the presence of monoclonality in 12 (48%) out of the first 25 cases of a group of 99 patients with localized primary gastric MALT lymphoma enrolled in an ongoing international prospective trial (LY03 International Study comparing observation vs chlorambucil after *H. pylori* eradication in primary gastric MALT lymphoma). In one case patient-specific primer was not feasible due to a too short CDR3 fragment. All histological complete remission will be molecularly monitored by the clone-specific assay. Mature follow-up data are already available for 10 cases apparently showing that the neoplastic clone is always present in all post-remission samples up to 2 years after antibiotic therapy. Despite this persistent molecular positivity no patient has relapsed. The study of additional cases is ongoing and more complete data will be presented.