

## **ABSTRACT**

This work deals with lymphoproliferative diseases in which morphology can contribute to diagnosis and speed up the diagnostic process.

The cytomorphological examination is performed whenever any hematopathology is suspected. Cell morphology is assessed from both peripheral blood and bone marrow aspirates. We evaluate many parameters during microscopic examination of the cells: size, shape and deposition of the nucleus, chromatin structure, presence of nuclei, cytoplasm volume and colour, the presence of granules, vacuole, etc. The most common finding in peripheral blood is reactive lymphocytosis and often the presence of cellular atypia: e.g. visible nucleus, a distinct fine structure of chromatin, heterogeneity of the nucleus. Lymphoproliferation can be manifested by non-specific clinical and laboratory findings, which are sometimes difficult to properly evaluate. Therefore should be the results of other laboratory tests and clinical picture taken into account too.

Morphology continues to play an important role in the process of recognizing leukaemias and lymphomas. In today's classification responds morphology seldom to the question what disease we looking at. However, the examination is still far more accessible and usually faster than follow-up laboratory methods and has its place in the chain of an investigation because it helps a physician to decide method to continue with.

Keywords: lymphoproliferation, lymphoma, leukaemia, morphology, peripheral blood, bone marrow