Proteolytic Enzymes as Biological Markers for Tumor Diseases: Review

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Nowadays, about one thousand proteolytic enzymes are isolated and purified from different organisms. According to the catalytic mechanism, the structure of the active center and their tertiary structure, proteases are divided into four main groups – aspartic peptidases, metallopeptidases, cysteine and serine peptidases. Most of them not only perform various physiological functions but are also involved in pathogenic mechanisms of different diseases. The aim of the present mini-review is to outline the main groups of proteases and individual enzymes typically used as biomarkers for tumor diseases as well as to designate certain enzymes that are promising for future application in oncology.

Key words: proteolytic enzymes, biological markers, tumor diseases.