

ANALYSIS OF ADDITIONAL PROGNOSTIC MARKERS
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The work is devoted to the analysis of the potential additional prognostic markers expression of human colon adenocarcinoma in the tumor and adjacent normal tissue and the search for the relationship between them. The expression of potential prognostic molecular markers (IGFBP3, AhR, CYP1A1, CYP1B1, HIF-1 α , OCT4A, OCT4B, and OCT4B1) was analyzed by quantitative RT-PCR in the samples. A correlation was found between the expression of IGFBP3 and AhR. The knockout of the IGFBP3 gene was carried out in the primary cell cultures of human colon adenocarcinoma BSK 8, the activity of the AhR signal pathway was analyzed. Increased AhR expression may be an additional diagnostic criterion in the diagnosis of colon cancer. The presence of correlation between the level of expression of HIF-1 α , IGFBP3, OCT4 isoforms and clinico-morphological stage of disease (TNM) is not detected. There is decreased cell growth rate and increased resistance to cytostatics in knockout clones.

Key words: colon cancer, prognostic marker, aryl hydrocarbon receptor (AhR), insulin-like growth factor-binding protein 3 (IGFBP3), isoforms of OCT4 (OCT4A, OCT4B, OCT4B1), hypoxia-inducible factor 1-alpha (HIF1A)
