The author in his doctoral thesis, proposed primers and conditions optimized design Quantitative PCR for determining the gene expression of MMP-7, TIMP-1, MMP-2 and TIMPsecond Revealed the presence of gene expression of GAPDH TIMP-1 and TIMP-2 in cancer line HT-29 SW480 and SW620. Noted the high level expression of MMP-7 in line HT-29th Expression of the 2-3 orders of magnitude higher than the lines SW480 and SW620. MRNA expression of MMP-2 in line HT-29 noticed. MRNA expression of MMP-2 by the detected lines SW480 and SW620. He found that determining absolute and relative expression in tumor lines is ekvivalentní. significantly higher mRNA expression of MMP-7, TIMP-1, MMP-2 and TIMP-2 in tumor tissue compared to normal tissue. It can be used in therapy. Noticed the presence of correlation of gene expression MMP-7, TIMP-1, MMP-2 and TIMP-2 with survival and DFI. He showed that a higher stage cancer correlated with a higher median momery MMP-2/TIMP-2. 7, Noticed the difference in gene expression between TS, TP and DPD in control and tumor tissue. Scored marginally significant increase in TS expression in colon tumors compared to tumors rectosigmoid and rectum. This finding can be used in treatment decisions. scored marginally significant correlation between the expression of TS and DPD. This finding can be used in treatment decisions. He has not correlate mRNA expression levels of TS, TP and DPD with overall survival and DFI