P–31; **DIFFERENT EFFECTS OF ENDOSTATIN EXPRESSION ON THE ONCOGENICITY OF TWO MICE HPV-16 TRANSFORMED CELL LINES**

Monika Lakatošová, Vladimír Vonka, Martina Dušková, Vincent Lučanský

Institute of Hematology and Blood Transfusion, Prague, Czech Republic

Background: Endostatin is one of the most efficient and most widely studied anti-angiogenetic factors. By downregulating of neoangiogenesis it strongly suppresses tumour growth without any significant side effects.

Materials and Methods: In the present series of experiments we introduced the endostatin gene into two mouse (C57BL/6) HPV-16-transformed cell lines, namely the TC-1 and MK16/1/III/ABC (MK16) cells. Both these cell lines were originally obtained after transfection of lung cells (TC-1) or kidney cells (MK16) with E6 and E7 oncogenes of HPV-16 and activated with Ha-ras oncogenes. They differ in a number of properties including the degree of oncogenicity, morphology and presence of MHC class I molecules on the cell surfaces.

Results: The cell cultures were transfected by bicistronic plasmids carrying the genes for mouse endostatin and blasticidin resistance. The transduced cells were isolated in the presence of blasticidin. From their populations several clones were isolated and tested for the production of endostatin. Those identified as the most efficient producers (two from MK16 cells and two from TC-1 cells) were used for *in vivo* experiments. While one of the MK16 derived clones was without any oncogenic activity, the other one produced tumours after significantly longer incubation period and their growth was not associated with the formation of lung metastases. The oncogenicity of TC-1 derived clones was unaltered in spite of higher amounts of endostatin production in comparison to MK16 derived clones.

Conclusions: In an attempt to clarify this obvious paradox, experiments are under way to determine, whether the parental TC-1 cells and MK16 cells and their progenies differ in the production of factors known to be involved in angiogenesis.