

The chorioallantoic membrane (CAM) of chicken embryos belongs to the *in vivo* model systems frequently used for the study of angiogenesis and cell invasiveness. Using CAM assay we have tested selected chicken sarcoma cell lines characterized by different angiogenic properties and different ability to form metastasis. In addition to CAM assay, several other methods have been used to characterize the phenotype of these cell lines. We have selected a few proteins which could significantly influence the angiogenic and metastatic properties of investigated cell lines. We have established cell lines stably overexpressing these genes and compared their phenotypes with parental cell lines. We have shown that genes encoding ISL1, ARNT2, PROM1, HOXA11 proteins participate, in our experimental model, in activation of programmes controlling angiogenesis and cell invasion.