

# Biology of tumor growth

Tumor growth biology is a malignant transformation of a cell and its clonal proliferation is a multi-step process.

## Initiation

Tumor cell reversal is initiated. An irreversible change in the genotype of the cell occurs. This process is called an initiation mutation. The damaged cell may die spontaneously or go into a latency period, where the carcinogen responsible for initiation may continue to act. The cell can be selectively eliminated.

## Promotion

It occurs after a phenotype change and requires the action of a promoter (hormone, growth factor, physical effects, oncogenic virus). It is a substance that usually does not indicate tumor change, but its main function is to stimulate division. Clonal expansion occurs at the end of the phase.

## Progression

It is characterized by local invasion, and then metastatic spread.

## Links

## Sources

- SKÁLOVÁ, Alena, et al. *obecná onkologie* [online]. [cit. 2014-10-20]. <<http://www.siklucv-ustav-patologie.patologie.cz/vyuka/prednasky-vseob.html>>.