Laboratory of Pharmacogenomics is involved in the study and development of prognostic and predictive biomarkers for more refined evaluation of survival of cancer patients and the response of tumor cells to the therapy. Genomic, epigenomic, proteomic, and metabolomic analyses of tissue preparations from cancer patients provided by clinical collaborators from the Czech Republic are performed for this purpose. Predictive biomarkers may help clinicians in the stratification of patients into different therapeutic regimens. Discovery and validation of prognostic biomarkers may also contribute to the invention of drugs for targeted therapy. Our team has experience in this area for more than 20 years. Research activities are supported by a number of grants including Center of Excellence awarded by Czech Science Foundation. Lab members regularly publish our results in publicly accessible scientific journals and collaborate with several highly respected foreign partners.

**MEMBERS**

- Assoc. Prof. Pavel Souček, Ph.D., M.Sc. – Research Group Leader
- Veronika Brynychová, M.Sc.
- Marie Ehrlichová, M.Sc.
- Kateřina Elsnerová, M.Sc.
- Viktor Hlaváč, M.Sc.
- Tereza Kunická, M.Sc.
- Simona Šůsová, M.Sc.

**WE OFFER**

- Research in pharmacogenetics and genomics from the clinical and academic point of view.
- Isolation of nucleic acids from different types of tissues and cells, especially from clinical specimens.
- Detection of single nucleotide polymorphisms and mutations by allelic discrimination, HRM, and sequencing.
- Quantitative PCR in real-time (qPCR) design and gene expression analysis.
- Help with interpretation of results of studies on metabolism and transport of anticancer drugs.
SELECTED PUBLICATIONS


