

# Establishment of biobank of patients with glioma, OC and GIST for the purpose of personalised medicine in Molecular Medicine Center, Medical University of Sofia

Atanaska Mitkova<sup>1</sup>, Gergana Stancheva<sup>1</sup>, Romyana Dodova<sup>1</sup>, Kalina Mihova<sup>1</sup>, Darina Kachakova<sup>1</sup>, Daniela Pencheva,  
Silva Giragosyan<sup>1</sup>, Veronika Petkova<sup>1</sup>, Vanio Mitev<sup>1</sup>, Radka Kaneva<sup>1</sup>

<sup>1</sup>Molecular Medicine Center, Department of Medical Chemistry and Biochemistry, Medical Faculty, Medical University of Sofia, Sofia, Bulgaria

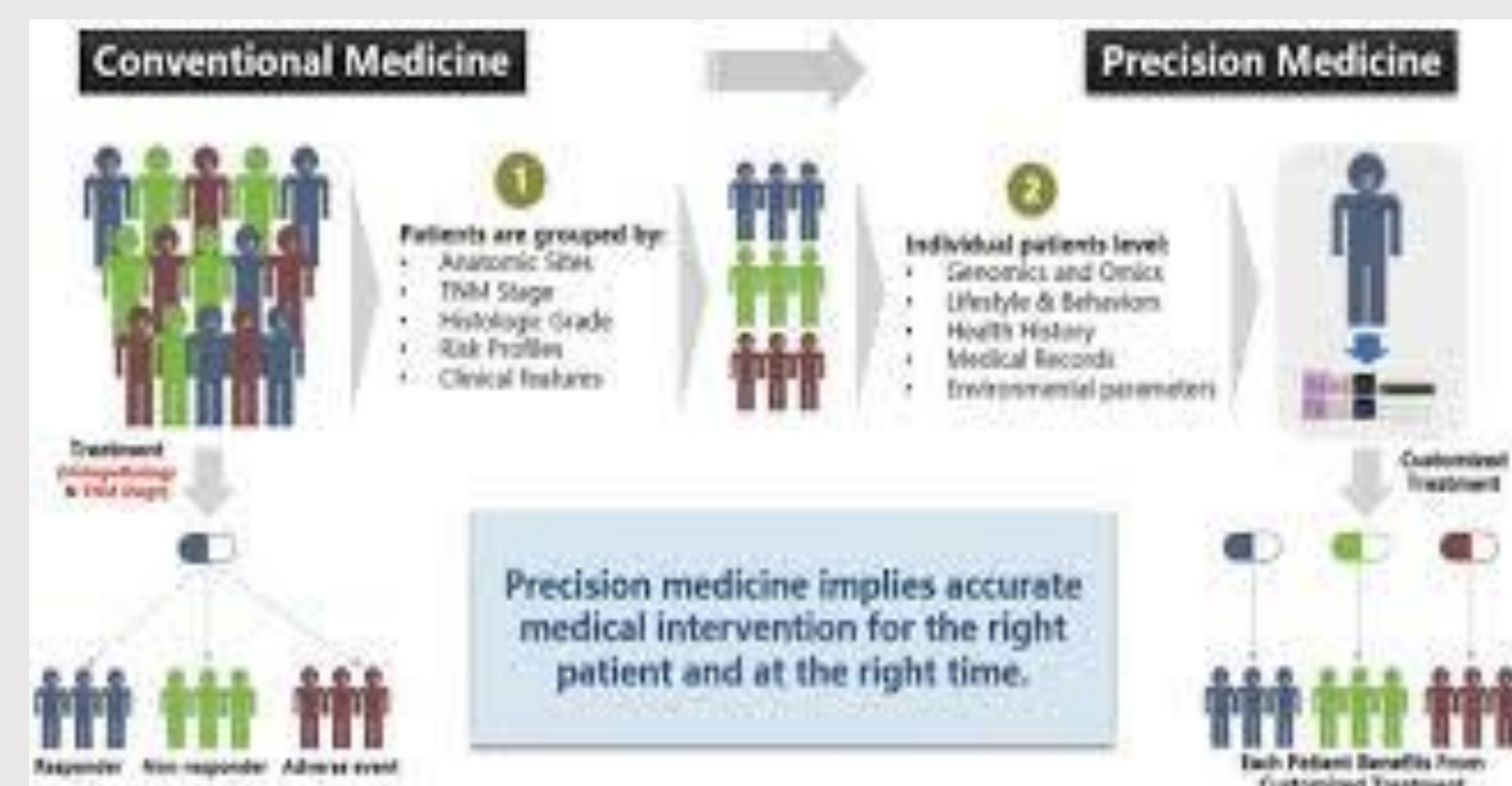
**Introduction.** Biobanks are important part of the personalised medicine concept and support the diagnostics, biomarkers discovery and stratification of patients for targeted therapy. The advances of science allowed the successful implementation of many biomarkers in companion diagnostics and targeted therapy, in particular in oncology. Some of the success stories in translational medicine include biomarkers for brain tumours, GIST and ovarian cancer (OC).

**Materials and methods.** Through research projects and diagnostics we collected biological samples (fresh frozen/FFPE tumour tissue, DNA and plasma) from 400 glioma, 300 OC and 100 GIST patients. A database including patients' clinical and epidemiological data was built. The biobank was approved by the Ethics Committee, MU-Sofia, and patients gave written informed consent.

**Results.** The disease biobank of glial, ovarian and GIST tumours has been accumulated as result of research activity of the oncogenetics group in MMC in collaboration with the University Hospital for Active Treatment and Emergency Medicine "N. I. Pirogov", University Hospital "St. Ivan Rilski", *University Hospital of Obstetrics and Gynecology "Maichin Dom"*, etc. In addition, all patients were offered molecular diagnosis and received adequate treatment according to the molecular genetic characteristics of their tumours.

**Identifier/Topic 1: Biobanking and personalized medicine in oncology – success stories**

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**Conclusions:** The established biobank has been successfully applied for molecular profiling of solid tumors and stratification of patients for therapies. It will support the discovery of new biomarkers for better diagnosis, prophylaxis and treatment. The collections of high-quality human biospecimens along with associated patient clinical information have high innovation potential for cancer research and treatment.

#### References

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Contact: mitkova@mmcbg.org