

IX CONFERENCE OF YOUNG ONCOLOGISTS "CURRENT PROBLEMS OF EXPERIMENTAL AND CLINICAL ONCOLOGY"

Kyiv, Ukraine, April 23-24, 2008

Current problems of experimental and clinical oncology were discussed during the IX International Conference of Young Oncologists, which have been held in the R.E. Kavetsky Institute of Experimental Pathology, Oncology and Radiobiology (IEPOR), NAS of Ukraine.

The meeting was dedicated to the 80th anniversary of Zoya A. Butenko, academician of NASU, the first Ukrainian scientist who has started to study the molecular mechanisms of leukemogenesis and the role of stem cells in malignant transformation, as well as to the 85th anniversary of Dmytro G. Zatula, corresponding member of NASU, the author of original anticancer vaccine that has become a background for the development of cancer biotherapy which is actively elaborated in IEPOR nowadays.

Our annual Conference of Young Oncologists has become now an international event. More and more young scientists working in the field of oncology attend this meeting. This year more than 150 scientists and physicians from different regions of Ukraine and CIS, in particular Belarus and Russia, have participated in the conference.

The program of the conference included the invited lectures which have been presented by the leading IEPOR scientists Prof. Danil Gluzman, Prof. Volodymyr Shliakhovenko, Prof. Ninel' Berezhna and Dr. Grygoriy Potebnya.

The participants discussed actual scientific problems, such as molecular and genetic aspects of carcino- and leukemogenesis, the role of immune and other regulatory systems in the development of malignant tumors, the elaboration the nano- and biotechnologies to create effective means for tumor diagnostics and treatment of cancer patients. The best authors were awarded the special diplomas.

The study of Natalia Val'kovs'ka (IEPOR, NASU) concerning the role of the ADAM8 protein in the development of pancreas cancer was nominated as the best one among the works in experimental and clinical studies. The scientific committee also marked Anna Kudryavtseva study (Institute of Molecular Biology, RAS), concerning the changes in *HYAL1* and *HYAL2* gene expression in malignant tumors of lung and kidney. Some aspects of diagnostics in hematological diseases were presented by Tetiana Ivanivska (IEPOR, NASU). In the field of immunotherapy, the presentation

of Olha Puzanova (N.N. Blokhin Institute of Experimental Diagnostics and Tumor Therapy, ROSC, RAMS) has been worthy of attention.

The scientific committee also nominated the best three posters devoted to the problems of molecular biology and experimental immunotherapy. The poster presentation of Bohdan Bilyk (Institute of the Cell Biology, NASU) concerning the development of a new method to obtain overproducers of a human arginase 1 by means of Hansenula polymorpha yeasts was awarded as the best. The second nomination was given to Volodymyr Sovenko (National Institute of Cancer of Ukraine), who reported his own experience in applying the dendritic cell autovaccines in the treatment of the patients with lung cancer staged as IIIA. The third award was given to Maryana Shabel'nyk (IEPOR, NASU) who had shown correlations between the number of proliferating cells and the level of their differentiation in tumor tissue of patients with gastric cancer with expression and autophosphorylation of PKD2.

Scientific committee also specially marked the work of Natalia Bezdenezhnykh (IEPOR, NASU). Her study deals with molecular-biological characteristics of the human lung cancer cells exposed to chemotherapy and hyperthermia in the setting of the long-term interferon effects *in vitro*.

Discussing the results of the conference, academician of NASU Vasyl' Chekhun has mentioned that such meeting is advantageous in summarizing the main achievements in immunology of tumor growth, which will be helpful in outlining new prospects for immunodiagnostics as well as cancer immunotherapy. Large attention was given to the possibility of elaborating new antitumor vaccines using dendritic cells or the products of microbial synthesis, an allogenic vaccine based on genetic engineering techniques. The efforts to enhance the activity of the lymphocytes as killer cells are also worthy of much attention. Several biotechnologies based on experimental studies are on their way to being implemented in oncological practice. The results presented in the conference by young oncologists allow to hope for the development of new approaches for resolving the most difficult problems of modern oncology.

> Natalia Lukyanova, PhD Deputy Head of the Organizing Committee of the Conference