

DANYLO FISHELEVYCH GLUZMAN (1936–2022)

Professor Danylo Fishelevych Gluzman, well-known Ukrainian oncohematologist, Head of the Oncohematology Department of R.E. Kavetsky Institute of Experimental Pathology, Oncology and Radiobiology of the National Academy of Sciences of Ukraine died on March 29, 2022 at the age of 85.

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D.F. Gluzman graduated from Bohomolets Kyiv Medical Institute in 1960 and started his medical career as a pediatric physician in Ovruch Pediatric Hospital, Zhytomyr region. In 1962, D.F. Gluzman started his research activity as a research fellow at the Institute of Experimental and Clinical Oncology (nowadays R.E. Kavetsky Institute of Experimental Pathology, Oncology and Radiobiology of the National Academy of Sciences of Ukraine), the Institute to which Daniil Fishelevych has committed himself for life. For many years, Dr. Gluzman worked under the supervision

of the first director and the founder of the Institute academician R.E. Kavetsky, the famous Ukrainian oncologist and pathophysiologist. In 1967, Dr. Gluzman got his PhD degree. In 1976, Dr. Gluzman earned a Habilitation degree (Doctor of Sciences) in Medicine, and in 1985 — the academic title of Professor. In 1982, Dr. Gluzman headed the Laboratory of Cytochemistry and Immunocytochemistry, which was later transformed into the Oncohematology Department.

Prof. Gluzman is well known for his pioneering research in developing the cytochemical methods for studying the progenitor cells in various hematopoietic lineages. His pivotal studies on the identification of the hematopoietic stem cells in the yolk sac provided the basis for the advanced exploration of leukemia origin. Prof. Gluzman with his colleagues demonstrated that morphologically unidentifiable hematopoietic progenitor cells possess the marker cytochemical features inherent to the mature cells of the specified hematopoietic lineages. Based on these findings, the improved cytochemical techniques became widely used in Oncohematology Department for the delineation of various forms and cytological variants of acute leukemia. The series of the monographs “Diagnostic Cytochemistry of Hemoblastoses” (1978); “Cytochemistry and Immunocytology of Malignant Lymphoproliferative Diseases” (1982); “Embryonic Hematopoiesis and Hemoblastoses in Children” (1988) where these studies were disclosed are widely quoted



by those engaged in cytochemistry of blood cells.

In the Department headed by Prof. Gluzman, the first-ever in Ukraine monoclonals against differentiation and activation antigens of the cells of human hematopoietic and lymphoid tissues have been produced. The novel immunocytochemical techniques for detection of the wide array of the antigens in blast cells in the smears of blood and bone marrow, fine-needle punctates of lymph nodes and tumors have been elaborated and improved allowing for high quality and precision of diagnostic exami-

nations. The practical implementation of the complex of modified cytomorphological, cytochemical and immunocytochemical techniques has been advantageous for improved diagnoses of the malignant tumors of hematopoietic and lymphoid tissues in Ukraine to meet the requirements of the up-to-date classifications. The extensive network connecting the Department of Oncohematology and dozens of clinical facilities all over Ukraine proved to be the effective tool for assisting the clinicians-hematologists in the precise diagnosis of various hematological malignancies. Annually, the diagnostic tests based on modern technologies were provided to more than 1500 patients from 20 regions of Ukraine. The state-of-the-art in diagnosis of leukemia as well as the long-term practical experience was summarized in the series of monographs: “Immunocytochemistry and Monoclonal Antibodies in Oncohematology” (1990), “Immunocytochemical Diagnosis of Malignant Serous Effusions” (1993), “Laboratory Diagnosis of Oncohematological Diseases” (1998), “Leukemia Diagnosis. Atlas and Practical Handbook” (2000) becoming the guidebooks for clinicians-hematologists and the specialists in experimental and clinical oncohematology in Ukraine.

The Department of Oncohematology headed by Prof. Gluzman launched the large-scale diagnostic examination of Ukrainian patients who suffered from the consequences of the Chernobyl catastrophe with a particular focus on diagnosing leukemia in Chernobyl

clean-up workers and the children from the most affected regions. This study by D.F. Gluzman and his colleagues has drawn the attention of scientific community to the real situation with hematopoietic malignancies in persons exposed to low doses of ionizing radiation following the Chernobyl catastrophe. Such research was supported by specialists in oncohematology from many countries. In 1998–2003, the study of leukemia in clean-up workers was performed within the framework of a joint Ukrainian-Japanese group on the study of leukemia and lymphoma. The data of this study were presented at the Radiation Effects Research Foundation (Japan) in 1999 and 2000. For many years, D.F. Gluzman collaborated as a hematologist with French Center “Children of Chernobyl” consulting on diagnoses of the hematological diseases among the children from the regions of Ukraine contaminated with radionuclides. Prof. Gluzman was involved in the activity of the International Committee of the experts-hematologists set up for verification of the diagnoses of oncohematological pathologies within the framework of the collaborative research program sponsored by the USA. Taking into account the high quality of diagnosing leukemia in children, the Department headed by Prof. Gluzman was selected as the Ukrainian team for participating in the project “My Child Matter” sponsored by Sanofi-Aventis and International Union Against Cancer in 2006–2007. In the setting of this project, assistance was provided for the improvement of diagnosing cancer and leukemia in the children of our country.

The findings on radiation-associated leukemia have been summarized in the collective monograph “Ionizing Radiation and Oncohematological Diseases” (2016) commemorating the 30th anniversary of Chernobyl catastrophe. In 2020, the monograph “Leukemia. Radiation. Chernobyl (Oncohematological Consequences of the Chernobyl Catastrophe)” was published in the USA by Nova Science Publisher. For the first time, some trends in the patterns of hematological malignancies throughout the post-Chernobyl period have been identified.

Prof. Gluzman authored 14 monographs and more than 450 scientific papers on various aspects of oncology and hematology, and made numerous presentations and reports around the world. He trained numerous graduate students and postdoctoral researchers. For many years, Prof. Gluzman was a Deputy Editor-in-Chief of the international journal “Experimental Oncology”. He was also a member of the Editorial Board of Ukrainian journals “Oncology”, “Hematology and Transfusiology”, “Laboratory Diagnosis” as well as a Member of the Ukrainian Society of Hematologists, Ukrainian Society of Oncologists, and an Asso-

ciate Member of the International Network of Cancer Treatment and Research.

Prof. Gluzman contributed much to the organization of highly qualified laboratory assistance in diagnosing patients in Ukraine with the pathology of the hematopoietic system. He was a genuine teacher for the cohort of oncohematologists in Ukraine willing always to help others in their work. A series of booklets entitled “Seminars in Hematopathology” (25 issues in total) initiated by Prof. Gluzman and his colleagues highlights the recent achievements and novelties in diagnosing oncohematological diseases. The annual scientific-and-methodological seminars on the urgent problems of cytochemistry and immunocytology of hematoblastoses organized by the Department of Oncohematology gathered dozens of specialists in hematology and laboratory techniques. The monographs “Diagnostic Oncohematology” (2011) and “Modern Methods of Laboratory Diagnosis of Oncohematological Diseases” (2014) gave a big boost to the improvement of skills of Ukrainian specialists in hematology.

Prof. Gluzman received many honors during his long career. He is the Honored Master of Science and Technology of Ukraine. In 2001, D.F. Gluzman was among the scientists awarded the first established memorial R.E. Kavetsky Prize of the National Academy of Sciences of Ukraine for a series of scientific works “Novel approaches and technologies in diagnosis and treatment of cancer”. In 2015, D.F. Gluzman was among the team of scientists awarded the State Prize of Ukraine in Science and Technology for the series of works “Monoclonal and recombinant antibodies for experimental biology, medicine and veterinary”. In 2018, D.F. Gluzman and his team were awarded the Prize of the Cabinet of Ministers of Ukraine for innovative technologies in diagnosing oncohematological diseases in the Ukrainian population in the post-Chernobyl period.

Danylo Fischelevych will forever remain in our memories as a scientist of permanent creative endeavor and inexhaustible energy who devoted his entire life to medicine with a commitment to making things better for people. We all appreciate his extensive knowledge, his passion, and willingness to stand up and fight for what he believes. The bright memory of Danylo Fischelevych will remain forever in our hearts.

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