

SECOND ALL-UNION CONFERENCE
ON THE CHEMOTHERAPY OF TUMORS

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The Second All-Union Conference on the Chemotherapy of Tumors, in which the main trends in the search for effective antitumorigenic agents, new biochemical prerequisites in directed synthesis, synthetic pathways and methods, results of investigations of synthesized compounds in biochemical experiments and experiments on animals, clinical tests, and the utilization of antitumorigenic preparations in medical practice were reviewed, was held in Kiev on September 25-27, 1974.

One day of the conference was devoted to an extensive session of the Problem Commission on the Chemotherapy of Tumors (with Professor M. N. Preobrazhenskaya presiding), in which review papers on the synthesis and study of the properties of antitumorigenic compounds were presented by the following: M. N. Preobrazhenskaya (Moscow), N. M. Émanuél' (Moscow), L. D. Protsenko (Kiev), Z. V. Pushkareva (Sverdlovsk), V. P. Chernetskii (Kiev), T. S. Safonova (Moscow), T. K. Chumbalova (Alma-Ata), and O. F. Ginzburg (Leningrad). Also presented in the conference were papers on recommendations for the initial selection of antitumorigenic preparations and on the criteria for their delivery to clinics, as well as information regarding international conferences on these problems (Z. V. Sof'ina, V. A. Chernov, and A. B. Syrkin).

In the plenary sessions Academician of the Academy of Medical Sciences N. N. Blokhin demonstrated the development of ideas and the practical utilization of chemical agents, new problems in the chemotherapy of tumors, and the tasks of the current period. Academician of the Academy of Sciences of the Latvian SSR S. A. Giller set forth the principles of a new rational approach in the search for antitumorigenic agents, research on the isolation of the cancer genome projected within the framework of complex studies, and development, on this basis, of the synthesis of specific modified polynucleotides. Also of interest were papers by A. K. Belousova on the reasons for the development of the medicinal immunity of tumors and on methods for overcoming it, by R. E. Kavetskii on the chemotherapy of tumors and the reactivity of the organism, by V. A. Chernov on some aspects of the study of the pharmacokinetics and metabolism of antitumorigenic preparations, and by M. G. Brazhnikov on the results and prospects of research on antitumorigenic antibiotics.

Four sections, of which one dealt with chemistry, two dealt with experimental chemotherapy, and one dealt with clinical chemotherapy, were in operation at the conference. Of the 22 papers presented in the chemical section approximately half were devoted to the synthesis of compounds containing cytotoxic groupings. The remaining papers were devoted to the directed synthesis of antimetabolites, among which heterocycles play a fundamental role. Inasmuch as the search is being carried out mainly with analogs of bases that are included in nucleic acids or are products of nucleic metabolism, problems in the synthesis and chemistry of pyrimidine (Leningrad and Moscow) and purines and their analogs with a modified heterocyclic system, for example, pyrimido-, pyrazino-, and pyrido-1,4-thiazines and -1,4-oxazines (Moscow) were extensively represented. A large amount of material on the synthesis and properties of 5-nitrofurans (Riga), glycosides of pyrazole derivatives and condensed pyrazole systems (Moscow), imidazole derivatives (Novokuznetsk), new analogs of purine precursors - aminoimidazolecarboxamide - and azapurines (Sverdlovsk) was presented.

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