TRANSLATION MEDICINE, BIOMEDICINE AND MEDICAL BIOTECHNOLOGY: THE TRANSITION TO PERSONALIZED MEDICINE

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Given that biomedical research in the field of molecular and cellular foundations of pathogenesis has been actively developing in the last two decades, there is a need for active collaboration between scientific and laboratory institutions to create new and improve existing methods of treatment to provide effective professional care for the patient. The transition to personalized therapy, which aims to create methods of treatment adapted to a specific group of patients or individual, became a big step in the field of translational medicine. An important issue is the introduction of translational medicine into modern clinical practice and its development ensuring on the basis of scientific centers and institutes.

The purpose of the article was to analyze and summarize information regarding translational medicine and its implementation in treatment and scientific and practic activity to ensure more effective therapy for patients.

The literature concerning the development of translational medicine, its application in clinical practice and methods of implementation in the scientific field was reviewed and analyzed. The information about personalized medicine was generalized.

Translational medicine contributes to the practical application of scientific advances to the development and implementation of new methods of prevention, diagnostics, treatment and rehabilitation. An important characteristic of translational medicine is its double-sided concept, which consists in the collaboration of laboratory and clinical institutions in order to regularly information exchange. The introduction of personalized medicine allows, based on the individual characteristics of the patient, to find an effective approach to treatment.

Translational medicine is a promising area of treatment, the introduction of which in clinical practice would enable to create and improve effective methods of various diseases therapy. The widespread use of personalized medicine will increase the percentage of positive treatment outcomes due to the individual approach to each patient. For the active development and spread of this type of therapy, there is a need to create more institutes of translational medicine, to hold scientific conferences on this subject, and to introduce into the curricula of universities the disciplines for the study of the basics of translational medicine.
Key words: translational research, translational medicine, cancer, personalized medicine.

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