Biotherapy of cancer: break the barriers to foster translation of knowledge

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ABSTRACT

Biotherapy of cancer holds great promise for its potential to lead to the identification of novel, selective, and effective treatments against cancer. However, the clinical development of biopharmaceuticals and biotherapy products is hampered by several and diverse barriers. Herein, we will address some of the critical issues identified both at the national and European level as the major obstacles for the translation of knowledge into clinical applications in the field of biotherapy and immunotherapy of cancer. We will also illustrate specific initiatives undertaken both in Europe and in Italy in order to support the translational and clinical research and that are expected to have a favorable impact on the process of clinical development of novel and more effective therapeutic interventions against cancer.

The contents of this article are directly referred to the event “International Clinical Trials’ Day on Biotherapy of Cancer” organized in the context of the OECI Genoa 2008, with the sponsorship of Alliance Against Cancer (ACC) and the Istituto Superiore di Sanità (ISS, the Italian National Institute of Health), and under the auspices of the European Clinical Research Infrastructures Network (ECRIN). This event sees the active participation of representatives of the ISS and of the Italian Network for Tumor Biotherapy, both involved in a project recently funded by ACC and aimed at the promotion of clinical research in the field of cancer biotherapy and immunotherapy, through the creation of a national network of clinical cancer research centers and GMP facilities dedicated to the production of biological drugs and advanced medicinal products.

Key words: cancer, biotherapy, infrastructures, network.

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