

FORMULATION OF BIOMEDICINES AND NEW GENERATION VACCINES DERIVED FROM PLANTS FOR THERAPIES OF DISEASES OF GREAT SOCIAL IMPACT AND ADVANCED MOLECULAR BIOLOGY TECHNIQUES

Innovations and Benefits - Development of methodologies for the production of innovative biotechnological medicines, in order to broaden access to treatment in case of cancer, infectious and rare diseases.

Plant-derived antibodies have recently demonstrated their actual potential as in the case of the ZMapp medicine which was effective when administered to patients with Ebola. Together with the production of antigens interesting as far as vaccines are concerned, plants represent an extremely interesting platform for ease of scale-up, as well as for investment and operating costs reduced up to 100 times compared to a classic bio-fermenter.

Uses - Production of monoclonal antibodies from plant systems aimed at anti-cancer therapies, anti-fungal therapies (Candida), diagnosis of aflatoxins. Production of vaccine formulations against HPV 16 (Human papilloma virus).

Past and present activities - Kit formulation based on plant-derived antibodies for the detection of aflatoxins in food matrices with Euroclone S.p.A. Milan.

