Resource Summary Report

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Pharma-Planta Consortium

RRID:SCR_003880
Type: Tool

Proper Citation

Pharma-Planta Consortium (RRID:SCR_003880)

Resource Information

URL: http://www.pharma-planta.net/

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Description: Consortium to develop efficient and safe strategies for the production of clinical-grade protein pharmaceuticals in plants, and to define the procedures needed for the production of these proteins in compliance with the strict regulatory standards that govern the manufacture of all pharmaceuticals. Ultimately the consortium aimed to take a candidate product all the way through the development pipeline culminating in a phase I human clinical trial. The consortium has a wide range of expertise spanning the areas of molecular biology, plant biology, immunology, recombinant protein expression technology, vaccinology, and plant biotechnology. The objectives listed at the beginning of the Pharma-Planta project are as follows: # To produce a recombinant pharmaceutical molecule in transgenic plants, which will be developed through all regulatory requirements, GMP (good manufacturing practice) standards and pre-clinical toxicity testing. This will then be evaluated in Phase I human clinical trials. # To develop robust risk assessment practices for recombinant pharmaceutical molecules produced in plants, based on health and environmental impact, working with regulatory authorities within the EU as well as public groups to ensure that the production systems are as safe and as acceptable as possible, and that they comply with all biosafety regulations. # To define and carry out a coordinated program for securing and managing intellectual property that will facilitate the availability of high priority plant-derived recombinant pharmaceuticals to the poor in developing countries while simultaneously allowing the products to be developed commercially in Europe and North America. # To develop and refine new strategies for the expression of recombinant pharmaceuticals in plants, which can be used on a generic basis for molecules that are normally expressed poorly. # To develop and generate transgenic plants expressing a second generation of recombinant molecules that will be used in future clinical trials. In 2011 they reached their benchmark for success launching a phase I clinical study of an antibody that neutralizes HIV, produced in and isolated from tobacco plants. This antibody could one day become an

inexpensive component of a microbicide used to prevent the spread of HIV/AIDS. The project has also spun off many additional technologies that are being adopted by researchers all over the world, and has resulted in more than 100 publications in peer-reviewed scientific journals.

Abbreviations: Pharma-Planta

Resource Type: organization portal, data or information resource, consortium, portal

Keywords: drug, clinical trial, drug development, basic research, tool development, recombinant protein, pharmaceutical, protein, antibody, tobacco plant, hiv, aids, pharmaceutical protein, pre-clinical

Funding: European Union FP6

Resource Name: Pharma-Planta Consortium

Resource ID: SCR_003880

Alternate IDs: nlx_158208

Record Creation Time: 20220129T080221+0000

Record Last Update: 20250519T203312+0000

Ratings and Alerts

No rating or validation information has been found for Pharma-Planta Consortium.

No alerts have been found for Pharma-Planta Consortium.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 2 mentions in open access literature.

Listed below are recent publications. The full list is available at NIF.

Sheehan ZBV, et al. (2019) Differential investment in brain regions for a diurnal and nocturnal lifestyle in Australian Myrmecia ants. The Journal of comparative neurology, 527(7), 1261.

Makhzoum A, et al. (2014) Recent advances on host plants and expression cassettes' structure and function in plant molecular pharming. BioDrugs : clinical immunotherapeutics, biopharmaceuticals and gene therapy, 28(2), 145.