Press Release

OncoTrack: A new European consortium launches search for novel genomic cancer diagnostics

Brussels, March 8th 2011 - OncoTrack, an international consortium of over 60 scientists, managed by Bayer HealthCare Pharmaceuticals and the Max Planck Institute for Molecular Genetics, has launched one of Europe's largest collaborative academic-industry research projects to develop and assess novel approaches for identification of new markers for colon cancer. The unique five year project, Methods for systematic next generation oncology biomarker development, brings together top scientists from European academic institutions with a wide range of expertise, and partners them with pharmaceutical companies.

In the last several decades, there have been significant advances made in the range of therapeutic agents available for the management of many common cancers. The inherent heterogeneity of most tumors, however, means that even innovative targeted therapies still typically only help a sub-population of patients. The challenges for the clinician of accurately diagnosing the tumour type and stage are further compounded by the necessity of predicting therapeutic responsiveness. Thus the application of tumor-specific biomarkers is recognized as a key factor in improving diagnosis, refining the selection of therapies and tracking the response of patients during treatment. A more sensitive, reproducible and systematic approach to the discovery and quantification of molecular markers reflecting neoplastic disease status, and their subsequent translation into clinically robust diagnostic methods, is therefore a prerequisite for the broad application of modern targeted therapies.

The essential objective of OncoTrack is to establish new methods for systematic next generation oncology biomarker development. Detailed molecular characterization of high quality tumor tissue will provide critical information to support our fundamental understanding of cancer and the influence of heterogeneity on response to colon cancer therapy. The project intends to generate high quality genomic and epigenetic sequence data from clinically well-defined tumors and their metastases, and will compare these to the germline genome of the patients. These data will be complemented by a detailed molecular characterization of the tumors. In parallel, the consortium will establish and characterize a novel series of xenograft tumor models and cell lines derived from the same set of tumors which will support research on tumor biology and also the early stages of biomarker qualification.

The combined data from all phases of the project will allow OncoTrack to address fundamental questions regarding the relationships between tumor genotype and phenotype, thus providing the starting point for discovery and selection of suitable candidates for development as biomarkers of colon cancer.

Dr. David Henderson, Principal Scientist in Translational Sciences at Bayer HealthCare Pharmaceuticals, and Coordinator of the OncoTrack consortium, comments: 'OncoTrack is a prime example of the manner in which Public-Private Partnerships are breaking new ground in collaborative research involving academic and industrial partners. We have assembled a team of clinicians, molecular scientists, bioinformaticians and associated experts; thus creating a Europe-wide network of complementary capabilities extending far beyond the scope of a traditional 'one-on-one' industry-academic collaboration. The joint efforts of this consortium will generate the critical mass required to tackle the complex task of using large-scale genomic analysis as a basis for rational selection of novel cancer biomarkers.'
Prof. Hans Lehrach, Leader of the Managing Entity from the Max Planck Institute for Molecular Genetics comments: ‘We welcome the unique opportunity afforded by this IMI initiative. The broad support from Europes’ top pharma companies combined with the expertise within our Institute and our partners, will enable us to achieve the leverage necessary to tackle this complex project. Additionally the access to the scientists & commercial research facilities afforded by members of the OncoTrack Consortium will allow us to adopt avenues of discovery previously out of reach for academic research institutes. I look forward to our collaboration and feel that this initiative will both strengthen European academic research and provide our industry partners with important new tools applicable to clinical development programmes. Most importantly, our research will yield tangible benefits to patients in the therapy and management of their disease’.

The project Methods for systematic next generation oncology biomarker development, is partnered with a selected group of major global pharmaceutical companies, composed of AstraZeneca, Bayer HealthCare Pharmaceuticals, Boehringer Ingelheim, Janssen Pharmaceutica, Merck, Pfizer and Roche Diagnostics, whose in-kind contributions to the project are matched by funding from the IMI Joint Undertaking, resulting in a total budget of €25.8mio.

The academic partners contribute essential skills & knowledge crucial toward the success of this enterprise. Those involved include: the Max Planck Institute for Molecular Genetics (Germany), Uppsala Universitet (Sweden), University College London (United Kingdom), Université Paris-Sud (France), Charité Universitätsmedizin Berlin (Germany), the Medizinische Universität Graz (Austria) and the Technische Universität Dresden (Germany). Aiding this ground-breaking project are three further pharmaceutical small and medium-sized enterprises (SME), International Prevention Research Institute (France), Experimental Pharmacology and Oncology and Alacris Theranostics (both in Germany) who will contribute to the success of OncoTrack, while the SME GABO:mi (Germany) will have the complex task of managing the multi-national project.

About the Innovative Medicines Initiative (IMI)
The project is funded by the Innovative Medicines Initiative, a young and unique public-private partnership between the pharmaceutical industry (represented by the European Federation of Pharmaceutical Industries and Associations, EFPIA) and the European Union (represented by the European Commission).
IMI aims to put Europe at the forefront of biopharmaceutical innovation and to support more efficient discovery and development of better medicines for patients.
IMI’s innovative funding scheme has a budget of €1 billion from the European Union’s ‘Seventh Framework’ Programme (FP7/2007-2013). That amount will be matched by in kind contributions of at least another €1 billion euro from the EFPIA member companies.

For more information on IMI: www.imi.europa.eu