

Press release for immediate release

Liquid biopsies enter clinical practice A major challenge for European cancer centres

Brussels, 8 February 2021. - Liquid biopsies, just a few years ago still used solely in cancer research projects, are today entering the clinic. A new tool for diagnosis and monitoring that is bringing many benefits, for doctors as well as cancer patients. Doctor Michail Ignatiadis, medical oncologist at the Jules Bordet Institute and expert in the field of liquid biopsies, is the author, with George W. Sledge Jr and Stefanie S. Jeffrey, of an article published in the prestigious scientific journal Nature Reviews Clinical Oncology. The authors report very specifically on how liquid biopsies are now entering clinical practice and highlight the essential challenge this represents for leading edge medicine in the fight against cancer.

A quick reminder: What are liquid biopsies and what do they permit?

A liquid biopsy is the analysis of a blood sample for the purposes of detecting the presence of circulating tumour cells (CTCs) or circulating tumour DNA (ctDNA) in a patient's blood and then analysing them at the molecular level, in particular to search for any mutations. CTCs are cancer cells that have detached themselves from the primary tumour (cancerous process at the site (tissue) where the cancer originated) or metastatic lesions (distant from the primary tumour) that are circulating in the blood and that are at the origin of metastases in various body organs.

The potential applications of liquid biopsies are major. It is now possible, by means of a simple blood test, to detect genetic anomalies linked to certain cancers, to monitor the development of the disease, to easily evaluate treatment effectiveness and to guide the choice of a new treatment. The benefits for patients are many: a non-invasive treatment presenting less of a risk compared to solid biopsies (taken directly from the tumour), simple to implement, and an effective method of analysis in the case of lesions or tumours to which access is difficult via a conventional biopsy.

Potential applications and practical questions, Dr Ignatiadis's article explains

The article in Nature Reviews Clinical Oncology presents the latest scientific data on liquid biopsies and their potential applications in the fight against cancer. It also looks at many practical questions, such as the human resources required, the integration of liquid biopsies in the patient's care pathway, the method of working with the analysis laboratories, the equipment needed, management of the data obtained, training (of care staff, researchers, data analysts) and many other points.

"Already well integrated in the USA, Europe today has some catching up to do in integrating liquid biopsies into clinical practice. This requires a clear overall view of the elements that must be put into



place for this to be done intelligently and coherently. Liquid biopsies are a new tool for personalised care that will benefit both doctors and patients. They represent an important step forward in combatting cancer," explains Dr Ignatiadis.

You will find the article titled "Liquid biopsy enters the clinic — implementation issues and future challenges" by clicking on this link: https://www.nature.com/articles/s41571-020-00457-x

The research by Dr Ignatiadis is to a large extent financed by the Friends of the Bordet Institute, the Jules Bordet Institute's biggest private sector donor, as well as by the Fondation contre le cancer.

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About the Jules Bordet Institute

An integrated multidisciplinary centre, unique in Belgium, the Jules Bordet Institute is an autonomous hospital devoted exclusively to cancer.

For 80 years, the Jules Bordet Institute has been providing its patients with diagnostic and therapeutic strategies at the forefront of progress to prevent, detect and actively combat cancer. The Institute pursues three missions: care, research and teaching. Its international reputation attracts the world's leading cancer experts. Its spirit of innovation has enabled it to participate in the development and discovery of major new methods of diagnosis and treatment with the aim of bringing the findings to the patient as rapidly as possible.

In May 2018, the Jules Bordet Institute received official accreditation and designation from the OECI (Organisation of European Cancer Institutes) as a "Comprehensive Cancer Centre", a quality label reserved for multidisciplinary cancer care institutions whose activities include research and teaching. The only Comprehensive Cancer Center accredited by the OECI in Belgium.

The Jules Bordet Institute is a member of the Iris and Université Libre de Bruxelles hospital networks. With its 160 beds dedicated exclusively to cancer patients, every year the Institute treats more than 6,000 in-patients., 15,000 out-patients and provides 84,000 consultations. To effectively meet future demographic and scientific developments, a new Bordet Institute is being built on the ULB Anderlecht campus, next to the Erasmus Hospital. Inauguration is scheduled for the end of 2021.

www.bordet.be

About the Friends of the Bordet Institute

For more than 50 years, "The Friends of the Bordet Institute" have been financing research against cancer research at the Jules Bordet Institute, the reference centre in the fight against cancer in Belgium and abroad. As the Institute's biggest private donor, it has given close to 13 million euros to the Institute in the past five years.

Considerable progress has been made in the field of oncology in recent years. Our understanding of the biological origin of cancer is growing all the time. Whereas 10 years ago we spoke of the microscopic analysis of tumours, today we speak of genetic profile, of sequencing, etc. Dozens of new molecules and markers have been developed, permitting the advent of personalised treatment. This progress has to a large extent been made possible through the extraordinary technological progress of recent years. But these new techniques that now enable us to probe the infinitesimally small are increasingly expensive.



For more than 50 years, the help of the "Friends" has enabled the Jules Bordet Institute to pursue its research using the most advanced technologies, thereby providing patients with the most innovative screening and treatment techniques. Techniques that generate life and hope.

By helping and supporting "The Friends of the Bordet Institute" you are participating in the many research programmes that they support and that all pursue a single aim: victory for life.

To find out more about the association The Friends of the Jules Bordet Institute, go to the website www.amis-bordet.be
To find out more about the "101 tables pour la vie", go to the website www.101tables.com