Fighting childhood cancer at EU level

EU legislation is seriously blocking progress…

There is an urgent need for clinical trials, research, quality-assured standard treatments and new drugs to improve the chances for European children and youths with cancer.

The importance of clinical trials to battle childhood cancer

In Europe, three out of four children with cancer who would have been considered incurable 40 years ago survive today. Continuous national and international collaborations of interdisciplinary groups and paediatric oncologists performing investigator-driven clinical trials and systematic biomedical research have been the backbone of this progress so far. Since the 1970s, most European children and adolescents with cancer are treated in so-called therapy optimising studies. These academia-sponsored trials, which are performed for the various childhood cancer diseases, guarantee standardised treatments according to the current status of medical knowledge for all the young patients.

However, childhood cancer is still the number one killer amongst paediatric diseases in Europe. Despite all successes, a quarter of children and adolescents with cancer will die as a consequence of their disease, due to side effects of the toxic therapy, or because their cancer does not respond to the treatment.

"Your child has cancer"

In Europe, almost 15,000 young people aged up to 19 years are newly diagnosed with cancer each year. It is a parent's nightmare since, most commonly, their previously healthy and thriving child faces the real prospect of distressing and rigorous therapies. With the rapidly changing landscape for cancer treatment, there are new opportunities to design less toxic, more effective therapies to save a child's life. However, physicians and researchers are facing regulatory challenges.

MEP Mr Peterle with kids from Belgium and the SIOPE Board in the EU Parliament, 9th February 2011

ENCCA, an EU funded 'Network of Excellence'

The new four-year European Network for Cancer research in Children and Adolescents (ENCCA) project is supported by the European Commission under the 7th Framework Programme and coordinated by the Children's Cancer Research Institute (CCRI) of the St. Anna Kinderkrebsforschung Association, Vienna, Austria. Launched in January 2011, this network, involving 33 leading European institutions and organisations – such as ICCCPO, the International Confederation of Childhood Cancer Parent Organisations – aims to improve cure and facilitate access to new drugs and standard care across Europe.

A network for a change

"ENCCA is an essential step to create a better future for children and adolescents who suffer from cancer. Because cancers in children and youths are rare and greatly differ from those found in adult patients, it is important to systematically examine research results and their implications on diagnosis and treatments. We need increased understanding of the specific characteristics of paediatric cancers," explains the ENCCA coordinator Ruth Ladenstein, MD, physician and scientist at the Viennese Children's Cancer Research Institute and president of SIOPE, the European Society for Paediatric Oncology. The main objective is to restructure knowledge-sharing through the integration of the whole chain of stakeholders in paediatric oncology, including high level research teams dedicated to paediatric tumour biology. "We also strive to promote innovative methodology and designs for clinical trials to address the specific needs of cancers in children and youths."

Putting childhood cancer research on the agenda of the EU Parliament

On 9th February, Alojz Peterle, Member of the European Parliament, organised a multi-stakeholder meeting at the European Parliament. Members of SIOPE and ENCCA, including young patients from Belgium, their families, MEPs, experts in paediatric oncology and other cancer policy stakeholders discussed how the rapid progress previously established in paediatric oncology is being forcibly arrested by EU legislation. "These topics need urgent improvement: regulatory constraints for our clinical studies, licensing of new drugs, introduction of innovative therapies, the implementation of harmonised Europe-wide

standards of care for patients and childhood cancer survivors and funding of research," stated Ruth Ladenstein during the meeting.

Coping with barriers caused by EU regulations

In 2001, the EU Clinical Trial Directive was introduced to improve the quality and safety of drug development. However, it has created considerable administrative workload as well as financial burdens on clinical trials aiming at continuous improvement of standard cancer therapies in children and youths. The directive has had a disproportionately negative effect on the initiation and conduct of trials for children, particularly due to its inhomogeneous implementation in the EU member states. Indeed, the significant progress made so far, resulting in more than 75% cure rate, is under threat. Ruth Ladenstein explains: "As a consequence, the number of such clinical trial settings has considerably declined under the bureaucratic fundamentalism in Europe."

At the meeting on 9th February, Professor Richard Sullivan from the Centre for Global OncoPolicy, London, UK, emphasised the need for the immediate reduction of the bureaucratic barriers that negatively influence the conduct of investigator-led clinical trials. "This directive, whilst proposing a high standard of research conduct, has generated very significant blocks to the development of trials, especially in smaller countries, making it almost impossible for them to participate. Indeed in Poland, not a single children's clinical trial has opened since 2007." The 'regulatory fundamentalism', according to Professor Stefan Bielack of Olga Hospital in Stuttgart, Germany, severely constrains the research-based approaches that have been developed, and prevents newer member states from offering new treatments.

Off label use of drugs to treat young cancer patients

Children should no longer be pharmaceutical orphans. Effective new approaches are needed to overcome off label or off licence use of live-saving standard treatments, such as chemotherapy agents. Currently up to 80% of drugs used for children and adolescents with cancer fall into this category.

Current challenge: sufficient funding of clinical research

Burning issues are sharing of responsibilities in transnational, multicentre investigator-driven trials and associated logistics for the sponsor role, contracts and insurance costs. Since cancers in children are rare, research has not yet been financially attractive to the pharmaceutical industry, explaining the strong dependency of research – clinical trials as well – on donations and public funds. "The lack of sustained and sufficient funding of our research activities endangers previous achievements," says Ruth Ladenstein. "The extremely poor access to new drugs necessary for improving survival chances is a further major inequality children with cancer are facing."

At the European Parliament, Professor Gilles Vassal, Head of Translational Research at Institut Gustave Roussy in Villejuif, France, and SIOPE Vice-Chair appealed to the MEPs to take the special needs of young people into account and push for strategies to encourage the rapid licensing of new drugs. "The new Regulation (EU Paediatric Regulation (EC) No 1901/2006) has not had the impact upon the pace of licensing we had hoped for. The pharmaceutical industry does not perceive the childhood cancer drug market as commercially attractive because of the rarity of young people with cancer." Paediatric malignancies need to be considered as a major health issue.

Side effects of current treatments are still a reality

Ladenstein explains: "Another goal of the ENCCA network in close collaboration with the FP7 PANCARE project is to substantially improve the quality-of-life of patients and childhood cancer survivors, since potential long-term side effects of current therapies are still a reality. Ethical issues related to the participation of young cancer patients in clinical research are a further topic. We need common ethical definitions at European level."

A strong alliance based on three pillars for a better future

"To achieve real success in this fight against paediatric cancers, sustainable funding of childhood cancer research – which should be non-competitive – must be ensured by a strong alliance based on three pillars: politics, industry and the academic community," emphasises Ruth Ladenstein. Detailed dialogues and collaborations with potent partners in politics and the pharmaceutical industry have to be realised to ensure future developments for the benefit of young cancer patients in Europe. These are the commitments that will ultimately make regulations in the field of paediatric oncology a success and will secure equal chances for children with cancer within the European community.

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