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The way to quality

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OECI MAGAZINE n. 2-2020

Welcome of the OECI President

On the eve of the launch of two major European cancer initiatives, the European Cancer Beating Plan and the European Cancer Mission, this Edition of the OECI Magazine is going to firstly look at the latest developments in the European cancer agenda and then outline some of the initiatives promoted by OECI - the largest European cancer network - to achieve the goals put forward by the EU Commission.

For the first time, Europe is preparing to launch five flagship R&I specific "Missions" which will galvanise innovation by conforming inter-sectoral, inter-actor and interdisciplinary features. Cancer is one of the five targeted areas of focus and the EU brings forward a set of ambitious goals in the Report of the Cancer Mission of June 2020, which reads:

"By 2030, more than 3 million lives saved, living longer and better" and "to reduce by one third premature mortality through prevention and treatment and promote mental health and well-being."

With its membership of 102 centres/institutes, actively fighting cancer on the frontline, OECI is directly involved in this action plan and has launched a host of initiatives targeted towards achieving the goals set forward by the EU Recommendations.

Thinking big, experimenting and learning from trial and error is critical to the portfolio approach behind R&I Missions and in order to bring about change, we must take a step back and look at the obstacles that are still standing in the way:

- *A lack of coordination at regional, national and European level*
- *A lack of coordination between national cancer plans, and in some cases the absence of the plans themselves*
- *A lack of a homogeneous system to digitize patient data*
- *A marked financial disparity amongst EU Member States*
- *A scarce involvement of patients in decision-making processes*
- *A slow transfer of research results to clinical practice*
- *An uneven distribution of specialised "Comprehensive cancer centres" or "Clinical Cancer Centres"*
- *An unsolved debate between the organ-based and the pan-cancer approach*

The ongoing debate between an organ-centred vs a pan-cancer approach to accreditation and monitoring is certainly part of a wider discussion. There have been rapid advancements in science, genomics, proteomics and immunology, along with an increasing cross-over between organs in diagnostic and therapeutic terms (Cambridge has found remarkable results in this area, as an example). In this scenario, an approach which strictly focuses on organs is going to be inevitably replaced by one where MDTs are backed up by molecular diagnostics and monitoring in a wider institutional environment. We are concerned for patients treated in separate (i.e.) units, inadequately connected to larger hospitals and institutes and firmly believe that patients themselves will be asking for a more comprehensive approach which may yield better outcomes.

OECI hopes that many of the aforementioned issues will be solved through a major alignment of the various cancer initiatives developed within the framework of Horizon Europe and the European Beating Cancer Plan.

As a matter of fact, research and public health cannot feature siloed interests; these two worlds must find a common ground to co-create and co-implement politics and actions to foster a broad interactive process. Scaling down, it is also time for Research and Health Ministries who act at national level to understand that patients are demanding answers and proactive solutions that should be evenly applied across all the EU landscape; feeble excuses can no longer be accepted.

As we saw, in addition to Brexit and its possible financial implications, the EU budget is facing several long-term challenges. Imminent enlargement rounds, substantial regional disparities and structural problems of the Southern and Eastern countries, climate and demographic changes, unemployment, income inequality and persisting poverty, just to name a few, are also topped by issues arising from the outbreak of COVID 19.

Not only has the epidemics caught us all unprepared, but it has also hampered a host of financial plans waiting for approval. For instance, the next EU Multiannual Financial Framework (QFP) had to be re-evaluated following the epidemic and so did the substantial investments planned for both the Cancer Mission and the Beating Cancer Plan, which have been largely reduced in order to allocate funding to tools designed to cushion the disasters related to COVID-19. Such tools include "SURE", a European instrument for temporary Support to mitigate Unemployment Risks in an Emergency, the European Stability System (MES), whose dedicated funds support the adaptation of health systems to the pandemic or Next Generation Europe, just to name a few.

Our patients have been deeply affected by the setbacks caused by the pandemic. In this predicament, we can only find strength in cooperation and it is by working together that we may avoid an economic collapse who will tackle those who have already paid with their most important asset: their own health.

OECI has mustered all its resources to prevent decreasing its activity and in this Issue will look at our members' struggle with the COVID-19 epidemic and at our experience re-shaping our live site visits into hybrid online events. We will also talk about DIGICORE, an initiative supported strongly by OECI, aimed to implement systematic data collection and utilisation of cancer RWD by creating a network which, other than cancer institutes & networks, industry segments and academics, must involve patient's organisations.

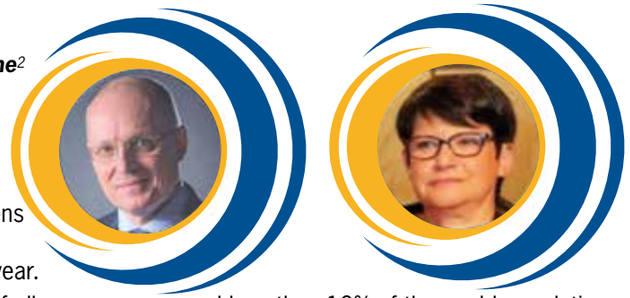
Strengthening the coordination, continuity and inter-sectoral cooperation for cancer patients is profusely being underlined by European and international guidelines. Each cancer patient should be involved in decision-making and it is for this reason that we have also strengthened our dialogue with the European Cancer Patient Coalition. Here at OECI we believe the partnership between patients and care providers needs to be set in stone and therefore, institutionalised both within each cancer centre and in the relationship between Organisations.

Finally, I would like to warmly thank all our contributors for their availability to collaborate to this Edition; I truly hope our readers will appreciate its contents. A democratic exchange of opinions is essential and OECI is opening the doors of its Magazine to those willing to submit their own articles and contributions to help further the advancement of cancer research and care.

Thierry Philip
OECI President

Horizon Europe Cancer Mission: state of play

Walter Ricciardi[1] *and* ***Christine Chomienne***[2]
1. Chair - European Cancer Mission Board
2. Vice Chair - European Cancer Mission Board



Cancer is a growing challenge for Europe. Almost 4 million European citizens per year are diagnosed with cancer. The disease still kills 1.3 million people per year.

Considering that Europe has a quarter of all cancer cases and less than 10% of the world population, this is clearly a challenge, one of the five major societal challenges in Europe. The number of new cancer cases diagnosed is projected to increase by 25% in Europe by 2035. This could be a serious problem for all European citizens if we do not act now. Europe needs better, more equitable prevention and diagnosis, treatment and care, survival rates and post-cancer quality of life.

The European Commission has recognized this societal challenge and the need to work differently. In Horizon Europe, the mission concept has been brought forward as a new manner to tackle research and innovation, with a deeper insight in the needs of patients/their carers, a more transparent way to understand the gaps of translating research and innovation to care and policy actions at every Member State level and for each European citizen. In line with the Mission-orientated approach, the Cancer Mission Board has worked with the Assembly members, citizens and patients, national stakeholders, EU organisations, MEPs and received inputs from many associations to provide all stakeholders in Europe, politicians, managers, professionals, citizens, patients and care givers, the best possible answer to conquering cancer, as a "mission possible" for the next 7 years. The Cancer Mission Board's report was handed to Commissioner Gabriel at the R&I days in September 2020[1]. This report explains the intervention areas, the recommendations for actions needed to making conquering cancer a mission possible.

The first intervention area is understanding. Understanding better the causes of cancer, understanding better why some rare cancers happen in children for example, understanding better why some cancers cannot be detected earlier, are not druggable today, understanding the needs for a better quality of life. Europe is the only place where we have all the possibilities to do that.

The second intervention area is preventing the preventable. Of course, preventing cancer is not only a matter of medicine, it is a matter of economics, of changing our behaviours. We would like to help politicians and governments prevent cancer, reduce risk factors, improve lifestyles for all European citizens, and understand better why. Even though it is clear that eating too much, not practising physical activities, drinking too much alcohol and smoking tobacco is something that is going to cause cancer sooner or later, or serious health problems, changing our behaviours is difficult.

Still, too many people, particularly in some areas of Europe, do not have access to improve early detection, diagnosis and treatment. Cancer patients, their families, and carers do not go through cancer similarly. The quality of life must be improved for each need. Equity and equitable access are a serious challenge for us. These are three additional intervention areas explained in the Mission report.

The Cancer Mission Board has produced a total of 13 recommendations for bold actions. Our recommendations range from prevention, to diagnosis and treatment, to quality of life, and two horizontal areas for equitable actions and actions to transferring the best possible cancer culture to all of Europe.

We are confident that this can happen in Europe, because in Europe we share values of solidarity, of equity, of justice. We all share the culture of universal coverage. The Europe's Beating Cancer Plan is another opportunity and we are working together with all the pertinent services in the European Commission to make this reality come through. Cancer can be conquered and we will conquer it.

[1] ***https://ec.europa.eu/info/publications/conquering-cancer-mission-possible_en***

Conquering cancer: mission possible

Report of the Mission Board for Cancer presented to the European Commission

RECOMMENDATIONS

Recommendation 1

Launch UNCAN.eu – a European Initiative to Understand Cancer

Recommendation 2

Develop an EU-wide research programme to identify (poly-)genic risk scores

Recommendation 3

Support the development and implementation of effective cancer prevention strategies and policies within Member States and the EU

Recommendation 4

Optimise existing screening programmes and develop novel approaches for screening and early detection

Recommendation 5

Advance and implement personalised medicine approaches for all cancer patients in Europe

Recommendation 6

Develop an EU-wide research programme on early diagnostics and minimally invasive treatment

Recommendation 7

Develop an EU-wide research programme and policy support to improve the quality of life of cancer patients and survivors, family members and carers, and all persons with an increased risk of cancer

Recommendation 8

Create a European Cancer Patient Digital Centre where cancer patients and survivors can deposit and share their data for personalised care

Recommendation 9

Achieve Cancer Health Equity in the EU across the continuum of the disease

Recommendation 10

Set up a network of Comprehensive Cancer Infrastructures within and across all EU Member States to increase quality of research and care

Recommendation 11

Childhood cancers and cancers in adolescents and young adults: cure more and cure better

Recommendation 12

Accelerate innovation and implementation of new technologies and create Oncology-focused Living Labs to conquer cancer

Recommendation 13

Transform cancer culture, communication and capacity building

Full Report at:
https://ec.europa.eu/info/publications/conquering-cancer-mission-possible_en

A project on Real World Data in patients with cancer within the Alliance Against Cancer and Unicancer

Ruggero De Maria[1] *and* ***Jean-Yves Blay***[2]
1. President - Alliance Against Cancer - Italy
2. President - UNICANCER - France

Established in 2002 by the Italian Ministry of Health as the network of the top Italian comprehensive cancer centers, Alliance Against Cancer is the largest Italian organization for cancer research, currently comprising the Italian National Institute of Health, 27 research hospitals certified by the Ministry of Health for the excellence in research and patient care, the Italian Sarcoma Group, a major patient organization, and one the six world center delivering both proton and carbon ion hadrontherapy. About 30% of the Italian cancer patients are treated in this network, whose primary goal is to bring innovation into the clinical practice.

Unicancer is the national Federation of Comprehensive Cancer centers in France, also referred to as French Federation of Comprehensive Cancer Centers (FNCLCC). It gathers 18 centers on 20 sites covering all regions in France, since 1945. Exclusively at public service it provides patient care of highest standards from screening to treatment to post treatment management, excellence and innovation for all being its central missions. In France, 23-25% of patients with cancers are treated within Unicancer, and close to 15% of patients are treated into clinical trials. The comprehensive cancers centers are University hospitals, contributing to teaching of medical students and specialists, leaded by medical doctors, and also basic, translational and clinical research sites in partnership also with INSERM, CNRS, INRIA, CEA and several major high education schools.

The French Unicancer and Italian Alliance Against Cancer are partnering to optimize the use of patient data collected in real life. In partnership with the OECI, Unicancer and Alliance Against Cancer have decided to initiate a reflection on the collection and optimized use of real life data.

The evolution of molecular and precision medicine results in the fragmentation of cancer diseases into a multitude of rare pathologies. In this fast changing context, traditional clinical research methodologies are often put at fault. It becomes increasingly challenging to bring together large numbers of patients with homogeneous diseases to conduct prospective clinical trials. However, real-life verification of the pertinence of a treatment is an information increasingly required by Health Authorities to validate the reimbursement of a drug. It is in this dual context that the use of real-life data (real-world evidence) is particularly important to tangibly measure on nationwide populations the impact of the introduction of new treatment strategies or lack of treatment.

The networks of the Comprehensive Cancer Centers had a very special place in the compilation of these data. These Networks have a specific activity focused exclusively on cancer care and often have electronic records that are easy to connect and extract in order to gather them in large-scale databases. The analysis of these databases is a very profitable source of information for patient follow up. These ones are informed very early in their care within these institutions of the potential use of their data for academic research objectives and are most often agree to such use.

The OECI initiates a partnership approach to the collection of these data and Unicancer as well as Alliance Against Cancer share common goals in this field. It appears that joining forces and sharing experiences could be valuable for data collection.

This program, called Digicore, is still under development and raises many questions that remain to be resolved for its deployment:

1. Compliance with the GDPR is obviously an essential point and must be associated with compliance with the specific legislative context of each of the European countries. This aspect has to be carefully worked out in this project.

2. The methodology for extracting data from the electronic patient record is also an important technological issue. The partnership with our private operators or the use of natural language processing tools such as the Consore program developed by Unicancer might be considered for the collection of these data.

3. It will be important to define a shared methodology for data use and data access that respect both the patient's wishes and the data producer that contributes to these large informative databases. The scientific management and the formalized building of a partnership where each center has the possibility to decide whether or not to participate in each individual study is one of the critical issues for the success of this program.

In total, the collection and use of real-life data are key elements of the construction of clinical cancer research in the years to come. The program initiated with Unicancer and Alliance Against Cancer presages broader collaborations on a European scale.

DIGICORE: toward a European Digital Institute for Cancer Outcomes Research, and a practical answer to RWD studies

Giovanni Apolone[1,2], ***Gennaro Ciliberto***[3], ***Xosé Fernández***[4], ***Claudio Lombardo***[2,5], ***Piers Mahon***[6] *and* ***Ashley Woolmore***[6]

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4. Institut Curie, Paris – France
5. Sustaining Oncology Studies Europe Srl, Genoa – Italy
6. IQVIA Ltd, London – UK

Real World Evidence can be a powerful complement to traditional trials that allows the clinical research community to tackle certain important research topics. These vary from outcomes research to establish the true efficacy of treatment on real populations, through to improving evidence around clinical decision making (especially based on clinical biomarkers) to health systems research to optimise entire care pathways or understand the dynamic nature of care – for instance in different cancer care system responses to COVID-19.

Making high quality real world research takes effort just like high quality trials. IQVIA (the contract research organisation) with UNICANCER in France, Alleanza Contro il Cancro in Italy, and other cancer centres/institutes already certified by the Organisation of European Cancer Institutes (OECI), have been developing a large scale real world research alliance called the "DIGital Institute for Cancer Outcome REsearch" (DIGICORE).

This article lays out the opportunity and the challenges ahead in driving that joint Real World Research programme, based on the partnership's collective experiences to date. We do this to extend a warm welcome to other similar existing networks and cancer centres to join us in our mission to "make every willing cancer patient a research patient and so transform cancer care".

For formal proof of comparative efficacy, the well designed, appropriately powered randomized controlled trial is the gold standard. However, it is costly, often slow and while internally consistent may not generate results that are reflected in the co-morbid, complex patient pools of clinical reality. We also need to recognize that many innovations come to market on proxy endpoints such as Progression Free Survival, which does not correlate well with Overall Survival (and rarely establish that survival benefit once on market).

There are also certain research questions trials cannot easily tackle, for instance to understand how patients are being treated today and the impact of that variation in care on care quality and cost. Trials also struggle to be powered to understand rare events or rare sub-groups. For these topics, observational research may be a useful and complementary approach to randomized trials.

Traditionally, the research community has tackled such questions with consented prospective or retrospective observation studies, as typically used for safety studies. These rely on manual retype from the medical record to an electronic clinical research record (eCRF). eCRF studies have the advantage that they can work with records in any format, including paper. But their manual approach is high cost, creates case selection bias and requires costly supervision and project management to drive appropriate data quality and timely data capture.

However, inside today's electronic medical records (EMR) lies a wealth of information that could create a faster and more efficient research solution for many important research topics, especially in precision oncology given its rare patient groups. The challenge is to make the diverse information collected in the delivery of routine clinical care "ready for research".

What does it take to make electronic medical records research ready? In short: some technology and a lot of research process and methods innovation (not the other way around). Done this way, high quality research is approachable at reasonable cost by most comprehensive cancer centres, clinical centres, and national cancer associations who can comply with the principles within the OECI. Not surprisingly, many OECI Members have already experimented individually with local EMR based research. But to get scale and representativity, we need a large highly interoperable multi-centre, international network – which is much more technically challenging.

The technical challenges for creating network interoperability grow with scale, with these common:

i) The broad range of data definitions, languages and IT systems available
ii) Variation in the practice of medicine, especially internationally
iii) The need to solve for both unstructured and missing data
iv) Appropriate GDPR compliant privacy solutions
v) Internal capability of each cancer centre to put forward skilled human resources

These are now solvable at scale, and there are many examples of those solutions up and running across Europe. The PIONEER programmes have shown that OHDSI's OMOP[1] common data model is extendable to cancer and that a single common data model can be implemented over multiple European countries and EMRs, as well as in elite US cancer centres.

UNICANCER has developed Consore[2], a federated search engine empowering fast data queries across EMRs at national scale. Multi-centre patient cohorts can be identified with this tool in a matter of minutes, instead of weeks. Consore annotates and standardises medical records relying on key medical references (ICD-10, SNOMED, etc.) to structure all the patient files. To illustrate, Institut Curie needs +3000 new documents to be added to EMR system on a daily basis – these become searchable. The system can also infer patient disease history, with machine learning approaches helping to improve the quality of the inference made on the highly heterogeneous underlying data. Consore's underlying data model is highly aligned to OMOP.

Millions of patient descriptions, clinical narrative reports, chemotherapy protocols, administration data, tumour characteristics… are indexed over hundreds of millions of documents across the network nodes. The search engine delivers timely responses across the various comprehensive cancer centres in the network without centralising data in a single location. Each Consore node is deployed in a dedicated environment and can only be queried by other authorised nodes. Only the number of matches corresponding to a given question is provided, no other data items are shared in this process.

A couple of examples can illustrate how Consore empowers clinical teams at Institut Curie for academic research. Mining EMR to identify pregnancy cases after breast cancer was hugely simplified. Likewise, it is possible to analyse and reveal the importance of comedications (and comorbidities) in a multi-centre breast cancer cohort by analyzing the influence on immune infiltration and pathological response to neoadjuvant chemotherapy. However, by being limited to counts, Consore can only identify the members of a research cohort, not drive a full protocol to results.

IQVIA's Oncology Evidence Network (OEN) focused more on solving for transforming all forms of local data into research quality data and the end-to-end delivery of a specific multi-centre protocol. Member sites today have on-site teams and data tools ready to curate and enhance records under hospital

[1] The Observational Health Data Sciences and Informatics (or OHDSI, pronounced "Odyssey") program is a multi-stakeholder, interdisciplinary collaborative to bring out the value of health data through large-scale analytics. It's Observational Medical Outcomes Partnership (OMOP) common data model allows the harmonization of disparate clinical coding systems - with minimal information loss - to a standardized common vocabulary.

[2] ConSoRe (Continuum Soins Researche or continuum of care research) is an evolved tool for semantic search, associated with a Clinical Data Warehouse (CDW), enhancing the use of patients' data in oncology research.

control for ethics approved, protocolised research. IQVIA developed comprehensive end-to-end approaches to privacy with pseudonymisation and risk assessment technologies. With that approach it is possible to reconcile the data diversity over international network to a research fit, protocol specific, common data model and then use data science to drive the protocol at each centre. To give a sense of the power of this approache, the record to date from protocol acceptance to research insights on a large cohort that can be released to a study sponsor is 10 working days. Congratulations to fellow OECI member, the Frankfurt University Cancer Centre, for that record!

As we said earlier the technology and data science are the "easy bit" (if also the exciting bit!). Much harder is to systematically understand and tackle the organizational barriers to collaborative research and to develop new and effective ways of working to solve them.

The two most important of these barriers are a lack of trust and a need for control. Cancer centres have a duty of care to make sure their records are used appropriately for research and that their research autonomy is respected. At the same time, these new methods are complex and require new skills, making the assessment of appropriate controls (such as technical privacy standards) challenging for many centres.

For these reasons of trust and control, the above cited partners agreed to create a new European Economic Interest Grouping with several OECI cancer centres. This new organisation is called the DIGital Institute for Cancer Outcome REsearch (DIGICORE), with the objective to become the European Digital Cancer Institute and global destination of choice for high quality real world research. DIGICORE's constitution also puts the cancer centres "in charge" with 1 member, 1 vote. It also enshrines (among other things) the inalienable rights of a cancer centre to their own data, to research autonomy and to clinical decision making, for instance in molecular test choice.

It will catalyse both high quality academic and commercial international collaborative research.

Two areas are of particular focus for the DIGICORE academic programmes.

The first will be joint programmes of work to develop and validate care quality analytics that are fit for the precision era, such as tracking guideline adoption in near real time and in measuring the impact of those analytics on care quality and outcomes. This focus on care quality improvement fits well with the recommendations of the European Cancer Mission and the European Beating Cancer Plan. Quite rightly – and as recognized from inception by the OECI - patients must be of prime concern to healthcare professionals. Patients rightly demand to receive the best personalised care available. It is only through a swift and thorough analysis of real-world data that it is possible to establish if a therapeutic protocol was truly effective or, at least in part, whether it failed.

The second is in joint research methods development and validation to make best use of these new digital research infrastructures for precision oncology care development. As an example, the development of novel semi-automated study designs that could drive predictive biomarker discovery and validation. Like these will use Mendelian randomisation applied for the first time at scale to real world somatic mutation data upstream of current standard of care therapy. Such methods could be applied to a broad range of cancer therapy responses (such as radiotherapy or generic chemotherapy) to work out *"what works, what doesn't and why"* and so improve clinical decision making and the cost effectiveness of cancer care. As a result of such research we will find subgroups of patients which had been historically hypothesized to be similar, but actually yielded different responses to the same therapeutic protocols. Over time, this will improve care outcomes – and care cost effectiveness.

Secondly, via IQVIA, DIGICORE members have access to programmes of work linked to pharma sponsored real world research opportunities. These start from digital trial site selection and recruitment solutions that help connect patients and their clinicians to appropriate trials. But regulators are also innovating on the use of real world evidence to support the introduction of novel agents (especially in narrow indications). To provide three examples, there are now large effect size drugs that have conditional market approval based on single arm trials and real world comparators. There are now drugs that have secured second indications based on off-label real world evidence alone, for instance in male breast cancer. Finally, recent Dutch publications have shown the power of multi-centre off-label case series in de-risking and accelerating next indication development in secondary indications .

In conclusion, DIGICORE is a new solution geared towards implementing an innovative way to support collaboration between clinical data producers. The Grouping will give a voice to the real users of the incredible wealth of knowledge behind clinical data: the patients and catalyze transformative cancer research.

The DIGICORE constitution will be warmly welcomed by the organisations appointed to coordinate national and European initiatives, which can support the establishment of a European health system where citizens are the protagonists of a dynamic dialogue with those who have the power to assess the outcomes of consolidated or experimental protocols.

Cancer institutes at the forefront of cancer care are well aware that their patients' data are a fundamental tool to advance knowledge and therefore a veritable heritage of the entire community. DIGICORE will serve as a meeting point for the cancer community where partners may find a shared solution to all those questions that involve patients, care providers and private collaborators.

We welcome sister cancer centres of the OECI – and more broadly – to join with us to deliver our mission to

"make every willing cancer patient a research patient and so transform cancer care"

A Beating Cancer Plan that reconciles high ambition with the art of the possible

Matti Aapro
President - European Cancer Organisation, Brussels - Belgium

Last year, I started quoting the following proverb attributed as having African origin that states "If you want to go fast, go alone. If you want to go far, go together." This is what the European Cancer Organisation continues to believe in.

As I write this, we are six weeks out from the much awaited publication of Europe's Beating Cancer Plan. An initiative whose launch in Brussels, during a live event (one of the last ones), created great excitement on World Cancer Day in February. Since that date it has been wonderful to see the energising of the cancer community that the open consultation activity with stakeholders has created. The challenge now for the European Commission is to perform a political feat that isn't always conducted successfully. That is, the challenge of organising the best ideas and creating a package that can deliver real change, while simultaneously making its way through the tough obstacles that can too often stymy many a good idea for health cooperation, namely the regular opposition from EU Member States concerned about EU over-reach into health competence.

This tight balancing act has been something that has occupied the thinking of the European Cancer Organisation very much as we have sought, in the name of our 31 Professional Member Organisations and 20 Patient Organisations, to give impactful advice this year on what could form the key underpinnings of the Beating Cancer Plan. A real Plan that is achievable for the Commission to reach agreement with Governments on. Yet a Plan that also will fulfil its promise as a true game-changer in the fight against cancer in Europe. While we have made many very specific recommendations for the content of each Pillar of the Plan, below are three headline messages we have been conveying in respect to the overall philosophy and organisation of the Plan that we think can navigate the Plan through the obstacles just described.

Setting big goals for cancer care in Europe

To start with, we have argued for some inspiring political goals on cancer, that can serve to unite, galvanise and create accountability for action. There is ample precedent for this at international level, from the UN's Sustainable Development Goals, to internationally agreed carbon emission goals, to goals set already by the EU in areas such as industrial development, research activity or biodiversity.

So what might EU goals and ambitions on cancer care look like? Well there is a good starting place already with the recently signed off WHO goal of eliminating cervical cancer as a public health problem across the world. With international governments, including all 27 EU Member States having already agreed to this, why not make Europe the international leader in showing how attainable this is by adopting it as an EU goal as well? Indeed, with a growing number of EU countries already vaccinating both boys and girls, we urge a goal of eliminating all HPV cancers as a public health problem. The roadmap to doing this is at our fingertips, by taking the already well known actions on universal vaccination, screening, treatment and education. Indeed, it was in Europe that the link between HPV and cancer was identified. Wouldn't it be all the more inspiring if Europe too becomes the first region of the world to establish that vaccination and other actions can eliminate a class of cancer? These are the sort of success stories the public wants to see the EU achieve. See our recent report 'Viral Protection' for more information.

Other goals we have suggested include:

- the 70:35 Survivorship Goal (70% long-term survival for all patients with cancer by 2035),
- doubling survival for poor prognosis tumours such as lung, pancreatic and other cancers, as recommended by OECI President Thierry Philip in a past edition of Tumori Journal
- the common European goal of having at least one comprehensive cancer centre in each Member State and 1 for every 5 million citizens in larger countries, all cooperating in a strong network.

We have also urged close attention and consideration to other goals put forward, such as the SIOP Europe strategic goal of achieving zero deaths and zero late effects in respect to childhood cancer, and ensuring that each pillar of the Beating Cancer Plan be well directed towards its own sub-goals, including supportive care and specific action for elderly citizens.

Measuring success and engaging the public

I am sure we can all think of examples from our daily lives where we have witnessed big goals being set yet remaining undelivered. More than one personal New Year's resolution may come to mind to begin with, I imagine!

Suffice to say, setting big goals alone will not make the difference unless mechanisms and actions are put in place to see them achieved. Thinking back to 'the art of the possible', a role that the EU has frequently played in policy terms, without upsetting its member states priority for maintaining independent discretion on national policy, is the role of monitoring, measuring, publishing and advising.

In that vein, another important recommendation we have been making for the Beating Cancer Plan is the provision of a 'European Cancer Dashboard'. Linked to my point above on setting big goals, this Dashboard should measure year-by-year progress towards goals and sub-goals, as well as agreed parameters for each pillar of the Beating Cancer Plan (i.e. Prevention, Early Detection and Diagnosis, Treatment and Quality of Cancer Care, Survivorship and Quality of Life). It has been my pleasure to work alongside other organisations in the cancer policy sphere, such as the European Cancer Patient Coalition and EFPIA to recently advance other principles that we jointly agree should underpin such a Dashboard:

- The Dashboard should be public-facing, with all citizens considered to be its primary audience. The Beating Cancer Plan can, should, and we believe will, inspire all.
- The Dashboard should constantly evolve, making use of immediately available indicators, with new indicators added as they become available.
- To this end, experts from multi-professional, multi-stakeholder fields should assist in its development, with the patient interest at all times at the very heart of its purpose.

Our suggested European Cancer Dashboard builds upon foundations of work already conducted, taking the EU's role in monitoring, measuring and providing accountability, to the next level. What gets measured gets done.

Don't reinvent the wheel – there is an army of volunteers to work with

A third key message we have provided to the EU at this time is to have the strongest awareness when constructing Europe's Beating Cancer Plan of what has already been done.

This message was well received by the EU Health and Food Safety Commissioner, Stella Kyriakides, who has excellent personal knowledge of the cancer field, for many reasons. The European Cancer Organisation, for example, can speak to phenomenal high value activity conducted by its 31 European and international level member organisations, and the 20 patient societies within its Patient Advisory Committee. When rolling out new European level actions on cancer it is really not necessary to start always from a blank sheet of paper.

In fact, there is often great risk of duplication in doing so. We urge instead to be setting goals and then examining what work already conducted could be further developed to achieve them. I think, for example, of the superb activities of OECI in driving higher standards in cancer care through its accreditation and designation programme. Resource support from the EU to such activities could yield a much greater return on investment than always seeking to start something anew.

Furthermore, in light of the devastating effects of Covid-19, which has impacted on the revenue models of many top quality European healthcare professional and patient organisations, we strongly consider that the new EU4Health funding programme should encompass a core element of solidarity support to help organisations with decades of experience in European health and cancer focused activity to weather this storm. Dedicated elements of activity under the EU4Health programme, related to attaining core goals of the Beating Cancer Plan, with funding accessible to healthcare professional and patient organisations, could be an excellent mechanism for doing so, providing a win-win solution for all parties, must most importantly the advancement of high quality cancer care and control.

I am looking forward to reading the many other contributions to this issue of the OECI Magazine and hope to see soon the day when we can all reconvene to give our assessments of what has been published and the work ahead of us to help the Beating Cancer Plan come to life. Our European Cancer Summit, on 18-19 November will be such an opportunity, albeit not in person.

If 2020 is the year of Covid, I think it is the task of all of us to unite, work together and make 2021 the year that Europe's Beating Cancer Plan will make the EU come alive for citizens again: an organisation demonstrably dedicated to the betterment of lives of all its members and allied countries, showing an example for the world, that we shall help wherever possible.

It remains a deeply exciting challenge for us all to take up and I know we can meet the occasion.

How is the cancer researcher community adapting to COVID-19?

The European Association for Cancer Research (EACR) supports a community of 10,000+ researchers in more than 100 countries. Throughout 2020 we've heard stories of how our members are adapting to working in new and different ways to try to stop the spread of the COVID-19 virus.
2020 has seen huge changes in the way most of us work, and we've made some big changes at the EACR too. There are now even more reasons to be an EACR member:

- With conferences cancelled and people not travelling, it's even more important to be part of a supportive global community whose members share the same goals and challenges as you
- We've given EACR members FREE access to our new series of expert webinars on topics like career development, grant funding and communicating your research, as well as Q&A sessions with leading researchers
- There's also FREE access to video recordings of past webinars, conferences and events
- In addition to our highly praised EACR Conferences we've introduced EACR Virtual Conferences, and of course members enjoy a big registration discount.
- Feeling disconnected? You can use our Find a Collaboration tool, Member Network and EACR Science Book Club to build connections with other researchers

JOIN AS AN EACR MEMBER
If you're not already an EACR member we'd like to invite you to join us and be part of what we do. We have members at all levels, from first-year PhD students to winners of the Nobel Prize.
www.eacr.org/membership

EACR European Association for Cancer Research

The impact of COVID-19 pandemic on cancer care

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During the first COVID-19 pandemic wave, we said: "nothing will be the same", due to both the life-threatening situation and health systems crisis we were thrown into[1]. In particular, high mortality rates in patients with underlying chronic illness and compromised immune system were a notable feature of this infection[2]. Furthermore, the possible comorbidity, in the same individual, of a cancer diagnosis and a COVID-19 infection prompted concerns on their synergistic negative prognostic effect. In this scenario, oncologists have had to balance patients' needs for treatment with the risks related to the infection, whilst relying on scant health care strategies and recommendations to support clinician decision-makers from the cancer community[3-6].
Today we are observing a progressive and worrying increase in the incidence of laboratory-confirmed COVID-19 cases with over 4 million positive cases and 250,000 deaths in Europe (October, 2020)7. So far, the risk of a second pandemic storm on the horizon forced us to address some crucial questions concerning cancer patients contracting COVID-19.

What are the interactions among COVID-19, cancer biology, immune system, and coagulation?
The knowledge of the immune system status related to both COVID-19 and cancer and the host, the altered expression of ACE-2 (through which virus is internalized) and TMPRSS2, and the prothrombotic status may help in the identification of biomarkers to identify both patients severe disease and potential therapeutic targets[8]. Clinical trials evaluating the role of androgen-targeted therapies to limit COVID-19 infection by down-regulating TMPRSS2 and/or stimulating an anti-COVID-19 immune response are ongoing. Furthermore, COVID-19 has been associated with venous and thrombotic events[9] representing a potential factor in the increased rate of mortality in cancer patients who are characterized by a pro-coagulant state.

Are cancer patients more susceptible to get infected and more vulnerable to worse outcomes from COVID-19 infection?
Initial reports suggested that cancer patients seem more likely to be diagnosed with COVID -19[10]. Nevertheless, several confounder factors (differences in the definition of testing criteria and imbalances in age, gender and comorbidity between cancer patients and general population) biased published data not allowing to establish the higher susceptibility of cancer patients for COVID-19 infection, which ranges among various cancer series from 0.5% 11 to 6%[12].
As for the higher mortality of cancer patients, *is it true for all of them?* Authors in China[13], the USA[14] and Italy[15,16] reported that cancer patients are more likely to develop severe symptoms, require greater need for ventilator support and show elevated mortality rates. Nevertheless, *what does it mean "to have a cancer"?* Recent data suggest that only patients with ongoing or recent cancer treatment for advanced active disease, metastatic solid tumors and hematological malignancies have a poorer disease outcome compared with COVID-19 positive individuals without cancer[17]. This does not seem to be the case for other cancer settings. So far, if a true difference exists in terms of mortality rates, whether it is related to a viral infection or to overlapping risk factors for both COVID-19 mortality and cancer (such as age, frailty, smoking history, obesity and organ dysfunctions) remains unclear[18].

Are changes in cancer care delivery necessary?
Oncologists base their clinical decisions on the expected impact of their treatments on patients' outcome. In light of the aforementioned, it is important not to generalise the assumption that *"cancer*

patients have a higher mortality rate". If we understand that not all cancer patients are "too vulnerable" to start or continue treatments of proven activity and/or efficacy, we can assume that the decision to delay or stop them is not correct[19].

During peak numbers of COVID-19 cases, *elective surgeries* were delayed firstly due to initial evidences suggesting that surgery had increased treatment-related morbidity and mortality and secondly, to procuring theater spaces and ventilators to support additional critical care capacity for patient with COVID-19. Today, the impact on cancer progression and death because of these delays is unknown.

Radiotherapy has often been used to replace or delay surgery (e.g. patients with localized rectal carcinoma)[20]. Data in literature shows that very few patients undergoing radiotherapy were diagnosed with COVID-19 during their treatment course or required treatment interruptions[21].

According to the four categories under cancer treatments fall proposed by Schrag et al. (curative potential, moderate clinical importance, marginal impact on quality or quantity of life, and survivorship and surveillance)[22], systemic therapy options including *chemotherapy* can be provided safely after individual risk/benefit assessment[23] and some adaptive measure[24]. In particular, when chemotherapy is associated with dramatic improvements in outcomes (i.e. acute hematological malignancies, extensive small-cell lung cancer, or germinal tumors) there should be no doubts that chemotherapy must start or continue. On the contrary, when the incremental benefit of systemic treatment may be marginal, clinical decision-making is not as clear-cut[25]. Interestingly, HIV-1 and HBV reactivation is uncommon during chemotherapy in cancer patients[126], suggesting the feasibility of continuing anticancer treatments in patients with COVID-19.

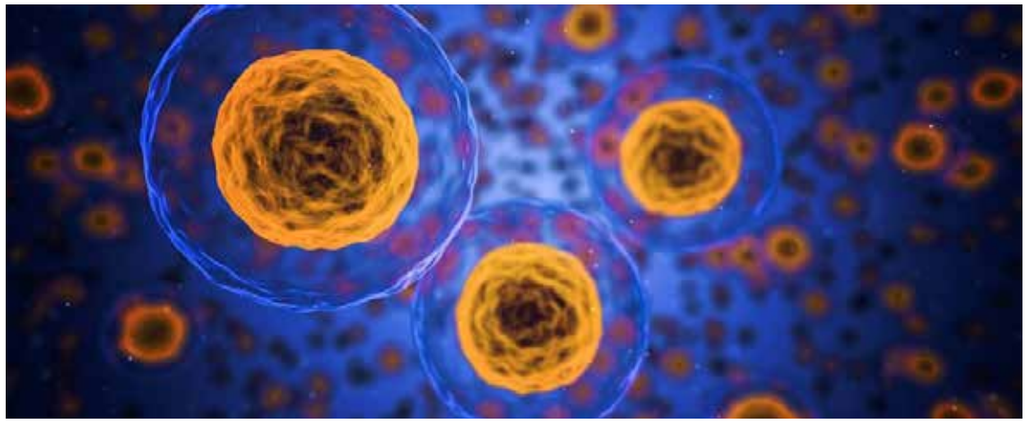
The risk associated with targeted therapies and immunotherapy is less clear, and some of them may be beneficial in fighting the peculiar inflammatory storm observed in COVID-19[27].

What are the implications for screening and surveillance programs?

Regional and national lockdowns were associated with interruptions to cancer screening which dropped by as much as 85%-90%[28]. An United Kingdom population-based modeling study assessing the impact of diagnostic delays on survival in breast, colorectal, esophageal, and lung cancer, estimated a significant increase in avoidable cancer deaths 5 years after diagnosis (4%-17%), depending on tumor type, due to diagnostic delays during the COVID-19 pandemic compared with pre-pandemic figures[29]. It should be considered that about one in five cancers are diagnosed in emergency presentations. If we consider that many patients have been fearful of exposure to COVID-19 and thus less inclined to turn to healthcare services and emergency departments, diagnoses have been considerably delayed too. One way to attend visits and screening tests is to ensure a safe environment, obtained with evidence-based sanitation techniques and to offer quick antigenic swabs. This way, the goal of creating a safe environment for patients and healthcare professionals will be achieved.

Furthermore, telehealth may constitute a cutting-edge tool for clinical care during a pandemic, as it provides a safe and easy way for patients to access their healthcare providers in times when human contact and mobility present substantial health risks[30].

In the context of the term Telehealth, the tools offered by Digital Health must also be included; they are approaches that, between the input provided by the patient and the output offered to him (indications, recommendations, prescriptions, etc.) utilize databases and artificial intelligence programs to produce customized indications[31].



An opportunity to reorganization of cancer care and oncological research: the Italian ACC moonshot approach

The first pandemic wave has resulted in the publication of a large amount of data from small, highly selected, and often flawed case series with a significant impact on oncological clinical practice and policy in the absence of high strength of evidences. Nevertheless, we must keep in mind what London and Kimmelman recently stated: *"crises are no excuse for lowering scientific standars"*[32]. This pandemic requires large-scale collaborative initiatives aimed to elaborate meaningful scientific evidences by collecting all the data that are and will become available in cancer centers, coupled with the design of large clinical studies. In a similar manner to the Cancer moonshot initiative in the United States[33], Alliance Against cancer (ACC) – the largest Italian organisation for cancer research – hypothised a multinational moonshot project towards the management of cancer patients during COVID-19 pandemic[34].

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OECI audits: from on-site to hybrid to 100% virtual

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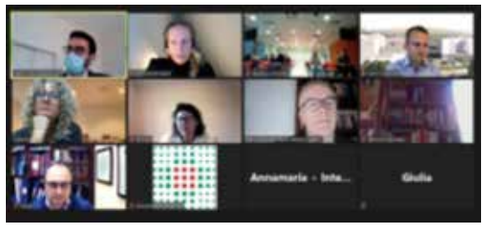

The Covid-19 virus has had a major impact on the way everyone works. This also applies to the work for the Accreditation and Designation Programme of the OECI.

This spring, the audit for the Cancer Centre in Reggio Emilia was cancelled in a hurry after it became clear that the number of Covid-19 patients in the northern provinces of Italy was rapidly increasing at the end of February. The number of Covid-19 cases also increased rapidly in the rest of Europe. It became clear that visiting cancer centres on-site would no longer be possible for the entire international audit team in the near future, since the auditors who work in cancer centres come from all over Europe. So the A&D Board asked the coordinators to set up a virtual peer review system. The key enabler for this process is that the A&D Programme is entirely electronic in its documentation: all self-assessment, uploading of evidence, documentation, and auditors' review, is through the e-tool in a secure area of the OECI website.

Hybrid audit

The A&D Board's goal in making adjustments to the peer review was to protect the health and well-being of the health professionals and the OECI auditors and coordinators, and to minimise any spread of the virus. The goal was also to guarantee the quality of peer reviews and to continue the accreditation process for those institutes that had already prepared the self-assessment or had started this preparation.

In the hybrid audit, the audit team consists of 2 local auditors (from the country itself, in this case Italy), 2-3 remote auditors and the remote co-ordinator. The interviews are conducted by videoconferencing. The 2 local auditors visit the different departments and in this way they can observe the environment and atmosphere in the centre and share this with the remote auditors.

The first hybrid audit was carried out in September for a cancer centre in Aviano. A hybrid or virtual audit requires a very good preparation of the audit team, and detailed planning of the agenda and of the technical aspects. Our evaluation, however, was the hybrid peer review was successful, and indeed the centre reported in the post-audit evaluation form that they were very satisfied with the process. This was despite the fact that it is quite difficult for the auditors to get a good feeling of what is going on at the other side of the screen, especially if the interviewees are wearing a mouth mask.

Members of the cancer centre in Reggio Emilia in front of their hospital.

Member of the cancer centre in Reggio Emilia presenting online.

100% Virtual audit

With this first good experience, we looked forward to the next one with confidence. This was due to take place at the end of October. Only 2 days before the audit it became clear that the Covid-19 virus had caught up with us again. Due to the tightened measures in Italy it was again not possible for the local auditors to be physically present in Azienda Unità Sanitaria Locale di Reggio Emilia-IRCCS. Thanks to the commitment and flexibility of the centre and the auditors, we were able to convert this audit into a 100% virtual audit within one day. The centre did as much as possible to give us the best possible picture of their centre by giving us a virtual tour and the opportunity to join multidisciplinary team meetings.
This virtual form will allow us to continue auditing centres in the near future, as long as the virus does not preclude any non-critical clinical activity. This year, 3 more audits are planned in Padova, Naples and Rome; these will be completely virtual. But, of course, we hope that the situation will improve soon and that we will be able to be physically present with other audits, because a virtual audit can never completely replace an on-site visit! For this reason also, the virtual format will not be feasible for a brand new accreditation of a centre.

If you want to know more about the OECI Accreditation and Designation Programme or this approach to auditing, please contact one of the coordinators:

Mail to: ***accreditation@oeci.eu***

The closing meeting for the cancer centre in Reggio Emilia after 3 days of audit. The audit team presents their results online.

The team of interpreters for the cancer centre in Reggio Emilia.

100 European Core Quality standards for cancer centres published

Simon Oberst
Chair OECI Accreditation and Designation Programme

In August 2020, the Accreditation and Designation Board of OECI published the results of two years revision work on the Quality Standards for our cancer centres in Europe. Part of this exercise was to select by consensus the Core Standards for quality care and research infrastructure which would be regarded as essential to apply across Europe, and which OECI will use as core requirements in every (re-)accreditation of a cancer centre, and require full evidence of compliance.
The core standards numbered 100, and these were published in the August edition of Lancet Oncology: Oberst, S. (2020) '100 European core quality standards for cancer care and research centres', Lancet Oncology 21 (8) pp2009-1011, DOI:
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The OECI set of standards were first developed in the period 2005-8, and were then piloted in selected centres. The evaluated result, Manual 1.0, was used in centres 2010 to 2015. The first revision process took place 2013-15, resulting in Manual 2.0. The second revision process began in 2017. Manual 2.0 was reviewed against other published quality standards, namely Qmentum, Joint Commission International; the German Cancer Society, Institut National du Cancer; National Institute for Health and Care Excellence, the ASCO QOPI certification program, the American College of Surgeons' programme, and the International Society for Quality in Healthcare (ISQua). This review was conducted by the Netherlands Comprehensive Cancer Organisation (IKNL) using a screening methodology based on: (i) relevance/potential for improving patient outcomes in cancer; (ii) feasibility in the majority of cancer institutes and centres in Europe; (iii) capability of objective self-assessment and external review, and (iv) applicability to almost all cancers within an overall centre-based approach.

The recommendations of ISQua, following their review and accreditation of the OECI Manual 2.0 standards, were implemented. The OECI Accreditation and Designation Board decided that new standards were required around molecular pathology, nuclear medicine, radiology, radiotherapy and surgical oncology, and that quality standards on prevention services, patient-centred care, patient involvement and patient survivorship should be strengthened. The input from acknowledged experts in these fields, and of patient groups, was obtained, to inform the stages of decision-making.

Integral of this whole process was the decision about which of the standards in each chapter were absolutely core to the quality programme, defined as: "fundamental to good quality of care or research, requiring structural evidence of compliance during the peer review at every 5 year re-accreditation". This also had the objective of facilitating a lighter administrative burden during re-accreditation exercises. The selection of the Core Set was made by formal decisions of the Accreditation Board, based on consensus, at each stage of the process, and validated by the Expert Societies and Patient Groups below.

An expert meeting was held on 10 April 2019 in Brussels with participants from 10 European Societies and Patient Groups including ECCO, ESTRO, EORTC, EONS, ECPC, ECL, ESMO, CCE, CPE, EACS, and OECI peer review teams. Particular foci for discussions were: patient involvement and empowerment; multidisciplinarity; supportive and palliative care; research; clinical research and education; governance and organisation of cancer centres.

The resulting output from the meeting was sent for review to 94 OECI cancer centres for comment and input. Detailed feedback was received from 14 OECI Centre members. The Revised Standards were presented at the OECI Annual Oncology Days on 13 June 2019 in Bari, Italy, and further input was taken from the assembly. Final approval to the new Standards was given by the OECI Board in June 2019.

The whole set of revised Quality Standards and Indicators in Manual 3.0 have recently been published[1,2]. The resulting set of 100 Core Standards (representing 27% of the full set of standards) are integral to Manual 3.0 which OECI has been implemented in the Accreditation Programme from 1 January 2020.

We believe that the 100 Core Quality Standards for cancer care and research centres can be regarded as a consensus across Europe, deriving from professionals and patients, for years to come. Their unique feature (distinguishing them, for instance, from standards in the US and Germany) are that they combine standards on both cancer care and research infrastructure, and the integration between those two to drive practice changes, supported by educational priorities. Thus, they are the most suitable vehicles to evaluate Comprehensive Cancer Centres and other large Cancer Centres in Europe, which are the engine rooms of innovative research and highest quality cancer care. This will be fundamental to the aims of the EU Cancer Mission.

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Showcasing good practices in OECI centres

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Within the A&D Programme, in the final reports to the centres OECI reflects back to the audited centres their strengths and good practices (as well as the opportunities for improvement). OECI aims to help all European cancer patients to have the possibility of receiving the best available care.
So the OECI A&D Programme has started a project which aims to share good and promising practices amongst the participant centres of the programme. The selection of practices needs to follow objective criteria, and the gathering of evidence to support their impact should follow consistent principles.

A working definition of good practices is important, and has been based on the Benchcan project [***https://www.oeci.eu/benchcan***].
A good practice is a relevant policy or intervention implemented in a real life setting and which has been favourably assessed in terms of adequacy (ethics and evidence) and equity as well as effectiveness and efficiency related to process and outcomes. Other criteria are important for a successful transferability of the practice such as a clear definition of the context, sustainability, regulatory or health environment, and participation of stakeholders.

To start the process, the A&D co-ordinators made an overview of all strengths of the centres participating in the programme in Manual 1.0 and 2.0. These strengths were then assigned to the chair of the peer review of a first identification of a long-list of practices, according to agreed criteria, among which were the basis of evidence, patient relevance and replicability. The chairs highlighted the top 3 innovations / good practices in each Centre, using the experience of the Benchcan project.

After this exercise the A&D Board will consult, and according to clear criteria will vote upon the most impactful and replicable good and promising practices. The relevant centres then will be asked to document this good practice according to a standard template stating the description, the impact of the good practice, evaluation, who is involved, who is responsible, and if it is remains a good practice of their centre. They will be asked to give permission to share this evidence either within the A&D community of centres. The endpoint is that a final selection of good practices covering many areas of diagnosis, treatment, care, research and education will be showcased on the OECI website and will be available for other centres to pick up and connect with the innovating centre to see if the practice can be replicated. In this way, the A&D community of centres becomes a community of centres learning from each other and contributing innovative practices.

Implementation Manual 3.0 OECI Accreditation & Designation

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To help cancer centres implement a quality system for cancer care, OECI has developed standards and a peer review system. These standards are revised every 5 years. The revision process is a meticulous process, where we evaluate each standard, while also looking at new developments in cancer care.

The OECI Accreditation & Designation (A&D) Programme launched its second version of the revised standards and procedures, as described in Manual 3.0, in December 2019. The Manual can be downloaded from our website (oeci.eu/accreditation). Currently, seven centres are working with the new set of standards in the e-tool in preparation for (renewal of) their certification.

To introduce the standards to participating centres, auditors, OECI members and interested parties, we have recorded a presentation by Simon Oberst, chair of the OECI A&D Programme. The presentation provides an explanation about the OECI A&D Programme and the accreditation process. The presentation can be viewed via our OECI A&D website, the homepage of the e-tool environment for participating centres and also via this link: ***https://youtu.be/TKXO-69Fo1Y***

For more information, please contact the OECI A&D Co-ordinators via ***accreditation@oeci.eu***

OECI General Assembly 2021

Due to the Covid-19 pandemics, the OECI General Assembly shall be organised by videoconference on May 26th 2021.
Dr Giovanni Apolone, OECI Executive Secretary and President Elect, kindly accepted to host the General Assembly at the Fondazione Istituto Nazionale dei Tumori of Milan.
Please note that this is a digital event; a link for the online session will be shared with the confirmed participants.
All Full Members shall be contacted to provide a name of their delegates and, if necessary, a proxy to be sent to ***oeci@oeci.eu***
The Agenda& Infopack will be available in May, 2021.

Update: EACR-OECI

Joint Conference on Molecular Pathology Approach to Cancer
In the last edition of the Magazine, we told you about the EACR and OECI's long-standing collaboration on the Molecular Pathology Approach to Cancer conference. The 2020 conference sadly had to be postponed due to COVID-19 but we are excited to announce that it will now be held as a Virtual Conference in March 2021!
The new dates are 23-24 March 2021 and you can find out more on the website here:

https://www.eacr.org/conference/molecularpathology2021virtual?utm_source=confseriespage&utm_medium=web&utm_campaign=vMP20&utm_content=

EACR European Association for Cancer Research

OECI

OECI ONCOLOGY DAYS

Oncology Day 2021

16th June, 2021 - Milan, Italy

Due to the Covid-21 pandemic, the OECI Oncology Days 2021 are a blended event

Courtesy of Fondazione IRCCS Istituto Nazionale dei Tumori

Oncology Days 2022

June, 2022 - Brussels, Belgium

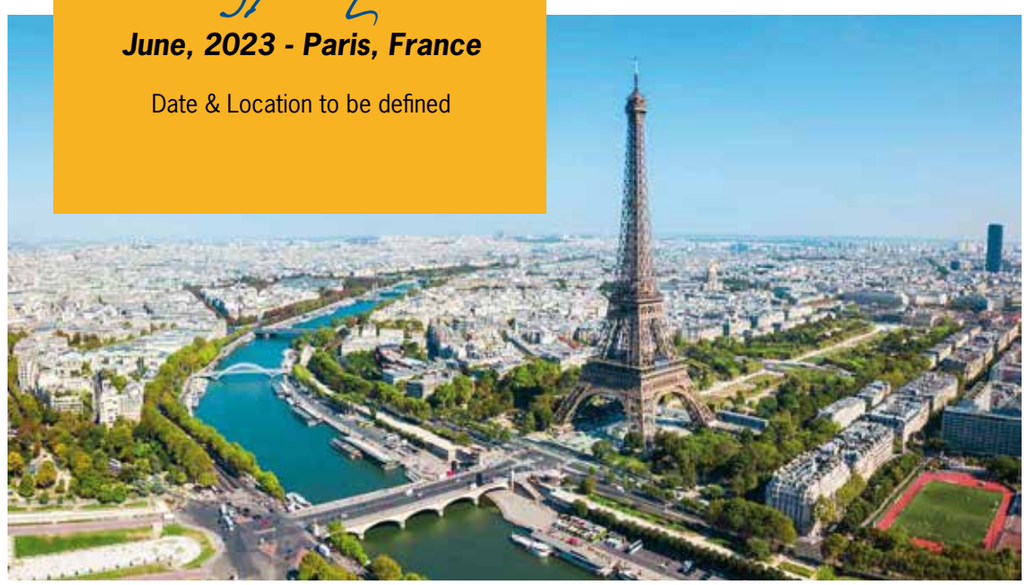
Date & Location to be defined

OECI ONCOLOGY DAYS

Oncology Days 2023

June, 2023 - Paris, France

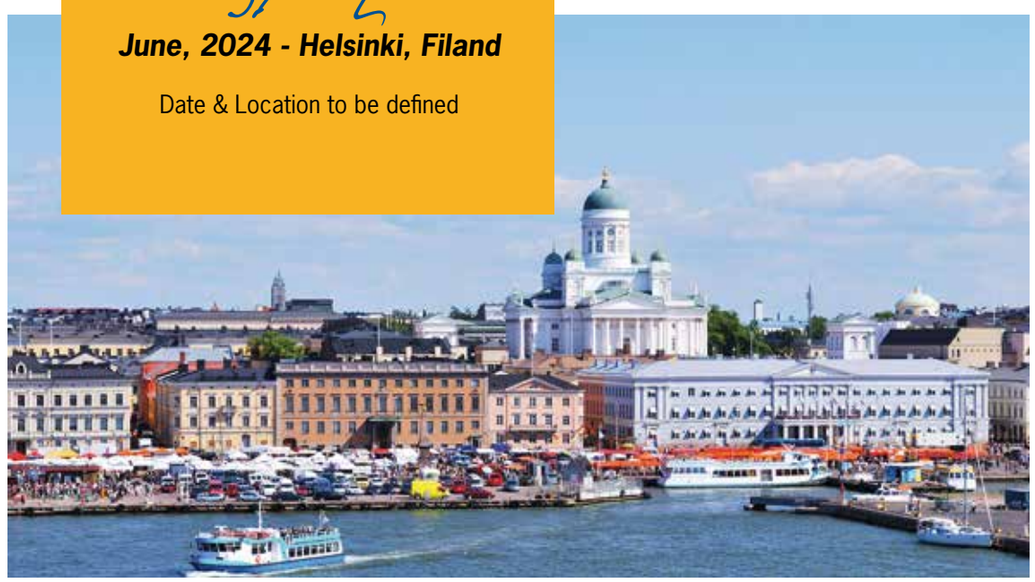
Date & Location to be defined



Oncology Days 2024

June, 2024 - Helsinki, Filand

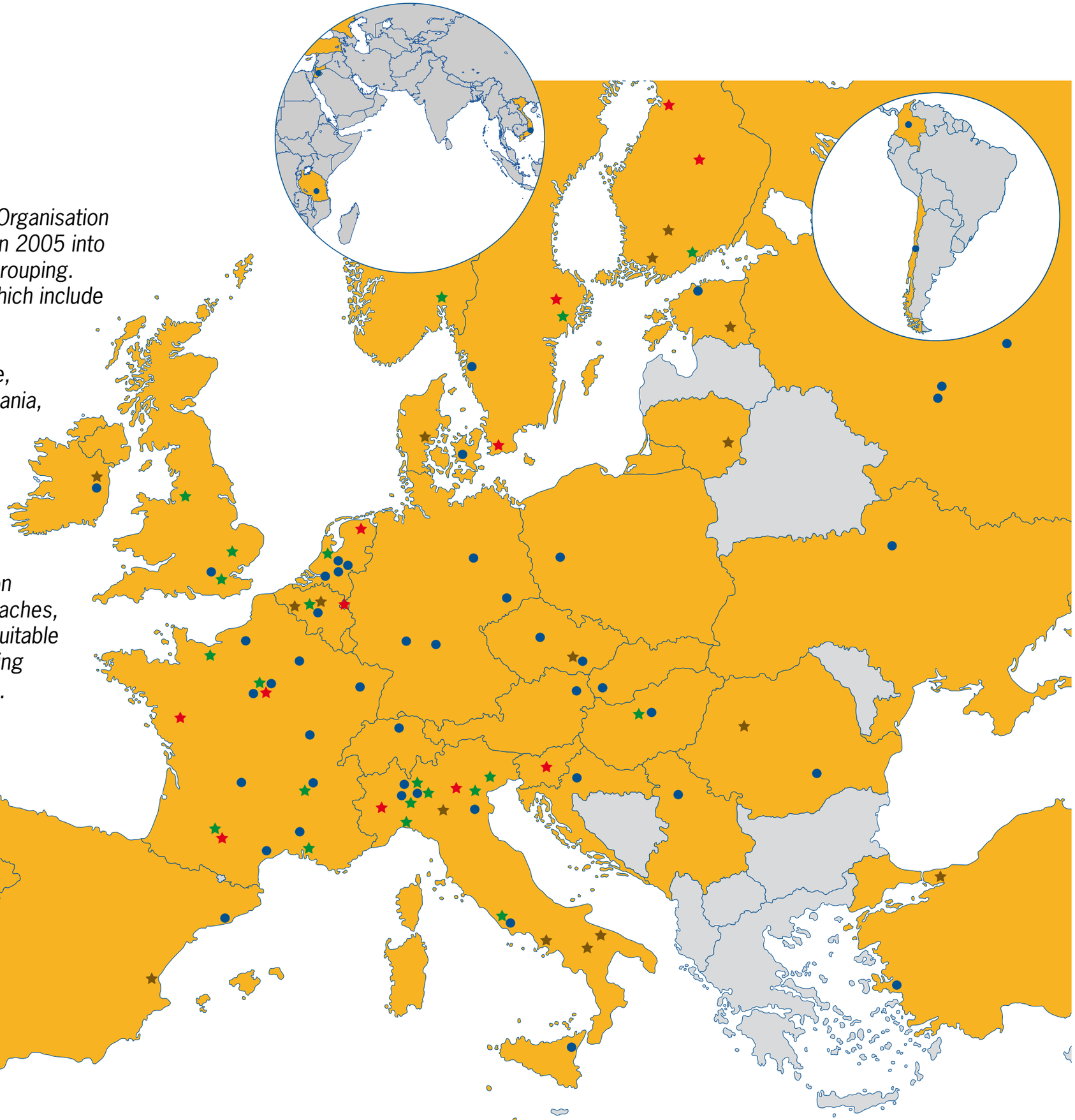
Date & Location to be defined



The OECI Network

The OECI is a non-governmental, non-profit Organisation founded in Vienna in 1979 and remodelled in 2005 into OECI-EEIG, a European Economic Interest Grouping. Today, the OECI regroups 102 Members, which include some of the most prominent European Comprehensive Cancer Centres.
Several major cancer centres from the Chile, Colombia, Jordan, Russian Federation, Tanzania, Turkey, Ukraine and Viet Nam are also members of the Organisation, also to benefit from our Accreditation and Designation Programme.

The OECI aim is to accelerate the application of multidisciplinary personalised care approaches, to reduce morbidity and to guarantee an equitable access to care to all cancer patients, avoiding the collapse of the National Health Systems.



- OECI Members A&D certified Comprehensive Cancer Centre
- OECI Members A&D certified Cancer Centre
- OECI Members in the A&D process
- Other OECI Members

OECI Membership

Austria
- **Comprehensive Cancer Center Vienna**, Vienna

Belgium
- ★ **Institut Jules Bordet (IJB)**, Brussels
- ★ **Oncologisch Centrum UZBrussel**, Brussels
- ★ **AZ Groeninge**, Kortrijk
- **Institut Roi Albert II Cliniques universitaires Saint-Luc**, Brussels

Chile
- **Instituto Oncológico Fundación Arturo López Pérez (FALP)**, Santiago

Colombia
- **Instituto Nacional de Cancerologia – ESE**, Bogotà

Croatia
- **Klinika za tumore Klinicki bolnicki centar Sestre milosrdnice**, Zagreb

Czech Republic
- ★ **Masarykův onkologický ústav**, Brno
- **Fakultní nemocnice v Motole**, Prague
- **Institut biostatistiky a analýz Lékařská fakulta Masarykovy univerzity**, Brno

Denmark
- ★ **Vejle Sygehus, Patienternes Kræftsygehus en del af Sygehus Lillebælt**, Vejle
- **Kræftens Bekæmpelse Center for Kræftforskning**, Copenhagen

Estonia
- ★ **Sihtasutus Tartu Ülikooli Kliinikum**, Tartu
- **North Estonia Medical Centre**, Tallin

Finland
- ★ **HUS Syöpäkeskus Helsingin Yliopistollinen Sairaala**, Helsinki
- ★ **TYKS Syöpäkeskus Turun Yliopistollinen Sairaala**, Turku
- ★ **TAYS Cancer Centre Tampere University Hospital**, Tampere
- ★ **KYS Syövänhoitokeskus Kuopion Yliopistollinen Sairaala**, Kuopio
- ★ **OYS Oulun Yliopistollinen Sairaala**, Oulu

France
- ★ **Centre Léon Bérard**, Lyon
- ★ **Institut Curie**, Paris
- ★ **Institut Paoli – Calmettes**, Marseille
- ★ **Institut Universitaire du Cancer de Toulouse-Oncopole**, Toulouse
- ★ **Centre François Baclesse**, Caen
- ★ **APHP-CARPEM Institute**, Paris
- ★ **Institut de Cancérologie de l'Ouest (ICO)**, Angers - Saint Herblain
- ★ **Association Toulousaine de Oncologie Publique (ATOP)**, Toulouse
- **Gustave Roussy**, Villejuif
- **Institut de cancérologie Strasbourg Europe ICANS**, Strasbourg
- **Centre Jean Perrin**, Clermont-Ferrand
- **Institut du Cancer de Montpellier (ICM)**, Montpellier
- **Institut Godinot**, Reims
- **Institut de cancérologie des Hospices Civils de Lyon**, Lyon
- **Assistance Publique - Hôpitaux de Paris Institut Universitaire de Cancérologie APHP. Sorbonne Université**, Paris
- **Centre de Lutte Contre le Cancer Georges-François Leclerc**, Dijon
- **Centre Henri Becquerel**, Rouen
- **Institut Sainte-Catherine**, Avignon

Germany
- **Deutsches Krebsforschungszentrum (DKFZ)**, Heidelberg
- **Nationales Zentrum für Tumorerkrankungen Dresden NCT/UCC**, Dresden
- **Charité Comprehensive Cancer Center**, Berlin
- **Universitäres Centrum für Tumorerkrankungen (UCT)**, Frankfurt

Hungary
- ★ **Országos Onkológiai Intézet**, Budapest
- **Országos Korányi TBC és Pulmonológiai Intézet**, Budapest

Ireland
- ★ **Trinity St. James's Cancer Institute**, Dublin
- **Beaumont Hospital**, Dublin

Italy
- ★ **Centro di Riferimento Oncologico, Istituto Nazionale Tumori**, Aviano
- ★ **IRCCS Ospedale Policlinico San Martino**, Genova
- ★ **Istituto Europeo di Oncologia**, Milano
- ★ **Fondazione IRCCS Istituto Nazionale dei Tumori di Milano**, Milano
- ★ **Istituto Nazionale Tumori Regina Elena**, Roma
- ★ **Istituto Oncologico Veneto IRCCS-IOV**, Padova
- ★ **IRCCS Istituto Clinico Humanitas**, Rozzano (Milano)
- ★ **Istituto Tumori Giovanni Paolo II, Istituto di Ricovero e Cura a Carattere Scientifico**, Bari
- ★ **Istituto Nazionale Tumori IRCCS "Fondazione G.Pascale" (INT-Pascale)**, Napoli
- ★ **IRCCS, Centro di Riferimento Oncologico della Basilicata (CROB)**, Rionero in Vulture (Potenza)
- ★ **Azienda Unità Sanitaria Locale di Reggio Emilia - IRCCS Istituto in Tecnologie Avanzate e Modelli Assistenziali in Oncologia**, Reggio Emilia
- ★ **Istituto di Candiolo FPO-IRCCS**, Candiolo (Torino)
- ★ **IRCCS Ospedale Sacro Cuore Don Calabria**, Negrar di Valpolicella (Verona)
- **Ospedale San Raffaele (OSR)**, Milano
- **Fondazione IFOM - FIRC Institute of Molecular Oncology**, Milano
- **Istituto Romagnolo per lo Studio dei Tumori "Dino Amadori" [IRST]-IRCCS**, Meldola (Forlì-Cesena)
- **Fondazione Istituto Oncologico del Mediterraneo (IOM)**, Viagrande (Catania)
- **IRCCS - Istituto di Ricerche Farmacologiche Mario Negri**, Milano
- **Istituto Dermatologico San Gallicano**, Roma

Jordan
- **King Hussein Cancer Center**, Amman

Lithuania
- ★ **National Cancer Institute**, Vilnius

Norway
- ★ **Oslo Universitetssykehus (OUS)**, Oslo

Poland
- **Wielkopolskie Centrum Onkologii**, Poznań

Portugal
- ★ **Instituto Português de Oncologia do Porto Francisco Gentil, E.P.E. (IPO-Porto)**, Porto
- ★ **Instituto Português de Oncologia de Lisboa Francisco Gentil, E.P.E. (IPO-Lisboa)**, Lisbon
- ★ **Instituto Português de Oncologia de Coimbra Francisco Gentil, E.P.E. (IPO-Coimbra)**, Coimbra

Romania
- ★ **The "Prof. Dr. Ion Chiricuta" Institute of Oncology (IOCN)**, Cluj-Napoca
- **SC RTC Radiology Therapeutic Center – Amethyst Radiotherapy**, Otopeni

Russia Federation
- **Tatarstan Cancer Center "TCC"**, Kazan
- **N.N. Blokhin Russian Cancer Research Centre**, Moscow
- **National Medical Research Radiological Centre (NMRRC)**, Moscow

Serbia
- **Oncology Institute of Vojvodina**, Sremska Kamenica

Slovakia
- **Biomedicínske centrum Slovenskej akadémie vied**, Bratislava

Slovenia
- ★ **Onkološki Inštitut Ljubljana**, Ljubljana

Spain
- ★ **Fundación Instituto Valenciano de Oncología IVO**, Valencia
- **Institut Català d'Oncologia ICO**, L'Hospitalet de Llobregat (Barcelona)

Sweden
- ★ **Karolinska Institute and University Hospital**, Stockholm
- ★ **Skånes Universitetssjukhus**, Lund
- ★ **Sahlgrenska University Hospital**, Göteborg
- **Uppsala University Hospital**, Uppsala

Switzerland
- **Comprehensive Cancer Center Zürich (CCCZ)**, Zürich

Tanzania
- **The Aga Khan Hospital, Dar es Salaam**, Dar es Salaam

The Netherlands
- ★ **Netherlands Cancer Institute**, Amsterdam
- ★ **Maastricht University Medical Centre**, Maastricht
- ★ **University Medical Center Groningen Comprehensive Cancer Center (UMCG-CCC)**, Groningen
- **Erasmus MC Cancer Institute**, Rotterdam
- **IKNL Integraal Kankercentrum Nederland**, Utrecht
- **Radboudumc Centrum voor Oncologie**, Nijmegen
- **Rijnstate**, Arnhem

Turkey
- ★ **Anadolu Sağlik Merkezi**, Kocaeli
- **Dokuz Eylül Üniversitesi Onkoloji Enstitüsü**, Izmir

Ukraine
- **RE Kavetsky Institute of Experimental Pathology, Oncology and Radiobiology of National Academy of Sciences of Ukraine (IEPOR)**, Kyiv

United Kingdom
- ★ **The Christie NHS Foundation Trust**, Manchester
- ★ **Cambridge Cancer Centre**, Cambridge
- ★ **King's Health Partners Integrated Cancer Centre**, London
- **Imperial College Healthcare NHS Trust**, London

Viet Nam
- **Bệnh viện K Viet Nam National Cancer Hospital**, Hanoi

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