european cancer

SUMMIT 2021

Report

From Plans to Action

Contents

Matti Aapro, President of the European Cancer Organisation and European Cancer Summit 2021 Programme Co-Chairs Kathy Oliver (left) and Theresa Wiseman (right).

Foreword

2021 has exposed the weaknesses and lack of resilience of European healthcare systems with major consequences for cancer care and cancer patients, regrettably not too different from 2020. More than ever, this past year has stressed the need for crucial attention not only to restore cancer services but to build back better and be prepared to face upcoming challenges.

Despite the tough two years that our European cancer community has faced, there have been some very positive developments during this time which demonstrate that even out of darkness, there can be light. In February 2021, **the European Commission published Europe's Beating Cancer Plan**, acknowledging the need for a renewed and enhanced commitment to cancer prevention, treatment and care that recognises the growing challenges, and opportunities to overcome them. Reflecting a **political commitment to leave no one behind**, the Cancer Plan contains concrete and ambitious actions that will support, coordinate and complement Member States' efforts in fighting cancer. The Cancer Plan, which works hand in hand with the EU Cancer Mission, will hopefully bring concrete solutions and funding potential. These possibilities have been enthusiastically welcomed by the cancer community.

This year's European Cancer Summit, held in a hybrid format on 17 & 18 November 2021, was an opportunity to bring together the valuable work conducted by the European Cancer Organisation's Focused Topics Networks which are built on the importance of patient advocacy, multi-professionalism and collaboration across all stakeholders. With the facilitation and support of the Focused Topics Networks, the Summit examined in detail how to support the implementation of Europe's Beating Cancer Plan in the coming years, under the motto "From Plans to Action". Indeed, this Summit came at an important time. Six months on from the publication of Europe's Beating Cancer Plan, it was a good opportunity to look at the Cancer Plan's progress and bring the cancer community together to offer its advice for the next stages of the implementation journey. On 17 November, Health Commissioner Kyriakides announced that on that same day the implementation roadmap[a] had been made public. We believe that there is great promise in Europe's Beating Cancer Plan and the recommendations made by the EU Cancer Mission. The challenge now is to turn the plans into reality to ensure that we maximise their value for cancer patients and citizens.

We hope that the work of the EU Commission will mark the beginning of a new era in cancer prevention and care, and patient access to high-quality screening and state-of-the-art treatments and technologies. We also hope that these goals will be supported by concrete, multi-stakeholder actions.

The 12 sessions of the European Cancer Summit gave focus and recommendations on how the almost 40 different EU initiatives being taken forward as part of the Plan can achieve the greatest impact. We highlight the positive contributions from the European Cancer Organisation's Member Societies, Patient Advisory Committee, Community 365 and many others across and beyond Europe in making this year's Summit such a success.

With 100 distinguished speakers and more than 500 delegates at the Summit, we discussed the impact of Covid-19 on cancer, health systems and treatment optimisation, digital transformation of cancer care, quality cancer care, disparities and inequalities in cancer care, earlier detection of cancer, cancer survivorship, resilient oncology workforce, and the elimination of HPV-related cancers in Europe. Finally, with a session dedicated to cancer issues worldwide, we had the chance to widen our focus and welcomed international contributions and advice.

This year's Summit has seen the publication of two consensus policy statements, including '*Earlier is Better: Advancing Cancer Screening and Early Detection*' and '*Unlocking the Potential of Digitalisation in Cancer Care – No Stopping Us Now!*'. These are consensus recommendations on how to leverage the current political momentum to harness the full potential of cancer control and care to improve patients' and citizens' lives.

Two additional impactful projects were also presented to the Summit audience: 'The Time to Act Data Navigator' as well as 'HPV Testimonies'. We are very grateful for the work of all within our community to develop and deliver these initiatives.

2021 will be remembered for more than Covid-19. Stakeholders at the European Cancer Summit expressed optimism for the future. Over 60 organisations have endorsed the **European Cancer Summit 2021 Declaration**,[b] encapsulating the headlines of overall advice from the cancer community for a brighter future for healthcare and cancer care across Europe.

With implementation activity across already underway, the Declaration calls for:

- Taking forward an EU agenda supporting earlier detection of cancer across all tumour types by developing Council Recommendations on Cancer Screening and Early Detection.
- Accelerating the adoption of digital technology's promise for cancer care by addressing complaints of barriers created by the GDPR regulation, setting firm targets on EU data interoperability and taking actions to boost the digital literacy of the public and healthcare professionals
- Addressing sustained shortages in the oncology workforce. This should include the provision of workforce mapping within new EU level post pandemic health emergency planning structures.
- Providing greater commitment to combatting inequalities in cancer care across Europe related to social determinants such as age, ethnicity, gender, sexual orientation and social marginalisation.

This year's Summit and Declaration highlight the importance of cooperation at the international level and between disciplines and stakeholders to ultimately improve outcomes for cancer patients and their families.

As President of the European Cancer Organisation and Co-Chairs of this year's European Cancer Summit, we are very optimistic that Europe's Beating Cancer Plan and the Cancer Mission will be excellent tools to drive **the necessary advances and improvement in cancer care**.

Cancer patients cannot wait. So, the **European cancer community stands right behind the European Commission in the implementation journey ahead. The time is now**.

Matti Aapro
President,
European Cancer Organisation

Theresa Wiseman
Programme Co-Chair,
European Cancer Summit 2021

Kathy Oliver
Programme Co-Chair,
European Cancer Summit 2021

Save the Date

The European Cancer Summit 2021 will take place on 16 & 17 November in Brussels and virtually.

a. European Commission (2021). Europe's Beating Cancer Plan: Implementation Roadmap. https://ec.europa.eu/health/sites/default/files/non_communicable_diseases/docs/2021-2025_cancer-roadmap_en.pdf

b. European Cancer Summit 2021 Declaration. https://www.europeancancer.org/declaration


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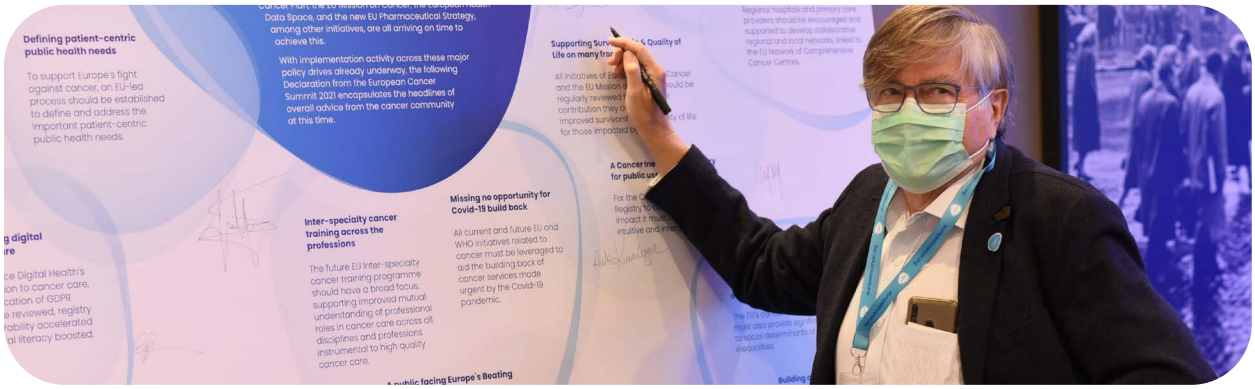
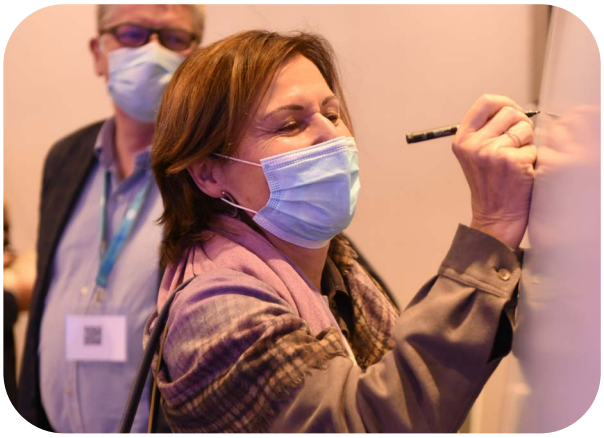

Defining patient-centric public health needs
To support Europe's fight against cancer, an EU-led process should be established to define and address the important patient-centric public health needs.
With implementation activity across these major policy drives already underway, the following Declaration from the European Cancer Summit 2021 encapsulates the headlines of overall advice from the cancer community at this time.
Inter-specialty cancer training across the professions
The future EU inter-specialty cancer training programme should have a broad focus, supporting improved mutual understanding of professional roles in cancer care across all disciplines and professions instrumental to high quality cancer care.
Missing no opportunity for Covid-19 build back
All current and future EU and WHO initiatives related to cancer must be leveraged to aid the building back of cancer services made urgent by the Covid-19 pandemic.


Inter-specialty cancer training across the professions
Missing no opportunity for Covid-19 build back
A public facing Europe's Beating Cancer Plan
Cancer research leadership in ALL EU countries



Beating Cancer Before It Starts: Lessons Learnt from Screening

The opening session was hosted by the Co-Chairs of the Prevention, Early Detection and Screening Network, Isabel Rubio and Jan Van Meerbeeck.

Jan Van Meerbeeck, and Isabel Rubio, Co-Chairs of the Prevention, Early Detection and Screening Network opened the session by stating that at the 2020 European Cancer Summit, a Resolution on Cancer Screening[1] was passed aiming to assist the European Commission in its thinking about cancer screening components of the (at that time) upcoming Europe's Beating Cancer Plan. The Resolution recommended the following:

- An evidence-led update to the 2003 EU Screening recommendations, including dedicated consideration of screening policies for tumour types such as lung & prostate cancer
- A European Cancer Dashboard that monitors screening coverage and quality performance
- A European Platform for screening agencies to facilitate rapid best practice-sharing
- EU research initiatives supporting screening-related policy needs, such as new behavioural research insights, impact assessment, the application of risk stratification approaches, and how to examine and assess new screening options

Further to this, and in light of the Beating Cancer Plan's publication in February 2021, in June 2021 the European Cancer Organisation held a Community 365 Roundtable on Early Detection and Screening. This brought together leading policymakers, politicians, oncology experts, and patient advocates to discuss the implementation of Europe's Beating Cancer Plan and Cancer Mission in respect to cancer screening and early detection.

Coinciding with the 2021 Summit, and arising from the June roundtable, a fresh stakeholder consensus statement was published entitled "Earlier is Better: Advancing Cancer Screening and Early Detection".[2] This describes a number of pressing needs to be encapsulated in the new formal advice on cancer screening that the European Commission and Federation of European Academies of Medicine (FEAM) are currently formulating. The calls include:

- Developing Council Recommendations that cover advice to Member States on both Cancer Screening and Early Detection
- In respect to cancer screening, the new Council Recommendations should:
    - Take note of, and reflect, scientific and practice developments in cancer screening, including the greater deployment of risk-based approaches
    - Include ambitious goals and advice to Member States on improved screening and early detection strategies for further tumour types, including lung, prostate, and other cancers
    - Incorporate a strong implementation framework, through a new EU platform of screening agencies to accelerate best-practice sharing, and better monitoring and information at European, national, and regional level on early detection performance
- In respect to early detection of cancer overall, the new Council Recommendations should advise Member States, and include initiatives on:
    - Increasing population awareness of potential warning signs of cancer
    - Enhancing the role of primary care in the improvement of cancer early detection
    - Addressing needs of the healthcare workforce involved in the cancer diagnosis pathway
    - Leveraging the advancement of new technologies that can drive improvement in cancer early detection across tumour types, including Next-Generation Sequencing, AI, and liquid biopsies

Van Meerbeeck called for the upcoming update of the EU Council Recommendations on Cancer Screening in 2022 to incorporate these recommendations.

Basing Progress in Cancer on Science and Research

Stefan Constantinescu, President of FEAM, (an alliance of 23 academies of medicine, sciences and pharmacy from across Europe), described the 'Science Advice for Policy by European Academies' (SAPEA) network, of which FEAM is part of and through which it provides scientific support to the European Commission's decision-making, as part of the overall Scientific Advice Mechanism of the European Commission.

In particular, FEAM is currently preparing an evidence report on cancer screening, to be published in spring 2022 and aimed at informing the upcoming update of the EU Council Recommendations on cancer screening. The report will respond to three questions:

- What is the scientific basis of extending screening programmes to other cancers, e.g., lung, prostate and gastric cancers, and ensuring their feasibility throughout the EU?
- How can cancer screening programmes targeting breast, cervical and colorectal cancer, be improved throughout the EU?
- Which are the main scientific elements to consider, and best practices to promote, for optimising risk-based cancer screening and early diagnosis throughout the EU?

Constantinescu informed the audience that there are several other new FEAM projects planned for the future, for example, on the harmonisation of health care practice, a minimum level of harmonisation for molecular testing, and centralised evaluation of biomedical grants.

"*Progress in cancer, equals cancer research.*"

Constantinescu highlighted that more research is required in cancer as the molecular causes of only a minority of cancers have been identified. Constantinescu explained that there have been major breakthroughs in the recent years, including through artificial intelligence (AI), with the example of algorithms to predict the secondary structure of proteins, which have significant implications for cancer research, prevention, and detection.[3,4]

Early Diagnosis is Key to Cancer Survival

Michelle Mitchell, CEO, Cancer Research UK, spoke about the importance of early diagnosis and detection of cancer, and recent scientific and technological developments in the field. Cancer Research UK, as the world's largest cancer research charity, committed the equivalent of €489 million last year to cancer research and advocacy.

Mitchell stressed that early diagnosis is a crucial factor to improving cancer survival rates. For example, UK bowel cancer patients diagnosed at stage I and II have a five-year survival rate of 80%, versus 10% for those diagnosed at stage IV. Yet, many cancer cases are still detected late and cancer early detection targets are not being met. As such, Cancer Research UK has prioritised research in early detection and diagnosis. There are several promising research areas, such as the use of the 'cytosponge' test to identify those at high risk of oesophageal cancer, multiparametric Magnetic Resonance Imaging (MRI) for early detection of prostate cancer, liquid biopsies and multi-cancer early detection tests, and the use of AI in mammography.

To overcome the impact of Covid-19 on cancer, we must continue working together to optimise screening, improve pathways and referrals, shorten time for tests and diagnostics, encourage people to come forward earlier with symptoms, and stimulate innovative early detection and screening research. To succeed, we need improvements in the use of data, understanding of the biology of cancer, collaboration, removal of the barriers to commercialisation of diagnostics, embedding research into national health systems, and investment in new technologies.

Good Practices from the Netherlands

Ruud Pijnappel, Vice-President, European Society of Breast Imaging (EUSOBI), explained how breast cancer screening is organised in the Netherlands, under the responsibility of the national Ministry of Health. In practice, women are invited on average every two years to mammography via mail, which is delivered mainly in mobile trucks. The mammography is then read independently by two radiologists and the result is sent back via mail.

The system is based on the four public values of effectiveness, quality, affordability, and accessibility. Having data available is critical for evaluation of the screening programme's effectiveness and affordability. Since the start of the screening system in the 1990s, the Netherlands has achieved a 30% reduction in breast cancer deaths, equating to over 1,000 breast cancer deaths prevented per year. Accordingly, the screening programme allows for an extensive stage shift, with tumours being detected at a smaller size, and better treatment options. This screening system is also cost-effective, with the €5.000 per life gained per year estimated cost coming well below the Dutch threshold of €20,000.[5]

Quality of the screening programme depends on a chain involving the equipment itself, the technicians and the radiologists. Pijnappel said that as part of the quality assurance of the system, it should include audits -not to punish anyone, but to apply lessons learnt for the future.

Finally, Pijnappel stated that the Dutch screening system has also been successful due to a high level of accessibility, with invitations in multiple languages and mobile centres delivering screening free of costs, resulting in a high participation rate of around 78%.

Pijnappel then offered several lessons learnt for the future, i.e., that population-based breast cancer screening is effective and cost-effective, quality of care is needed, and that data collection and programme evaluation are essential. There should be teaching, training, and auditing of professionals, the system should prevent inequalities, and it should inform women about the benefits and harms of the service. To conclude, Pijnappel called on professionals, policymakers and politicians to enable high-quality screening for all women in Europe.

A Call to Action for Policy-makers

Anne-Marie Baird, Member of the European Cancer Organisation's Patient Advisory Committee, and President of Lung Cancer Europe, provided an overview of recent work aimed at making Members of the European Parliament (MEPs) and other policymakers aware of the importance of lung cancer screening in Europe. Baird stated that an MEP Lung Health Group had been formed to identify potential EU policies to improve lung health. Additionally, a European Society of Radiology (ESR) and European Respiratory Society (ERS) statement paper[6] on lung cancer screening was published in 2020, outlining the key asks from the ESR and ERS in lung cancer screening in Europe. Amendments to the draft report of the European Parliament's Special Committee on Beating Cancer (BECA) have also been submitted, including suggested targets for lung cancer screening in Europe. Baird called on policymakers to remove their bias and actively reduce stigma around lung cancer, as we move to the implementation phase of Europe's Beating Cancer Plan. Baird also called for lung cancer screening to be added to the 2022 EU Council Conclusions on Cancer Screening.

Transforming Evidence into Policy

Frances Fitzgerald MEP, Vice-Chair, European People's Party (EPP) Group in the European Parliament, emphasised the need for multi-stakeholder engagement to make progress on research and transform it into policy changes. Fitzgerald stated that this is what is being done in the *Transforming Breast Cancer Together* initiative; a multi-stakeholder initiative which recognises screening as key. Europe's Beating Cancer Plan highlights that implementation is often lacking for screening systems across Europe, and we also know that there are vast disparities in implementation of screening policies across Europe. Whilst we have excellent data on the benefits of screening, priorities still need to be set in national-level budgets to ensure implementation, especially when competing with Covid-19 and other health-related topics.

A Staged, Risk-based Approach for Prostate Cancer Screening

Frank Verholen, Vice President and Head of GU Franchise, Bayer, reminded the audience that the Summit was taking place during the annual 'Movember' campaign to raise awareness on men's diseases, such as prostate cancer. Verholen highlighted that half a million men are diagnosed with prostate cancer every year, 100,000 of which will eventually die from it. Prostate cancer screening and local treatment cost just a tenth of advanced prostate care costs, he said. Verholen stated that prostate cancer is a disease that progresses slowly, and there are effective screening tests and treatments. The prostate specific antigen (PSA) screening that was introduced in the 1980s, led to only a 20% reduction in prostate cancer deaths. This practice was however applied to all men, leading to a lot of testing and retesting, overtreatment and associated morbidity. However, today we are able

to deploy much smarter, targeted screening, for example, by following the European Association of Urology (EAU) screening recommendations.[7] Candidates for screening should have a sufficient life expectancy (of 10-15 years). Screening should start at 50 and should target higher-risk men (for example, those with a female relative with a history of breast cancer), and following this, there should be further, staged investigations (such as MRIs, biopsies), and therapy.

Discussion

In the ensuing discussion, Brian Ward, European Respiratory Society (ERS), enquired about the process for FEAM's recommendations to the European Commission. Constantinescu stated that their evidence report will be peer reviewed by independent experts, then sent to the European Commission's group of chief scientific advisers together with a literature report, for them to make final recommendations to the College of European Commissioners.

Fitzgerald called for 'BECA Committee MEP Champions' in each Member State to put pressure on the institutions to ensure we have the latest research-informing priorities and budgets for implementation. Even though health is a national competence, due to Covid-19, we saw both an interest and an EU-level engagement in health issues across Europe, and we should leverage this for our work on beating cancer.

Van Meerbeeck asked the panel what role general practitioners (GPs) could fulfil in improving early detection of cancer. Pijnappel replied highlighting the important role GPs can play in getting women screened and making referrals to hospital for screening, and even for giving a 'heads-up' to patients that they will be invited for screening to encourage participation. Additionally, the GP knows the patient care pathway for cancer patients.

Barbara Klein, European Breast Cancer Coalition (Europa Donna), asked how we can encourage people back to screening given the reduced participation experienced across Europe due to Covid-19. Mitchell replied stating that we should use public information campaigns, work with charities (which have a high level of trust), and ensure our health systems are safe (in relation to staffing and equipment).

Regarding prostate cancer, Verholen outlined that all non-invasive screening and tests should be carried out before any invasive or risky interventions, i.e., avoiding surgery or radiotherapy unless necessary.

Constantinescu highlighted that in some countries, echography is used instead of MRI, to which Verholen replied that whilst MRI is the preferred method of imaging, we have to use the best resources available in each country.

Baird stated that we need to consider cultural issues when communicating. Educational and awareness campaigns need to be appropriately tailored to their audiences with clear messaging. Additionally, we need to encourage the return to normal screening, the seeking of medical help, and ensuring that we tackle the perceived 'normality' of persistent respiratory symptoms that has arisen during the pandemic.

Session Co-Chairs, Isabel Rubio and Jan Van Meerbeeck, and panellists discuss action on early detection.

Action on Early Detection

Wide-ranging EU Council Recommendations on Cancer Screening and Early Detection are required to ensure all countries can enhance their performance in catching cancer early, and for all tumour types. The new Council recommendations should include attention to how to better implement existing programmes for breast, cervical and colorectal cancer, as well as how to achieve more effective strategies for screening and early detection of lung, prostate and other cancers, including via the use of risk-stratified approaches. This should be supported by the establishment of a range of mid and long term targets to support implementation of the new EU Council Recommendations on Cancer Screening and Early Detection.

Wider policy needs related to early detection should also be covered within the forthcoming update of Council recommendations, including, for example: heightening population awareness of potential warning signs of cancer, improving the role of primary care in early detection and leveraging the possibilities of new technologies in increasing early detection rates.

Access further positioning by the European Cancer Organisation's Prevention, Early Detection and Screening Network here: europeancancer.org/topic-networks

Eliminating HPV Cancers: From Flagship Policy to Flagship Practice

Celebrating the inclusion of a commitment to HPV cancer elimination in Europe's Beating Cancer Plan, Daniel Kelly and Rui Medeiros, Co-Chairs of the HPV Action Network, opened the HPV elimination session.

Kelly brought to the attention of the audience that the HPV cancer elimination flagship policy of Europe's Beating Cancer Plan has been an early example of how successful the cancer community can be when it collaborates and comes together in promoting shared and practical policy goals. Medeiros added that now that the EU goal for HPV cancer elimination is established, a fully defined implementation strategy for achieving the goal should be articulated.

Vaccination, Also for Boys

Steve Bergman, HPV Cancer Survivor and Vaccination Advocate, provided his personal testimony as an HPV cancer patient. For Bergman, the emotional impact of the cancer diagnosis and treatment affected him greatly. This distress also had an impact on his daughter and wife, who 'suffered cancer' as much as he did. Bergman, having been previously fit and healthy, described going from cycling to work every day for 15 years, to being fitted with a tracheostomy, unable to speak. Following his diagnosis of oropharyngeal cancer, Bergman kept a meticulous diary of his experiences, and described the consequences of his treatment: a dry mouth, burnt red skin, and nervous breathing, amongst others. The journey Bergman experienced had such an impact on him, that he decided to make a film supporting HPV vaccination for boys in the UK.

Bergman recited an entry from his diary. 7 September 2016. An entry of hope.

"My salivary glands will probably never work perfectly again, but I'm a happy man."

Bergman recounted that in 2018, the UK finally announced plans to vaccinate boys against HPV, ten years after a vaccination programme had been introduced for girls. Bergman's experience led him to becoming the 'poster-boy' for HPV in the UK. A taboo still exists around HPV and thus men are often not willing to speak about it. Bergman ended his intervention by stating that the key thing needed is to drive vaccination, also for boys, and on a global level.

Kelly highlighted the European Cancer Organisation's webpage for 'HPV Testimonies',[8] consisting of real-life stories of HPV-related cancers which further underline the urgent need for access to vaccination and screening.

More Than a 25-fold Return on Investment

Zsuzsanna Jakab, Deputy Director-General, World Health Organization (WHO) reminded the audience that for millions of people, cancer is a death sentence, as well as a trigger for inequalities. low- and middle-income countries (LMICs) are particularly affected by such inequalities, and in 2018 the WHO committed to a global elimination strategy for cervical cancer.

The WHO has produced guidelines and targets on HPV vaccination, screening, and treatment. Many of these strategic suggestions have been picked up within Europe's Beating Cancer Plan, including the EU target to vaccinate 90% of girls and significantly increase vaccination of boys against HPV. Some EU countries have already achieved such goals, with many more on the way to doing so. Jakab drew parallels between the inequality of Covid-19 vaccines provision, and the inequalities of HPV vaccines provision. For example, 90% of the cervical

cancer burden is within low- and middle-income countries (LMIC), but with only 25% of the access to HPV vaccines. Jakab highlighted that mRNA vaccines research has been pioneered in oncology and are now being evaluated as a possible platform for an HPV therapeutic vaccine and other cancer-related indications.

Resilient health systems are needed for the achievement of the HPV cancer elimination goal, especially after the experience of the Covid-19 pandemic, as for example, HPV vaccination global coverage fell from 15% in 2019 to 13% in 2020, much more than for other childhood vaccines. While, according to recently released country profiles on cervical cancer management, cervical cancer prevention, screening, and treatment is not optimal, Jakab stressed that for every dollar invested in cervical cancer prevention and screening, $26 is recouped in social benefit.

Poorer Vaccination Coverage Equates to Higher Cancer Cases

Laia Bruni, Senior Researcher, Catalan Institute of Oncology, Spain, provided an overview of HPV prevention in the European region, as part of a mapping exercise for the European Cancer Organisation to be published in 2022. In 2020, 74% of WHO Europe Member States had introduced HPV vaccination in their national immunisation programmes. Most cover pre-adolescent girls through school-based plans, with only 44% being gender neutral. Bruni stated that 29% of eligible girls in Europe were vaccinated last year, however the impact of the Covid-19 pandemic may not be clear until 2022, due to the delay in recording systems.

Almost all WHO Europe Member States have an officially recommended test for cervical cancer, and 82% of women aged 25-65 have been screened in the last year. With 70.000 new cases, and 30.000 deaths, cervical cancer has the third highest incidence, and the second highest mortality in women.

The organisation of screening varies across the European region, and most cervical cancer cases occur in low HPV vaccination coverage countries.

Multiple EU Flagships and Initiatives in Progress

Matthias Schuppe, Team Leader, Europe's Beating Cancer Plan, European Commission, stated that following a year of stakeholder consultation, Europe's Beating Cancer Plan[9] was adopted in February 2021. The Plan comprises four pillars: prevention, detection, diagnosis and treatment, and quality of life. The Plan, with a budget of €4 billion, contains ten 'Flagship' initiatives, and 32 other actions to beat cancer, including applying lessons learnt from Covid-19.

Schuppe highlighted the launch of one of the flagship initiatives in June 2021 (the Knowledge Centre on Cancer), which will map the latest evidence on cancer, provide guidelines and quality assurance schemes, as well as monitor and project trends in cancer incidence and mortality across the EU. In addition, the European Cancer Imaging Initiative, which will support the development of new computer-aided tools to improve personalised medicine, will be set up in 2022.

Schuppe described several other actions from the Plan, including secure access to and sharing of patient data in the European Health Data Space (2021-2025), and expanding the European Cancer Information System (2021-2022). Furthermore, the flagship initiative on HPV vaccination for girls and boys will support Europe in reaching the WHO target, and the European Code Against Cancer will be updated, with consideration made as to whether it should advise gender neutral HPV vaccination within its key points.

Schuppe informed the audience that there will be a Commission proposal for a Council Recommendation on vaccine-preventable cancers in 2023. Schuppe also stated that the Council Recommendation on Cancer Screening will be updated in 2022, and that EU level screening and treatment guidelines for cervical cancer will be developed in 2022-25. The Plan will also support the development of a network of National Comprehensive Cancer Centres across Europe (2021-25), which will be complemented by a new Cancer Diagnostic and Treatment for All initiative (2021-25).

Session Co-Chairs and panellists discuss elimination of HPV-related cancers in Europe.

Schuppe also mentioned several other flagship initiatives, such as the development of an Inter-speciality Cancer Training Programme, new European Reference Networks, a Cancer Survivor Smart Card, a European Patient Digital Centre, a Cancer Inequalities Registry, and fair access to financial services.

A Stakeholder Contact Group has been established to support the implementation of the Plan. Schuppe stated that the implementation of the Plan will also be supported by the Steering Group on Health Promotion, Disease Prevention and Management of Non-Communicable Diseases, and its Sub-group on Cancer.

Schuppe stated that EU4Health funding has also been made available to support the achievement of the EU's HPV cancer elimination goal. This includes the construction of a Joint Action on HPV Vaccination. Schuppe reminded the audience that there is an EU Health Award for Cancer Prevention, and that the EU Health Programme second wave of calls is still open for proposals for Action Grants. Schuppe mentioned there will be an Action Plan on Vaccine Preventable Diseases planned for 2023.

The First HPV Cancer-free Generation

Alessandra Moretti MEP, Member of the European Parliament's Special Committee on Beating Cancer (BECA), informed the audience that in the past year, BECA has gathered knowledge and inputs from a wide range of stakeholder experts. BECA will publish a report at the end of 2021, aiming to enrich Europe's Beating Cancer Plan, and to broaden its scope.

Moretti stated that progression in medicine has been impressive in recent times, and this pace could result in unprecedented discoveries in the treatment of cancer. Today, we already have the opportunity to eliminate an entire type of cancer, HPV cancer. On a political level, we must remember that Europe's Beating Cancer Plan is just the beginning of multiple future initiatives to beat cancer. Moretti reminded the audience that the European Parliament is committed to developing a European Health Union, to enforce minimum standards for health across the EU, for example, equal access for both girls and boys to screening and vaccination. Moretti stressed that unfortunately, we are seeing some hesitancy towards vaccines across Europe, and a coordinated effort at EU level promoting the benefits of HPV vaccination should be made. We need to pave the way for the first HPV cancer-free generation.

HPV is Not Just a Cervical Problem

Mario Preti, Member of Scientific Committee, Fondazione Veronesi and Associate Professor, Department of Surgical Sciences, University of Torino, Italy, emphasised that HPV is not only a cervical problem. Preti asked why there is no screening for anal, vaginal, penile, and other rare cancers? Most of these cancers are diagnosed in later stages, and thus have poorer survival rates. Preti highlighted that there is an unmet need for action on orphan cancers, and that healthcare professionals working in the genitourinary field could be involved in screening the vulva mucosa and peri-anal regions for abnormalities. Preti also suggested there is a need to increase awareness of self-genital inspection, especially in older women, and to overcome the stigma and taboo with self-genital inspection.

Self-sampling Can Reduce the Covid-19 Backlog

Jeff Andrews, Medical Affairs Global Vice President, Integrated Diagnostic Solutions, BD Life Sciences, stated that 67.000 women are diagnosed with cervical cancer annually, and 25.000 die each year. Andrews reminded the audience that vaccine protection takes decades 'to move through the population', so for the next 20-30 years we need an organised programme of national screening programmes. Andrews stated that a new technique to reach the under-screened is self-sampling. Self-screening can also reduce the backlog caused by Covid-19, and fits well with various telehealth solutions. Andrews mentioned that such risk-based screening is also being used for other cancers.

Andrews highlighted the Risk-based Screening for Cervical Cancer (RISCC)[10] project, a Horizon 2020 funded, multidisciplinary consortium aiming to develop and evaluate the first risk-based screening programme for cervical cancer.

Andrews stressed the need to move away from the one-size fits all approach, and stated that chemical staining, methylation tests, smartphone imaging, and other technical solutions can all contribute to beating cervical cancer.

Discussion

In the ensuing discussion, David Winterflood informed the audience that Sweden could eliminate HPV in four weeks if they provided HPV vaccinations at the same rate as Covid-19 vaccinations.

The International Agency for Research on Cancer (IARC) stated that global solidarity in access to HPV vaccines is critical in beating HPV cancers.

A plan for HPV cancer elimination

In 2022, a full implementation strategy for achieving the EU goal of eliminating HPV associated cancers in Europe should be developed and articulated to guide Member States. Included within its provisions should be a commitment to 90% vaccine uptake by all genders, the means of tracking vaccine uptake across countries, innovative measures to tackle vaccine hesitancy, and promoting new methods of screening, such as self-sampling.

Access further positioning by the European Cancer Organisation's HPV Action Network here: europeancancer.org/topic-networks

Affordable and Equitable Access to Multidisciplinary Treatments: Vision or Illusion?

The next session was hosted by the Co-Chairs of the Health Systems and Treatment Optimisation Network, Denis Lacombe and Yolande Lievens.

Denis Lacombe, Co-Chair of the Health Systems and Treatment Optimisation Network, opened the session by updating the audience on the Network's ongoing work to outline key policy recommendations in respect to health systems and treatment optimisation:

- Independently assess and publish the critically needed questions in cancer research
- Reorientate funding to address the gaps in the cancer research continuum

Lacombe welcomed the agility of regulators to make innovative therapies available to patients, but emphasised that many questions remain to be addressed after market access and that information gaps exist to document and optimise their actual use and benefit (treatment optimisation), as well as their effective delivery and access (health systems optimisation). Such questions are in the remit of the non-commercial sector in order to avoid the risks of inappropriate use of expensive anti-cancer agents and technologies, often developed in a non-patient-centric manner and lacking tangible patient benefits. Beating cancer requires a multidisciplinary treatment approach, and Lacombe stressed that the future of oncology is 'combinatorial'.

Yolande Lievens, Co-Chair of the Health Systems and Treatment Optimisation Network, stated that cancer care expenses increase in an unsustainable manner, and emphasised the need to recognise truly innovative treatments that benefit patients and society, for healthcare to remain affordable and accessible. Lievens stated that we have to develop approaches that put the needs of patients first whilst optimising health systems. Such an approach could start with an aim, and work back in a 'reverse engineering' approach. Lievens also highlighted the need for independent research to address optimisation research questions.

In this respect, Lievens made reference to the Network's resolution at the 2020 European Cancer Summit and the 2021 European Cancer Summit declaration, highlighting the key requirement of an EU process to define and address important patient-centric public health needs. Lievens described several aspects that are most relevant and meaningful for patients and public health. Having independent, optimal access to evidence-based, multidisciplinary cancer treatment and reverse engineering approaches with critical clinical research questions. Lievens went on to say that if we do not get access to patients, the public health system is not being served appropriately, or achieving its goals.

One Evidence Generation Plan for All Decision-Makers

Emer Cooke, Executive Director, European Medicines Agency (EMA), outlined the EMA's role in access to medicines, in the context of the new Pharmaceutical Strategy for Europe, the EMA's Regulatory Science Strategy (RSS) for 2025, and upcoming extensions to the EMA's mandate and associated EMA activities. Cooke clarified that the EMA's primary role is the scientific evaluation and supervision of medicines, including helping developers throughout the process. Cooke reminded the audience that all new anticancer products are approved through the EMA's Centralised Market Authorisation Procedure. Pricing and reimbursement decisions are a Member State competence, however the EMA does see some opportunities for collaboration at EU level to increase access.

Cooke emphasised the key role of evidence generation and communication for treatment optimisation, requiring efficient and sustainable use of resources and knowledge to deliver on the EU Pharmaceutical Strategy. Cooke stated that evidence generation needs to be an ongoing continuum to refine the optimal understanding of medicines in clinical practice and reduce uncertainty. Echoing Denis Lacombe's remarks, she highlighted that clinical development does not stop with approval or reimbursement: many knowledge gaps do remain once treatments reach market access, and that research must be prioritised to address them and generate evidence that is impactful for patient care. Importantly, this does not only concern newly developed therapies, but also existing cancer treatment options, through

the potential of optimising dose and duration, or outcomes in different patient groups. The EMA has a very strong Stakeholder Network, including a Cancer Medicines Forum (comprised of representatives from patients, professionals, academia). Cooke reported that EMA and the European Organisation for Research and Treatment of Cancer (EORTC) are discussing establishing a multi-stakeholder forum to help facilitate discussions on evidence generation priorities, aiming to be operational by the beginning of 2022.

Cooke also outlined how the EMA has been working with Health Technology Assessment (HTA) bodies across Europe to ensure mutual understanding of evidence needs, with the ultimate aim of having one evidence generation plan for both sets of decision-makers (regulators and HTA bodies) and thereby helping to reduce delays and disparities in access to medicines. Following the recent approval of the new EU Regulation on Health Technology Assessment, oncology has been highlighted as the first topic for 'Scientific Advice'. This Regulation will also help facilitate long-standing cooperation between regulators and HTA bodies, including on Joint Scientific Advice and information-sharing.

Cooke described several initiatives in the area of big data and registries, including a large project on real-world evidence (RWE), known as DARWIN-EU,[11] the Big Data Task Force, and the Advisory Committee on Big Data. Cooke highlighted the opportunity through the European Health Data Space to generate learning healthcare systems, maximising data generation and collection. Cooke also stated that as part of the work for the RSS 2025, the EMA is looking at expanding its toolkit on benefit-risk assessment. The benefit-risk assessment framework should take into account patient preferences, and should communicate benefit-risk as a whole.

Cooke concluded by stating that this is an unprecedented opportunity to increase visibility and communications of medicines regulation, and to promote optimal evidence generation and cooperation in cancer therapies.

Focusing Efforts on Health Services Strengthening

Richard Sullivan, Editor-in-Chief, Journal of Cancer Policy (JCP) and Director, Institute of Cancer Policy (ICP), provided the a policy perspective on health systems and treatment optimisation. He opened his presentation by stating:

"Across Europe, delivering equitable, affordable and high-quality cancer care is indivisible from supporting high-quality robust public sector research"

We know what works, but the value gap is increasing. There are delays in presentation, diagnosis, and treatment, which are known to have serious consequences. For example, a four-week delay in breast cancer treatment equates to an additional ten deaths.[12] Sullivan highlighted that in most countries, the data needed to relate outcomes to healthcare structure and process are simply not in place, as very few countries perform site-specific audits to understand patient pathways and service delivery, and that there is also a failure to record patient experiences.

Sullivan explained that we are seeing a de-linking of expenditure and outcomes in cancer, whilst as a result of general population ageing the fiscal headroom available to health systems is decreasing. Rigorous public clinical research is needed to understand every new health intervention. Sullivan stated that research funders do not recognise the 'second' or 'third' translational research gaps, i.e., implementation research, health services research or scale-up research.

Sullivan highlighted that there were serious underlying health system issues across Europe prior to Covid-19. Sullivan declared that if you do not have the workforce capacity for care, you also cannot do research successfully, and hence it has become even worse after the pandemic.

Sullivan also stated that there is a huge, yet to be fully realised, expected financial impact of the pandemic-associated disruptions to cancer care on healthcare systems, and that although fundamental, technology will not be the cure to these deficiencies. Sullivan asked the audience, what have we actually learnt from the past?

"The definition of insanity is doing the same thing again and again and expecting things to change."

Sullivan claimed that there is also a need to address issues between the Member States versus the EU, and that there is a lot of 'unhappiness' in the way that care and research systems are operated, and extensive disparities in cancer research across Europe. To conclude, Sullivan highlighted that cancer exposes strengths and deficits of health systems and that investment and rebalancing of research agendas into health systems' strengthening are crucial towards affordable and equitable outcomes and innovation.

Empowering Patients to Drive Improvement

Antonella Cardone, Director, European Cancer Patient Coalition (ECPC), said that one of ECPC's main priorities is to overcome inequalities in access to screening, diagnosis, and treatment. Patients have unique perspectives as the ultimate beneficiaries of medical technologies, and therefore patient preferences, experiences, and stories should be considered in agenda setting, formulation, and implementation of health technologies. Cardone called for patients to receive information about their cancer diagnosis and treatment options to increase patient choice in care. Cardone stated that patients are the best advocates, but they need to be empowered by capacity-building and training.

ECPC are working on ensuring that patient preferences can input into treatment pathways. Cardone stressed that early diagnosis is critical for cancer patient outcomes and quality of life. Cancer comorbidities and outcomes cannot be looked at in isolation. As such, Cardone outlined the ECPC's Cancer Related Complications and Comorbidities Initiative, which, with 31 partners, is already achieving results in the Cancer Mission and Europe's Beating Cancer Plan.

Better Assessments and Holistic Approaches for Better Access to Treatment and Care

Milka Sokolovic, Director General, European Public Health Alliance (EPHA), stated that affordable and equitable access to medicines is a high priority for EPHA. Sokolovic explained that EPHA has advocated for a broader and more holistic approach to patient access to cancer prevention, treatment and care, involving financial resources, insurance coverage, health workforce availability, infrastructure, and physical barriers, amongst others. Sokolovic stated that access to cancer treatments should not be at the expense of access to other healthcare products and services in other therapeutic areas, and EPHA has suggested innovative approaches to high-price cancer medicines. Better assessment of such medicines' benefits is also crucial, as targeted therapies have transformed some cancers, but, for a number of them, we only have data that indicates

Session Co-Chairs and panellists discuss access to multidisciplinary treatments.

improvement of 'surrogate endpoints', whilst there has also been evidenced increases in toxicity.

Sokolovic outlined that EPHA also advocates for the repurposing of drugs, i.e., non-cancer medicines that have shown promise in oncology. Sokolovic called for a combined approach utilising the Europe's Beating Cancer Plan, the Mission on Cancer, the Pharmaceutical Strategy, and new technologies such as AI to drive change, notably recognising the value of public funding for research in areas of unmet needs, making all voices heard and reflecting public health priorities. Building strong governance and transparency rules will be critical for the future.

Better Organisation Means Better Outcomes

Josep Borras, Director, Catalan Cancer Strategy, stated that our approach should be to support any action that improves cancer diagnosis and treatment. Borras reminded that cancer requires a multidisciplinary approach, and that equity, quality and timeliness in access equate to equity in outcomes. Countries in the EU have been learning from each other over the last 12 years via several 'Joint Actions' and the development of cancer plans.

Borras described the need to prioritise efforts on optimal organisation of multi-disciplinary care at both the patient level and health system level, using benchmarks between hospitals. Measures to address quality gaps are then required, such as through centralisation of care and data, provision of feedback to hospitals from central level, using care reimbursement as a tool to help foster such collaboration and support needed investment. Better organisation means better outcomes.

The Importance of Moving Quickly from Approval to Access

Gavin Lewis, Vice President, Value and Access, Amgen, said that he was convinced the key to success will be the effective implementation of Europe's Beating Cancer Plan and EU Cancer Mission. Lewis outlined the importance of moving quickly from regulatory approval to access, and that there are metrics available to illustrate this. For example, the European Federation of Pharmaceutical Industries and Associations (EFPIA) 'W.A.I.T. Survey'[13] showed that the average rate of access to oncology medicines was 58% (when looking at the 41 EMA oncology approvals from 2016 to 2019), which also varies a lot between countries within Europe.

Lewis then provided several recommendations:

- Greater harmonisation between regulators, and HTA bodies and payers, who currently all have different expectations,
- Greater adoption of statistical methods, indirect treatment comparisons, biomarkers, and patient-reported quality of life data to facilitate flexible or differentiation of prices for cancer medicines, and
- Greater investment in healthcare system readiness, for example, by increasing multidisciplinary teams in institutions at national levels (such as HTA bodies).

Defining Patient-centric Public Health Needs

To support Europe's fight against cancer, an EU-led process should be established to define and address the important patient-centric public health needs. Such a process requires robust and independent scientific evidence in order to guarantee access to optimised multidisciplinary treatments in sustainable healthcare systems. This can provide a foundation for employing a reverse engineering approach to address gaps in clinical and health services research applied to cancer.

Access further positioning by the European Cancer Organisation's Health Systems and Treatment Optimisation Network here: europeancancer.org/topic-networks

Harnessing the Power of Data in Cancer Care: Data Sharing and Artificial Intelligence

This data-focused session was hosted by Wim Oyen, Co-Chair of the Digital Health Network and Gilly Spurrier-Bernard, Vice-Chair of the Patient Advisory Committee.

Wim Oyen announced that the Network recently published a new position paper entitled "*Unlocking the Potential of Digitalisation in Cancer Care – No Stopping Us Now!*".[14] Oyen informed the audience that this paper provides advice to the EU, WHO and national governments on how to harness the power of data and digital technologies for better quality cancer care.

Oyen suggested that Digital Health and data-driven solutions can accelerate the shift towards patient-focused cancer care, whether these data-driven solutions are of high quality and efficient innovations. Oyen stated that digital literacy, education, training, and awareness programmes for both patients and healthcare professionals (HCPs) are critical. Oyen described the need to ensure interoperability and appropriate standardisation, to overcome technical barriers, and to address the fragmentation of data.

Gilly Spurrier-Bernard, Vice-Chair, European Cancer Organisation's Patient Advisory Committee, said that action is needed to overcome the regulatory challenges to data sharing. Additionally, Spurrier-Bernard raised the issue of ensuring the appropriate level of digital literacy for both healthcare professionals and the general population.

Artificial Intelligence is increasing healthcare professionals' capacities

Regina Beets-Tan, Co-Chair, Digital Health Network, informed the audience that she was also a Member of the EU Mission Cancer Board. Beets-Tan stated that the digital and AI revolutions will change the way we practice cancer care. Beets-Tan suggested that the human-machine interaction can augment human performance and clinical decision-making, citing the recent European Parliament BECA Committee Public Hearing on AI earlier this year.

Providing examples of clinical applications related to imaging, Beets-Tan highlighted the fact that AI enhances and upgrades radiologists' roles. However, further technical advances, political harmonisation and stakeholder cooperation are still needed to fully harness the potential of AI.

AI Predicts More Accurate Survival Outcomes

Andre Dekker, Professor of Clinical Data Science and Medical Physicist, MAASTRO Clinic, Maastricht, the Netherlands, referred to a study conducted in 2014 comparing a 2-year survival prediction for lung cancer patients by physicians and by AI. The study concluded that physicians correctly predicted the outcomes for only 50 percent of cases.[15] Dekker explained that cancer is mainly a prediction problem, and that Artificial Intelligence is now supporting clinicians in widening their cognitive understanding to better understand the factors influencing cancer predictions. In addition, Dekker highlighted that a lack of trial evidence also affects prediction accuracy in survivorship.

Dekker listed several barriers to sharing data: the problem is not only technical, but mainly administrative, political, and ethical.

"*If you can't bring the data to the research, bring the research to the data.*"

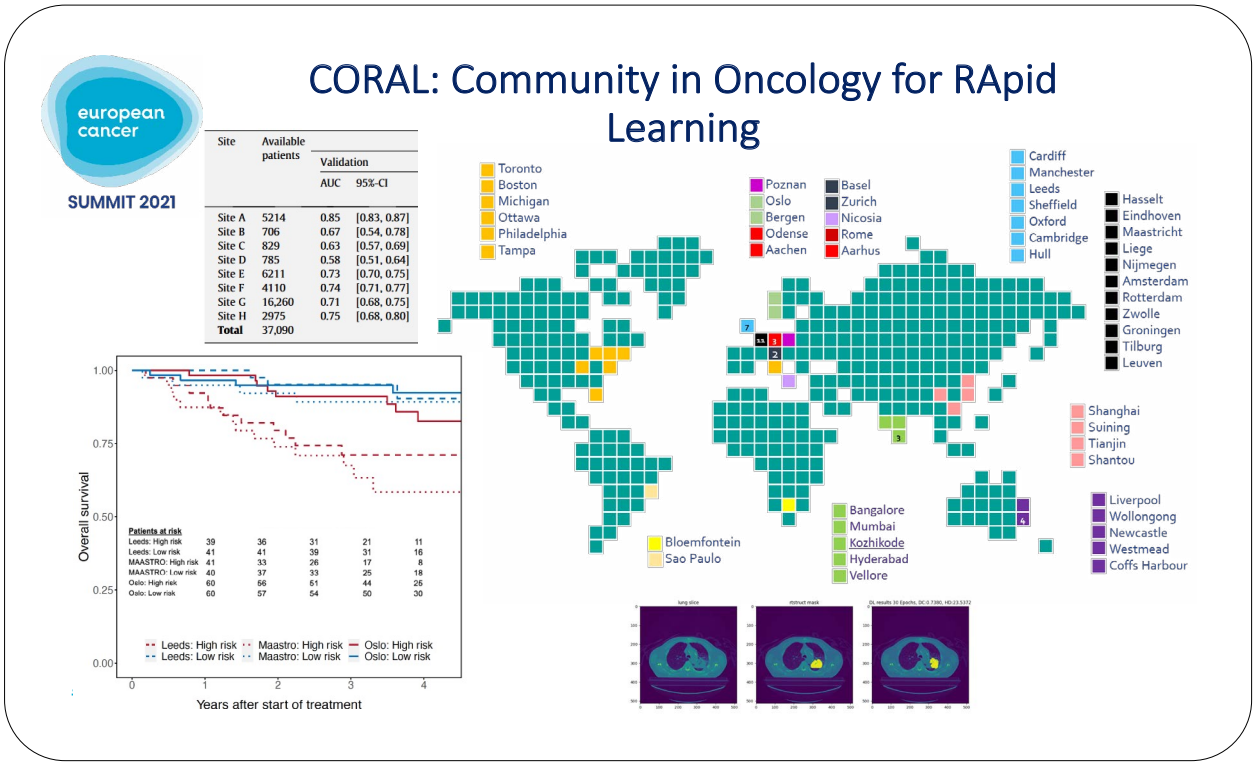
Dekker informed the audience that further legal and technical governance is required to 'bring the research to the data'. Because there are often linguistic and interoperability issues when it comes to secondary use of data, any exchange of high-quality health data should follow the 'FAIR' data sharing principles: Findable, Accessible, Interoperable and Reusable.

In this respect, Dekker cited the 'CORAL' project (Community in Oncology for Rapid Learning), which is running in 20 centres globally[16] and aiming at leveraging existing initiatives to share clinical cancer data and use Artificial Intelligence methods to gain new knowledge from the data. It is using a unique distributed infrastructure, which is the "Personal Health Train": data are made FAIR and put into FAIR data "stations" inside cancer centres. Then questions, the so-called "trains", such as learning an Artificial Intelligence for predicting survival in a cancer patient, are sent to each cancer centre and

their data station rather than moving the actual data. These trains are secured and controlled. Therefore, the Personal Health Train infrastructure allows learning from data in a privacy-preserving manner and under full control of the cancer centres.

"AI is present all along the patient journey" and supports the development of precision oncology.

D'Ugo described how AI can support lung cancer screening. An AI enhanced radiology system can



Dekker concluded by stating that AI is needed for both efficiency gains, and better outcomes. Global data sharing is needed for effective performance and generalisability, and that federated FAIR data structures are now mature, and can allow more data sharing according to European values.

AI Detects Faster, and More Accurately

Domenico D'Ugo, President of the European Society of Surgical Oncology (ESSO) and Full Professor of Surgery at Catholic University of Rome, Italy, shared experiences of AI in cancer surgery and treatment. D'Ugo proclaimed that AI is already with us in daily life, and introduced the concept of 'augmented intelligence', which is the combination of AI and human intelligence. D'Ugo stated that AI technologies have been segmented into eight categories, covering both data capture and insight-generation capabilities, such as imaging, robotics, and real-world data. Most growth is being seen in software development.

process 100 images of lungs, with 10% error rate, in one hour. This compares to processing the same number of images by a senior radiologist with a 20% error rate, over an entire day,[17,18] highlighting that AI and machine learning approaches complement the expertise and support the radiologist and oncologist.

D'Ugo also outlined the use of AI in surgical oncology, such as with the use of mixed-reality headsets to help with augmented reality and dexterity.

AI powered pre-operative planning, with 3D model reconstruction, can also help identification of key tissues and anatomical structures. D'Ugo cited the potential future application for AI in cancer, via the use of heat diffusion imaging for early cancer detection.

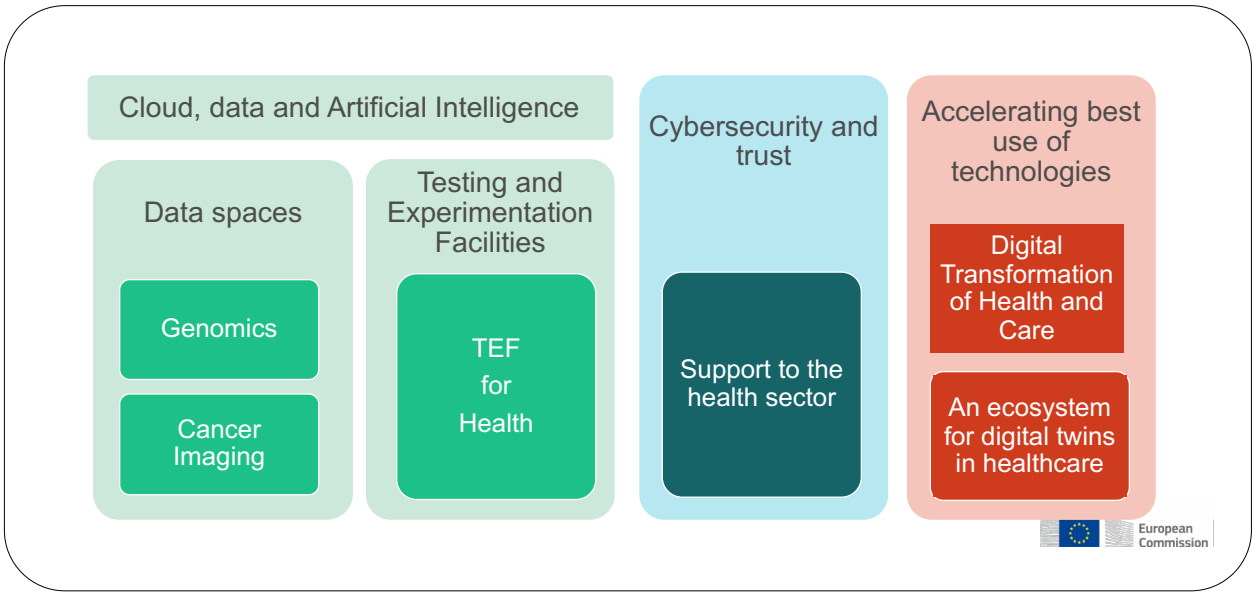
D'Ugo concluded by stating that big data and AI should be introduced in undergraduate curricula, including the 'four V's of big data' (volume, variety, velocity, veracity). D'Ugo recommended patient-driven AI systems, public awareness, European funding and regulations on AI, and promotion of harmonised standards.

A European Cancer Imaging Initiative

Ceri Thompson, Deputy Head of Unit eHealth, Wellbeing and Ageing (DG CNECT), European Commission, provided an overview of the Commission's framework for Digital Health.

Thompson described the E*uropean Cancer Imaging Initiative*, a new EU state-of-the-art platform to support the development of new computer-aided tools to improve personalised medicine and innovative solutions. The Initiative will include an atlas of anonymised cancer-related images, that will be used by researchers and hospitals to train diagnostic AI tools, improving their accuracy and reliability.

Thompson concluded by stating it is hoped that cancer patients will be early beneficiaries of these new developments, such as by using cancer images as 'a pathfinder' within technology frameworks.



Session Co-Chairs and panellists discuss data sharing and artificial intelligence in cancer care.

The GDPR is Intended to Allow Data Sharing, Not the Opposite

Ivars Ijabs MEP, Member of the European Parliament's Special Committee on Beating Cancer (BECA) recalled that the BECA Committee's upcoming Report will complement Europe's Beating Cancer Plan. Ijabs highlighted that the main goal is to provide Europeans with the best techniques to address cancer, and that the European Parliament is also addressing cancer-related issues in other Committee activities.

Ijabs stated that the exchange of data is critical for success, and underlined the stated role and unintended consequences of the General Data Protection Regulation (GDPR). The GDPR, said Ijabs, should be about sharing data, however, in many ways it has prevented better access to data.

Ijabs called for a new study to understand the impact of the GDPR on access to data for cancer research and care. The implementation and interpretation of the GDPR needs to be harmonised across the EU, for example, through codes of conduct and certifications. Ijabs also pointed to a possible future revision of the GDPR, to ensure that data can be easily used for cancer research and treatment.

Not Sharing Data Kills People

Gilly Spurrier-Bernard, Vice-Chair, European Cancer Organisation's Patient Advisory Committee, proclaimed that now is a great time to have an impact.

Spurrier-Bernard recalled the EU Cancer Mission Board's proposal for a European Cancer Patient Digital Centre. Data needs to be 'query-able' wherever located, and should be of high quality and standardised. Spurrier-Bernard called for the use of data in research to be relevant to patients and taxpayers, and that patients should be able to access their own data. There should be a good governance and criteria for suitable 'secondary data use' in research, in the knowledge that patients are the ultimate owner of their data.

Data is the Lifeblood of the Life Sciences Industry

David Anstatt, Vice President, Business Insights & Analytics, Research & Development, Bristol Myers Squibb declared that data is the lifeblood of the industry, especially, in understanding the safety of, and in the development of medicines. Exploration of data is extremely important, especially when bringing in other factors, such as biomarkers. Anstatt also recognised the need to respect patient privacy and adhere to compliance regulations, whilst at the same time also recognising how we adhere to advances in science. Anstatt called for 'establishing mechanisms' for data to move across geographies.

Discussion

In the ensuing discussion, Ariane Weinman stated that patient consent forms need to be updated to ensure the appropriate level of informed consent.

Jan Geissler, EU Cancer Mission Assembly Member and Member, European Cancer Organisation's Patient Advisory Committee, said that GDPR is too often used to avoid sharing data: if taxpayer money is invested in data creation projects, data sharing should be mandatory.

Advancing Digital Cancer Care

Advancing the promise of digital for cancer care sooner will require:

(a) review of the application of the General Data Protection Regulation (GDPR) in respect to key aspects of cancer care;

(b) acceleration of interoperability between cancer registries (including via published interoperability targets); and

(c) active support for increasing the digital literacy of citizens and healthcare professionals.

Access further positioning by the European Cancer Organisation's Digital Health Network here: europeancancer.org/topic-networks

Supporting the Drivers for Implementation: The Cases of the Oncology Workforce

This session was hosted by the Co-Chairs of the Workforce Network, Andreas Charalambous, Mirjam Crul, and Geerard Beets.

Andreas Charalambous, Co-Chair of the Workforce Network, and President Elect of the European Cancer Organisation, recalled the publication of the Network's consensus paper entitled Working Against Cancer: Giving Professionals the Right Tools for the Job.[19] This paper outlines four critical challenges for the cancer workforce in the context of implementing Europe's Beating Cancer Plan, namely:

- Resolving the difficulties caused by workforce shortages
- Reducing unnecessary barriers to professional mobility
- Improving occupational conditions to protect the safety and well-being of healthcare professionals working in cancer care
- Enhancing education and development opportunities for healthcare professionals that are now even more achievable in the digital age

Charalambous also called for a coordinated response to Europe's Beating Cancer Plan's proposed Inter-Speciality Cancer Training Programme (ISCTP), to ensure that what is proposed suits future needs.

An Inter-Speciality Cancer Training Programme

Kim Benstead, Leader, Core Curriculum/UEMS Programme, European Society for Radiotherapy and Oncology (ESTRO) described the underlying vision of the ISCTP. Benstead stated that, as set out by the European Commission's call for proposals, the ISCTP will initially focus on clinical oncology, surgery, radiology and nursing. The overarching aim is to deliver a more skilled and mobile workforce through cross border training and information sharing by optimising collaboration among cancer specialists and ultimately benefiting cancer patients.

It will involve a needs assessment, curriculum development, and programme design with a wide variety of disciplines and stakeholders to be involved. Benstead stated that increased survivorship rates mean that important elements of inter-speciality training related to this should be covered in the curricula, and stressed the importance of the relationship between curricular design and implementation.

Practice Makes Perfect

Alberto Costa, CEO, European School of Oncology (ESO), explained that while most of what is being taught to surgical trainees is theoretical, surgery is a practical exercise, explaining why the younger

Session Co-Chairs and panellists discuss oncology workforce.

generation lacks dexterity, which is important to surgeons. Costa stressed that 'doing' is different to 'watching' your mentor for years.

Costa stated that in the EU, a trainee needs to participate in 15 sentinel node biopsies before he can do it on his own. Manual exercise, practice, or simulated exercises can help improve this process. In this respect, Costa mentioned the potential usefulness of remote training with robots, (and other technologies such as VR) and the need to update and address imbalances in training.

Another issue to be dealt with highlighted by Costa is language and 'natural language processing'. Costa argued that 'bad English' has, until now, been the lingua franca for surgical training, with the associated difficulties in expressing and explaining oneself in a second or third language. Adding subtitles in other languages to English presentations or providing multi-lingual training programmes could be transformational in oncology workforce education. Advances in technology, such as the AI-led automatic translation of curricular, is another potential solution for linguistic barriers.

Avoiding 'Brain-Drain'

Malgorzata Bogusz, Member, European Economic and Social Committee, referred to the recent EESC opinion on Europe's Beating Cancer Plan[21]. The opinion calls for addressing and improving the education and training needs of the oncology workforce, as well as strengthening the oncology workforce generally.

"*The EU is 10% of the world's population, but we have 25% of the world's cancer burden.*"

Boguz said that the EESC called for the European Commission to describe how Europe's Beating Cancer Plan will translate into concrete plans. She stated that several of the EESC's comments were considered by the Commission in the development of the Plan such as education, access to high quality treatment and care, and shortages of oncologists. Boguz highlighted the particular issue of 'brain-drain', especially from Eastern European countries. Boguz concluded by stating that cancer treatment should also include psychological and rehabilitation support.

Give Cancer Nurses Better Opportunities

Johan De Munter, President, European Oncology Nursing Society (EONS), declared that high-quality cancer care relies on a high-quality workforce. De Munter informed the audience that 40% percent of nurses leave their job after their first year, and up to 70% are actively considering leaving the profession. De Munter stated that there are huge discrepancies across Europe in nursing education, disrupting cancer outcomes and the pandemic has made this worse. In this respect, De Munter mentioned the EONS Cancer Nursing Index, which contains data on the opportunities for post-graduate nursing training, and demonstrates disparities between specialisations for oncology nursing across Europe.

Reform of education and training of our health workforce, by using for example an inter-professional training program, would be highly welcomed.

"*We work together, so why don't we train together?*"

De Munter stated that we have a responsibility to protect and nurture our health workforce, especially by promoting life-long learning, continuous professional development, and free movement across the EU.

Transformation of the Workforce Requires Education, Training, and Skills Development

Berfu Yaziyurt, Regional President, Oncology, International Developed Markets, Pfizer stressed how leveraging digital technologies, for example, the use of AI and machine learning (ML) can help deliver better services, and allow HCPs to spend more time with patients. Yaziyurt highlighted that digital technology can support all four key action areas of Europe's Beating Cancer Plan, namely Prevention, Diagnosis, Treatment, as well as Survivorship and Follow-up Care.

Yaziyurt stated that 20% of consultations will continue to be remote after the pandemic and explained that Pfizer is developing new tools to help home/self-monitoring, in turn helping reduce hospital visits.

Yaziyurt described how home delivery of health services improve the patient experience, for example, avoiding high-risk patients needing to go into hospital during the pandemic. However, HCPs should be supported and equipped to use these new technologies allowing remote consultations. Transformation of the workforce requires education, training, and skills development.

Education, Training, and Technology Can Address Disparities

Sema Erdem, Co-Chair, Patient Advisory Committee, European Cancer Organisation, placed a special emphasis on the multi-disciplinary aspects of cancer care. Erdem cited the Europa Donna Short Guide to the European Guidelines for Quality Assurance in Breast Cancer Screening and Diagnosis.[22]

Erdem stated that education, training, and technology can be tools to address disparities between and within hospitals in terms of cancer treatment. For example, the exchange of training best practices, quality assessment of medical specialities, and accreditation and certification are valuable tools in this respect.

Erdem also stressed the need to address regulatory barriers to further enhance multidisciplinary team. She also highlighted the need to better integrate digital technologies in healthcare professionals' clinical practice. We need to raise awareness that new technology should not replace the 'personal touch', or engagement with an HCP. Technology can facilitate sharing of knowledge and experience.

Discussion

In the ensuing discussion, Gilly Spurrier-Bernard, Vice-Chair, Patient Advisory Committee, stated that cancer nurses are often the best communicators in healthcare teams.

De Munter highlighted that nurses in general are leaving the profession, mainly due to the care demand, workplace stress, and impact of the pandemic.

Responding to a question from Dr Miet Vandemaele as to whether there are EU health workforce planning regulations, Boguz replied that Europe's Beating Cancer Plan could be used to address health workforce issues.

Combatting Oncology Workforce Shortage

Political attention to the problems of oncology workforce shortage requires elevation. DG Employment, the Cancer Inequalities Registry and the forthcoming EU Health Emergency Preparedness and Response Authority (HERA) should all be providing focus to these matters in the years ahead to avoid a known problem worsening to a crisis.

A further means by which the EU can support oncology workforce resilience and availability is by proactively aiding professional qualification recognition for the specialties and professions involved in cancer care.

Inter-speciality Cancer Training Across the Professions

The future EU Inter-specialty cancer training programme should have a broad focus, supporting improved mutual understanding of professional roles in cancer care across all disciplines and professions instrumental to high-quality cancer care. Access to the programme should be broadened by utilisation of proven technologies, including distance learning and simultaneous translation. The programme should be established with a firm long-term funding model to ensure its sustainability and growth.

Access further positioning by the European Cancer Organisation's Workforce Network here: europeancancer.org/topic-networks

Europe's Beating Cancer Plan: From Plans to Action

This session was hosted by Matti Aapro, President of the European Cancer Organisation.

A Plan for Europe, a Plan for All

Stella Kyriakides, EU Commissioner for Health and Food Safety, started by reminding the extensive impact of the Covid-19 pandemic on cancer, as an estimated 1 million cancer cases have been undiagnosed. Because of Covid-19-associated disruptions, screening programmes have been halted and provision of cancer treatment has been delayed.[23] Kyriakides outlined how, with Europe's Beating Cancer Plan, this is the first time that the EU has a common plan to beat cancer, with clear policy objectives, and dedicated funding, in the aim of making a difference and improving reality for all families affected by cancer. The Plan takes an integrated, 'Health in All Policies', multi-stakeholder approach, covering the entire disease pathway, supported by the four main pillars of prevention, detection, treatment and quality of life and its two transversal focus areas of reducing inequalities and harnessing the potential of research.

Kyriakides stressed that governments and health authorities cannot address cancer alone, and therefore the Plan is intended to be a Plan for Europe, a Plan for all. A Stakeholder Contact Group has been created to ensure the continued voice and input of the stakeholder community during the implementation phase.

Stella Kyriakides, EU Commissioner for Health and Food Safety, discusses Europe's Beating Cancer Plan.

Kyriakides stated that there were 12 Action Grants and four Joint Actions related to cancer this year under the EU4Health programme. In terms of prevention, an update is planned to the European Code Against Cancer, and an EU mobile app for cancer prevention will be developed. Kyriakides re-emphasised that high-quality cancer care relies on a high-quality cancer workforce. In this respect, the Inter-Speciality Cancer Training Programme will be developed; an EU Network linking National Comprehensive Cancer Centres will also be established to stimulate high-quality and quality-assured diagnosis and treatment through collaboration between countries. Finally, Kyriakides informed the audience of the recent call for proposals on the Cancer Diagnostic and Treatment for All initiative in order to help innovation be more widely available across the EU.

Beyond the funding elements, Kyriakides outlined several ongoing activities of the European Commission relating to the Plan's implementation, including an upcoming revision of the European Council Recommendation on Cancer Screening to reflect the latest evidence and the upcoming development of the Cancer Inequalities Registry. Social integration is also key, and all the obstacles that cancer patients and survivors face should be addressed, including access to financial services.

Kyriakides concluded by stating that Europe's Beating cancer Plan is a fundamental pillar of a stronger European Health Union, and a priority for the European Commission. Finally, Kyriakides announced that the Implementation Roadmap[24] for Europe's Beating Cancer Plan is now available.

One Step at a Time

Aron Anderson, Cancer Ambassador for Europe, World Health Organization (WHO) described his personal experience as a childhood cancer survivor and his strategy for successfully making it through chemotherapy.

"*One more bag of chemo then I'd be done.*"

Anderson stated that this strategy of facing problems 'one step at a time' was how he beat cancer, and this is how we can all beat cancer. One step at a time.

Véronique Trillet-Lenoir MEP, Rapporteur, Special Committee on Beating Cancer (BECA) speaking at the session on Europe's Beating Cancer Plan.

Many Steps Lead to Progress

Véronique Trillet-Lenoir MEP, Rapporteur, European Parliament's Special Committee on Beating Cancer (BECA) highlighted that in Europe 1.3 million people die from cancer each year, including 6.000 children, and 4 million cancer patients are now in need of effective and innovative treatment. Trillet-Lenoir stated that there are 12 million cancer survivors, and that cancer is a disease of social injustice, as differences in cancer survival rates across EU Member States exceed 25%.

The draft BECA Report covers all pillars of Europe's Beating Cancer Plan. In respect to prevention, it addresses wide-ranging cancer determinants through suggested EU legislation in the fields of tobacco, alcohol and environmental health, and recommendations to EU Member States on matters such as HPV vaccination, occupational campaigns, better nutrition, increased physical activity, and 'Generation Smoke-Free 2040', amongst others.

Trillet-Lenoir recognised the uneven development of cancer screening across Europe. As a response, the draft Report proposes to harmonise methods, support innovation and stimulate best practice sharing. The draft Report also proposes better implementation of the Directive 2011/24/EU on patients' rights in cross-border healthcare, homogeneous identification of cancer professions and establishment of at least one cancer centre in each Member State.

Trillet-Lenoir stressed the need to tackle issues related to medicines access, affordability and supply, including applying lessons learnt from Covid-19. Trillet-Lenoir called for a virtuous circle on ensuring equitable access to affordable medicines, involving joint evaluation, in relation with developments in EU policies for HTA, and joint purchasing procedures for expensive therapies. Trillet-Lenoir also suggested that HERA and the HERA Incubator initiatives can be leveraged to stimulate development of new anticancer treatments.

Trillet-Lenoir also stated her support for the Time To Act campaign on addressing the impact of Covid-19 on cancer across Europe. The draft Report recommends in particular financial support for patient associations, actions to help patients reintegrate into work and society, including through the implementation of the "right to be forgotten", and closely linking the Plan's implementation to the EU research strategy. There should be an independent, multidisciplinary, transparent, adequately funded research strategy, with a 20% increase in funding on diagnostic and therapeutic innovation, and incentives to multi-centric trials, especially for research in elderly and vulnerable groups. The sharing of knowledge and expertise, especially related to rare and poorly curable cancers, should also be further facilitated by strengthened European Reference Networks (ERNs).

Trillet-Lenoir stated that whilst Member States have set-up National Cancer Control Plans (NCCPs), they are often heterogenous, and thus the implementation of Europe's Beating Cancer Plan will be difficult. Therefore, a 'European Cancer Cloud' should be set-up to help foster cancer data sharing, and a 'Virtual European Cancer Institute' created. This would help coordinate the 27 NCCPs, support implementation of the Plan's recommendations, and support specific cooperative missions.

Finally, Trillet-Lenoir suggested that the €4 billion budget for the Plan should come not only from the EU4Health Programme, but also from other funding streams, such as Digital Europe and Horizon Europe. Trillet-Lenoir stated that we need to work on implementation now, and that significant progress will be driven by the French European Council Presidency from January 2022.

Cancer as a Key Priority for the Slovenian European Council Presidency

Janez Poklukar, Minister of Health, Slovenia, reminded the audience that cancer is a key priority for the Slovenian European Council Presidency, as it was in Slovenia's first Presidency in 2008. The pandemic has had a strong impact on lifestyle determinants, prevention and detection programmes, with a consequential impact on cancer.

The Slovenian Presidency has focused on prevention, as more than 40% of cancer cases can be prevented. Poklukar mentioned several other aspects of cancer policy that the Slovenian Presidency has supported, such as comprehensive cancer care, nutrition and obesity, medicines access and repurposing, survivorship and quality of life, the right to be forgotten, and the creation of a European Health Union.

Finally, Poklukar also mentioned the final conference of the Slovenian-led Innovative Partnership for Action Against Cancer[25] 'iPAAC' which will take place in December 2021.

From Plans to Action

Kathy Oliver, Co-Chair, European Cancer Summit 2021, speaking on behalf of the European Cancer Organisation's Patient Advisory Committee, provided a patient and caregiver perspective on the Plan. Oliver praised the proposal for EU-wide data sharing ('UNCAN'), and the possible links with the European Health Data Space. Additionally, Oliver recognised the expansion of screening and prevention initiatives, the Knowledge Centre of Cancer, actions towards gender-neutral HPV vaccination, addressing essential medicines shortages, and the Plan's overarching focus of tackling inequalities.

Oliver outlined several additional asks from the Patient Advisory Committee:

- Improving access to cross-border healthcare and research
- Providing access to palliative care for all
- Enhancing efforts in the geriatric oncology field
- Ensuring vulnerable groups are looked after
- Addressing adult and paediatric rare cancers through better diagnosis, care and support
- Advancing the use of Survivorship Care Plans
- Implementing impactful Health literacy programmes
- Promoting uptake of the European Code of Cancer Practice
- Ensuring the implementation of the right to be forgotten for all cancer survivors

To conclude, Oliver emphasised the support from the cancer patient community to the success of Europe's Beating Cancer Plan and called for sustained collaboration between EU institutions and umbrella patient organisations to turn the tide against cancer and health inequalities.

Now is the Time to Bring the Plan to Life

Manfred Weber MEP, Chairman, EPP Group in the European Parliament, recounted how the European People's Party (EPP) fought for Europe's Beating Cancer Plan in the last European election campaign.

"*Now we need to bring it to life.*"

Weber stated that we need to bring experts together, and to share data across Europe. Obstacles to public clinical trials and research need to be removed. Weber called for investment in EU research and innovation, equal access to cancer therapies across Europe, and better use of telemedicine.

Finally, Weber highlighted the importance of building a European Health Union as a new defining project of the European integration.

Discussion

In the ensuing discussion, Mark Lawler, Co-Chair of the Special Network on the Impact of Covid-19 on Cancer, asked how Europe's Beating Cancer Plan could be used to address issues for patients with co-morbidities, for example, obesity. In reply, Kyriakides stated that the Plan aims to raise awareness on the key risk factors, for example, on healthy lifestyles, which also links to the other half of DG SANTE's mandate, on food safety.

A Public Facing Beating Cancer Plan

We urge that a high public presence for Europe's Beating Cancer Plan be maintained. This includes the setting of goals related to the Plan's initiatives, measuring and reporting on progress and underpinning all initiatives with the clearest understanding of intentions and purpose. Partner with the army of willing stakeholder organisations all committed to the Plan's success.

Time To Act: Covid-19 & Cancer

The opening session of the second day of the Summit was hosted by the Co-Chairs of the Special Network: Impact of Covid-19 on Cancer, Mirjam Crul and Mark Lawler.

Mirjam Crul, Co-Chair of the Special Network: Impact of Covid-19 on Cancer provided an overview of the Special Network's 7-Point Plan to Address the Urgency and Build Back Better.[26]

Crul reminded the audience that in May 2021 European Cancer Organisation launched the Time To Act Campaign in 30 languages, the key message being that Covid-19 should not prevent us from tackling cancer. This call to action was incorporated into the 2021 Summit Declaration and is still as important today as it was one year ago.

Mark Lawler, Co-Chair of the Special Network: Impact of Covid-19 on Cancer, said that it is not only about plans, but also about actions, and the time to act is now. The research data collected to drive this campaign has shown that approximately 100 million screening tests have not been performed, with one million patients undiagnosed as a result. In addition to the 'fear of clinic attendance', one in two did not receive the surgery or chemotherapy that they should have, and one in five are still not receiving what they should be. Lawler stated that the figures show HCP burnout levels of 40%, with 30% showing signs of clinical depression.

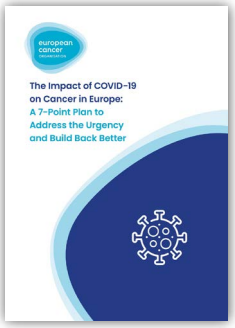
Lawler stated that this is why the European Cancer Organisation developed high-profile, multi-national, multi-lingual launches of the campaign across Europe this year.

Lawler also announced that the 'Time To Act' Data Navigator – a new landmark tool in the fight against the impact of Covid-19 on cancer[27] was launched during the Summit to inform national and pan-EU discussions. The Data Navigator provides key data on the impact of Covid-19 on cancer screening, diagnosis, treatment, patients and professionals available across European countries. The Data Navigator uses over 200 different resources to bring together data, with Lawler describing it as a 'Data Navigator 0.1'. It is a living tool, currently with 17 European countries, but with the intention to build and expand on it in the future. Lawler stated that the traditional rhetoric that 'health is a national competency', has been disproved by Covid-19 and our responses to it.

european cancer
SUMMIT 2021

The 7 Point Plan to Build Back Better

1. Urgently addresses the cancer backlog
2. Restore confidence of European citizens and patients in cancer health services
3. Tackle medicines, products and equipment shortages
4. Address cancer workforce gaps across the European continent
5. Employ innovative technologies to strengthen cancer systems and provide optimal care to cancer patients
6. Embed data collection and the rapid deployment of cancer intelligence to enhance policy delivery
7. Secure deeper pan-European health cooperation



Cancer must not become the Forgotten "C" in the Fight against Covid-19.

#europeancancersummit

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Learning the Lessons from the Pandemic - a Global Perspective

Karen Canfell, Professor and Director, The Daffodil Centre at the University of Sydney and Cancer Council NSW, Australia, provided an international perspective on beating cancer during the pandemic. In the Australian State of Victoria, there were over 2.500 delayed diagnoses alone in a six-month period in 2020.

Canfell stated, however, that Australia pledged to be the first country in the world to meet the WHO target to eliminate cervical cancer; in 2007, Australia was the first country to introduce a publicly funded vaccination programme for HPV.

Canfell stated that equity and access to these types of interventions have been a long-standing issue, with indigenous peoples' mortality rates much higher. Canfell explained that HPV self-sampling will be offered as part of Australia's cervical cancer screening programme from next year. This will increase the community-led screening opportunities opportunities, improve screening update, and avoid access-related issues to attending clinic-based screening opportunities, which have also been worsened by Covid-19.

Act Together, Act Now

Andrei Baciu, Secretary of State for Health, Romania explained that the EU has an ambitious target of fighting cancer all over Europe, and that Romania is currently finalising its very first National Beating Cancer Plan. Describing the Romanian response to tackling the effect of Covid-19 on cancer care, Baciu stated that despite some difficulties they have managed to maintain treatment access for chronic disease and cancer patients. Baciu stated that the most important thing we can do is to act together, including by working with the European Cancer Organisation, and other cancer organisations.

"*The time to act is now, let's start this journey now.*"

Joining Forces to Overcome Disruptions and Beat Shortages

Nathalie Moll, Director General, European Federation of Pharmaceutical Industries and Associations (EFPIA), announced that shortages remain a priority for all stakeholders, and are a top priority for EFPIA. Moll explained that manufacturers have established a robust supply chain and activated pandemic preparedness plans, with some companies producing 400-800% of normal capacity. Moll said:

"*We had to learn to do things differently to overcome the disruptions.*"

Mark Lawler, Co-Chair of the Special Network: Impact of Covid-19 on Cancer, announces the Time To Act Data Navigator

Examples outlined by Moll included EFPIA members cooperating with the military, switching to direct patient deliveries, and providing educational support for patients to self-administer their treatments. Moll said that 2022 needs to be the year where we catch-up, and build on the nimbleness and agility we had during the pandemic.

Moll highlighted that more data and transparency on demand, forecast, epidemiology, real-time flow of products, and understanding what the trends are, can make a difference in tackling medicine shortages. Moll stated that the EU took the lead on addressing disruptions to clinical trials during the pandemic to mitigate setback on research and innovation. We should take note of the lessons learnt from these regulatory flexibilities.

Moll informed the audience of the EFPIA publication in May 2021 entitled, 'Every Day Counts', a campaign focused on improving the time to patient access to innovative oncology therapies in Europe.

Public Health Coordination is a Shared Competence

Sara Cerdas MEP, Shadow Rapporteur, EU4Health; Vice Chair of the Special Committee on Beating Cancer (BECA) and Co-Chair, ENVI Committee Health Working Group, provided the European Parliament's perspective. Cerdas stated that BECA has had the opportunity to meet with various experts over the course of the Committee's mandate, and they are now working on their comprehensive final Report. Cerdas stated that cancer is expected to reach 22 million new cases by 2030 around the globe, which means we are failing to tackle this disease. We need to address the social, economic, and environmental determinants of health as around 40% of cancers are preventable.

Cerdas emphasised that three billion people cannot afford to have a healthy diet, and even in the EU, it is easier to access unhealthy food than healthy food. Regarding physical activity, Cerdas promoted the idea of having 'healthy hubs' in cities, ensuring citizens have the opportunities to increase their physical activities close to where they live. Cerdas called for the empowerment of citizens to make the best decisions for their health, for example, by improving health literacy and encouraging positive behaviour change.

Cerdas stated that environmental and occupational risk factors are responsible for between 7% and 20% of cancers, and called for strict approaches on tobacco and alcohol marketing through EU legislation.

Cerdas reminded the audience that the organisation of health services is a national competence, however public health coordination is a shared competence between Member States and the EU. We need all policymakers, politicians, stakeholders, institutions, academia, HCPs, patients, and carers to join the fight to beat cancer, especially following the setbacks caused by the pandemic.

Lessons Learnt for the Future

Robert Greene, Member, Patient Advisory Committee, European Cancer Organisation, said that data is changing rapidly, not only due to Covid-19, but as part of the normal patient experience. Greene challenged the campaign by thinking not only about what to do tomorrow, but also:

"*What should we have already done?*"

Greene provided an example from Ireland, where the impact of Covid-19 has been biggest on mental health, with a dramatic increase in the number of counsellors needed. In Finland, Greene said that intensive care facilities are filling up fast, with major surgeries being cancelled. In the Netherlands, stated Greene, regular oncological care has been scaled back due to the increase in Covid-19. Greene highlighted that a treatment delay of four weeks equates to between a 6% and 13% increase in deaths. Greene proclaimed that we need to act on the information we have today, and use it as a catalyst to move from plans to action.

Do Not Forget the Co-Morbidities

Jennifer L. Baker, Co-chair, Childhood Obesity Task Force, European Association for the Study of Obesity (EASO), and Senior Researcher, Center for Clinical Research and Prevention, Copenhagen University Hospital, reminded the audience that obesity is one of the co-morbidities associated with poorer outcomes for other diseases. For example, Covid-19 and cancer. Baker stated that obesity has been declared as a disease by the WHO and Joint Commission, and informed the audience that obesity is a gateway to 13 types of cancer.

Baker stated that increasing the professional recognition of obesity as a disease, especially with

its impact on cancer, is a key challenge. Baker said that, additionally, we have to go beyond primary prevention, and whilst prevention of childhood obesity is mentioned in Europe's Beating Cancer Plan, we also need to think about people living with obesity now. Baker called for further research into the biology of obesity, and the need to address this over the life-course of the disease. Approximately 20% of obesity-related cancers can be prevented, for example, colorectal, and ovarian cancers.

Baker stated that obtaining good data on obesity patients is difficult, and this has come to light especially due to Covid-19 pandemic. Baker closed by asking, what role could the European Health Data Space (EUHDS) play?

Discussion

In the ensuing discussion, Luigi Riccardiello emphasised the disruption that Covid-19 has caused to colorectal cancer screening. Mark Lawler acknowledged the challenges to colonoscopy services, however, advances in modelling could help, for example, FIT (Fecal Immunochemical Test) levels could predict 80% of cases and allow action to be taken. Canfell suggested that tailored, risk-stratified screening, optimised to life-course, and individual risk will help us close some of the gaps caused by Covid-19.

Andreas Charalambous reiterated that HERA could be used to address oncology workforce shortages, as workforce planning and forecasting could be considered part of health systems' resilience. In response, Cerdas reminded the audience that HERA is not a stand-alone agency, however, within the proposal for a regulation on serious cross-border threats to health, health workforce issues will be addressed.

Crul asked what role tele-learning and tele-medicine could play. Greene replied that any new service should not be 'just about introducing new technology', but should be introduced because it will help the target group. We forget the initial reason for coming up with new solutions, and we should always keep in mind what we are trying to achieve, i.e., improving quality of care for patients.

In response to Crul asking if there is an EU approach to address shortages of medical counter measures and personal protective equipment, Moll replied that the industry can organise themselves in a matter of days to address such shortages.

Additionally, the degree of solidarity in Europe has increased, one of the biggest learnings from the pandemic. Moll stressed the need for a clear, quick view of patient needs, and reiterated that we have been able to stockpile essential medicines at EU level. Moll stated that we have also learnt to trust and rely on each other. Moll reminded the audience of the agility of R&D and marketing authorisations, HTA processes, and the use of digital health during the pandemic, and that we should build on these developments and lessons learnt in post-Covid-19 times.

Lawler, commenting on the use of tele-medicine, asked how it is possible to truly judge if a patient has lost weight over a video call? Lawler stated that we still need more data on the true effectiveness of the broader and systematic use of tele-medicine services.

On the point of data gaps, and how we can 'build back better', Moll suggested that the EUHDS is never explicited as an acronym and is not standard. Suggest replacing with 'European Health Data Space' throughout has become even more important since Covid-19. Making the data visible is crucial, and Moll emphasised the role that the Data Navigator could play in this.

Canfell stated that Australia had not had as many Covid-19 patients compared to Europe, however they still had endured a strict lockdown. Canfell mentioned that Australia is also struggling to get timely data on the impact of Covid-19 on health services, as well as the difficulties in gaining access to data within global research collaborations. Canfell stated that we need to invest in the development of cancer registries to access timely data on cancer.

Greene described a recent European Society of Surgical Oncology (ESSO) congress on patient-reported outcome measures (PROMS), and coined the phrase "data is once the deed is done". Greene remarked that we need to know how the data is going to affect and improve our lives and care.

Lawler stated that we are used to seeing data on Covid-19 every single day, so why can't we have this for cancer?

Guy Buyens stated that patients with low digital literacy may be excluded, exacerbating current cancer health inequalities.

Alexandra Abela Fiorentino stated that patients refused cancer treatment due to Covid-19, as they were more scared of contracting and dying from Covid-19 than from cancer.

Marianna Vitaloni, Digestive Cancers Europe, stated that people have avoided symptoms due to Covid-19, so now there are more late-stage presentations of digestive cancers. In response to Vitaloni's question on how we restore confidence, Mark Lawler replied that this was the reason why we set up the Time To Act Campaign and Data Navigator.

Greene said that we need to tailor the information we provide to our citizens, and it should have been done yesterday. "If they have symptoms, they should go and seek help." Greene also highlighted how we could encourage friends and family to help pick up on risk factors.

Cerdas stated, (in reply to views on how Europe's Beating Cancer Plan can help with the Building Back Better Initiative), that we cannot delay early diagnosis and access to treatment. Cerdas hopes we can reach the end of the negotiations by the end of this year, and that it will lead to a series of actions by the Commission.

Missing No Opportunity for Covid-19 Build Back

All current and future EU and WHO initiatives related to cancer must take into account the enormous damage imposed upon cancer services in all countries as a result of the Covid-19 pandemic. Delivery of timely and effective solutions through Europe's Beating Cancer Plan and the EU Cancer Mission must be a priority in the urgent process of building back smarter, including in respect to vaccination, screening, early detection and treatment programmes.

Access further positioning by the European Cancer Organisation's Special Network on the Impact of Covid-19 on Cancer here: europeancancer.org/topic-networks

The EU Cancer Mission & Research

This session was hosted by Matti Aapro, President of the European Cancer Organisation.

A Better Future for Us All

Mariya Gabriel, EU Commissioner for Innovation, Research, Culture, Education, Youth and Sport, reminded the audience of the recently published EU Mission Cancer Implementation Plan,[28] and thanked Professor Walter Ricciardi for his leadership of the Mission Board.

Gabriel stated that the EU Cancer Mission has a budget of €378 million to deploy several concrete actions, including:

- Sharing data, via UNCAN by 2023
- Fighting childhood cancer, with a monitoring programme expected by 2027
- Engaging with citizens, including via regional and local authorities, supported with a cancer toolkit
- Creating a OneStop Cancer Info Centre by 2025, which will work with the European Partnership on Personalised Medicine, the Healthy Innovation Partnership, the Knowledge Centre on Cancer (which recently published European guidelines on breast cancer screening and diagnosis)[29]
- Improving education in cancer, for example the Marie Skłodowska-Curie Actions
- Funding €2.5 billion from Horizon Europe and Erasmus+ for cancer education, training, research, and innovation

Gabriel concluded by stating that fighting cancer is supporting a better future for us all.

We Have Lift Off!

Walter Ricciardi, Chair of the EU Cancer Mission announced that "we are on track with the Mission", and that the Mission has five intervention areas and thirteen recommendations. Ricciardi stated that they have already started to deliver some of the proposed actions, such as the guidelines mentioned by Commissioner Gabriel.

Ricciardi stated that the Cancer Mission does not wish to reinvent the wheel, but the aim is to make existing actions more sustainable and interoperable. Ricciardi mentioned that the Cancer Mission Board would like to develop new methods for screening and detection, facilitated by a network of national cancer hubs. The Mission will also address childhood cancer, and aims to improve clinical trials using personalised medicine approaches, and focusing on improving quality of life.

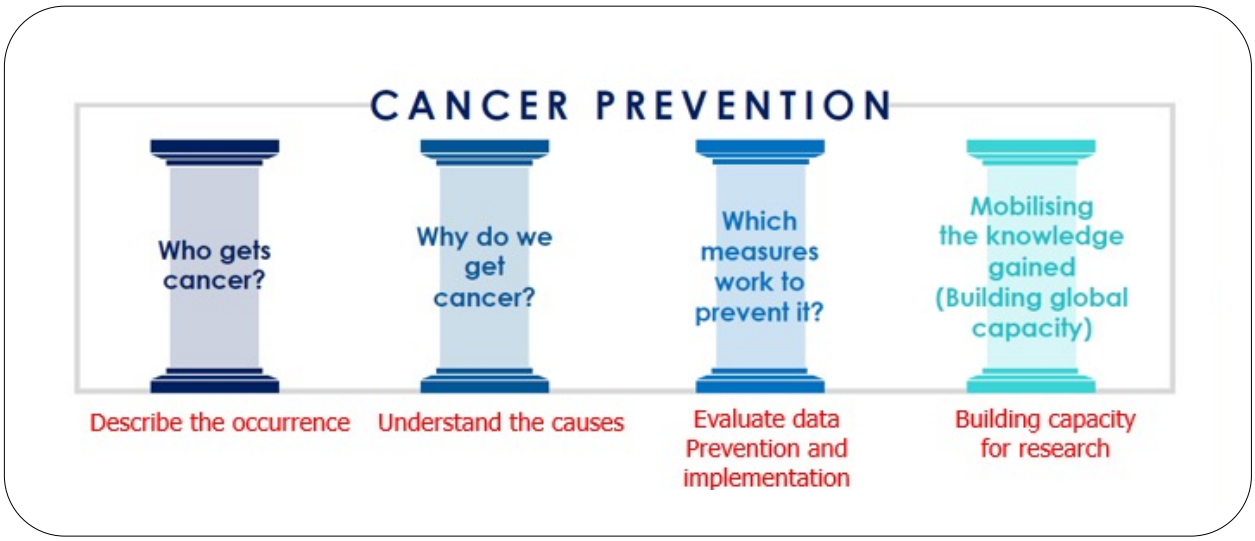
Ricciardi informed the audience that some of the Horizon Europe-related actions have already started, citing for example the ones related to data sharing and palliative care, using data tools for decisions, in data sharing, and related to infrastructure.

In concluding, Ricciardi stated that:

"*We do not want to repeat the mistakes of the past.*"

Ambitious Targets

Elisabete Weiderpass, Director, International Agency for Research on Cancer (IARC) provided an intervention on how both the WHO and the IARC could contribute to the Mission. Weiderpass said that in 2020, 2.95 million people were diagnosed with cancer in the EU 27, with 1.27 million dying from cancer in the same year. Weiderpass stressed that by 2040, these figures are expected to reach 3.61 million and 1.67 million respectively. Cancer has a major impact on the EU economy, with a loss of productivity reaching over €70 billion. Weiderpass emphasised that the Cancer Mission was the only health-focused Mission, aiming to save more than three million lives.



Weiderpass reminded the audience that at least 40% of all cancer types can be prevented, and described the four pillars of IARC's Medium-Term Strategy for 2021-2025,[30] aiming at improving cancer prevention.

Weiderpass also cited the goal of making 80% of the EU population aware of the EU Code Against Cancer by 2025.

Implementation Counts

Jan Geissler, Member, EU Cancer Mission Assembly and Member, Patient Advisory Committee, European Cancer Organisation, was pleased to see patients in each session of the European Cancer Summit, as ultimately, patients are the end users and recipients of everything we are trying to achieve.

Geissler gave special thanks to both Commissioners Gabriel and Kyriakides for keeping cancer high on the agenda, when it could have so easily been dislodged by Covid-19. Highlighting the importance of implementation, Geissler highlighted he measures effectiveness of actions based on what is happening, rather than on what is planned.

Geissler underlined the need to reduce fragmentation and inequalities in cancer, for example, between the East and West, and the North and South of Europe. Geissler praised the Knowledge Centre on Cancer, as it considers it as breaking down silos.

Geissler also mentioned the potential link between UNCAN and the EUHDS, and the potential for expanding digital cancer care, including being able to compete with China and the US to develop standardised, interoperable big data solutions.

In concluding, Geissler stated that implementation is what matters and that we should do better and be quicker than in the past. He added that patient organisations should be involved in the implementation plan.

Industry a Key Partner in European Innovation

Roks, Member, EU Cancer Mission Assembly and Head of the European Oncology Business at Novartis Pharma, provided several suggestions on how we could improve the impact of the mission, including:

- Taking a holistic approach
- Looking at the full spectrum
- Engaging with all stakeholders

Roks admitted that while Covid-19 has affected all of us, there are many good lessons to take from the pandemic, such as the direct relationship between health and wealth. To address related inequalities, innovation is key. Roks stated that Europe is losing ground in this regard, as of the top 50 universities in the world, only 16 are in the EU.

Roks then reiterated Commissioner Gabriel's words, in that we should strengthen the relationship between education, research, and innovation. While stressing the importance of public research, Roks also highlighted the industry's contribution to innovation that cannot be neglected. He mentioned that the Covid-19 crisis could not have been dealt with as it was without the contribution of the industry. In this respect, discussions should be held on how to better cooperate.

Mariya Gabriel, EU Commissioner for Innovation, Research, Culture, Education, Youth and Sport, and panellists discuss the latest EU Cancer Mission developments.

Roks also stated that the digital infrastructure is fragmented in Europe, for example, with registries, and we should move beyond 'data lakes', to 'data oceans' to have a better understanding of the disease.

"*To move the needle, we need the data.*"

Citizens are Upfront in the Mission

Christine Chomienne, Vice-Chair of the EU Cancer Mission, referring to experience from the French National Cancer Institute (INCA), stated that she understood the difficulty in establishing a programme of research. However, the positive news, said Chomienne, was that the European Commission managed to produce Europe's Beating Cancer Plan and Mission, with implementation plans.

Chomienne emphasised that the Mission is a new approach and opportunity, that will work in synergy with Europe's Beating Cancer Plan (which itself, has another budget and workflow). This is an opportunity to provide solutions to the challenges that citizens face every day in their life.

"*Citizens are upfront in the Mission.*"

Chomienne stressed that patients and citizens have to be co-constructors in the process, in addition to all the other stakeholders. Chomienne CONCLUDED by proclaiming that we need to reach out to patients and citizens and tell them that they have they have an opportunity to shape the actions to fight cancer.

Discussion

In the ensuing discussion, Mark Lawler asked about the inclusion of specific provisions on cancer comorbidities within the Cancer Mission. Chomienne replied that this is not something that has been forgotten, and it is behind some of the Mission Board's other work, for example, working with the elderly. The Mission considers it as important, but due to the brief given by the Commission, they could not focus specifically on it. Chomienne declared that it is up to all of us now, to implement the calls that come out.

Ricciardi stated that the concept of the Mission was inspired by the Mission to the Moon, and we have headed lessons learnt by working together (not in silos), from the start.

Geissler said that when we think about EU data collection, we are always very clinically focused, and what we need is real-world data.

Prof Mehmet Ungan from WONCA Europe raised the importance of primary care in prevention, and highlighted the neglect in research in primary care. Ricciardi replied stating that there is a continuum of care, including primordial prevention (prevention outside of healthcare system). Despite the variety of health system organisations in Europe, the importance of primary care is recognised.

Weiderpass said that the bulk of cancer prevention can be planned, delivered, and monitored by primary care HCPs, and suggested that in the EU, primary HCPs could help increase HPV and Hepatitis B vaccinations.

When speaking about Code of Cancer Practice, Weiderpass stated that, like any good code, or guideline, they need to be regularly updated with new information and evidence, for example on exposure to new risk factors. Weiderpass also stated that there is an issue with health literacy concerning cancer prevention, and we need to work together with civil society organisations and learned societies to improve this.

Michelle Mitchell, Cancer Research UK asked how third countries, such as the UK, could partner with the EU in achieving the Mission's objectives. Chomienne replied by saying that all cancers are becoming rare cancers, and we cannot do it alone in the EU, and therefore we need a global effort with international collaboration.

Cancer Research Leadership in ALL EU Countries

The European cancer community applaud the ambitions and intents set out by the EU Mission on Cancer. The implementation of the Mission must be governed by the principle of ensuring equity and access to knowledge, research and care between and within countries, regions, and between people of different socio-economic backgrounds, genders, and age groups. The EU Mission on Cancer should further conceive of itself as having the role of stimulating a reality in which all countries in the EU are at the frontiers of new research and knowledge in cancer.

Advancing the Vision of Comprehensive Cancer Care in Europe

This session was hosted by the Co-Chairs of the Quality Cancer Care Network, Philip Poortmans and Simon Oberst.

Philip Poortmans, Co-Chair of the Quality Cancer Care Network, opened by stating, as a multidisciplinarity oncologist himself, he believes that inter-disciplinarity is critical in oncology, including to provide the highest quality of cancer care. Poortmans called for the Network's Essential Requirements for Quality Cancer Care[31] to be applied in practice, and informed the audience that the Network's next topic will be on haematological malignancies.

Simon Oberst, Co-Chair of the Quality Cancer Care Network said that we have a unique window of seven years to advance cancer research. Initiatives such as UNCAN will have a huge impact on accelerating cancer research across Europe.

"What instruments exist at national level to help implement policies?"

"How do you help athletes to 'vault the bar'?"

Building on Three Joint Actions in Cancer Control

Tit Albreht, Senior Health Services and Health Systems Researcher at the National Institute of Public Health of Slovenia, and Coordinator of the Innovative Partnership for Action Against Cancer (iPAAC), informed the audience that the Time To Act Campaign received a lot of traction in Slovenia, for example, related to screening programmes, and the National Comprehensive Cancer Centre (NCCC).

Albreht recalled that during the first Slovenian Council Presidency, policy dialogues revealed that Member States seemed hesitant to work on European-level guidelines in health, however, from this we have been able to move forward, for example with the three Joint Actions on cancer.

Albreht provided an overview of several relevant publications, including the European Guide for Quality National Cancer Control Programmes,[32] the European Guide on Quality Improvement in Comprehensive Cancer Control,[33] and two CanCon Joint Action Policy Papers.

Albreht stressed that there is a strong need to address the 'rapprochement' from Member States, who, due to the organisation of their national and regional authorities, may not be immediately enthusiastic about NCCCs. Additionally, solutions need to be found for smaller Member States.

Albreht also took the opportunity to announce the start of a new Joint Action on creating an EU Network of CCCs (CraNE).

Funding for NCCCs and the Role of Mission Hubs

Marcis Leja, EU Cancer Mission Board Member, Professor of Medicine and Vice-Dean, Faculty of Medicine, University of Latvia, stated that the most debated of all of the 13 Mission Cancer Recommendations relates to the set-up of the NCCCs. Leja called for translational and clinical research to be embedded, as there are significant inequalities between, and within Member States, and there is also a de-link between university research hospitals and cancer centres.

Leja also highlighted that currently, there is no big stimulus for countries to set-up NCCCs, and funding to do so is an issue. Existing funding, for example, Twinning grants, is not enough. Motivation at national level is also a critical factor for success, and relates directly to the role of the Mission Hubs. Some countries have difficulty in setting criteria and organising accreditation for cancer centres, and Leja suggested that EU funding could help with this, with matching national funding.

Leja concluded by saying that the upcoming Joint Action is critical, and Mission hubs will be critical in bringing together different stakeholders at national level.

Session Co-Chairs and panellists discuss the vision of comprehensive cancer care in Europe.

Empowering Patients is an Investment

Alex Filicevas, President, All.Can and Member, European Cancer Organisation's Patient Advisory Committee, provided the All.Can definition of cancer care:

"Cancer care should deliver the best possible health outcomes, using different resources, such as the human, financial, infrastructural, and technological resources available, with a focus on what really matters to patients and society."

Filicevas proclaimed that greater efficiency in cancer care is achievable, but it requires collaboration at both EU and national levels. Patient empowerment is the key to unlocking efficiency, transparency, and high-quality care, but this requires cancer centres to share their data. Filicevas stated that this should be seen as an investment in high-quality care. Data, for example, PROMS can help provide information on the efficiency and quality of cancer centres.

Filicevas concluded by stating that All.Can aims to use all the resources available efficiently to deliver high-quality cancer care.

High-Quality Research, High Quality Care

Niko Andre, Global Head of Immuno-Oncology and Haematology, AstraZeneca, highlighted the role of industry as a major partner because it is able to scale-up and drive improvements in quality care, access to care, and learning from care. Andre stated that the failure rate of drug discovery is high, up to 90%, and therefore there is a lot of interest in high-quality research to improve this rate. Andre stated that industry already collaborates with cancer centres, and with all of the data available, we need to collaborate even more effectively. Andre highlighted that a reliable comprehensive cancer network is extremely valuable, with patients at the centre of everything we do.

NCCCs Should Reduce Inequalities

John Gribben, Past President, European Haematology Association (EHA) called for NCCCs to reduce inequalities, and to increase access to clinical trials. Gribben stated that for acute leukaemia, and many paediatric haematological conditions, treatment in clinical trials is standard practice.

In haematology the treatments are expensive, targeted treatment approaches, which leads to inequalities, and we must find ways to provide optimal care for all across Europe. Gribben stated that everything starts with an accurate diagnosis, and in haematology there is a focus on precision medicine, precision diagnosis, prediction, and

testing. Gribben concluded by emphasising the need to be able to access and share data and learnings.

Data Helps Improve Quality of Care

Lorenza Marotti, CEO of EUSOMA, stated that the Essential Requirements for Quality Cancer Care have become a go-to resource, and bring together stakeholders at national and local level to tackle breast cancer. Marotti stated that the certification process has increased the quality of care, as it is also based on real data. Marotti concluded that we need 'data warehouses' to collect data and help monitor the quality of breast centres.

Discussion

In the ensuing discussion, the European Association of Nuclear Medicine stated that this Network should also focus on combating inequalities, for example in nuclear medicine facilities.

Rodbin Campos called for future actions to address cancer in migrants in Europe, and related policies regarding their care.

Additionally, several participants also stressed the need to collect and utilise data, and that making data available should be a prerequisite for public funding.

A Goal Focused EU Network of Comprehensive Cancer Centres

The core purposes of the new EU Network of Comprehensive Cancer Care Centres should be understood as including:

(a) the reduction of inequalities in diagnosis, treatment and care, including in access to clinical trials;

(b) strengthening the quality of translational, clinical and outcomes research; and

(c) integrating clinical care and research and evaluating the quality of cancer care throughout.

Drawing on the Strength of the Many for Quality Cancer Care

To achieve the Beating Cancer Plan's goal on comprehensive cancer care access, regional hospitals and primary care providers should be encouraged and supported to develop collaborative regional and local networks, linked to the EU Network of Comprehensive Cancer Centres.

Access further positioning by the European Cancer Organisation's Quality Cancer Care Network here: europeancancer.org/topic-networks

I Am Not a Statistic. The Human Element of the Beating Cancer Plan

The next session was hosted by the Co-Chairs of the Survivorship and Quality of Life Network, Andrew Davies and Csaba Dégi.

Andrew Davies, Co-Chair of the Survivorship and Quality of Life Network opened the session by reminding the audience that it was this Network who co-created the EU Code of Cancer Practice. Despite Europe's Beating Cancer Plan containing proposals for a Cancer Survivor Smart-Card, an EU Cancer Patient Digital Centre, and the Better life for Cancer Patients Initiative, the psycho-social aspects of survivorship were still lacking in the Plan.

Davies stated that quality of life is relevant to all other Networks, and everyone in oncology. During the survivorship phase, people face a range of problems, and we know that the number of survivors is increasing significantly. Many people hold the belief that once tough treatment is over, "that's it", but in fact, upon stopping treatment, the post-treatment survivorship period can be even more difficult in many cases. Survivors have physical, psychological, and social unmet needs.

Csaba Dégi, Co-Chair of the Survivorship and Quality of Life Network, recalled the Free From Cancer: Achieving Quality of Life for All Cancer Patients and Survivors[34] report, which highlights seven key priorities to help more cancer patients and survivors achieve a life truly free from cancer, and its often underappreciated impacts.

An Integrated Ladder of Patient-Centred Care

Stein Kaasa, Professor of Palliative Medicine, University of Oslo, Norway, and Head of Department of Oncology, Oslo University Hospital, Oslo, Norway, spoke about the social and commercial determinants and solutions for successful re-integration of survivors back into society.

"Cancer is more and more becoming a chronic disease."

Kaasa stated that as such, the importance of survivorship and quality of life will become more and more significant in the future. Kaasa stated that the 'holy grail' of cancer care, is the delivery of patient centred care, and to achieve this, a combination of patient and tumour care is needed. Randomised-controlled Trials (RCTs) have shown that symptom management, anxiety, depression, overall quality of life, satisfaction, survival, and health economy are all improved from treatment. However, these improvements are not transferred or implemented into public or primary health care.

Kaasa called for the inclusion of the basic assessment of psychological issues and caregiver distress, and advanced care planning in relevant guidelines. There are some common barriers, said Kaasa, as there is little commercial interest in symptom management. Kaasa stated that people

Session Co-Chairs and panellists discuss the human element of Europe's Beating Cancer Plan.

want to live as long as possible, and this leads to the trap of overtreatment, for example, where treatment is still being provided in the last two weeks of life. Kaasa stated that PROMs are not part of routine care, and modern digital solutions have not been incorporated into electronic health records (EHRs).

Kaasa stated that we should be using an integrated ladder of Patient-Centred Care (PCC), inspired by the WHO Pain Ladder. Kaasa concluded by recommending the following:

Personalised Healthcare is Not About Data, it's About the Person

Martin Inderbitzin, Neuroscientist and Founder of MySurvivalStory.org provided the survivorship perspective. Inderbitzin coined that phrase "illness beyond the illness". Inderbitzin, a metastatic pancreatic cancer patient survivor for the last ten years, encouraged the use of changing one's mindset, and has been developing online support programmes using the phrase 'mindset versus mental health problems'.

"Cancer is not just a biological challenge."

Inderbitzin stated that 90% of people struggle with their diagnosis or treatment, and 30% struggle from significant psychological disorders, with issues including work, finances, body image, body function, survivorship, and family life. Inderbitzin challenged why, when we speak about 'people' we speak about 'life', whereas with 'patients' we speak about 'quality of life'? We are all people, and all want to have a good life. Inderbitzin highlighted that there are huge costs, and therefore huge opportunities in the 'market' of cancer survivorship.

Inderbitzin stated that his non-profit website is about helping cancer patients change their story, to change their mindsets, to inspire them, and to reduce stigma. Stories alone are not enough, this needs to be supported by support programmes.

Inderbitzin stated that the video does not give any advice, but only asks people their thoughts. The 'illness beyond the illness' cannot be treated in the hospital, and personalised healthcare is not

- How to handle fear?
- How to handle work?
- How to find support?
- How to handle stigma?
- How to let go?
- How to trust?
- How to accept?
- How to support?
- How to heal?
- How to help?
- How to find your way?
- How to handle an emergency?
- How to make the first step?

about data, it's about the person. Doctors, and the medical profession are data-driven, whereas patients are emotionally-driven. Inderbitzin emphasised that emotions and mindset are key, and outlined a pilot study, using stories from other survivors to change people's own mindset on survivorship.

Inderbitzin made the following four recommendations, firstly, to make emotional and psychological support accessible and 'cool'. Secondly, Inderbitzin called for a 'start-up' culture to address survivorship. Thirdly, Inderbitzin called for guidelines to be scientifically based, but with real-world impact. Finally, Inderbitzin called for 'investment' and not money, i.e., people willing to invest in a solution with a long-term sustainable model.

The Importance of Biopsychosocial Screening

Matthew Loscalzo, Professor, Population Sciences at the City of Hope-National Medical Center stated that survivorship is a real challenge. Survivorship can be from the moment of diagnosis until death, a matter of weeks, or three to five years after diagnosis.

Loscalzo asked what does comprehensive biopsychosocial screening have to do with survivorship? Loscalzo replied, 'almost everything'. Loscalzo went on to say that there are multiple risk factors and comorbidities, including on health behaviours, and a diagnosis creates a greater openness to think and act healthier as patients shift into 'survival mode'.

Loscalzo stated that patients want to tell us what they need, and that patients are our partners. Economic problems should be addressed early on, as well as fertility, future dreams, and aspirations. Loscalzo explained that approximately one third of all cancer patients experienced high levels of distress.

So, what is biopsychosocial screening? Biopsychosocial screening looks prospectively for risks and illness-related problems. Loscalzo stated that screening is beneficial because it shows the patient that we are listening to them, and provides a way of helping them, in the ways that they would like, not ways HCPs think they would like. Loscalzo also emphasised the importance of early screening, for example, immediately at diagnosis, as we know from the data that this will save money, and patients will live better, longer lives.

Loscalzo stated that the top areas of concern of patients were high levels of distress, sleep and fatigue, side effects, talking with the doctor, finances, worrying about the future, and pain[35]. Whilst some HCPs may be hesitant to screen for concerns related to prognosis, in Loscalzo's experience, they have not received one single complaint about a prognosis-related question from patients.

Plans Should be Backed by Budgets

Luzia Travado, President-Emeritus, International Psycho-Oncology Society (IPOS) and Clinician & Researcher of Psycho-Oncology, Champalimaud Foundation, Lisbon, Portugal, highlighted that the CanCon Joint Action produced a guide with a chapter on survivorship and rehabilitation, including advice on implementation.

Travado outlined that only one third of plans with psychological support actually have a budget allocated to it. This is not because of the high cost, but because we need a shift towards the 'start-up' style investment system proposed by Inderbitzin. Travado stressed the importance of psychological support for patients to help them through their journey. Travado reminded the audience that in the past 15 years, the Portuguese and Slovenian Council Presidencies have been successfully putting health onto the agenda, with evidence-based guidelines being written, and awaiting implementation.

Travado stated that now we have Europe's Beating Cancer Plan, we should also lobby our national parliaments, and propose annual high-level meetings with Ministries of Health to discuss progress of the plan, and offer support and resources to those who are struggling. This is where the Beating Cancer Plan Implementation Roadmap can help.

The 'R' in PROMS Should be Changed to 'Relevant'

Natacha Bolaños, Member, European Cancer Organisation's Patient Advisory Committee, said that in the last 20 years, major advances have been made in haematology, and as such, the complexity of medical decision-making has also increased. Bolaños stated that many of the instruments available in haematology do not address issues

of quality of life or PROMs. Many PROMs have not been developed with patients, or are not relevant to patients. Bolaños stated that PROMs should be developed with multi-stakeholder input, and during the clinical development stages, before marketing authorisation.

Bolaños highlighted that in Europe, the patient community is pleased to see that Europe's Beating Cancer Plan focuses on holistic aspects, however, there are unique issues faced by patients with haematological cancers. Each patient has their own perspectives on quality of life. The interventions may be the same, but they affect patients differently.

Bolaños also stressed the need to improve pain management and quality of life, in particular for those in palliative care, or end-of-life care. Bolaños called for PROMs and PREMs to be implemented in practice to ensure a patient-centred approach.

Drugs are Only One Element of Cancer

Markus Kosch, Head, European Oncology Business Division, Daiichi Sankyo, declared that industry has a role to play in finding solutions, including looking beyond safety and efficacy, such as quality of life and psychological impacts. Kosch stated that this relates not only to the design of clinical trials, but also in the engagement with the PROMs agenda.

Kosch called for regulators and HTA bodies to accept more PROMs in addition to progression-free survival (PFS) and overall survival (OS). Kosch cited the DESTINY-Breast (DB12) trial,[36] which is a study looking at the impact therapy has on brain metastases, as the cognitive aspects matter to patients.

Kosch concluded by saying that the drug is only one element of the patient's experience with cancer, and that industry needs to recognise and respond to how the medicine can fit within this wider experience, and that we should increase the emphasis on non-traditional outcome measures beyond PFS and OS.

Discussion

In the ensuing discussion, Kathy Oliver stated that in the International Brain Tumour Alliance's 2021 magazine, there is a feature[37] on a programme from the University of California on a special model of brain cancer survivorship care. This includes peer support, physical exercise, access to relevant information, nutrition and integrative approaches, expressive arts, and relationships, amongst others. Oliver stated that the focus is on strengths-based, goal-orientated, compensatory strategies to help survivors thrive.

Matti Aapro stated that we must do our best to have our trusted psychiatrists working with us, instead of just prescribing medication to address psychological issues.

Several audience members stressed the need to integrate PROMs into the regulatory framework, to which Mirjam Crul added that we cannot have a 'one-size-fits-all PROM'.

Supporting Survivorship & Quality of Life on Many Fronts

An area of Europe's Beating Cancer Plan and the EU Mission on Cancer requiring further elaboration relates to Survivorship and Quality of Life. As flagships and other initiatives are taken forward, from the new Knowledge Centre on Cancer to the EU Network of Comprehensive Cancer Centres, from the Cancer Inequalities Registry to the Pharmaceutical Strategy and the European Health Data Space, all opportunities to maximise their contribution to the improvement of survivorship and quality of life should be identified and taken.

Access further positioning by the European Cancer Organisation's Survivorship & Quality of Life Network here: europeancancer.org/topic-networks

Leave No One Behind: Advancing Health Equity in Cancer Care

This session was hosted by the Co-Chairs of the Inequalities Network, Nicolò Battisti and Hendrik Van Poppel.

Hendrik Van Poppel, Co-Chair of the Inequalities Network opened the session by reminding the audience about the Network's Action Report from the Roundtable, "It Can Be Done – Beating Inequalities in Cancer Care",[38] which provides headline recommendations and case studies demonstrating how to achieve improvements in inequalities.

Nicolò Battisti, Co-Chair of the Inequalities Network stated that a multi-stakeholder approach is needed, for example, with the proposed Inequalities Registry outlined in Europe's Beating Cancer Plan. Battisti called for all cancer inequalities to receive attention.

Going Global Before Going to the Moon

Bishal Gyawali, Medical Oncologist & Scientist, Division of Cancer Care and Epidemiology, Assistant Professor of Public health Sciences, Queen's University Cancer Research Institute, stated that we need a 'Cancer Groundshot' programme. Gyawali cited discussions in the US related to an FDA position on approval standards for anticancer agents, where a difference of progression delay by only three days was mentioned.[39] However, in low and middle-income countries (LMICs), there are people who are not even getting access to curative surgery or radiotherapy. Gyawali stated that reducing inequalities is all about priorities.

Gyawali recalled discussions in The Lancet Oncology concerning the use of AI in oncology, and challenged whether oncology really needs AI, or if a more common-sense approach would be more effective. For example, the elimination of cervical cancer by vaccination.

"*We should be going global, before going to the moon.*"

Gyawali stressed the need to make the best of existing interventions before debating the affordability of newer, expensive medications. Gyawali said that whilst LMICs can participate in clinical trials, not all trials are created equal. Gyawali called for an end to the practice of countries not receiving access to drugs that were trialled in the country.

Gyawali also made the point that some LMICs still require access to the basic cytotoxic drugs, and compared news of advanced anti-cancer therapies similar to the discovery of a black hole, "Interesting, but not likely to affect us for some time." Gyawali stated that in order to pay for the relatively cheap treatment for leukaemia, 75% of families had to sell their property to afford it.

Gyawali provided the following take-home messages:

- We should prioritise cancer services based on local need
- We should prioritise and invest in meaningful clinical trials, also tailored to local need
- We should ensure access to already proven cancer treatments

The Beating Cancer Plan as an Equaliser

Nicolae Stefanuta MEP, Co-ordinator, Special Committee on Beating Cancer (BECA), stated that BECA is one of the most united committees in the European Parliament, and that the pandemic has been a great equaliser, uniting humanity. Stefanuta highlighted that cancer, on the other hand, is definitely not a great equaliser, and is quite the opposite. In fact, Stefanuta, referring to Gyawali's slides, stated that not all things are equal in Europe, with Romania being 'bright orange' the map.

Stefanuta recommended that the Inequalities Registry should be used with surgical precision, and that no country should be lacking the basic drugs needed to beat cancer. Stefanuta also stressed the need for data to address inequalities, as for example, in Romania, there is an average 700 days delay from marketing authorisation until patient access to medicines.

Stefanuta stated that investment often dwindles after a pandemic, and warned against dwindling enthusiasm for Europe's Beating Cancer Plan, (now that it is published). Stefanuta recalled that the European Parliament managed to obtain an additional €125 million for health funding in the EU budget, with an additional €75 million for health-related Horizon Europe activities.

Stefanuta also raised the issue of the right for cancer survivors to have their previous cancer diagnosis forgotten when in correspondence with financial service providers. This is currently unevenly applied across Europe. Stefanuta concluded by stating he hoped that Europe's Beating Cancer Plan will be an equaliser, because as Europeans, we should not leave anyone behind.

Addressing Regional Imbalances

Teodora Kolarova, Member, Patient Advisory Committee, European Cancer Organisation cited the 'SCAN' study, (exploring disparities in access to care and diagnostics in Europe), comprising 1100 responses from all over Europe.[40] The prevalence of neuroendocrine tumours is growing, however the challenge in diagnosing them remains. Kolarova stated that 44% of patients are misdiagnosed, with many patients diagnosed by chance whilst being tested for other conditions. Kolarova reported that there is an imbalance in financial support, as just under 50% of Central and Eastern European countries have a national healthcare plan that addresses neuroendocrine tumours. There are also financial inequalities, as over 30% spend over 30% of their annual income on care in Central and Eastern Europe. Kolarova added that there are also inequalities in access to diagnostics across Europe, for example in diagnostics for neuroendocrine tumours.

Kolarova stated that we need to implement financial instruments to support diagnostics and treatment for neuroendocrine tumours, as well as maximising the use of multidisciplinary care. Kolarova called for trained and motivated HCPs, well maintained infrastructure, and equity in access to healthcare services.

Significant Variabilities Between Regions in Europe

Claudia Allemani, Professor of Global Public Health in the Cancer Survival Group, London School of Hygiene and Tropical Medicine, and Scientific Committee member, European Cancer Patient Coalition (ECPC), opened by stating that clinical trials aim to achieve the highest level of survival, and patients recruited to trials only represent 10% of the real cancer patient population. Allemani presented data from the CONCORD Program[41,42] on global population-based cancer survival. Allemani stated that the third cycle of the programme covers cancer patients in the period 2000-2014, from 71

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Main findings

- **World-wide differences in 5-year survival**
- **Breast, colorectal: increase in most developed countries, and in South America**
- **Liver, lung: still lethal in most countries**
- **Stomach, oesophagus: survival very high in south-east Asia**
- **Prostate: striking increases, still wide range**
- **Cervix, ovary: wide range, little improvement**
- **Adult leukaemia, melanoma: low survival in Asian countries**
- **Childhood ALL: wide gap in 5-year survival**

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https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(17)33326-3/fulltext 63

countries, 322 registries, with 37 million patients across 18 common cancers.

Allemani presented a case study for age-standardised five-year survival for breast cancer, for the period 2010-2014, which provided an 85% survival rate, but with a variable level of survival. Allemani described significant variabilities between European regions in colon, breast, and childhood cancer. Even in high-income countries, such as the US, there are disparities between ethnicities.

Allemani stated the significance of the CONCORD program, given the global scope, methodological rigour, and comparability of data. Allemani informed the audience that the CONCORD program has triggered several campaigns and actions at global level, and closed by calling for additional papers in cancer and social inequity.

Equality at the Heart of a Cancer Control Agency

Diana Sarfati, Professor, Chief Executive and National Director of Cancer Control Te Aho o Te Kahu, Cancer Control Agency New Zealand, described the three-step pathway to health inequity:

- Determinants of health
- Access to care
- Quality of care

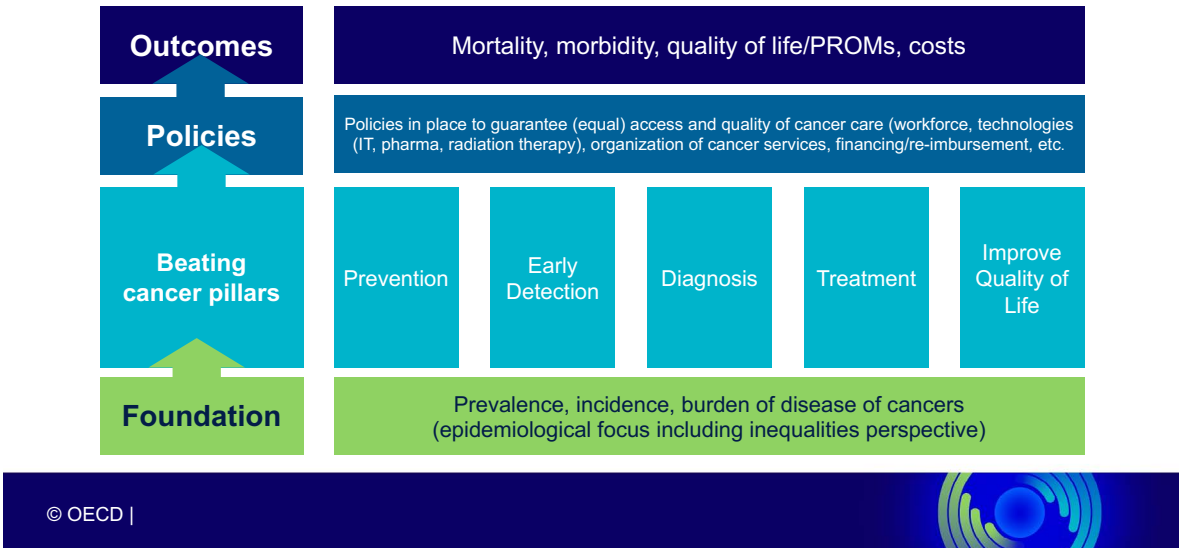
Sarfati stressed that despite a significant amount of work in this topic for decades, there are still three actions needed to address inequalities in cancer care. Clear treatment standards, excellent data, and a health workforce that represents the population. Sarfati described how, in September 2019, the New Zealand Government announced the opening of the new Cancer Control Agency, which was up-and-running within less than three months. The Agency aims to facilitate fewer cancers, better survival, and equity for all. The Maori name of the Agency, (which translates as 'The binding weave of the cloak'), reflects the Agency's commitment to diversity and equality, with 50% of the leadership group being comprised of Maori people.

Sarfati stated that the Agency has a Director of Equity, and they actively recruit Maori and Pacific people. All staff receive professional development opportunities on equality and inequity. Every project has a detailed equity plan, including for example, the recent response to Covid-19, which is framed within an Equity Framework that the Agency developed. Sarfati highlighted one of the successes as being that the Maori population received better chemotherapy services during the pandemic.

A European Inequalities Register

Guillaume Dedet, Health Economist and Policy Analyst, Organisation for Economic Co-operation & Development (OECD), Health Division, stated the

Visualizing the potential building blocks of a cancer framework



OECD are working on a monitoring framework for assessing the state of cancer prevention and care in the EU. Dedet reminded the audience that OECD's Health at a Glance[43] publication has included cancer care for the past 15 years, and from 2022, this will be strengthened by the OECD's involvement in the Beating Cancer Plan Flagship Inequalities Registry.

Dedet stated that the objective of the Registry is to develop an EU-wide framework to monitor cancer, and will comprise a cancer data tool, country profiles, and an overall report. Dedet compared this process to the State of Health in the EU cycle.

Dedet concluded by stating that the Inequalities Registry needs to be useful and available to patients as well as and citizens.

A Joint Stakeholder Approach

Deepak Khanna, President, Human Health Europe & Canada, MSD, stated that MSD and other companies in EFPIA have been active in the area of equity in health and cancer. Khanna cited the example of skin cancer, with one in two skin cancer patients expected to be alive in five years, whereas five years ago, it was only one in 20. Khanna stated that Covid-19 has further deepened existing inequalities, for example in Greece, there has been a 45% reduction in HPV vaccinations.

Khanna said that we need to move from plans to action, especially in inequalities and addressing disparities across Europe. Khanna reminded the audience that 40% of cancers are preventable, and that EU countries should implement and fund National Cancer Control Centres and Plans.

Despite the old adage, 'what gets measured, gets done', Khanna stated that a registry alone will not lead to action. Therefore, we need a joint stakeholder approach, and the measurement should be visible to patients, citizens, policymakers, and other stakeholders. Khanna called for a clear set of indicators, coordinated via a 'European Cancer Cockpit'.

Discussion

In the ensuing discussion Nicolò Battisti agreed that a multi-stakeholder approach is needed, and that marginalisation should be avoided.

The European Association of Nuclear Medicine stated that they are particularly concerned with the issue of inequalities of access, and there is an important East / West divide in terms of access to nuclear medicine services. The Lancet Oncology Commission on Medical Imaging and Nuclear Medicine,[44] examining global access to imaging and nuclear medicine for cancer care, underlined important variations across European countries in terms of equipment such as PET and CT scans. While new evidence is provided to demonstrate the benefits of imaging in improving cancer care and cancer survival, the need to invest in state-of-the-art equipment is increasing, as recognised by the SAMIRA Action Plan.

Deyan Lazarov stated that the WHO Essential Medicines List for Children has been recently updated to include new paediatric cancer indications.

Mirjam Crul, Co-Chair of the Workforce Network stated that without a health workforce, we do not have cancer care, so we should ensure it is included within the registry.

Session Co-Chairs and panellists discuss health equity in cancer care.

A Cancer Inequalities Registry for Public Use

Essential components of success for the Cancer Inequalities Registry include being public facing, intuitive and interactive, permitting EU citizens to easily and quickly view progress towards reducing inequalities across all core areas of the cancer care continuum. This will foster the generation of political will for Europe's Beating Cancer Plan's success in all countries, and accountability at all political levels.

All Cancer Inequalities Deserve Our Focus

As well shining new light on inequalities in cancer care between countries and regions in Europe, attention should also be paid to the inequalities in cancer to be found in respect to social determinants such as age, gender, race & ethnicity, sexual orientation & identity, and in respect to those who may experience social marginalisation such as undocumented migrants, the homeless, those resident within institutions, those affected by mental health problems or substance abuse difficulties. The EU's cancer inequalities agenda should focus on these central aspects as well, pursuing inclusion of potentially more vulnerable categories of individuals within the Cancer Inequalities Registry exercise and facilitating improved data availability and research to advance the understanding of these challenges and ensure equity for all individuals living with and beyond cancer

Inequalities are often able to persist because of the lack of data.
The new Cancer Inequalities Registry can take among its tasks the combatting of these data gaps.

Access further positioning by the European Cancer Organisation's Inequalities Network here: europeancancer.org/topic-networks

Cancer Issues Worldwide

This session was hosted by Matti Aapro, President of the European Cancer Organisation.

United Against Cancer

Hans Kluge, Regional Director, World Health Organisation (WHO), Europe cited the United Action Against Cancer initiative, aimed at joining forces against cancer in the European Region, with a long-term vision to eliminate cancer as a life-threatening disease. Kluge stated that the pandemic has delayed cancer care and caused delays, in what Kluge called 'a deadly interplay'. Kluge cited the findings from the Pan-European Commission on Health & Sustainable Development, calling for action at all levels of society to address the inequalities exacerbated by Covid-19.

Kluge highlighted that one in four people will get a cancer diagnosis in their life, and 44% of people will die from cancer. Kluge emphasised the need for cancer survivors to be able to return to work, to retain a social and emotional life, and the need to invest in health systems and education.

Kluge stated that WHO collaborates with partners internationally, for example in updating cancer control plans to reduce mortality, improve quality of life, and make better use of resources. The WHO has been involved in the development of country-specific recommendations, particularly in relation to recovery following the pandemic. Kluge concluded by stating that the rapid and joint response to the Covid-19 pandemic, (which, like cancer, is a life-threating disease), should remind us that we can, and should come together to beat cancer with the same urgency.

Advancing Cancer Care Through Innovation

Everett E. Vokes, President, American Society of Clinical Oncology (ASCO) opened by stating that ASCO is the world's largest society for cancer professionals, with a Mission and Vision for a global impact, with 45.000 members in 150 countries, aiming to advance equal cancer care through innovation. Vokes called for guidelines to be evidence based, feasible, and culturally appropriate. Vokes stated that a crisis spurs innovation, and that there are several lessons to be learnt from the Covid-19 pandemic.

- There should be virtual consent for clinical trials
- Trials should be integrated into routine care
- Regulatory requirements should be streamlined
- We should retain access to telemedicine services post-pandemic
- Grants to underserved populations should be increased
- Covid-19 exposed the underinvestment in health

Anil D'Cruz, President, Union for International Cancer Control (UICC) described the UICC as the largest and oldest cancer-related membership organisation, with 1.200 members from 172 countries, first established in 1933. D'Cruz stated that the coverage of NCCCPs has grown from 66% in 2013 to 81% in 2017, but many lack country-specific issues, and highlighted Europe's Beating Cancer Plan as a golden opportunity to build better collaboration across the region. D'Cruz also made the case for investing in cancer control, and maintaining the momentum behind prevention, for example, the MPOWER and SAFER packages.

D'Cruz proclaimed that increasing access to effective diagnosis, treatment, and care require comprehensive national policies and strategies, as well as the right legal and regulatory frameworks to meet health system needs. Additionally, D'Cruz stated that such strategies should also cover the entire product lifecycle. D'Cruz concluded by describing the case of cancer and Covid-19, a paradox of global cancer control at the time of a pandemic, with Covid-19 making it apparent that underinvestment in health exposes us all to unnecessary risk.

Early Diagnosis is Key

Cindy Perettie, Head of Roche Molecular Lab, stated that accurate and early diagnosis is key, but to achieve this, we need collaboration across the board, across the whole health system. Perettie stated that implementation of liquid biopsy (i.e.,

NGS) is 12% globally, and 25% in the US, however, prior to the pandemic, the 'gold standard' was tissue testing, and so the barriers introduced by Covid-19 have been somewhat mitigated by the use of liquid biopsies. Perettie mentioned that 'drive-through' blood testing clinics are in operation in some places, and cited another example of innovation from Roche Italia entitled, 'Liquid Biopsy at Home', where samples are taken by nurses in people's homes. Perettie stated that Brazil, Australia, and the UK are also making such tests available at home.

Perettie predicts that liquid biopsy will continue to play a role in the future, by becoming part of regular screening practices. However, Perettie stated that a recent study showed that biomarker testing is inconsistent across Europe, and suggested that the 2022 EU Council Recommendations should address this and other lessons learned.

Early Detection is Critical

Anita Kienesberger, Member, Patient Advisory Committee, European Cancer Organisation opened by stating that global collaboration is a must. Kienesberger highlighted how paediatric cancer differs from adult cancer, and that it is the leading cause of death of children across the world. Kienesberger said that the question 'why does my child have cancer?', usually goes unanswered, as there are no known alterable risk factors for paediatric cancers.

Therefore, declared Kienesberger, early detection is critical. It requires the power of a multi-stakeholder, patient-centred approach. Kienesberger stated that this also requires GP involvement, however there is a lack of competence at global level, as well as inequalities in survivorship, for example, 80% survival in the EU compared to 20% globally. Kienesberger cited the WHO global initiative to improve the survival rate from 20% to 60% by 2030. Kienesberger also stated that market-driven innovation can cause a focus on specific areas, and that off-label chemotherapy can cause side effects and issues in cancer survivors.

Ready to Move from Plans to Action

André Ilbawi, Cancer Control Officer, World Health Organisation (WHO) stated that there is fragmentation in the global cancer agenda. Ilbawi described three projects to help address this fragmentation. Firstly, to collect data and summarise policies, with an aim to shift the cancer agenda to a social movement. Secondly, to drive innovation, for both products and data, and thirdly, on access to medicines, where a transformational response is needed, including access to childhood cancer medicines. To conclude, Ilbawi declared that the WHO is ready to move forward together, ready to move from plans to action.

Winning the Battle, but are we Winning the War?

Franco Cavalli, President, World Oncology Forum (WOF), and Chair, Scientific Committee, European School of Oncology (ESO) recalled how, in a meeting in Lugano, Switzerland ten years ago, we asked ourselves if we were winning the cancer battle. The answer: scientifically, and medically, was yes, however we are seeing an increase in incidence in developing countries, who have poorer survival rates. For example, breast cancer survival is 75-80% in Europe, whereas in Zambia or Bangladesh, it is 5-10%. Cavalli called for a minimum cancer treatment package, for politicians to put cancer at the centre of their agendas, and for there to be a cancer plan in every country.

Cancer Issues Worldwide – We Go Further When We Go Together

Building a new century of international cancer & health cooperation out of the pandemic:

In the wake of the Covid-19 pandemic, we refresh our declaration of support for embedded and resourced structures for inter-governmental collaboration in combatting shared disease challenges. The mandate of the World Health Organisation, and associated entities, should be renewed and reaffirmed, with the ability of key stakeholders to meaningfully contribute to major goals and their implementation actions, including on cancer, refreshed.

Closing Session

The closing remarks were provided by the Co-Chairs of the European Cancer Summit 2021, Theresa Wiseman and Kathy Oliver. Matti Aapro, President of the European Cancer Organisation, also took this opportunity to introduce the next President of the European Cancer Organisation, Andreas Charalambous, starting his term on 1 January 2022.

Oliver stated that the Patient Advisory Committee members, who were represented at every session during the Summit, have helped provide the reality check that we need with patient voices.

Aapro stated that the Focused Topic Networks have allowed us to cover the breadth and depth of content, enriching the discussions and informing the Declaration.

Charalambous stated that the discussions of the Summit have the potential to impact both clinical practice and the implementation of Europe's Beating Cancer Plan. Charalambous, having seen the health workforce response to mitigating Covid-19, stated that 'building back better' should be our aim going forward. Charalambous also mentioned the need to link the outcomes of the Summit with the incoming European Council Presidencies as we move toward implementing the Beating Cancer Plan and EU Cancer Mission.

Thierry Breton, Director General, French National Cancer Institute (INCa), stated that in France, there have been three NCCPs since 2003, with a ten-year strategy outlined at the beginning of 2021. Breton stated that NCCPs should promote an integrated approach, including prevention, detection, care, and survivorship. The aforementioned ten-year strategy also includes an approach to addressing the needs of vulnerable groups in the population.

Breton stated that in the French Presidency would like to progress work on legislation for affordable and accessible cancer therapies, multidisciplinary care, implementation, treatment and follow-up. Breton also announced that on the 3rd and 4th of February 2022 there will be a high-level event hosted under the auspices of the French Presidency, and will ensure a broad representation of stakeholders. The event will focus on paediatrics, prevention, survival, and international cooperation. Breton concluded by saying that together we can do more to beat cancer.

Oliver announced that the European Cancer Summit 2022 will be held on the 16th and 17th November, as a hybrid event online and in Brussels.

Aapro drew the Summit to a close by celebrating the European Cancer Organisation's membership of 40 (and growing) organisations from 2022 onwards. Aapro also thanked the multiple partners, and 20 patient advocacy groups, the Focused Topic Networks, the Community 365 members, and the Summit Supporters.

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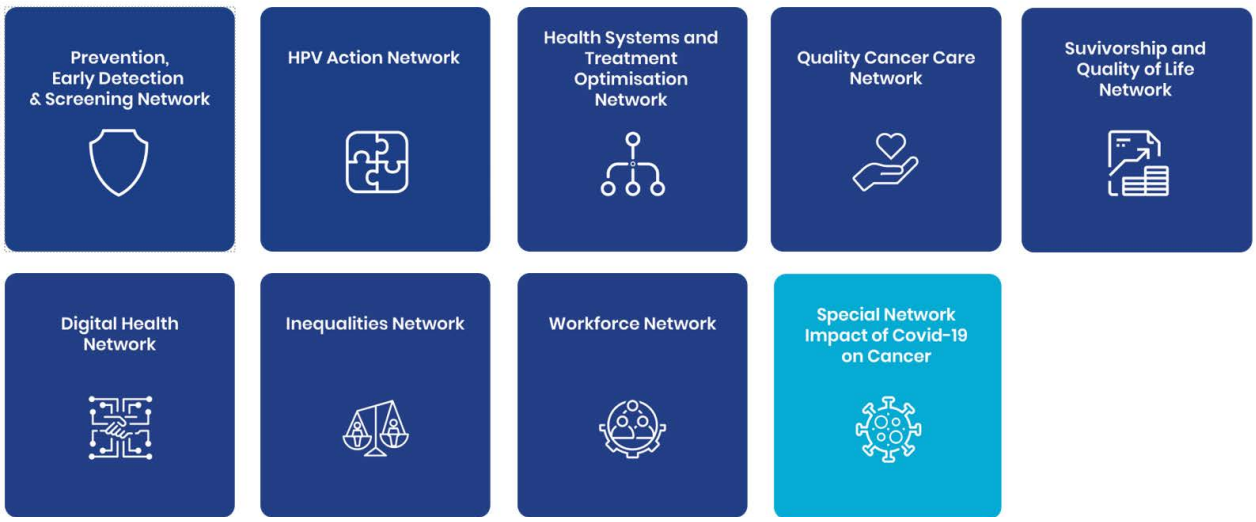
Our Focused Topic Networks



Our Member Societies

Our Patient Advocacy Groups

Our Community 365

Contributors

Supporters

Startups

References

1. European Cancer Organisation, 2020. Resolution on Cancer Screening. [online] Nov 19. Available at: https://www.europeancancer.org/resources/180:resolution-on-cancer-screening.html (Accessed 30 Nov 2021)
2. European Cancer Organisation, 2020. Earlier is Better: Advancing Cancer Screening and Early Detection: Action Across Tumour Types and Challenges. Available at: https://www.europeancancer.org/index.php?option=com_attachments&task=download&id=695:ECO_Earlier-is-Better-Advancing-Cancer-Screening-and-Early-Detection_2021 (Accessed 30 Nov 2021)
3. Jumper J, et al, 2021. Highly accurate protein structure prediction with AlphaFold. Nature, 596, 583–589. https://doi.org/10.1038/s41586-021-03819-2
4. Baek M, et al. 2021. Accurate prediction of protein structures and interactions using a three-track neural network. Science, 373, 6557, 871-876. doi:10.1126/science.abj875
5. Landelijk Evaluatie Team voor bevolkingsonderzoek naar Borstkanker, 2019. Landelijke evaluatie van bevolkingsonderzoek naar borstkanker in Nederland 2004 – 2014. Available at: https://www.lrcb.nl/resources/uploads/2019/06/14e-evaluatie-bvo-BK-2004-2014-LETB-feb-2019.pdf (Accessed 30 Nov 2021)
6. Kauczor H, et al, 2020. ESR/ERS statement paper on lung cancer screening. European Respiratory Journal, 55(2)1900506; DOI:10.1183/13993003.00506-2019
7. Mottet N, et al, 2021. Prostate Cancer: Full Text Guidelines. EAU. Available at: https://uroweb.org/guideline/prostate-cancer/ (Accessed 30 Nov 2021)
8. European Cancer Organisation, 2021. Real-Life Stories of HPV-Related Cancers Underline Urgent Need for Access to Vaccination and Screening. [online] 17 Nov 2021. Available at: https://www.europeancancer.org/resources/226:real-life-stories-of-hpv-related-cancers-underline-urgent-need-for-access-to-vaccination-and-screening.html (Accessed 30 Nov 2021)
9. European Commission, 2021. Communication from the Commission to the European Parliament and The Council: Europe's Beating Cancer Plan, COM(2021) 44 final. [online] Available at: https://ec.europa.eu/health/sites/default/files/non_communicable_diseases/docs/eu_cancer-plan_en.pdf (Accessed 30 Nov 2021)
10. RISCC, 2021. Risk-based Screening for Cervical Cancer. [online] Available from: https://www.riscc-h2020.eu/ (Accessed 30 Nov 2021)
11. EMA, 2021. Data Analysis and Real World Interrogation Network (DARWIN EU). [online] Available at: https://www.ema.europa.eu/en/about-us/how-we-work/big-data/data-analysis-real-world-interrogation-network-darwin-eu (Accessed 30 Nov 2021)
12. Hanna TP, et al, 2020. Mortality due to cancer treatment delay: systematic review and meta-analysis. BMJ, 371 :m4087 doi:10.1136/bmj.m4087
13. EFPIA, 2020. EFPIA Patients W.A.I.T. Indicator 2020 Survey. [online] Available at: https://www.efpia.eu/media/602652/efpia-patient-wait-indicator-final-250521.pdf (Accessed 30 Nov 2021)
14. European Cancer Organisation, 2021. Unlocking the Potential of Digitalisation in Cancer Care – No Stopping Us Now! [online] 15 Nov. Available at: https://www.europeancancer.org/resources/222:unlocking-the-potential-of-digitalisation-in-cancer-care-no-stopping-us-now.html (Accessed 30 Nov 2021)
15. Oberije C, et al, 2014. A prospective study comparing the predictions of doctors versus models for treatment outcome of lung cancer patients: a step toward individualized care and shared decision making. Radiotherapy and oncology : journal of the European Society for Therapeutic Radiology and Oncology, 112(1): 37-43. doi:10.1016/j.radonc.2014.04.012
16. CORAL, 2021. CORAL - Community in Oncology for RApid Learning. [online] Available at: http://www.eurocat.info/community.html (Accessed 30 Nov 2021)
17. Hosny, Ahmed et al, 2018. Artificial intelligence in radiology. Nature reviews. Cancer, 18(8): 500-510. doi:10.1038/s41568-018-0016-5

18. Bera K, et al, 2019. Artificial intelligence in digital pathology — new tools for diagnosis and precision oncology. Nat Rev Clin Oncol, 16: 703–715. https://doi.org/10.1038/s41571-019-0252-y

19. European Cancer Organisation, 2020. Working Against Cancer: Giving Professionals the Right Tools for the Job. [online] Available at: https://www.europeancancer.org/index.php?option=com_attachments&task=download&id=497:Working-Against-Cancer_Action-Report-2021 (Accessed 30 Nov 2021)

20. INTERACT-EUROPE, 2021. [online] Available at: https://www.interact-eu.net/ (Accessed 30 Nov 2021)

21. European Economic and Social Committee, 2021. Opinion on Europe's Beating Cancer Plan. Available at: https://www.eesc.europa.eu/en/our-work/opinions-information-reports/opinions/europes-beating-cancer-plan (Accessed 30 Nov 2021)

22. EUROPA DONNA, 2007. Short Guide to the European Guidelines for Quality Assurance in Breast Cancer Screening and Diagnosis. [online] Available at: https://www.europadonna.org/short-guide/a-short/ (Accessed 30 Nov 2021)

23. European Cancer Organisation (2021). Covid-19 & Cancer Data Intelligence. https://www.europeancancer.org/timetoact/impact/data-intelligence

24. European Commission, 2021. Europe's Beating Cancer Plan: Implementation Roadmap. [online] Available at: https://ec.europa.eu/health/sites/default/files/non_communicable_diseases/docs/2021-2025_cancer-roadmap_en.pdf (Accessed 30 Nov 2021)

25. iPAAC, 2021. Innovative Partnership for Action Against Cancer. [online] Available at: https://www.ipaac.eu/ (Accessed 30 Nov 2021)

26. European Cancer Organisation, 2020. Build Back Smarter from COVID-19-19: The European Cancer Community Speaks Out. [online] Available at: https://www.europeancancer.org/resources/165:build-back-smarter-from-Covid-19-19-the-european-cancer-community-speaks-out.html (Accessed 30 Nov 2021)

27. European Cancer Organisation, 2021. Time To Act Data Navigator. [online] Available at: https://www.europeancancer.org/data-navigator/ (Accessed 30 Nov 2021)

28. European Commission, 2021. Implementation Plans for the EU Missions. [online] Available at: https://ec.europa.eu/info/publications/implementation-plans-eu-missions_en (Accessed 30 Nov 2021)

29. European Commission, 2021. European guidelines on breast cancer screening and diagnosis. [online] Available at: https://healthcare-quality.jrc.ec.europa.eu/ecibc/european-breast-cancer-guidelines (Accessed 30 Nov 2021)

30. IARC, 2021. IARC Medium-Term Strategy for 2021-2025. [online] Available at: https://events.iarc.who.int/event/29/attachments/67/154/GC63_6A_MTS_2021-2025.pdf (Accessed 30 Nov 2021)

31. European Cancer Organisation, 2021. Essential Requirements for Quality Cancer Care. [online] Available at: https://www.europeancancer.org/2-content/8-erqcc (Accessed 30 Nov 2021)

32. Albreht et al, 2015. European Guide for Quality National Cancer Control Programmes. [online] Available at: http://www.cancercontrol.eu/uploads/images/European_Guide_for_Quality_National_Cancer_Control_Programmes_web.pdf (Accessed 30 Nov 2021)

33. CanCon, 2017. European Guide on Quality Improvement in Comprehensive Cancer Control. [online] Available at: https://www.iccp-portal.org/resources/european-guide-quality-improvement-comprehensive-cancer-control (Accessed 30 Nov 2021)

34. European Cancer Organisation, 2020. Free from Cancer: Achieving Quality of Life for All Cancer Patients and Survivors. [online] Available at: https://www.europeancancer.org/resources/166:free-from-cancer-achieving-quality-of-life-for-all-cancer-patients-and-survivors.html (Accessed 30 Nov 2021)

35. Loscalzo MJ, and Clark KL, 2007. Problem-related distress in cancer patients drives requests for help: a prospective study. Oncology, 21(9): 1133-8.

36. ClinicalTrials.gov [online]. Bethesda (MD): National Library of Medicine (US). 2021 Feb 5- Identifier NCT04739761, A Study of T-DXd in Participants With or Without Brain Metastasis Who Have Previously Treated Advanced or Metastatic HER2 Positive Breast Cancer (DESTINY-B12); 2021 Nov 11 [cited 30 Nov 2021]: Available at: https://clinicaltrials.gov/ct2/show/NCT04739761 (Accessed 30 Nov 2021)

37. Brain Tumour Magazine, 2021. [online] Aug 31. Available at: https://issuu.com/ibta-org/docs/braintumour_2021 (Accessed 30 Nov 2021)

38. European Cancer Organisation, 2020. It Can Be Done – Beating Inequalities in Cancer Care. Action Report. [online] Available at: https://www.europeancancer.org/resources/164:it-can-be-done-beating-inequalities-in-cancer-care-action-report (Accessed 30 Nov 2021)

39. Gyawali B, and Kesselheim AS, 2021. FDA approval standards for anticancer agents - lessons from two recent approvals in breast cancer. Nature reviews. Clinical oncology, 18(7): 397-398. doi:10.1038/s41571-021-00504-1

40. Bouvier CV, et al, 2020. 1168P Survey of Challenges in Access to Diagnostics and Treatment for Neuroendocrine Tumour (NET) Patients (SCAN): Healthcare Quality Evaluation. Annals of Oncology, 31, p. S776. DOI.org (Crossref), https://doi.org/10.1016/j.annonc.2020.08.1381.

41. LSHTM, 2021. CONCORD Programme. [online] Available at: https://csg.lshtm.ac.uk/research/themes/concord-programme/ (Accessed 30 Nov 2021)

42. Allemani C, et al, 2018. Global surveillance of trends in cancer survival 2000–14 (CONCORD-3): analysis of individual records for 37 513 025 patients diagnosed with one of 18 cancers from 322 population-based registries in 71 countries. The Lancet, 391(10125):pp.1023-1075, DOI:https://doi.org/10.1016/S0140-6736(17)33326-3, Available at: https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(17)33326-3/fulltext (Accessed 30 Nov 2021)

43. OECD, 2021. Health at a Glance 2021. [online] Available at: https://www.oecd-ilibrary.org/social-issues-migration-health/health-at-a-glance-2021_ae3016b9-en (Accessed 30 Nov 2021)

44. Hricak, H et al, 2021. Medical imaging and nuclear medicine: a Lancet Oncology Commission. The Lancet Oncology, 22(4):E136-E172, https://doi.org/10.1016/S1470-2045(20)30751-8

As the not-for-profit federation of member organisations working in cancer at a European level, the European Cancer Organisation convenes oncology professionals and patients to agree policy, advocate for positive change and speak up for the European cancer community.

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