european cancer ORGANISATION

Treating the whole patient

Addressing often overlooked aspects of cancer care: medical nutrition, antimicrobial resistance and healthcare-acquired infections

Acknowledgements

This report draws on the input of experts from across Europe and beyond, and their presentations, contributions and recommendations shared at the European Cancer Organisation (ECO) Community 365[a] Roundtable Meeting 'Cancer care: are we treating the whole patient?' held online on Wednesday 27 May 2025[b].

We thank all speakers who contributed their expertise to illustrate key underserved and under-recognised aspects of cancer care. We also thank those who contributed via the roundtable's online chat and provided additional comments after the meeting. Finally, we wish to convey our gratitude to all those who took the time to review and edit this report and its recommendations as part of ECO's Policy Approval Pathway[c].

Leads

Alessandro Laviano, Professor at Sapienza University of Rome and Director of the European Society for Clinical Nutrition and Metabolism (ESPEN) Lifelong Learning Educational Programme

Ivana Dragojević, President of the Association for Liver Diseases Hronos and Vice-President of the European Liver Patients' Association (ELPA)

Drafting team

Richard Price, Head of Policy, European Cancer Organisation

Marion L'hôte, Senior Policy Officer, European Cancer Organisation

Riccardo Moschetti, Senior Policy Officer, European Cancer Organisation

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a. Community 365 is a group of charity, philanthropy, and industry contributors to the Focused Topic Networks of the European Cancer Organisation. Community 365 provide ideas, guidance, practical support, and resources for our work in convening stakeholders and building consensus in the European cancer community. Community 365 contributors do not have a decision-making role in our policy work. Rather, policies of the European Cancer Organisation, such as those represented in this document, are agreed by our Board after consultation with our Member Societies and Patient Advisory Committee, via our Policy Pathway process. More information here: https://www.europeancancer.org/community-365

b. Find more information concerning the report here: https://europeancancer.org/events/346:community-365-roundtable-treating-the-whole-patient.html

c. European Cancer Organisation's Policy Decision Making Process: https://www.europeancancer.org/content/policy-decision-making.html

Contributors

Najy Alsayed, Global Therapeutic Area Head for Infectious Diseases, Menarini

Zsuzsanna Bodor, Vice President, European Society of Oncology Pharmacy (ESOP)

Antonella Cardone, Director, Cancer Patients Europe (CPE)

Dave Chuter, Vice Chair of Digestive Cancers Europe

Marco Falcone, Full Professor of Infectious Diseases, Department of Clinical and Experimental Medicine, University of Pisa

Adriano Friganović, President, The European Specialist Nurses Organisation (ESNO)

Jose Luis Gómez Ruiz, Vice President Europe of Becton, Dickinson and Company (BD)

Katrien Van Laere, Chief Medical & Scientific Officer at Danone

José Medina-Polo, Urologist at Functional and Reconstructive Unit -Department of Urology- Hospital Universitario 12 de Octubre , Madrid, Spain and Member of RED ERN eUROGEN

Heidi Ulrike Siller, Project Manager EIWH - European Institute of Women's Health

Henry Skinner, CEO, Global AMR Action Fund

Tomislav Sokol, Member of the European Parliament, Croatia, Member of the European Parliament Public Health Committee (SANT)

Virpi Sulosaari, Principal Lecturer, Turku University of Applied Sciences and Past President, European Oncology Nursing Society

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Executive Summary

On improving the response to nutritional needs of cancer patients

- **Strengthen and formalise the role of dietitians within cancer care pathways**

  The essential contribution of dietitians to treatment tolerance, recovery, and survivorship should be explicitly recognised within standard cancer care pathways. This should include the development of benchmarked access indicators, such as recommended ratios of dietitians to cancer patients treated within a health system.

- **Embed malnutrition screening and clinical nutrition services as routine elements of cancer care**

  Systematic malnutrition screening, nutritional counselling, and access to clinical nutrition interventions should be integrated across the cancer care continuum. Wider establishment of dedicated clinical nutrition units within oncology services would support earlier identification of nutritional risk, improve patient outcomes, and reduce avoidable complications, length of stay, and associated healthcare costs.

- **Integrate nutrition-related indicators into cancer data systems**

  Core nutrition indicators — including body mass index (BMI), unintentional weight loss or gain, access to nutritional consultation, and adherence to nutritional interventions — should be incorporated into cancer registries and other relevant health databases to support monitoring, quality improvement, and policy evaluation.

- **Support peer-to-peer mechanisms for patients with long-term nutritional needs**

  For people living with cancer who require sustained nutritional support, structured peer-to-peer support involving patients and survivors with similar lived experiences can provide valuable practical guidance, psychosocial support, and reinforcement of adherence to nutritional care plans.

On protecting cancer patients from antimicrobial resistance

- **Awareness and education on antimicrobial resistance must be sustained and strengthened for both clinicians and the wider public**

  This includes systematic education of the health workforce on what good antimicrobial stewardship looks like, how to achieve more appropriate prescribing, and securing optimal use of antibiotics across all care settings.

- **Further action is required to correct the persistent market failure in antibiotic development**

  Governments should give serious consideration to new incentive mechanisms, including the creation of an 'AMR designation', analogous to orphan drug status, to prioritise the development, approval, and equitable access to essential antibiotics. Revenue-guarantee and subscription-based pilots merit expansion and evaluation, as the current volume-based market model continues to fail medicines intended for low use but with high societal value.

- **The pharmacy profession plays a critical and underutilised role in antimicrobial stewardship**

  Pharmacists bring unique expertise in medicine optimisation, prescribing support, and patient education, and should be fully enabled, recognised, and resourced to deliver this function across the healthcare system.

- **Antimicrobial resistance cannot be addressed by the health sector alone**

  A robust 'One Health' approach demands enforceable action in agriculture and aquaculture, where inappropriate antibiotic use continues to drive resistance. Governments must sustain political momentum to reduce non-essential use, strengthen surveillance, and align agricultural practices with public health objectives.

On safeguarding cancer patients from healthcare-acquired infection

- **Strengthen education and multidisciplinary collaboration**

  Given the significant burden of catheter-associated urinary tract infections (CAUTIs) on patient outcomes and health system sustainability, renewed efforts are needed to reinforce education, training, and multidisciplinary collaboration to improve infection prevention and control for cancer patients.

- **Reduce unnecessary urinary catheterisation**

  National health systems should prioritise systematic reductions in avoidable urinary catheter use, including through updated clinical protocols, decision-support tools, and consideration of newer technologies and alternatives to indwelling urinary catheters.

- **Promote EU-level strategic action on CAUTIs**

  A dedicated EU-level initiative on CAUTIs should be considered, including explicit integration of the issue within existing and future EU strategies on antimicrobial resistance, patient safety, and women's health.

- **Enhance surveillance, monitoring, and data quality**

  EU agencies should be adequately supported to help member states strengthen surveillance and monitoring of CAUTIs, including improving data quality, comparability, and visibility of gender-specific risks and outcomes.

Introduction

Europe has made remarkable progress in cancer prevention, diagnosis, and treatment over recent decades. Advances in screening, precision medicine, and therapeutic innovation have significantly improved survival outcomes across many cancer types. Yet for too many patients, the lived experience of cancer care remains fragmented, with critical aspects of supportive care insufficiently recognised, inconsistently delivered, or inadequately prioritised within health systems.

Treating cancer effectively requires more than treating the tumour alone. Optimal outcomes depend on addressing the whole patient — their nutritional status, their vulnerability to infection, and the broader clinical environments in which care is delivered. Medical nutrition, healthcare-acquired infections (HAIs), and antimicrobial resistance (AMR) are foundational determinants of patient outcomes, safety, and system efficiency, yet they remain systematically under-addressed in cancer policy and practice across Europe.

Malnutrition affects a substantial proportion of people living with cancer, compromising treatment tolerance, increasing complication rates, prolonging hospital stays, and reducing quality of life. Despite strong clinical evidence, nutritional screening and intervention are still not embedded as standard components of oncology care pathways in many European health systems. This gap reflects not a lack of knowledge, but a lack of structural prioritisation, accountability, and coordinated policy action.

Similarly, people undergoing cancer treatment are at heightened risk of healthcare-acquired infections due to immunosuppression, invasive procedures, and frequent contact with healthcare settings. HAIs impose avoidable harm on patients and place significant strain on already pressured health systems. The growing threat of antimicrobial resistance further compounds this challenge, undermining the effectiveness of treatments that are essential to modern cancer care and threatening the sustainability of healthcare delivery more broadly.

These issues sit at the intersection of patient safety, quality of care, and health system resilience. They are also closely aligned with Europe's wider strategic objectives — including strengthening health security, improving system efficiency, and reducing health inequalities. Yet they are often addressed in silos, rather than through integrated cancer policies that recognise supportive care as a core component of high-quality oncology services.

This report argues that Europe has a critical opportunity to move from awareness to action. By embedding medical nutrition, infection prevention, and antimicrobial stewardship more firmly within cancer strategies, care pathways, and funding frameworks, policymakers can deliver tangible improvements in patient outcomes while reinforcing the sustainability of health systems. Treating the whole patient is not an optional add-on to cancer care; it is a prerequisite for delivering the best possible outcomes for patients and for Europe's healthcare systems alike.

The full recording of the roundtable is available on the roundtable webpage. A summary of the roundtable discussion and arising policy recommendations follows.

Treating the patient with the disease – not just the disease

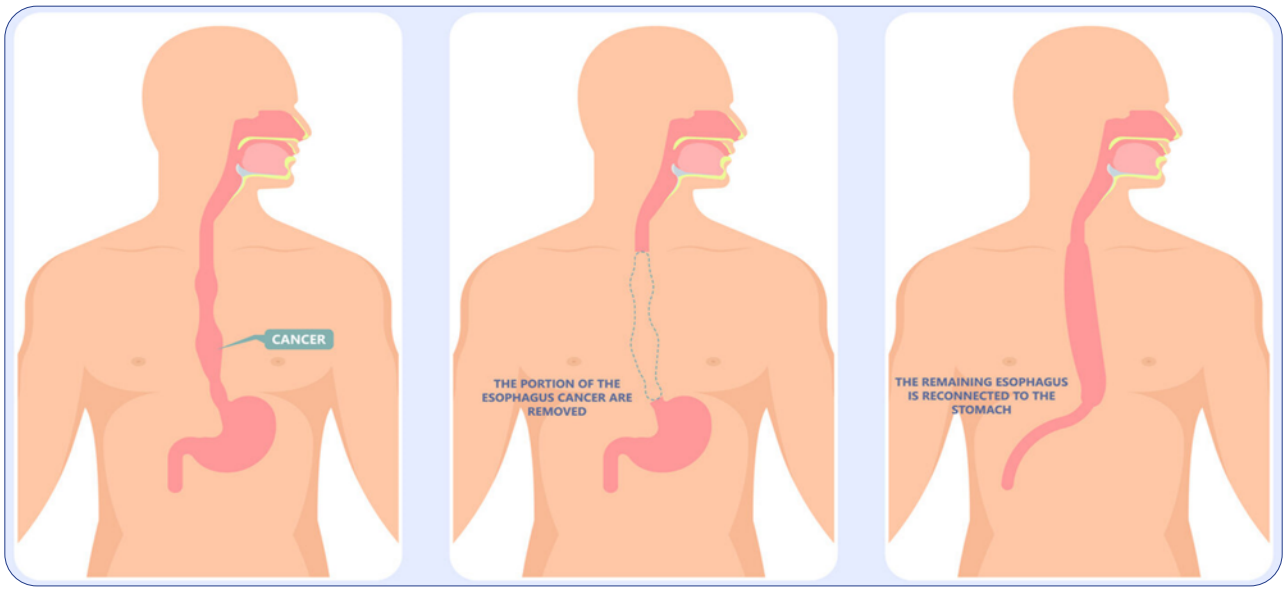
In opening the roundtable, co-chairs Prof Alessandro Laviano and Ivana Dragojević introduced the words of Sir William Osler: 'The good physician **treats** the disease; the great physician **treats the patient** who has the disease.' It is the philosophy that underpinned this special Community 365 policy roundtable.

Achieving better integration of medical nutrition into cancer care

*Co-chaired by **Prof Alessandro Laviano**, Professor at Sapienza University of Rome and Director of the European Society for Clinical Nutrition and Metabolism (ESPEN) Lifelong Learning Educational Programme and **Dr Katrien Van Laere**, Chief Medical & Scientific Officer at Danone*

> **'Medical nutrition is about more than simply telling the patient to "eat more", it's a little more complicated than that.'**
>
> **Professor Alessandro Laviano**

Oesophagectomy



The patient's view on medical nutrition

The testimony of Dave Chuter

- Dave is an oesophageal-gastric cancer patient, diagnosed and treated in 2006.
- After an oesophagectomy (a surgical procedure to remove all or part of the oesophagus), Dave lost 75% of his stomach and nearly all his oesophagus.
- Dave's life has had to change dramatically. 'A lifetime of eating habits has had to change. There are whole ranges of food I cannot eat now. Simple things like bread, or even lettuce.' Stomach acid reflux is an example of a continual problem.
- The chemotherapy Dave received has taken away taste sensations for certain foods. Other post-prandial symptoms that can occur for Dave include nausea, vomiting, feeling light-headed or dizzy, stomach pains, indigestion and urgent bowel motions.
- Dave also described the realities of being a cancer patient after hospital discharge. Work, family and other commitments can make adherence to the instructions and advice of healthcare professionals challenging, including the recommended six meals per day
- Dave spoke of the vital role of the dietitian in supporting him, highlighting the urgency for more cancer patients to receive this help.
- His local support group also provided valuable reassurance, offering a forum for understanding and improving clinician awareness of the day-to-day patient experience.
- Dave described the special diet he must now take to support his nutritional needs. It differs from what many would consider a 'normal' diet and clearly impacts eating socially. It isn't always possible to follow the advice fully, and departure has negative effects.

Hear Dave Chuter's story via the event recording, available from 7 minutes 30 seconds here.

The clinician perspective: medical nutrition in cancer care in review

Prof Alessandro Laviano

Our approach to clinical nutrition in cancer must reflect the fact that cancer is increasingly a long-term condition. More people are surviving for many years after diagnosis, but they often continue to live with the ongoing effects of both the disease and its treatment.

Almost all patients with cancer experience impaired quality of life following diagnosis and treatment.

However, malnutrition must not be seen as inevitable. Screening procedures can identify malnutrition risk and enable early intervention to prevent its occurrence. An individual assessment can calculate the patient's caloric needs and how these needs can be met.

This combination of nutritional counselling and medical nutrition, including oral nutritional supplements, can provide significant support. Prof Laviano presented data to show the improved quality of life achieved through such interventions, as well as opportunities to improve cancer treatment.

To help embed clinical nutrition in European cancer care, he recommended:

- Including nutrition-relevant indicators in European cancer databases, e.g. BMI, weight loss and gain, nutrition consultation and adherence
- Establishing wider use of clinical nutrition units within cancer care delivery systems and potential benchmarking levels of dietitian access.

Nutritional support during the hospital stay reduces mortality in patients with different types of cancers: secondary analysis of a prospective randomized trial

L. Bargetzi et al.

Table 3. Effect of nutritional support on primary and secondary outcomes

	Control (N = 251)	Intervention group (N = 255)	Type of analysis	Regression analysis (adjusted) (95% CI), P value
Primary outcome				
All-cause mortality within 30 days	50 (19.9)	36 (14.1)	OR	0.57 (0.35-0.94), 0.027
Secondary outcomes				
Clinical outcome				
Combined adverse outcome within 30 days[a]	93 (37.1)	86 (33.7)	OR	0.81 (0.56-1.19), 0.288
Additional hospital outcomes				
Admission to an intensive care unit within 30 days	6 (2.4)	4 (1.6)	OR	0.62 (0.16-2.5), 0.503
Non-elective hospital readmission within 30 days	22 (8.8)	31 (12.2)	OR	1.53 (0.85-2.75), 0.159
Mean length of index hospital stay (days)	10.4 (6.9)	10.4 (7.8)	HR	1.14 (0.93-1.40), 0.206
Functional outcome				
Decline in functional status of ≥10% from admission to day 30	67 (26.7)	45 (17.6)	OR	0.59 (0.38-0.93), 0.021
Mean Barthel Index score at day 30 (points)	94.72 (10.68)	94.98 (10.21)	Coefficient	0.6 (−1.16 to 2.36), 0.506
Mean EQ-5D Index at day 30 (points)	0.62 (0.39)	0.67 (0.37)	Coefficient	0.08 (0.01-0.15), 0.016
Mean EQ-5D VAS at day 30 (points)	43 (30)	48 (29)	Coefficient	6.16 (0.51-11.8), 0.033
Long-term mortality				
All-cause mortality within 180 days	128 (52.7)	115 (47.3)	HR	0.83 (0.65-1.08), 0.18

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Medical nutrition and cancer care – Did you know?

- Cancer-related malnutrition affects up to 70% of patients.
- Unaddressed, this impacts patient welfare and wellbeing, outcomes, recovery, and health system costs.
- Yet it is estimated that only 1 out of 3 cancer patients receive the clinical nutrition support they require.

The nurse perspective

Dr Virpi Sulosaari

- Nurses are in frequent contact with people with cancer, and nutrition is a routine and unavoidable part of those conversations. However, fully meeting a patient's nutritional needs requires a holistic multidisciplinary effort.
- Effective intervention often starts with asking 'how is the patient doing' and including nutrition in the response. This is important to achieve earlier intervention. Even simple observations, such as noticing whether a patient's clothes still fit, can provide crucial insights.
- Healthcare professionals need to be respectful of the patient's social life and the ways in which advice and recommendations can be tailored to enable, as much as possible, the patient's desired way of living.
- However, Dr Sulosaari related the challenges that exist in some countries, such as Finland, where nutritional support is not fully reimbursed by the healthcare system. This leads to inequity, where some patients must forgo nutritional supplements because they cannot afford them.

The policymaker perspective

Tomislav Sokol MEP

- Europe's Beating Cancer Plan remains an important vehicle for achieving improvements in cancer care across the EU, funding projects related to cancer and promoting European-level guidelines.
- The Horizon Europe research programme is also embracing cancer as a priority area and presents a key opportunity to advance research in clinical nutrition.
- However, funding for these initiatives is threatened by the proposed removal of EU4Health and the absence of a dedicated health budget in the MFF 2028–2034 proposal, making it urgent to safeguard these resources.
- The European Parliament is increasingly recognising the importance of cross-border cooperation on health challenges, as evidenced by the recent creation of a permanent committee on public health (SANT). This is another conduit by which political attention might be given to the pressing needs of clinical nutrition in cancer care.

RECOMMENDATIONS

ON IMPROVING THE RESPONSE TO NUTRITIONAL NEEDS OF CANCER PATIENTS

- Strengthen and formalise the role of dietitians within cancer care pathways
- The essential contribution of dietitians to treatment tolerance, recovery, and survivorship should be explicitly recognised within standard cancer care pathways. This should include the development of benchmarked access indicators, such as recommended ratios of dietitians to cancer patients treated within a health system.
- Embed malnutrition screening and clinical nutrition services as routine elements of cancer care
- Systematic malnutrition screening, nutritional counselling, and access to clinical nutrition interventions should be integrated across the cancer care continuum. Wider establishment of dedicated clinical nutrition units within oncology services would support earlier identification of nutritional risk, improve patient outcomes, and reduce avoidable complications, length of stay, and associated healthcare costs.
- Integrate nutrition-related indicators into cancer data systems
- Core nutrition indicators — including body mass index (BMI), unintentional weight loss or gain, access to nutritional consultation, and adherence to nutritional interventions — should be incorporated into cancer registries and other relevant health databases to support monitoring, quality improvement, and policy evaluation.
- Support peer-to-peer mechanisms for patients with long-term nutritional needs
- For people living with cancer who require sustained nutritional support, structured peer-to-peer support involving patients and survivors with similar lived experience can provide valuable practical guidance, psychosocial support, and reinforcement of adherence to nutritional care plans.

For more detailed analysis and recommendations on cancer and clinical nutrition, read the dedicated chapter in ECO's next level EU cancer survivorship & quality-of-life policy paper, which can be accessed here: https://www.europeancancer.org/next-level-sqol.html

Acting now. Protecting cancer patients from the effects of antimicrobial resistance (AMR)

*Co-chaired by **Prof Alessandro Laviano** and **Dr Najy Alsayed**, Global Therapeutic Area Head for Infectious Diseases, Menarini.*

Cancer care and antimicrobial resistance – Did you know?

Cancer patients are among the most vulnerable to antimicrobial resistance

- Chemotherapy suppresses immunity.
- Invasive procedures increase infection risk.

Antimicrobial resistance can make cancer treatments unusable

- If antibiotics fail, aggressive chemotherapy regimens become unsafe.
- Some cancers risk becoming effectively untreatable despite existing therapies.

The session opened with a keynote address by **Prof Marco Falcone**, Professor of Infectious Diseases, Department of Clinical and Experimental Medicine, University of Pisa. He outlined recent research on cancer and antimicrobial resistance. After conducting a study on 347 cancer patients (solid and haematological malignancies) with Gram-negative bloodstream infections (BSI), findings included:

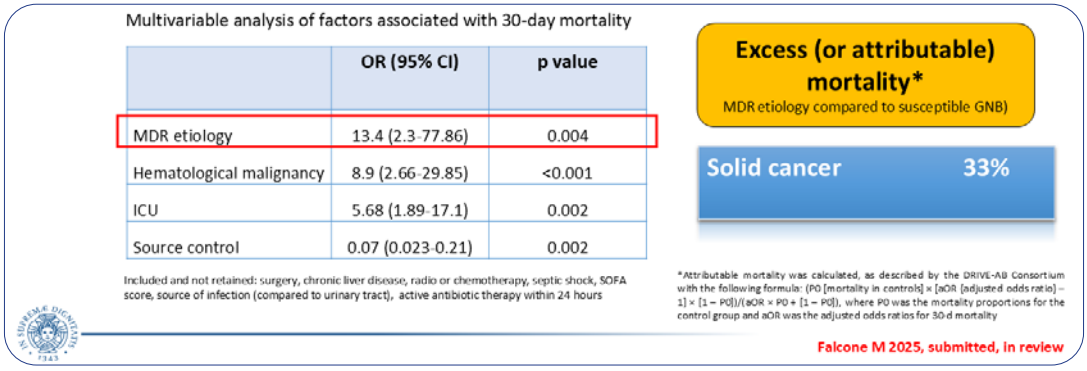
- 33% of infections were caused by strains not susceptible to any available antibiotic
- Crude mortality was 7% in patients with susceptible infections vs. 27% in those with multidrug-resistant (MDR) infections
- MDR infections were more prevalent in ICU and late-stage patients, indicating a higher level of frailty

Prof Falcone emphasised the many ways antimicrobial resistance can be a significant driver of mortality for cancer patients. He described one example of a pancreatic cancer patient developing sepsis from KPC Klebsiella pneumoniae. Due to diagnostic delay, appropriate therapy was not administered in time, leading to worsening clinical outcomes.

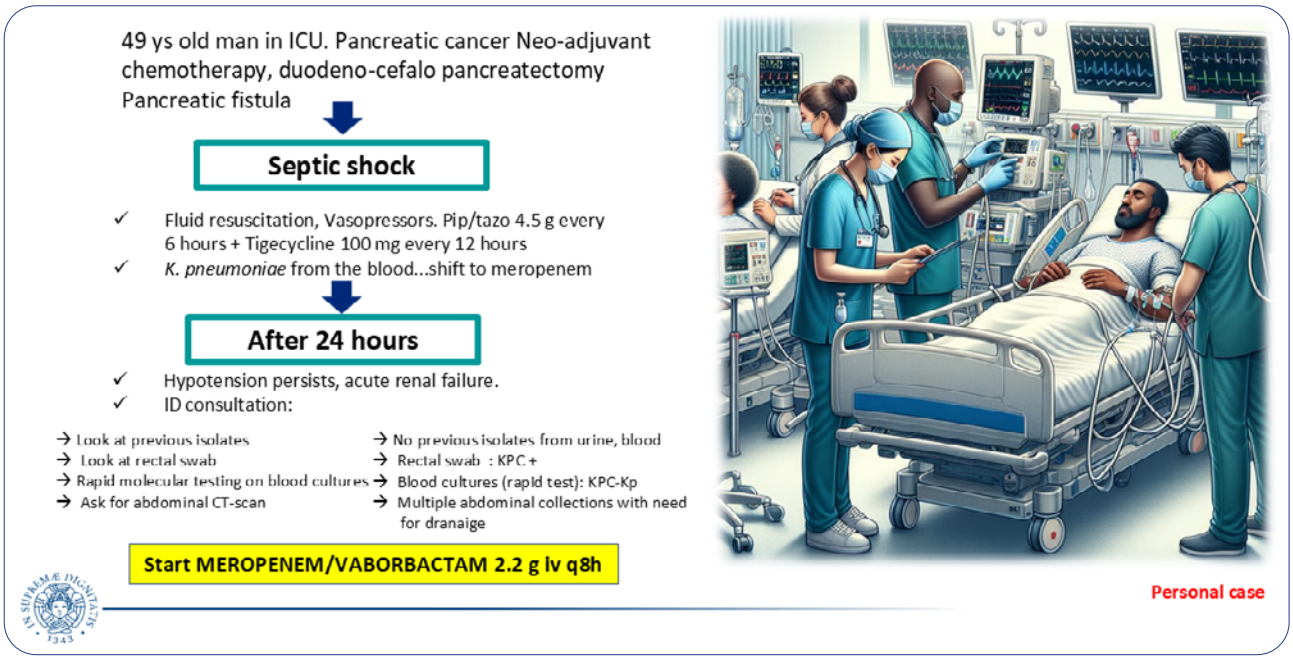
In summarising, Prof Falcone called for:

1. Improved education and infection control
2. Faster microbiology
3. Enhanced and earlier access to effective antibiotics

Multidrug resistance is associated with excess mortality in cancer patients with BSI by GNB: results from a multicenter cohort



Why MDR etiology carries higher mortality?



Exchanging after the presentation, Prof Laviano and Prof Falcone discussed the increasing number of cancer patients now losing their lives to sepsis, and the importance of gaining a good understanding of a patient's immune function.

Cancer care and sepsis – Did you know?

Cancer patients are nearly 10 times more likely to develop sepsis than people without cancer, largely due to immunosuppression from the disease and its treatments (e.g., chemotherapy, radiation, surgery)[1].

In studies of hospitalised cancer patients, sepsis is present in a very high proportion of deaths, sometimes in 30% or more of cases[2].

The perspective of Cancer Patients Europe

Antonella Cardone

Ms Cardone warned that AMR remains an invisible but deadly threat in cancer care, often overlooked in favour of a focus on access to innovation and precision oncology. Alarmingly, up to 50% of cancer deaths are due to infections, yet AMR is rarely recorded on death certificates, masking its true impact. Cancer treatments like chemotherapy, radiotherapy, and transplants weaken the immune system, leaving patients highly vulnerable to infections that become increasingly untreatable as resistance grows.

She projected that if left unaddressed, by 2030, AMR could render some routine cancer treatments nonviable, as the risks of infection would outweigh the benefits of therapy. The cost of advanced therapies becomes meaningless if patients are dying from preventable infections. This disconnect highlights the need for systemic change.

Cancer Patients Europe calls for a clear and structured AMR strategy at EU level, linking public health, research, and regulatory policy. This strategy must begin with strong prevention, rooted in education for both healthcare professionals and citizens, using a One Health approach that connects human, animal, and environmental health.

The EU should incentivise R&D for new antibiotics, including tools such as transparency and exclusivity vouchers and limited patent extensions, particularly through the Pharmaceutical Strategy. However, developing new antibiotics is not enough - access to existing antimicrobials remains restricted. Of the 18 antibiotics developed since 2010, only 2 are available across all high-income countries.

An EU-wide access and incentive system is needed to ensure equal patient access to urgently needed antimicrobials. This could include the creation of a new 'AMR designation', similar to the orphan drug designation, to prioritise and support development and equitable access to essential antibiotics.

A pan-EU subscription model could help tackle inequality in antibiotic access, drawing lessons from national initiatives like the UK subscription model, Germany's premium pricing scheme, and revenue guarantee pilots elsewhere.

Success will depend on member state buy-in and the creation of appropriate incentives that reflect Europe's leadership role in global health.

The pharmacist perspective

Dr Zsuzsanna Bodor

Dr Zsuzsanna Bodor emphasised opportunities for improving practice on antibiotic use within hospitals. This can include switching from intravenous (IV) to oral antibiotics and promoting shorter antibiotic courses - a practice now supported by recent evidence showing longer courses offer no additional benefit and may cause harm. Patient and physician education is essential to shift expectations around antibiotic duration and benefits, particularly regarding side effects and gut microbiome disruption.

Dr Bodor raised concerns about overreliance on broad-spectrum antibiotics - stressing that while they may seem safer, they are not always the most appropriate choice. Good education and international exchange of pharmacist knowledge are vital to guide rational prescribing.

This critical role of the pharmacist in antimicrobial stewardship becomes all the more vital when considering that second- and third-line antibiotics are significantly more expensive than first-line treatments. The pharmacist's antimicrobial stewardship is not only a frontline role in battling antimicrobial resistance. It is also a vital tool in the quest for cost-effectiveness in healthcare.

Global action on AMR. The work of the Global AMR Action Fund

Dr Henry Skinner

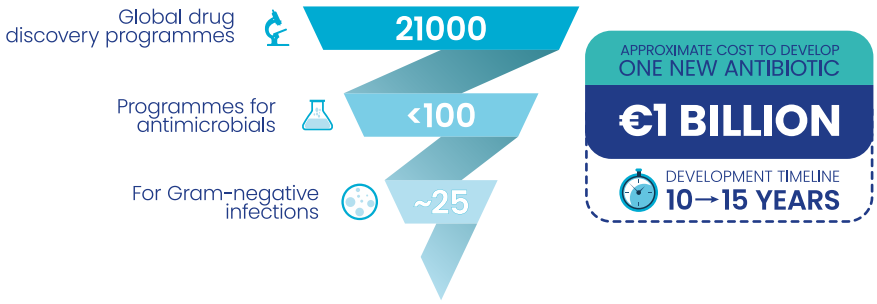
Dr Skinner reminded the audience of just what an undertaking it is to develop a new antibiotic. Taking between 10 and 15 years, it will frequently come at a development cost close to €1 billion. This has resulted in a very thin pipeline for new antibiotics. Of 21,000 global drug discovery programmes, fewer than 100 of them were for antimicrobials - and only about 25 for Gram-negative infections. Despite the urgent public health need, antibiotic R&D has been underfunded, with investments stuck at around $100–200 million annually for the past two decades - a number declining in real terms when adjusted for inflation.

The market for new antibiotics is fundamentally broken:

- Stewardship rightly restricts the usage of new antibiotics to preserve effectiveness.
- But low use translates into low sales, offering no financial return for manufacturers.
- Several biotech companies have gone bankrupt post-approval, despite developing critical new antibiotics.
- Investors have lost confidence in the possibility of making a return from expenditure on developing new antibiotics.

Without systemic change, no new antibiotics will be available within the next 5 to 10 years, putting patient lives at risk, especially those undergoing

The thin pipeline for new antibiotics



cancer treatment or living with compromised immunity.

To revive the antibiotic pipeline, major policy reform and financial incentives are urgently needed, including:

- Treating antimicrobials like orphan drugs, with tailored incentives similar to those used for rare diseases
- De-linking revenue from volume, such as through subscription models, ensures companies are rewarded for developing effective antibiotics, even if their use is limited
- Ensuring broad, equitable access across countries - not just approval, but availability and affordability

Dr Skinner concluded with an energetic call to action. Delays in implementing reforms will result in a lost decade, with a critical window closing on the ability to develop, approve, and distribute new antibiotics in time. He urged the cancer community to help elevate AMR as a top-tier health and policy issue — and to ensure antibiotics are there to support the rest of modern medicine.

RECOMMENDATIONS

ON PROTECTING CANCER PATIENTS FROM ANTIMICROBIAL RESISTANCE

- **Awareness and education on antimicrobial resistance must be strengthened for both clinicians and the wider public**

  This includes systematic education of the health workforce on what good antimicrobial stewardship looks like, how to achieve more appropriate prescribing, and securing optimal use of antibiotics across all care settings.
- **Further action is required to correct the persistent market failure in antibiotic development**

  Governments should give serious consideration to new incentive mechanisms, including the creation of an 'AMR designation', analogous to orphan drug status, to prioritise the development, approval, and equitable access to essential antibiotics. Revenue-guarantee and subscription-based pilots merit expansion and evaluation, as the current volume-based market model continues to fail medicines intended for low use but with high societal value.
- **The pharmacy profession plays a critical and underutilised role in antimicrobial stewardship**

  Pharmacists bring unique expertise in medicine optimisation, prescribing support, and patient education, and should be fully enabled, recognised, and resourced to deliver this function across the healthcare system.
- **Antimicrobial resistance cannot be addressed by the health sector alone**

  A robust 'One Health' approach demands enforceable action in agriculture and aquaculture, where inappropriate antibiotic use continues to drive resistance. Governments must sustain political momentum to reduce non-essential use, strengthen surveillance, and align agricultural practices with public health objectives.

Mobilising against healthcare-acquired infections

*Co-chaired by **Ivana Dragojević**, President of the Association for Liver Diseases Hronos and Vice-President of the European Liver Patients' Association (ELPA) and **Jose Luis Gómez Ruiz**, Vice President Europe of Becton, Dickinson and Company (BD)*

Cancer care and healthcare acquired infection – Did you know?

People with cancer are 2 to 5 times more likely to develop a healthcare-associated infection than other hospitalised patients[3].

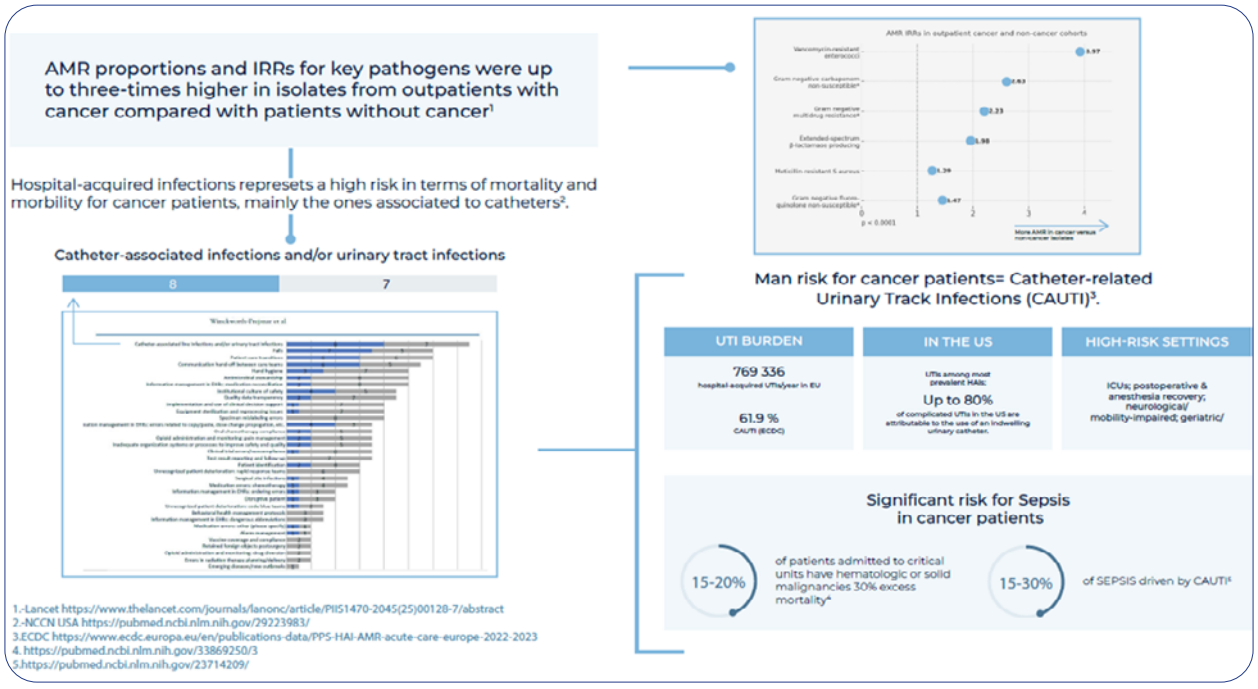
In patients with blood cancers or those undergoing intensive chemotherapy, the risk is even higher due to profound immune suppression.

Opening the session, co-chair Jose Luis Gomez Ruiz presented data on how infections acquired during hospital stays are a major cause of complications and death in cancer patients. He described the case study of Catheter-Associated Urinary Tract Infection (CAUTI).

In the spotlight: Urinary catheters and their infection risk

According to ECDC point-prevalence survey data, urinary tract infections (UTIs) are one of the most frequent healthcare-associated infections (HAIs) in acute care hospitals — accounting for about 19% of all HAIs in European hospitals[4]. Data from ECDC show that within Europe the vast majority of hospital-acquired UTIs are associated with the presence of an indwelling urinary catheter[5].(CAUTI).

HAIs represents significant risks in terms of morbidity and mortality for cancer patients. Because cancer patients show particularly high levels of antimicrobial resistance (AMR), a catheter-associated urinary tract infection (CAUTI) can rapidly become life-threatening. When antibiotics no longer work effectively in this population, the risk of severe complications, treatment failure, and mortality increases substantially.



The nurse's role in combatting healthcare-acquired infectiono

Dr José Medina-Polo

Dr Medina-Polo emphasised the importance of education and multidisciplinary collaboration to help improve infection control for cancer patients. This importantly includes the elevation of the nurse's role and investing time to educate caregivers. Matters to cover include catheter hygiene knowledge and principles of proper catheter use.

Dr Medina-Polo also counselled that unnecessary catheter use is a trend in healthcare that requires attention. Up to 47% of catheter insertions are potentially unjustified according to US and EU studies. Reducing unnecessary catheterisation has been shown to lower CAUTI rates and improve patient safety[6].

To combat CAUTIs, Dr Medina-Polo stressed the importance of attention to catheter materials: hydrophilic coated catheters have been found to be beneficial for reducing CAUTI rates, while silver-alloy-impregnated catheters have not been associated with reduced CAUTI rates. Dr Medina-Polo also highlighted the value of urinary catheterisation systems where the components are attached by seals to ensure that the system remains closed at all times. These systems eliminate the risk of the 'human factor'. He concluded his presentation by emphasising the importance of hospitals having awareness of, and implementing energy for, the EAU Guidelines on Urological Infections[7].

Healthcare Acquired Infections

To reduce the incidence of HAIs, it is important to manage the urinary catheter appropriately
- a daily review of the appropriacy of catheter have led to a fall for catheterisation in emergency from 17.5 to 6.6%

- Our data also show that observational assessment may reduce the incidence of catheter-associated infections, with rates falling from 9.1% in 2012 to 5.2% in 2018.


TOPIC PAPER

Prevention of healthcare-associated infections (HAIs) in a surgical urology ward: observational study—analysis of the problem and strategies for implementation

- Studies from the USA and Europe have reported that the placement and continued presence of the urinary catheter were unjustified in 21%
and 47% of cases, respectively


SHEA/IDSA PRACTICE RECOMMENDATION

Strategies to Prevent Catheter-Associated Urinary Tract Infections in Acute Care Hospitals: 2014 Update

- 80% of urinary tract infections in hospitalised patients are related to the presence of a urinary catheter.
- The prevalence of catheterisation in hospitalised patients is 12-16% in adults.
- Urinary catheterisation increases the daily risk of UTI-catheterisation by 3-7%.
- In the catheterised patient the presence or absence of odour or cloudy urine should not be used to differentiate asymptomatic bacteriuria vs UTI.

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European Association of Urology

Healthcare Acquired Infections

Prevention of CAUTI

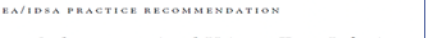

Challenges of catheter associated urinary tract infection: is prevention better than cure?

- Explored other alternatives prior to catheter insertion
- Aseptic technique on insertion, blockage prevention, perineal hygiene and maintenance of a closed system
- Need for catheter should be reviewed on a daily basis, with removal at the earliest possible opportunity


Changing Provider Behavior
An Overview of Systematic Reviews of Interventions

- Systematic review of 41 professional behaviour change interventions published between 1966 and 1998.
- "In general, **passive approaches are generally ineffective and unlikely to result in behaviour change.**"
  - Active interventions are effective under some circumstances but none are effective under all circumstances.
- Multifaceted interventions targeting different barriers to change are more likely to be effective than single interventions."

INFECTION CONTROL AND HOSPITAL EPIDEMIOLOGY MAY 2014, VOL. 35, NO. 5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Strategies to Prevent Catheter-Associated Urinary Tract Infections in Acute Care Hospitals: 2014 Update

CONCLUSIONS

Problem: INSUFFICIENT TRAINING AND/OR AWARENESS
Solution: "healthcare professionals should receive specific training on urethral catheter insertion and maintenance"
Solution: Promote training about alternatives to conventional urethral permanent catheterization

Problem: STAFF WORK OVERLOAD
Solution: Adherence to the recommendations requires **time, attention and monitoring** by the nursing staff.

Problem: INADEQUATE OR INSUFFICIENT INFRASTRUCTURE
Solution: The supplies required for the aseptic urinary catheter insertion technique should be available and conveniently located (Clinical evidence: III).
Solution: Urinary catheterisation systems where the components are attached by seals to ensure that the system remains closed at all times. These systems eliminate the risk of the "human factor" and ensure adherence to the recommendation.

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The nurse perspective

Dr Adriano Friganović

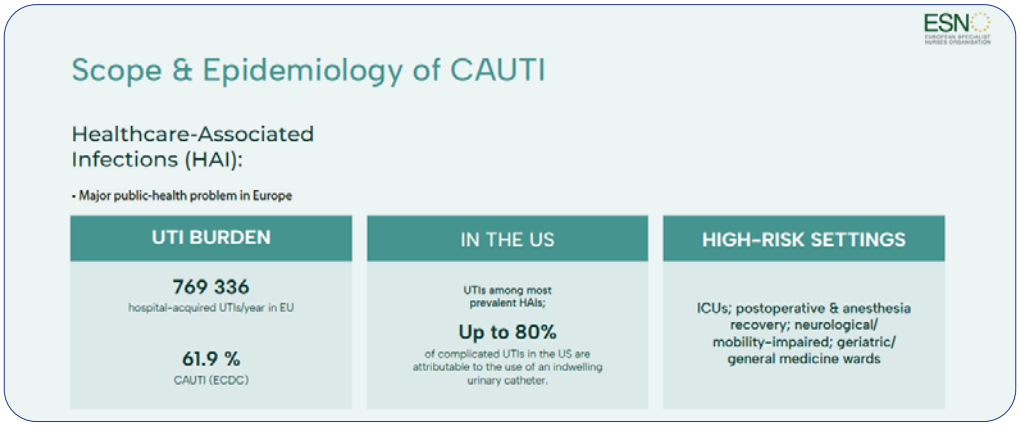
Dr Friganović introduced some startling statistics on the scope and epidemiology of CAUTIs in European healthcare. There are almost 800,00 hospital-acquired UTIs in the EU every year, and more than 60% of these are considered to be CAUTIs (ECDC estimates). Studies from the United States suggest that up to 80% of CAUTIs may be attributable to the use of an indwelling urinary catheter. In the United States, it is estimated that up to 13,000 deaths a year could be related to CAUTIs. From a health economic perspective, costs to healthcare systems from CAUTIs are between €800-1000 per case, suggesting a €477 million annual burden in EU healthcare costs. Furthermore, CAUTIs result in extended hospital stays, with consequent delays to new admissions and elective surgeries.

Dr Friganović indicated some of the gender dimensions to CAUTIs, with women facing a 2-fold higher CAUTI risk with indwelling catheters. Taking this all into account, some promise is offered by the adoption of Female External Urinary Catheters (FEUC), which can reduce CAUTI incidence by offering a non-invasive alternative for women.

In response, the European Specialist Nurses Organisation seeks to develop a broader coalition for European-level action on CAUTIs.

This should include:

- The establishment of a European Alliance Against CAUTIs
- The creation of a dedicated EU-wide CAUTI prevention strategy
- Improvement of CAUTI surveillance in acute care settings
- The integration of CAUTI prevention measures into EU antimicrobial resistance policies
- The publication of CAUTI-specific guidelines via the ECDC
- The establishment of a European hospital benchmarking system for CAUTI reduction
- The introduction of incentive schemes for CAUTI prevention across Europe



The gender dimensions of CAUTIs

Dr Heidi Ulrike Siller

Women face increased biological and systemic risks for catheter-associated urinary tract infections (CAUTIs), which include typically longer catheter durations. Since CAUTI risk rises with every day a catheter remains in situ, this significantly increases infection likelihood. Alternative catheter options for women, such as female external urinary catheters, should be considered, assessed, and made available across regions.

Dr Siller recommended:

- The fuller consideration of alternative catheter options for women
- Addressing gaps in data collection regarding infections by sex and gender, as well as other diversity aspects
- Greater sensitivity to gender and diversity dimensions in the creation, implementation and monitoring of infection control strategies
- Potential biases in decisions about catheter use for women may be present and worthy of additional study
- The EIWH is calling for a dedicated EU Strategy for Women's Health, which is a critical step toward reducing preventable infections, improving cancer outcomes, and advancing inclusive policies and systems that are both responsive and equitable.

The view from Cancer Patients Europe

Antonella Cardone

Ms Cardone emphasised the important role that standardisation could play in helping to reduce healthcare-acquired infections such as CAUTIs.

Strong variance in approach between countries is highly evident, with the consequent variance in outcomes. This indicates a value in both EU level guidance activities as well as better coordination of comparable data collection. This would also improve accountability for the problem. Uptake of new technologies can also drive improvement, including the design of safer catheter systems.

RECOMMENDATIONS

ON SAFEGUARDING CANCER PATIENTS FROM HEALTHCARE ACQUIRED INFECTION

- **Strengthen education and multidisciplinary collaboration**

  Given the significant burden of catheter-associated urinary tract infections (CAUTIs) on patient outcomes and health system sustainability, renewed efforts are needed to reinforce education, training, and multidisciplinary collaboration to improve infection prevention and control for cancer patients.

- **Reduce unnecessary catheterisation**

  National health systems should prioritise systematic reductions in avoidable catheter use, including through updated clinical protocols, decision-support tools, and consideration of newer technologies and alternatives to indwelling urinary catheters.

- **Promote EU-level strategic action on CAUTIs**

  A dedicated EU-level initiative on CAUTIs should be considered, including explicit integration of the issue within existing and future EU strategies on antimicrobial resistance, patient safety, and women's health.

- **Enhance surveillance, monitoring, and data quality**

  EU agencies should be adequately supported to help member states strengthen surveillance and monitoring of CAUTIs, including improving data quality, comparability, and visibility of gender-specific risks and outcomes.

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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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european cancer ORGANISATION

Rue de la Science 41
1040 Brussels, Belgium

+32 2 775 02 00

europeancancer.org

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