



Two-way traffic: aligning expectations with current realities in oncology. Mid-term ESMO Presidency considerations

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As we arrive mid-term of my ESMO presidency, I find myself reflecting on the current state of oncology and the necessity to more successfully bridge existing gaps between expectations and today's realities, for our patients as well as our profession. It really is a matter of two-way considerations and a delicate balancing act demanding reality and transparency in equal measure. Happily, in many areas we are delivering on expectations by translating them into proven realities. Other issues, however, require a lot more work or a rethink.

At the research level, we have witnessed tremendous progress over the past decade driven by increased focus on prevention and early diagnosis, and an expanding portfolio of powerful anti-cancer therapies that are being more precisely matched to individual cancers. For example, from 2011 to 2016, 68 new cancer medicines were approved for 22 indications,¹ including immune-based therapies that have significantly improved patient outcomes across many cancers, including melanoma and non-small cell lung cancer (NSCLC). The emergence of PD-1 inhibitors, with pembrolizumab and nivolumab taking centre stage back in 2014 for treating melanoma, has been followed by others, including CAR T-cell therapies and therapeutic antibodies, with a welcome expansion across many tumour types.

They are most certainly here to stay as we investigate further how to empower and personalise this anti-cancer armoury to unleash the power of the immune system to attack disease.

That said, the heightened expectations of our patients must be carefully managed as we seek to understand why some cancers do not respond or eventually become resistant to the treatments, as well as establish predictive markers of response to identify those individuals who would be most likely to benefit. The call to better manage expectations as

we move this rapidly evolving field forward was recently highlighted in the specialised literature.²

SPREADING THE WORD

As the Nobel Prize in Physiology or Medicine 2018 was awarded jointly to James P Allison and Tasuku Honjo “for their discovery of cancer therapy by inhibition of negative immune regulation”, an interesting article in *The Guardian*³ addressed the promise and current pitfalls of this potentially breakthrough therapy for an increasing number of patients. The author argued for a better balance between the hype and proven hypotheses in terms of established clinical benefit across patient populations.

We are reporting important progress in counteracting disease progression, resistance to cancer therapies and halting metastatic cell spread. These advancements have largely been driven by better screening, prevention strategies and earlier diagnosis. Our efforts aimed at identifying predictive biomarkers as well as developing more precise targeted therapies and combinatorial approaches—which in many cases are also proving less toxic for our patients—have also led to certain improvements to cancer incidence and mortality.

Reflecting some of these pioneering research trends, out of the 18 defined abstract categories for the ESMO 2018 Congress, the topics *Immunotherapy of cancer* and *Biomarkers* were among the top six receiving the most accepted submissions.

Similarly, three of the top five studies to make the most headlines during the meeting were as follows: atezolizumab in combination with chemotherapy against metastatic triple-negative breast cancer (IMpassion 130 trial)⁴; the power of tumour genomics in improving outcomes for breast cancer patients (SOLAR-1 trial)⁵; and potentially practice-changing data from a study^{6,7}

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showing that maintenance therapy with olaparib extends progression-free survival (PFS) by 3 years in over 50% of patients with newly diagnosed and advanced ovarian cancer (SOLO1 study).

To translate and apply this progress successfully for the clinical benefit of our cherished patients, we all rely on timely access to the latest research results and expect equal opportunity to engage in the essential conversations that continue to shape the future of cancer discovery and the practice of oncology.

ESMO congresses are renowned for facilitating a superb platform for this vital exchange of ideas. Importantly too, in today's era of personalised medicine that demands multidisciplinary approaches, they succeed in growing their reach, scope and appeal, year on year.

Last year's ESMO Congress in Munich drew a record attendance with 28 000 participants, up 16.8% on the previous year. Indeed, attendance has grown by a phenomenal 72.4% since 2012—a reality that surely delivers on expectations! The top 10 submitting countries of the 3350 plus abstracts that we received spanned North America, Europe and Asia.

Speaking of Asia, ESMO is especially dedicated to delivering on its educational agenda without borders. Launched in 2015, the ESMO Asia annual congress drew an attendance of over 3000 delegates last year. This statistic perfectly justifies ESMO's action of introducing this series of educational opportunities to keep oncology professionals in the Asia-Pacific region updated with the rapid pace of oncology science as well as promote networking opportunities with international colleagues.

While such successes must be applauded, we still have a long way to travel if we are to extend these breakthroughs and make them truly accessible to an increasing number of our patients, across borders.

I am optimistic that personalised medicine in oncology is starting to happen in practice, but expectations must be managed. Very real challenges stand in our way, including the hotly debated issue of expensive treatments carrying disproportionate price tags, buckling healthcare systems, the burden on treasury and the disparity of reimbursement policies across countries.

In 2016 there were 17.2 million cancer cases worldwide and 8.9 million deaths.⁸ Cancer cases are forecast to rise by 75% over the next 20 years. Added to the mix are the skyrocketing costs of oncotherapeutics and supportive care medicines. Global oncology costs are predicted to soar to over \$147 billion even as patent expiries and the advent of biosimilars are helping to reduce this unsustainable burden on the global purse strings. Equally daunting is the disparity in terms of access to new cancer medicines across even developed countries.¹

We are working to avert the pending catastrophe in terms of access to essential medicines and novel therapies for too many patients worldwide, as well as help deliver on ESMO's mission of facilitating equal access to optimal cancer care to all cancer patients. Our Cancer Medicines Committee, in close collaboration with especially

appointed expert groups, ESMO's global and regional public policy committees, are drawing up recommendations for policymakers, regulators, payers and pharmaceutical companies and translating them into models facilitating interaction between stakeholders at the regional level.

In our commitment to monitor the fair pricing of anti-cancer treatments, several value framework tools and platforms have been launched (and refined) to identify the proven (as opposed to merely promising) performance and clinical benefit of various treatments. Two of these important value frameworks are ESMO's Magnitude of Clinical Benefit Scale (ESMO-MCBS) and the American Society of Clinical Oncology (ASCO) Value Framework Net Health Benefit Score (ASCO-NHB), both launched in 2015.

Born out of a shared commitment to align their respective scoring systems by championing concordance through shared standards, findings from a study published this year⁹ found that both scales are largely in concordance regarding assessment outcomes, despite adopting different criteria and approaches to develop a clinical benefit or net health benefit score. In the instances of non-convergence, the report proposed several potential factors including varying means of evaluating relative and absolute gain for overall survival (OS) and PFS, and application of toxicity penalties. Importantly, the authors offered a four-point plan to further improve the two platforms. These findings will be key to potentiating current tools for assessing clinical gain of cancer medicines based on common parameters while upholding responsibility for reasonableness. In short, both platforms represent essential intelligence, particularly in guiding policymakers to ensure the appropriate allocation of limited funds towards delivering affordable and accessible cancer care globally.

Critically, these increasingly robust scoring systems will strive to only positively grade those treatments with proven clinical benefit. In so doing, they will better facilitate decision making as well as provide cancer patients and their families with independent, balanced information as they consult with their physicians.

Also rallying for real change, ESMO's Global Policy and ASCO's International Affairs Committees joined forces last year to push the agenda in improving cancer services and reducing cancer deaths. On the occasion of the United Nations High-Level Meeting on Non-Communicable Diseases (NCDs), ESMO and ASCO issued a joint statement¹⁰ calling on governments to renew their political commitment in scaling-up their actions and investments to meet the targets in reducing deaths from non-communicable diseases, with cancer as a top priority.

THE REAL WORLD

While these achievements are welcome, we must collectively review the worrisome realities that still fall far short of our expectations. In so doing, I believe that we can

reverse such trends and bring about real change towards improved outcomes for all stakeholders in oncology.

One particular area of focus where we are not yet delivering on expectations is closing the gender gap in oncology. Two recently published reports^{11 12} led by the ESMO Women for Oncology (W4O) Committee have revealed the realities in terms of how far we have come in addressing gender disparity within our field. Paired with an accompanying editorial,¹³ findings show that we are falling short of expectations. While an increasing number of women are undoubtedly pursuing careers in the healthcare sector—up to 75% of the workforce in some countries—the limited access to the upper tiers indicates that more senior positions largely remain out of reach for our female colleagues. With few exceptions, the problem is global.

Theory does not necessarily translate in practice. This is sometimes true of the disclosure and proper management of declarations of interest in biomedicine. While the policies and procedures in place should be second nature to us all—part of our DNA as practising physicians and cancer researchers—the history books show that proper disclosure can fall far short of what we naturally expect.

To help safeguard research quality and trust, as well as protect the essential collaborations and precious relationships between academia and industry in oncology, ESMO has launched a Compliance Committee.

This new addition to ESMO's expert infrastructure will seek to trigger the bigger conversations that clearly need to be added. As a priority, one of these will need to centre on disclosures. By engaging all relevant stakeholders including the publishers, professional cancer societies as well as patient advocates, I strongly believe that we can resolve the concerns surrounding the influence of competing interests in cancer research and treatment.

In our efforts to advance the practice of oncology and deliver optimal cancer care across borders, we can and will do better. We must all work together as we continue to translate current challenges in oncology into opportunity for the most deserved stakeholders of all—our patients.

Our environment, the world in which we live and work, is a mirror of our attitudes and expectations—Earl Nightingale, radio speaker and author 1921–1989.

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