

## New leadership, vision for the Worldwide Innovative Network Consortium in precision oncology

By Wafik S. El-Deiry

**GUEST EDITORIAL** 

From the time of its inception, the Worldwide Innovative Network (WIN) Consortium in precision cancer medicine has had a bold mission to significantly improve survival of patients with cancer across the world through international collaboration.

It is indeed a great honor and a career highlight for me to be elected this month as the chair of WIN.

WIN was founded in 2010, in France, as a unique first-of-its-kind non-profit non-governmental organization by the late Dr. John Mendelsohn, past president of MD Anderson Cancer Center, Houston, chairman of WIN until his death, and Prof. Thomas Tursz, general director at Gustave Roussy, France. WIN's strategy has been to perform proof-of-concept cancer clinical trials designed to explore novel strategies and tools to increase efficacy of precision oncology therapeutics and improve early diagnosis.



John Mendelsohn, MD



The impact of WIN has been global and has involved the conduct of signature clinical trials that have employed novel AI algorithms. The WINTHER trial on genomic and transcriptomic profiling to expand precision cancer medicine was published in *Nature Medicine* in 2019.

While this trial did not meet its primary endpoint of seeing that 50% of enrolled patients who had their therapy directed by tumor transcriptomics would achieve a 1.5x prolongation of their progression-free survival (PFS) as compared to their last prior regimen's PFS, this was clearly a very ambitious and high bar to achieve.

The 107 patients who were ultimately treated according to recommendations by a committee from five countries showed improved outcomes for those with a high matching score across tumor types such as colorectal cancer, head and neck cancer, and lung cancer. The trial did demonstrate that 25% of treated patients had a progression-free survival 2 (PFS2) to PFS1 ratio of >1.3 which is impressive considering that the patients were heavily pretreated.

WIN has contributed to algorithms based on patient tumor profiling to predict drug combinations that may be efficacious.

The Simplified Interventional Mapping System (SIMS) uses knowledge about existing drugs and their impact on hallmarks of cancer and based on genomic DNA sequencing, copy number variation, transcriptomics and micro-RNA reports the activation status of 24 nodes that are ranked for each patient and their tumor.

The SIMS algorithm was applied in WIN's SPRING trial that tested the combination of and anti-PD-L1, a VEGF receptor inhibitor and a CDK4/6 inhibitor in patients with non-small cell lung cancer who did not have alterations in EGFR, ROS, ALK or MET.

The combination of avelumab, axitinib, and palbociclib demonstrated 53% clinical benefit including stable disease for greater than 24 weeks or partial responses including in patients who had previously received anti-PD1 therapy.

Other advances include the Digital Display Precision Predictor (DDPP) as a prototype of a global biomarker model to guide treatments with targeted therapy and prediction of progression free survival.

This includes predictions of post-surgery recurrence in patients with early-stage non-small cell lung cancer who may benefit from adjuvant therapies. Important concepts in the field have emerged from the leaders and collaborators in the WIN Consortium.

Part of the future in precision oncology will involve N-of-1 clinical trials given the complexity and heterogeneity of specific cancers. Another trial that has supported these concepts in addition to WINTHER and SPRING was and as president of MD Anderson Canthe I-PREDICT study led by Dr. Razelle Kurzrock that was also published in Nature Medicine

I-PREDICT stands for Investigation of recognized and understood that work-Profile Related Evidence Determining ing together on a global scale provides Individualized Cancer Therapy and in this trial patients who enrolled were classified as either having a high matching score or a low matching score depending on the presence of drivers and available drugs.

The trial showed that in a cohort of 149 patients with GI malignancies, GYN cancers breast cancer and central nervous system cancer, patients with a higher matching score had significantly better survival as compared to patients with a lower matching score.

Dr. Kurzrock has been incredibly influential in the world of phase I trials and precision oncology in general.

Her leadership, innovation and continued role as the chief medical officer for the WIN Consortium is a major strength and will help shape the future based on many of her extremely well-conceived, rational and great clinical trial ideas.

It is very inspiring to work with someone who describes their commitment to a cause as a "labor of love," or to hear others describe her as the "sunshine" of the WIN Consortium organization.

I was honored to be considered for the role of chair of the WIN Consortium because I am interested in working with like-minded colleagues on an international scope to promote innovation and impact that can help patients.

I also thought this would be an opportunity to honor John Mendelsohn's leadership and vision in founding the WIN

Dr. Mendelsohn was a transformational figure in the field of oncology through his leadership throughout the years in translational therapeutics research cer Center, Drs. Mendelsohn and Tursz spired and superb leadership.

a unique strength to fight cancer.



osep Tabernero, MD, PhD Vice-chair WIN: Director, Vall d'Hebron stitute of Oncology, Head, Medical Oncology Department Vall d'Hebron University Hospital



Richard L. Schilsky, MD Chair emeritus, WIN: ofessor emeritus, University of Chicago ormer chief medical officer. merican Society of Clinical Oncology; Board chair, Reagan-Udall undation for FDA

After their involvement with the WIN Consortium, Drs. Richard Schilsky and Josep Tabernero are passing the baton to a new team after many years of in-

## The new team at the **WIN Consortium in** December 2023



Wafik S. El-Deiry, MD, PhD, FACP Chair, WIN; Director, Legorreta Cancer Center at Brown University; Attending physician, hematology/ oncology, Lifespan Cancer Institute, Associate dean, oncologic sciences, Warren Alpert Medical School, rown University



Chief medical officer, Equal opportunity and diversity officer, WIN; Professor of medicine, ssociate director of clinical research, Linda T. And John A. Mellowes Endowe Chair of Precision Oncology, Medical College of Wisconsin



Vladimir Lazar, MD, PhD Chief scientific and operating ast director, Genomic Platform, ustave Roussy



Catherine Bresson rector, Operational Team, WIN

Moving into the future, the WIN Consortium is expanding its membership both in the United States and throughout the world.

WIN is engaging with diagnostics and pharmaceutical companies, biotechnology companies, patient advocacy organizations, non-profits, and professional societies.

WIN will continue to build upon the transcriptomics' algorithms and precision medicine expertise with knowledge gained from international clinical trials in order to pursue the exciting potential of precision oncology. WIN working with global partners accelerates the testing of new concepts while bringing state-of-the-art clinical trials and therapeutics to patients throughout the world.

It is important to acknowledge the ongoing contributions of two individuals who can be described as the backbone and engine of the WIN Consortium, respectively: Catherine Bresson, the director of the Operational Team for the WIN Consortium and Dr. Vladimir Lazar, the chief scientific and operating officer of the WIN Consortium

Catherine's family has been touched by cancer in such a deeply personal way when her son Gaspard passed away in 2009 that she dedicated her energies to fighting cancer in every way possible.

Over the years, Vladimir has led the WIN Consortium's genomics and AI algorithm development through his expertise as the Head of Gustave Roussy's Genomic Center and Integrated Biology Platform from 2002-2015.

Josep Tabernero, head, Medical Oncology Department, Director, Vall d'Hebron Institute of Oncology (VHIO), and past ESMO President (2018-2019) has served as the Vice Chairman of the WIN Consortium and contributed to its global recognition, including through the WIN Consortium meeting that was held in Barcelona in 2022.

In October 2023, Dr. Tabernero was named as Cancer Core Europe's new chairman of the Board of Directors. Cancer Core Europe (CCE), an association of seven cancer centers in Europe desires to reshape cancer research to increase the European Union's competitiveness in translation of personalized medicine.

This will clearly benefit from Dr. Tabernero's leadership. When possible, the WIN Consortium would pursue joint efforts, events, or clinical trial collaborations.

As the incoming chair, I have been charged with the selection of a new vice chair for the WIN Consortium preferably from outside the United States.

This effort will be moving forward in the coming weeks with an eye towards enhancing diversity, innovation and facilitating global collaboration. Internationally recognized leading translational/clinical investigators from throughout the world are welcome to reach out to the WIN Consortium to express interest in the role of vice chair. Nominations are also welcome.

An international molecular tumor board (MTB) has been created by WIN where cases are discussed but also to assist with clinical trial enrollment of patients in the future.

An MTB was held at the in-person 2022 WIN Consortium meeting and another virtual WIN Consortium MTB was held on November 30, 2023.

The virtual WIN Consortium MTB of November 2023 was an outstanding well-attended event with terrific discussions of a case from Spain, co-chaired with Dr. Kurzrock and with a global audience.

Participants attended from all over Europe and USA, Canada, Japan, and Australia, all working together to help a patient with colorectal cancer through diverse inputs and perspectives.

The MTB discussed molecular targets in CRC including BRAF, c-MET, EGFR, NRAS, p53, APC, locoregional therapy, longitudinal liquid biopsies, emergent resistance mechanisms, clinical trials, standard of care options and innovative therapy combinations along the lines of I-PREDICT.

This was not only a great learning experience for all those who attended, but there were great suggestions and strategies proposed to help the patient whose case was discussed. Publications are expected from these events.

In the future, WIN will foster engagement with the community of thought leaders and partners through think tanks and through increased engagement with its independent scientific advisory board.

The key to success for the WIN Consortium is to pursue innovation and true collaboration with partnering institutions as a unique global effort. This will involve growth of centers and collaborators around the world as well as an increased volume of innovative precision oncology trials including N-of-1 trials and phase 1b/II trials of novel combinations based on drivers as identified by profiling algorithms involving transcriptomics and beyond.

Exceptional responders represent a great opportunity for all of us to learn about why some patients do much better than others due to biology or other factors.

The need to understand the underlying factors for better clinical outcomes as we continue to use novel therapeutics and combinations will continue into the future and is a very big area for impact in precision oncology.

During the summer and fall of 2023 I have had the honor and privilege of working with colleagues to organize the next WIN symposium in 2024 on March 1-2 in Abu Dhabi, UAE.

The 13th WIN Symposium features a keynote on immunotherapy by Nobel laureate Dr. Jim Allison, sessions on precision genomics, precision immunotherapy, radiation therapy, a molecular tumor board, a special lecture about access, equity and diversity in precision oncology, panel discussions, poster sessions and oral presentations from submitted abstracts.

In the future, the venue for the WIN Symposium will vary to reflect its global impact and presence. I am excited by the opportunity to lead the WIN Consortium as the new chair working with

amazing colleagues around the world. I expect the next phase of WIN's development to involve growth of membership, increased volume of innovative clinical trials, and meaningful impact in the field and on patients' lives. I look forward to working with many of you to realize this vision.

In this regard, this editorial provides a "call" to the oncology community to join with the WIN Consortium in achieving our vision for world-wide collaboration, innovation and impact on patients' lives through precision oncology clinical trials.

We are growing globally and would encourage institutions interested in joining to contact us. We warmly welcome partners and colleagues to discuss innovative ideas in precision oncology that could benefit from implementation through the WIN Consortium.

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