



Open camera or QR reader and scan code to access this article and other resources online.

COMMENTARY

Bridging Borders in Integrative Oncology: A Global Initiative by Society the for Integrative Oncology

Konstantina Stylianou,^{1,*} Nina Fuller-Shavel,^{2,3,*} Ricardo Ghelman,^{4,5} Eran Ben-Arye,⁶ Massimo Bonucci,⁷ Libin Jia,⁸ Santhosshi Narayanan,^{9,†} and Santosh Rao^{10,†}

Introduction

Cancer continues to be a leading cause of mortality worldwide, and its treatment often requires interdisciplinary approaches. Patients are increasingly seeking complementary therapies to enhance clinical outcomes and improve quality of life. However, the integration of these therapies into oncology care must be evidence-informed to ensure safety, efficacy, and broad acceptance.

Integrative oncology (IO) is a patient-centered, evidence-informed field of cancer care that incorporates mind-body practices, natural products, and lifestyle modifications alongside conventional cancer treatments. Witt et al.¹ define IO as optimizing health, quality of life, and clinical outcomes throughout the cancer care continuum while empowering patients to participate actively in their care. IO offers an evidence-informed framework to integrate complementary approaches and cultural traditions into personalized cancer care by drawing on worldwide traditional medicine systems and practices.

Despite its potential, IO implementation remains inconsistent globally, with significant variability in clinical practice. Recognizing this gap, organizations dedicated to advancing education, research, and the implementation of IO are steadily emerging.

The Society for Integrative Oncology (SIO) plays a pivotal role in this landscape. SIO was founded in 2003 and has been a leader in the field for over 2 decades as a nonprofit, international professional organization bringing together integrative oncology practitioners across multiple disciplines. Its mission is to advance evidence-based, comprehensive integrative health care to improve the lives of people affected by cancer worldwide. SIO actively promotes high-quality research, develops and disseminates educational tools and guidelines, and fosters collaborative cancer care models to enhance access to IO services.

This article explores the current state of IO worldwide and how SIO continues to support global advocacy, research, and clinical practice within the field to advance the quality of integrative cancer care.

¹Integrative Medicine Department, German Oncology Centre, Limassol, Cyprus.

²Synthesis Clinic, Reading, United Kingdom.

³National Centre for Integrative Oncology (NCIO), Reading, United Kingdom.

⁴Brazilian Academic Consortium for Integrative Health, University of São Paulo, São Paulo, Brazil.

⁵Department of Medicine on Primary Health Care, Federal University of Rio de Janeiro, Rio de Janeiro, Brazil.

⁶Lin Carmel, and Zebulun Medical Centers, Clalit Health Services; Faculty of Medicine, Technion-Israel Institute of Technology, Haifa, Israel.

⁷Association for Research on Integrative Oncology Therapies (ARTOI), Rome, Italy.

⁸Office of Cancer Complementary and Alternative Medicine, Division of Cancer Treatment and Diagnosis, National Cancer Institute, National Institutes of Health, Rockville, Maryland, USA.

⁹Department of Palliative, Rehabilitation, and Integrative Medicine, The University of Texas MD Anderson Cancer Center, Houston, Texas, USA.

¹⁰Department of Medical Oncology, University Hospitals, Seidman Cancer Center, Cleveland, Ohio, USA.

*Konstantina Stylianou and Nina Fuller-Shavel contributed equally as first authors.

†Santhosshi Narayanan and Santosh Rao contributed equally as senior authors.

SIO Global Committee

The SIO Global Committee connects leaders worldwide to fulfill its mission. The SIO Ambassador Program was launched to facilitate SIO's international impact, foster meaningful global research collaboration, and support regional and national IO initiatives. As of 2024, the SIO Executive Committee authorized the following ambassador nominations: regional ambassador to Europe and the Middle East and state ambassadors to the UK, Italy, Greece, Cyprus, India, Australia, and Brazil. The SIO ambassadors work towards the following goals:

- (1) Increasing international membership and representation of SIO worldwide.
- (2) Presenting the American Society of Clinical Oncology (ASCO)-SIO guidelines and supporting international dissemination and implementation.
- (3) Establishing a cross-cultural collaborative dialogue between integrative oncology centers and supporting regional IO initiatives.

International collaborations with organizations such as the British Society for Integrative Oncology (BSIO) and the Italian Association of Integrative Oncology Research Foundation (ARTOI) bolster and amplify SIO's initiatives, fostering greater reach and impact. In 2023, the SIO Europe Group was established in Rome during the European Congress of Integrative Oncology at the initiative of SIO members and leading IO clinicians, researchers, and educators from key academic centers and professional societies across Europe and the Middle East.

Furthermore, joint efforts and projects with groups such as the Multinational Association of Supportive Care in Cancer have aligned shared goals, enhancing the global landscape of cancer support and care.

IO Research and Implementation

SIO has prioritized evidence-based research and global collaboration to standardize integrative oncology practices. Since 2007, SIO has developed clinical guidelines in IO. ASCO has cosponsored SIO guidelines for pain, anxiety/depression, and fatigue.²⁻⁴ These guidelines emphasize modalities such as mindfulness, yoga, acupuncture, nutrition, and exercise to improve quality of life and support symptom management.⁵ SIO is also producing a comprehensive integrative oncology textbook in 2025.

Recent initiatives highlight SIO's impact on research, education, and clinical practice. The Patient-Centered Outcomes Research Institute funded the IMAGINE Project, led by Dr. Jun Mao at Memorial Sloan Kettering Cancer Center, focusing on implementing oncology-specific acupuncture and massage training in 35 U.S. cancer centers. Other funding bodies, such as the Scheidel Foundation and the Gateway for Cancer Research, invest in IO research and implementation initiatives.

Global Variation in Clinical Practice

IO is increasingly recognized worldwide, yet clinical practices vary greatly due to cultural, financial, and systemic

differences and the absence of global guidelines to guide care and ensure equitable access.⁶

In Europe, progress is inconsistent. Germany integrates therapies such as anthroposophic medicine and acupuncture within public health care, with 20 facilities in Baden-Württemberg offering IO services. Italy lacks a national IO program, though Tuscany includes several modalities in its public health care system.⁷ Cyprus has a single integrative medicine department offering free IO therapies. France established its Integrative Oncology Society in 2023, while Scandinavian countries lack formal IO clinical models. In the UK, IO is limited within public health care, focusing primarily on mind-body therapies, although this may change with the recent establishment of NCIO (National Center for Integrative Oncology).

In the Middle East, Israel leads with well-established IO practices integrated into cancer care, while Iran and Turkey show growing research interest but lack clinical IO implementation due to systemic challenges and cultural skepticism.

In the U.S., IO practices are more structured, with National Cancer Institute-designated centers offering modalities such as acupuncture, yoga, and dietary counseling. However, costs for services are often passed on to patients, limiting access. In Canada, IO services are predominantly community-based, with minimal insurance coverage.⁸

Latin America integrates diverse traditions, incorporating therapies such as acupuncture, herbal medicine, meditation, yoga, music therapy, aromatherapy, and massage into public systems. Examples of collaborations include CABSIN, Brazilian National Cancer Institute-Designated Cancer Centers, and Traditional, Complementary, and Integrative Medicine (TCIM) Americas Network, aiming to enhance access and foster evidence-based IO practices.⁹⁻¹¹

In China, IO therapies are widely accessible through hospitals, with costs largely covered by public funding and reimbursement systems.¹² In 2020 the China Society for Integrative Oncology (CSIO) was established with over 200 members. In Korea, the Ministry of Health and Welfare has supported IO since 2019 through pilots and the establishment of 12 integrative cancer centers, blending Western and traditional Korean medicine, with varying insurance coverage.¹³

India promoted traditional medicine globally through the G20 and cohosted the International Traditional Medicine Conference with the WHO in Gujarat in 2023.¹⁴ Ayurveda and other traditional practices are widely used, supported by the Ministry of Ayush.¹⁵

Australia's IO services are growing within several clinical centers, such as the Supportive Care and Integrative Oncology service at the Chris O'Brien Lifehouse. However, equitable access is hindered by limited insurance coverage, with many centers relying on philanthropy to subsidize therapies.

Education

The SIO Global Committee, as part of its global initiatives, organized its first-ever workshop themed "Research and Training as Tools for Enhancing and Strengthening Integrative Oncology in European Countries." Held in May 2023 in Cyprus, the workshop was highly successful and attracted participants worldwide. Similar workshops are planned globally, including upcoming SIO Europe initiatives. Alongside this, the SIO Education Committee has put

together two CME-accredited online educational modules covering the recent pain, anxiety, and depression SIO-ASCO guidelines.^{2,4}

Several educational programs aimed at integrative oncology physicians and allied health care professionals are available across Europe and the Middle East, including a long-standing master's program in Italy. A new integrative hematology-oncology fellowship was established in the U.S.,¹⁶ and a 6-month university diploma program was created in Bogotá to address training needs in South America.

However, geographical reach is an obstacle. Current efforts of SIO Europe, ARTOI, and BSIO are directed toward creating an international IO postgraduate master's program that would help improve access beyond locally available initiatives. This collaboration would enable delivery of an extensive, evidence-based standardized program with expert international faculty, providing in-depth coverage of the recently outlined educational competencies for integrative oncology.¹⁷ Importantly, the program aims to include experiential learning through international clinical placements to provide hands-on mentorship and foster collaboration.

Traditional medicine and collaboration

Traditional medicine has been fundamental to the health and well-being of people and the planet across countries for centuries. Importantly, TCIM can fill gaps in the management of chronic noncommunicable diseases, including cancer. More than 2,400 systematic reviews have been organized, associating specific interventions and outcomes within evidence maps by groups in Brazil (PAHO and CABSIN), South Korea (KIOM), and Norway (NAFKAM).¹⁸

Around 90% of WHO member states (170 countries) report using traditional medicine and are calling for robust evidence to guide policies, practices, and regulations to ensure its safe and effective use, with equity and sustainability. To meet this global demand, WHO has established the Global Traditional Medicine Center (GTMC) within the Division of Universal Health Coverage and the Life Course. GTMC's strategic actions include identifying research priorities, standardizing data collection, promoting biodiversity management, and developing a Global Library of Traditional Medicine to facilitate access to scientific publications and promote equitable knowledge exchange supported by intellectual property rights. All these actions will also be guided by the Global Strategy for Traditional Medicine 2025–2034.

Summary

The SIO Global Committee plays a pivotal role in connecting international leaders united by the SIO mission to advance evidence-based, comprehensive integrative health care to improve the lives of people affected by cancer worldwide. The efforts of committee members include increasing IO global outreach through the SIO ambassador program, research, education, engagement with the WHO, and guideline development and dissemination.

References

1. Witt CM, Balneaves LG, Cardoso MJ, et al. A comprehensive definition for integrative oncology. *J Natl Cancer Inst Monogr* 2017;2017(52); doi: 10.1093/jncimonographs/lgx012
2. Carlson LE, Ismaila N, Addington EL, et al. Integrative oncology care of symptoms of anxiety and depression in adults with cancer: Society for integrative Oncology-ASCO guideline. *J Clin Oncol* 2023;41(28):4562–4591; doi: 10.1200/jco.23.00857
3. Bower JE, Lacchetti C, Alici Y, et al. Management of fatigue in adult survivors of cancer: ASCO-Society for integrative oncology guideline update. *J Clin Oncol* 2024; 42(20):2456–2487; doi: 10.1200/jco.24.00541
4. Mao JJ, Ismaila N, Bao T, et al. Integrative medicine for pain management in oncology: Society for integrative Oncology-ASCO guideline. *J Clin Oncol* 2022;40(34): 3998–4024; doi: 10.1200/jco.22.01357
5. Carlson LE, Tripathy D, Zick SM, et al. The society for integrative oncology-American society of clinical oncology joint guidelines on integrative therapies for symptom management-overview and key recommendations. *J Integr Complement Med* 2024;30(7):596–601; doi: 10.1089/jicm.2024.0452
6. Lopez G, Narayanan S, Cohen L. Integrative medicine in oncology: Redefining the standard of care. *Nat Rev Cancer* 2024;24(11):739–740; doi: 10.1038/s41568-024-00735-1
7. Rossi E, Vita A, Baccetti S, et al. Complementary and alternative medicine for cancer patients: Results of the EPAAC survey on integrative oncology centres in Europe. *Support Care Cancer* 2015;23(6):1795–1806; doi: 10.1007/s00520-014-2517-4
8. Grant SJ, Hunter J, Seely D, et al. Integrative oncology: International perspectives. *Integr Cancer Ther* 2019;18: 1534735418823266; doi: 10.1177/1534735418823266
9. Lopez G, Salas CA, Cadiz F, et al. Complementary and integrative medicine use in individuals seeking conventional medical oncology care in Chile: Prevalence and patient characteristics. *J Glob Oncol* 2019;5:1–6; doi: 10.1200/jgo.18.00190
10. Tröndle M, Stritter W, Ghelman R, et al. Broadening the horizon for children's health—A qualitative study on the Centro Latino-Americano de Medicina Integrativa Pediátrica. *Complement Ther Med* 2021;58:102681; doi: 10.1016/j.ctim.2021.102681
11. de Moraes Mello Boccolini P, Siqueira Boccolini C. Prevalence of complementary and alternative medicine (CAM) use in Brazil. *BMC Complement Med Ther* 2020;20(1):51; doi: 10.1186/s12906-020-2842-8
12. Yang G, Zhang H, Xu Y, et al. Basic characteristics, status, and challenges of integrative oncology in China. *Integr Cancer Ther* 2021;20:15347354211063504; doi: 10.1177/15347354211063504
13. Kwag E-B, Kim S-D, Park JH, et al. The current status of integrative oncology in Korea. *Integr Cancer Ther* 2021;20: 15347354211063809; doi: 10.1177/15347354211063809
14. WHO Traditional Medicine Global Summit 2023 meeting report: Gujarat Declaration. *J Ayurveda Integr Med* 2023; 14(5):100821; doi: 10.1016/j.jaim.2023.100821
15. Gundeti MS, Arnold JT. Integrative oncology in cancer care continuum. *J Ayurveda Integr Med* 2024;15(1):100907; doi: 10.1016/j.jaim.2024.100907
16. Gowin K, Larsen A, Camoriano J. Integrative hematology oncology fellowship: A descriptive analysis of the first accredited program in the United States. *Blood* 2024; 144(Supplement 1):3826–3826; doi: 10.1182/blood-2024-211011

1. Witt CM, Balneaves LG, Cardoso MJ, et al. A comprehensive definition for integrative oncology. *J Natl Cancer*

17. Witt CM, Balneaves LG, Carlson LE, et al. Education competencies for integrative oncology—results of a systematic review and an international and interprofessional consensus procedure. *J Cancer Educ* 2022;37(3):499–507; doi: 10.1007/s13187-020-01829-8
18. WHO Global Traditional Medicine Centre. Evidence gap map in traditional medicine. Available from: <https://www.who.int/teams/who-global-traditional-medicine-centre/research-and-evidence/evidence-gap-map>

Address correspondence to:
Nina Fuller-Shavel, MB, BChir, MSc, MA
National Centre for Integrative Oncology (NCIO)
Unit 6 Castle End
Castle End Road, Reading
Berkshire RG10 9XQ
United Kingdom

E-mail: drninafullershavel@ncio.org.uk