Surgery for gynecological cancers in the era of personalized medicine: a novel paradigm

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Surgery has been the cornerstone of treatment for most gynecological malignancies for centuries. In the beginning of the 19th century, the pioneers of gynecological oncologic surgery marked the path that we still follow many years later. Dr Ephraim McDowell performed the world's first ovarian surgery on 25 December 1809. Principles such as adequate and transparent informed consent, the importance of appropriate and adequate infrastructural and institutional support, the concept of prehabilitation, the recognition of adequate patient selection and stratification as key to success, optimal conditions for adequate perioperative care, comprehensive surgical documentation and mapping, and long-term follow-up and holistic support persist today across centers, countries, and continents.

Our society is currently evolving at a rapid, almost vertiginous speed, and gynecological oncologic surgery is no exception. We have learned that surgery is now part of a much bigger concept incorporating and combining novel and targeted systemic approaches, early detection strategies and tumor–biological advances under an umbrella of individualization and personalized medicine.

In this special issue of *IJGC*, we wished as Guest Editors to reflect on and present to our readership the current aspects of reconstructive techniques in our field, the novel trends around image-guided resections even beyond the traditional application of tracers, and how advances in preoperative imaging, including radiomics, can now be used to tailor surgical radicality towards those who will benefit the most. We also provide an overview of the surgical management for rare and challenging tumors, such as gestational trophoblastic tumors and gynecologic sarcomas, by key opinion leaders in our community who have delineated all special facets not only of primary but also metastatic and recurrent disease. We are sure you will enjoy reading about surgical options for lymphedema after gynecological cancer treatment, the art of bowel surgery for gynecologic cancers, how to perform a uterine transposition for fertility preservation in pelvic cancers, the risks and benefits of extra-abdominal cytoreductive techniques in gynecological tumors (how far can and should we go?), and how to de-escalate surgical radicality in early stage cervical cancers.

Of course, in this day and age, we could not have omitted the vast impact of medico-legal, infrastructural, and financial aspects on decision-making processes, surgical stratification, and selection. In addition, under the key of holistic surgical care, we have experts presenting health-related quality of life metrics for surgical trials, and the new windows of surgical opportunities that arise in the era of targeted therapies and how to interlink them, especially in the cases of oligometastatic disease and after the failure of PARP inhibitor therapy.

Lastly, we wished to address the physical and psychological impact of surgery on the operating surgeon, and also to give a strong signal of the importance of the wellbeing of we treating physicians. In summary, we dedicate this special issue to all of you: this very special community of fighters against gynecological cancers. We very much hope it will be of value to you and your daily practice.

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