



Bernardo L Rapoport is a Specialist Physician and Medical Oncologist at The Medical Oncology Centre in Rosebank, Johannesburg, South Africa. His fields of interest include cancer supportive care, antiemetics and infections in cancer, breast cancer, solid tumours and new anticancer agents. Dr Rapoport is a member of numerous professional societies, including the South African Society of Medical Oncology (SASMO), the European Society for Medical Oncology (ESMO), the American Society for Medical Oncology (ASCO) and the Multinational Association for Supportive Care in Cancer (MASCC), Chair of the MASCC Infection and

Myelosuppression Study Group and a member of the MASCC Antiemetic Guidelines Working Group and the MASCC Skin Toxicity Study Group. He is a member of various South African and international pharmaceutical company Advisory Boards as well as Protocol Steering Committees. Dr Rapoport has presented more than 100 abstracts at South African and international meetings (including ASCO, MASCC and ESMO) and published more than 60 peer-reviewed publications with over 2,000 citations. He is a reviewer for numerous scientific medical journals, including *Annals of Oncology*, *Supportive Care in Cancer* and *Journal of Clinical Oncology*.

Nausea and vomiting remains one of the major side effects associated with anticancer chemotherapy. It is one of the main reasons for poor compliance with cancer treatment. Advances in the understanding of the pathophysiology of chemotherapy-induced nausea and vomiting (CINV) and the identification of major risk factors have greatly contributed towards the prophylaxis of CINV.

The three clinically distinct forms of CINV include acute, delayed and anticipatory nausea and vomiting. Each form is primarily associated with a different phase of time surrounding chemotherapy administration. Historically, the introduction of 5-hydroxytryptamine receptor antagonists (5-HT₃ RAs) in the 1990s was a major advance in the prevention of acute emesis, and highlighted the role of serotonin pathway in the emetic response. The second breakthrough in the management of CINV occurred in 2003 with the introduction of aprepitant, which is a neurokinin (NK1) receptor antagonist. Aprepitant is primarily active in the reduction of delayed emesis.

Treatment-related factors, such as the type of chemotherapy, dosage of the agents used and scheduling and route of administration, are primarily responsible for the risk of developing CINV. Individual patient-related risk factors, such as gender, age, prior history of CINV, poor emesis control in the acute phase, emesis during pregnancy or motion sickness, alcohol use, tumour burden, anxiety, concomitant medication and inadequate hydration, should not be underestimated. Current guidelines are based only the emetogenic potential of the chemotherapy itself. Consideration of the various patient-related risk factors is important, otherwise the accuracy of emesis prediction is likely to be reduced, resulting in inadequate CINV prophylaxis.

Despite all the advances in this field over the last two decades, a significant number of patients continue to experience CINV despite optimal treatment. More effective therapies are needed, with the ultimate goal of attaining complete control of CINV, improving treatment compliance and quality of life.

European Oncology & Haematology would like to thank all participants on this edition, especially the expert authors who spared precious time and effort to produce an insightful selection of articles. A special thanks is reserved for our editorial board, for their continuing support and invaluable guidance. We hope you find this issue useful and that it provides helpful information and discussions that are relevant to your practice and interests. ■