



Introducing a new *ESMO Open* article series: how I treat side effects of immunotherapy

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Immunotherapy has revolutionised medical oncology due to durable responses and favourable clinical trial outcomes seen in some patient populations treated with immune checkpoint inhibitors.¹ As a consequence, various immune checkpoint inhibitors have been approved by regulatory bodies and have quickly been adopted as the standard treatment option in several cancer types, such as melanoma, lung cancer and renal cell cancer.^{2–8} Efficacy has been shown not only in metastatic stages including patients in highly advanced treatment phases but also in patients with lung cancer and melanoma treated in the adjuvant setting.⁹ Recent data from lung cancer, melanoma and glioblastoma indicate that immune checkpoint inhibition may even be of relevant clinical benefit in neoadjuvant therapy, thus opening novel avenues for further development of cancer immunotherapy.^{10–23} In addition, novel molecular insights drive refined selection of patients with cancer for targeted treatments including immunotherapies and the development of new approaches to effective anti-cancer immunomodulation.^{24–26} Notwithstanding the economical issues and implications,^{27–29} all of these developments lead to a quickly increasing number of patients with cancer being exposed to modern immunotherapy in clinical routine worldwide. As a consequence, the medical community is increasingly faced with immune-related side effects of these novel therapeutics in everyday practice. The mode of action of immune checkpoint inhibitors explains the particularly broad spectrum of side effects associated with their use.^{30–32} Type and severity of adverse effects seen in patients treated with inhibitors of CTLA4, PD1, PD-L1 and other immunomodulatory molecules vary greatly between patients and require a well-informed and individualised approach to maximise patient safety. The current series of articles aimed to provide concise summaries of the personal approach

of key opinion leaders to specific immune-related toxicities with a focus on rare adverse effects such as neurological and rheumatological phenomena and may complement the comprehensive and well-accepted general guidelines published by international societies, including the European Society of Medical Oncology.³³ We do hope that the articles serve our readership and contribute to the spread of expertise in the quickly moving field of cancer immunotherapy and ultimately better care of patients with cancer worldwide.

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