Primary central nervous system lymphoma

Primary central nervous system lymphoma is a challenging neoplasm with peculiar biological and clinical features. Its increasing incidence, peculiar clinical behavior and aggressiveness as well as the distinctive biological and immunological features of the central nervous system represent several challenges in diagnosis, treatment and basic knowledge on this tumor. Technological achievements in neuroimaging resulted in earlier and more accurate diagnostic suspicion, and an increased number of patients with histopathologically confirmed diagnosis. Higher availability of biological and tissue samples and the use of recently developed, highly performing molecular techniques produced substantial knowledge in the molecular and genetic properties of this neoplasm. In this scenario, international cooperation played a central role, with the establishment of working groups that designed and completed large randomized trials, focused on relevant open questions. In the last decade, international cooperation established consolidated therapeutic guidelines and advanced our learning in some peculiar settings, like vitreoretinal lymphoma and neurolymphomatosis. Basic research critically contributed to these achievements, mostly on activated tumor pathways that could represent suitable targets for novel therapies. The efforts of several multidisciplinary experts led to relevant improvement in outcome and quality of life of patients affected by this dismal disease. Many of these internationally recognized experts contributed to summarize the current knowledge, discuss evidence, provide recommendations, and foresee possible scenarios in this special series of *Annals of Lymphoma*. Editors wish to thank authors but also several other experts that acted as peer reviewers of the article reviews, contributing anonymously and enthusiastically to improve the quality of this series.

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Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Andrés J. M. Ferreri

Maurilio Ponzoni

Andrés J. M. Ferreri[1]
(Email: ferreri.andres@hsr.it)
Maurilio Ponzoni[1,2,3]
(Email: ponzoni.maurilio@hsr.it)
[1]*Lymphoma Unit, Department of Onco-Hematology, IRCCS San Raffaele Scientific Institute, Milano, Italy;* [2]*Pathology Unit, IRCCS San Raffaele Scientific Institute, Milano, Italy;* [3]*Ateneo Vita e Salute San Raffaele, Milano, Italy*
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