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# Immunotherapy for nonsmall cell lung cancer: a new therapeutic algorithm

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**Immunotherapy is a new approach for the treatment of lung cancer with impressive long-term results**  
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After a nihilistic period lasting for decades, major progress in nonsmall cell lung cancer (NSCLC) therapy were linked to the introduction of platinum-based regimens, third generation chemotherapeutic drugs and, more recently, with the discovery of oncogenic driver mutations and the development of very effective targeted therapies [1]. However, for a long time, despite known significant immune dysregulations in the lung cancer environment, clinical trials with immune therapy failed to be superior to standard therapy. Adjuvant vaccination was one of the most recent prominent failures [2]. Fundamental research led to a better knowledge of immune cell cycle control and the recognition of the role of immune checkpoints, *e.g.* cytotoxic T-lymphocyte associated 4 (CTLA4) and programmed death-1 (PD1) and programmed death-ligand 1 (PDL1) complexes [3, 4]. This rapidly resulted in clinical application with different immune checkpoint inhibitors (ICI, monoclonal antibodies). In a 3-year period, the European Medicines Agency and the US Food and Drug Administration approved four distinct ICI for treatment of NSCLC, either in the metastatic setting or adjuvant in stage III NSCLC.