

The Immunoscore in the Clinical Practice of Patients with Colon and Rectal Cancers

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Abstract

In the fine balance between tumor invasion and our defensive systems, the role played by the adaptive immune response at the tumor site is critical. Beyond the fact that all the immune components of the innate and adaptive response can be observed to varying degrees in the tumor microenvironment, it appears that a high density of T cytotoxic and memory lymphocytes, in a context of Th1 immune orientation in the tumor and its invasion front, provides a prognostic marker of paramount importance for colorectal cancer and more generally all solid tumors. The understanding of the role of immunity in cancer, tailored during one century of intensive research, has led to a complete paradigm shift. In order to show the major impact of this conceptual revolution, we herein retrace through the example of colorectal cancer, how an effective immune test, namely the "Immunoscore", has been developed. We also provide up to date data demonstrating the capacity of the Immunoscore to prognosticate with a better accuracy than the TME classification clinical outcomes and to guide therapeutic strategies.

Key words: immunity, Immune, prognostic