

High Immunoscore[®] predicts long-survival in brain metastasis patients

Marseille - France, February 16, 2016 – In the January 2016 issue of *OncImmunity*, the study by Berghoff et al. demonstrates that Immunoscore[®] has a strong prognostic value in brain metastasis, even for the worst cancers at the latest stage ⁽¹⁾. This study led by Jérôme Galon from Inserm, Paris, France and Matthias Preusser from Medical University of Vienna, Austria, shows that Immunoscore[®] within brain metastases correlates with patient survival times.

Brain metastasis (BM) is one of the most common and devastating complication of cancer. Several studies describe the cancer to be the result of a balance between an invasive tumor and the host immune/inflammatory response ⁽²⁾.

Although the brain has long been considered an ‘immune-privileged’ organ with limited capacity for inflammatory response, BM do contain tumor infiltrating lymphocytes (TILs) whose role remains unclear.

In Berghoff et al., researchers evaluated the role of immune microenvironment in BM progression by using, inter alia, Immunoscore[®] which has an already proven prognostic value in colorectal cancer (CRC) ^(3, 4). Immune infiltration was quantified in 116 BM patients ⁽¹⁾. Patients with high Immunoscore[®] had a median OS of 27 months, compared to 10 months in patients with low Immunoscore[®] ($p < 0.001$). The data show that dense TILs infiltrates are very common in BM (99%) and their density correlate with survival prognosis, thus identifying the immune system as promising biomarker for cancer patients with CNS affection.

Jérôme Galon, Research Director at Inserm comments: *“Results of this study highlight the importance of immune microenvironment even in brain metastasis. These new data emphasize the real potential of Immunoscore[®] to be used in other types of tumors than colorectal cancers.”*

In general, the density of tumor-infiltrating lymphocytes has a strong prognostic impact in various extracranial solid tumors and may correlate with response to immune-modulating therapeutics such as immune checkpoint inhibitors. In Berghoff et al., the data show that BM harbors an active inflammatory microenvironment that may be exploited as treatment target.

Professor Matthias Preusser, Director of the Research Program for brain metastasis at Medical University of Vienna added: *“We have now evidence to show that there are inflammatory infiltrates in brain metastasis and that these are prognostic. More research is needed to better understand the role of the immune system in BM and clinical trials should specifically enroll BM patients to investigate the risks and benefits of immunotherapies in this patient population.”*

Indeed, providing immuno-oncology diagnostic tools to stratify patients and guide treatment is a topic of primary importance and HalioDx intends to be an active player in this new market segment. *“Today, HalioDx is actively working on the development of an Immunoscore® standardized assay for colon cancer prognosis. This is a first step as we are convinced about the key role of immune contexture in a large number of cancers. Our objective is to provide pathologists a validated solution for Immunoscore® in order to help clinicians in the management of their patients,”* said Vincent Fert, CEO of HalioDx.

- (1) Berghoff et al. *Oncoimmunology*. 2016 Jan 8;5(1) <http://www.tandfonline.com/doi/pdf/10.1080/2162402X.2015.1057388>.
- (2) Galon, *J Immunity*. 2013 11-26 (39) <http://www.ncbi.nlm.nih.gov/pubmed/23890060>
- (3) Pages et al. *J Clin Oncol*. 2009 10;27(35) <http://www.ncbi.nlm.nih.gov/pubmed/19858404>
- (4) Mlecnik et al *J Clin Oncol*. 2011 20;29(6): <http://www.ncbi.nlm.nih.gov/pubmed/21245428>

About HalioDx

The Immune Response to Cancer Diagnostics

By precisely measuring the immune reaction in and around the tumor, HalioDx tests allow the clinician to determine the degree of severity of the patient’s disease and predict the response to treatment, regardless of the cancer stage or the molecular class.

HalioDx designs and develops a unique range of immune scoring tests, whose first-in-class product is Immunoscore®. Considered a future diagnostic standard in Oncology, this biomarker has already demonstrated strong prognostic value in colorectal cancer.

HalioDx was founded in 2014 by the former management team of Ipsogen (leader in the molecular diagnosis of leukemia), and a pioneer in integrative immunology and oncology, Dr. Jérôme Galon.

HalioDx has an experienced team of 80 employees and compliant facilities to develop, manufacture, deliver and market in vitro diagnostic products and services in immuno-oncology.

More information: www.haliordx.com

Contacts

HalioDx SAS

Vincent Fert

President and CEO

+ 33 (0)4 91 29 30 90

vincent.fert@haliodx.com

ATCG Press

Marie Puvieux (France)

Mob: +33 (0)6 10 54 36 72

Jean-Mehdi Grangeon (ROW)

Mob: +33 (0)6 62 22 00 24

haliodx@atcg-partners.com

[Twitter: twitter.com/haliordx](https://twitter.com/haliordx)