FINAL REPORT

Patient:
Sex:
DOB:
MRN:
Client:
Clinician:

Type of Specimen:
Specimen ID:
Collected:
Received:
Reported:

DecisionDx-PRAME Result

PRAME negative

PRAME negativity has not been shown to alter the prognosis associated with a patient's Class 1 or Class 2 profile

The role of PRAME status in the risk of metastasis of uveal melanoma has been reported in retrospective datasets[1,2] and these findings are the subject of ongoing clinical research studies.

ASSAY DESCRIPTION

PRAME gene expression for uveal melanoma uses RT-PCR to determine this gene's expression level relative to 3 control genes in the supplied tumor tissue. The threshold expression for determining PRAME status was derived from PRAME gene expression values from more than 950 uveal melanoma (UM) tumors and has been independently validated[1-3].

CLINICAL INFORMATION

PRAME status has been evaluated in 123 patients having undergone concurrent or previous testing with the DecisionDx®-UM gene expression panel with known clinical outcomes[1,2]. However, specific risks for metastasis based on PRAME status and DecisionDx-UM Class have not been determined. The DecisionDx®-PRAME test is only reported in the context of the DecisionDx-UM molecular classification data and is reported at the specific request of the ordering clinician.

PRAME Overview

PRAME (*preferentially expressed antigen in melanoma)* is a member of the cancer-testis antigen family. Normal adult tissues have little to no detectable PRAME expression, but the gene can become aberrantly expressed in some solid tumors and hematological malignancies[4]. In UM, it is thought that increased PRAME expression results from epigenetic changes at the gene promoter[2]. While the mechanism of PRAME action in UM is unknown, PRAME can act as a repressor of retinoic acid signaling and thus may have a role in proliferation, differentiation and apoptosis[5]. PRAME protein presents on the surface of tumor cells where it can be recognized by the patient's immune system. Consequently, immunotherapies and vaccines that recognize PRAME have been developed and are being tested in clinical trials for several cancer types[6,7].

Recent studies have suggested that elevated expression of PRAME (PRAME+) could be a risk factor for metastasis in patients with either Class 1 or Class 2 uveal melanoma. These studies have indicated that PRAME expression is a marker for the small percentage of Class 1 uveal melanoma tumors that metastasize[1,2]. In Class 2 patients who are already at a higher risk for metastasis, PRAME expression may be associated with a shorter time to metastasis[2].

CAP ACCREDITED
COLLEGE of AMERICAN PATHOLOGISTS

Castle Biosciences, Inc. | Sherri Borman, PhD, HCLD, Lab Director

REFERENCE LIST

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