Talk to Your Doctor

In this difficult time, it's important to talk to your doctor about all possible treatment options for your eye cancer as well as any questions you might have about prognostic testing.

This downloadable sheet can help guide that discussion and provide your physician with the information he or she needs to help you make a decision about whether DecisionDx-UM is right for you. ✏

DECISIONDx-UM BACKGROUND

What is DecisionDx-UM?

■ The DecisionDx-UM gene expression profile (GEP) test was developed to predict the five-year metastatic risk for uveal melanoma patients, regardless of how the primary tumor is treated. The test requires a very small sample of the tumor for laboratory analysis. (If the treatment plan is radiation, the biopsy must be conducted prior to the procedure.) Castle Biosciences is the only laboratory that performs this test.

■ Prior to the test's introduction in December 2009, patients were mostly assigned a single surveillance plan, with strong potential for either under-treatment or over-treatment. The GEP tool enables individualization of a patient's monitoring and management plan.

The DecisionDx-UM test is "standard of care" in the management of uveal melanoma for the majority of U.S. ocular oncologists.

■ Since its clinical availability, the DecisionDx-UM test has been adopted by over 100 of the estimated 110 ocular oncologists in the U.S.

■ The National Comprehensive Cancer Network (NCCN), a group of the most recognized and respected comprehensive cancer centers in the U.S., recommends that the clinical utility of tumor markers in oncology be determined in a prospective clinical trial, similar to the type of study required for new drugs (Febbo, 2011). Though the NCCN has not specifically evaluated DecisionDx-UM, it is the only prognostic test in uveal melanoma that would meet this strict standard for the highest level of evidence as it is the only such test to be validated in a prospective, multi-center study.

■ Additionally, the American Joint Committee on Cancer recommends gene expression profile testing for use as the results are "clinically significant." The American Joint Committee on Cancer (AJCC, version 7, 2010) is the only national organization that reviews uveal melanoma and the DecisionDx-UM test is the only clinically available gene expression profile test for use in the U.S.

CLINICAL DATA

The DecisionDx-UM test accurately predicts 5-year metastatic risk in patients with uveal melanoma.

■   By identifying the molecular signature of an individual's tumor, DecisionDx-UM accurately predicts which patients with uveal melanoma are at low and high risk of metastasis (see figure) within five years, the period for which scientific data has been collected. Specifically, the assay determines the activity or "expression" of 15 genes which indicates a patient's individual risk, or Class.

The DecisionDx-UM test is superior to all other prognostic factors.

■   DecisionDx-UM is the only prognostic test for uveal melanoma that has been clinically validated for accuracy in an independent prospective study.

According to the 494-patient study conducted by the Collaborative Ocular Oncology Group (COOG), DecisionDx-UM test is clinically and statistically superior to all other prognostic factors in predicting metastatic risk–including clinical factors, pathologic factors, and chromosome 3 testing (*Worley, 2007; Onken, 2010; Harbour, 2011; Onken, 2012*).

Formal statistical comparisons (using net reclassification improvement) at the three-year mark in the COOG study showed the DecisionDx-UM test to have a 43% improvement over physical characteristics and a 38% improvement over chromosome 3 testing.

CLINICAL DATA *(continued)*

The DecisionDx-UM test reports Class 1A, 1B, and 2 phenotype.

■ The DecisionDx-UM test is highly specialized to the patient's tumor and is able to identify a subgroup of Class 1 tumors.

Class 1A: Very low risk, with a 2% chance of the eye cancer spreading over the next five years;

Class 1B: Low risk, with a 21% chance of metastasis within five years;

Class 2: High risk, with 72% odds of metastasis over five years.

At 97%, the DecisionDx-UM test has a high technical success rate.

■ The COOG study reported a technical success rate of 97% for samples collected from pre-plaque fine-needle aspirate biopsies and formalin-fixed paraffin embedded (FFPE) samples from enucleation procedures. This level of technical success has also been seen with the clinical use of the DecisionDx-UM test. Specifically, through mid-2012, the reporting success rate was found to be 97% in the first 1,500 patients tested clinically.

VALUE OF PREDICTING METASTASIS

Physicians use DecisionDx-UM to make important choices about their patients' care.

Physicians are using DecisionDx-UM to:

■ **Develop patient specific surveillance plans.** Patients at high risk of developing metastasis may receive an intensive surveillance plan including frequent CT scans or MRIs, while low risk patients may be recommended less intensive monitoring. Knowing the patient's odds of metastasis can help the physician determine if the risks and cost of radiation exposure outweigh the benefits.

■ **Initiate referral to a medical oncologist** for treatment planning and options which may include adjuvant treatment, and;

■ **Refer appropriate high-risk patients to clinical trials.**

DecisionDx-UM Fact Sheet

HOW TO ORDER

DecisionDx-UM test can only be ordered by a licensed physician.

■ The test requires a tumor sample, which can be obtained by fine needle aspirate biopsy (FNAB) for patients undergoing radiation, or from formalin-fixed paraffin embedded (FFPE) samples in the case of enucleation. For patients receiving radiation treatment, the timing of the biopsy is critical and the sample must be taken prior to surgery. The sample is sent to Castle's laboratory for processing and takes 2-3 weeks to produce a result after receipt.

If your physician is a new customer to Castle, then we request that your physician's office call our customer service line (**866-788-9007**) to review the ordering and shipping process prior to the placement of an order. This should eliminate errors or omissions in the collection and transport of the specimens.

REIMBURSEMENT

Castle Biosciences accepts assignment for all insurance and bills on the patient's behalf.

■ Castle believes the DecisionDx-UM test should be performed based on the physician's and patient's desire to incorporate this information into monitoring and follow-up plans. Castle will run the test at payment risk and work to secure appropriate payment from the patient's insurance carrier. Castle also has a generous program for uninsured patients.

MORE INFORMATION

■ For more information about DecisionDx-UM, please visit: www.myuvealmelanoma.com.