Transcript Details
This is a transcript of an educational program. Details about the program and additional media formats for the program are accessible by visiting: https://reachmd.com/programs/practical-dermatology-updates-in-skin-cancer/refining-risk-stratification-in-cutaneous-squamous-cell-carcinoma/54650/

ReachMD
www.reachmd.com
info@reachmd.com
(866) 423-7849

Refining Risk Stratification in Cutaneous Squamous Cell Carcinoma

Gaurav Singh:

My name is Gaurav Singh. I'm a dermatologist and a Mohs micrographic surgeon at the City of Hope Cancer Center in Chicago, Illinois. The 40-gene expression profile, or GEP, test has existed to make sure that we accurately risk stratify patients when we make decisions on their care if they have a cutaneous SCC, or a cutaneous squamous cell carcinoma. So what I mean by that is in my clinical practice, I've seen thousands of patients with SCC, and I've had some patients with low-stage disease that actually end up having bad outcomes despite everything being done correctly. We've also seen the flip side, which is a fantastic thing, of patients with high-stage tumors having great outcomes. And we, of course, like to take credit for that, for giving them these good outcomes. What's changed with the 40-GEP test is that in addition to considering tumor biology, and it's an RNA-based test wherein tumor biology is considered, certain risk factors that are a part of traditional staging and some that are not a part of traditional staging are considered to give us a true risk of the patient's local recurrence and metastasis.

So for example, size of the tumor is considered; perineural invasion and poor differentiation are also taken into account. Now we know that those risk factors are a part of traditional staging, but sometimes staging can have limitations and other risk factors that play into that, for example, including tumor location. We know that cancers on the head and neck tend to be more aggressive and may have worse outcomes. Patients with immunosuppression—for example, leukemia, lymphoma, HIV, or solid organ transplant recipients—are also at greater risk. So the nice thing about the new integrated test is that a combination of risk factors are included with tumor biology to give us an accurate reading on exactly what the patient's true risk is of recurrence and metastasis. The changes made to the 40-GEP tests have already redefined how patients are treated and the clinical performance has been good. The most important change has been that the negative predictive value has improved.

It's a bit over 97% now. So what that means is that if a patient is found to be low-risk by their tumor biology, we can really rely upon that most of the time. There's also redefinition of which patients would benefit from adjuvant radiation. The class 2B result, which is the highest risk result, does portend a benefit from adjuvant radiation. These patients have over a 30% metastatic risk, and in my practice, I've gotten several class 2B results despite stage one tumor biology and tumor staging. So the class call or the class result is somewhat independent of the staging system and combining the clinical pathologic risk features with tumor biology gives a much more accurate result. In addition to those factors, there's better delineation between the intermediate-risk results and really what I called them before is higher-risk results. There is now a class 1B result, which indicates a 5-10% risk of metastasis and about a 10% risk of local recurrence.

For these patients, we like to consider increased surveillance and consider imaging as well. The class 2A patients have over a 20% risk of metastasis and almost a 20% risk of local recurrence. So in some of those patients, multidisciplinary care is often considered, imaging is often done, and increased surveillance is also conducted. So with these changes made to the 40-GEP test, patients really do get placed in the correct bucket of low-risk, high-risk, or somewhere in between, and it's nice to have an exact number for what their risk of local recurrence in metastasis truly is.