

## **Breaking News in Skin Cancer**

*Presented by Darrell Rigel, MD*

The incidence and mortality of skin cancers are rising dramatically. In 2021, the lifetime chance of an American getting any form melanoma was about 1 in 21. Significantly, almost one American dies every hour from melanoma. In terms of death from melanoma by gender, the male death rate stayed nearly the same, but there was an increased death rate for women. Dr. Rigel listed several risk factors for melanoma. He suggested the 30% rise of melanoma incidence in the U.S. could be attributed to the increasing intensity of ultraviolet light. On the other hand, tanning bed use increases melanoma risk and shortens the second melanoma recurrence time.

Four issues related to melanoma in pregnancy were discussed:

1. In cases of localized melanoma, it is advisable to continue with the pregnancy. For patients with poor prognostic factors, however, it might be prudent to delay pregnancy for 2-3 years, as recurrence is more likely in that period.
2. For patients who developed malignant melanoma during pregnancy, close monitoring is often required postpartum as there is a significant chance of future recurrence.
3. A small lymph node biopsy is safe to perform during pregnancy.
4. There is no consistent data to suggest the association between in-vitro fertilization and melanoma.

Dr. Rigel also presented information regarding digital dermoscopy, total body photography, electrical impedance spectroscopy (EIS), and genomics regarding diagnostic tools. The mechanism of EIS underlies the differences in electric resistance in benign and malignant skin tissues. Studies have shown the combination of EIS and clinical assessment leads to increased biopsy accuracy. Additionally, the 3-gene expression profiling (GEP) test resulting from pigmented lesion assay (PLA) helped to increase the negative predictive value. Remarkably, the 31-GEP testing was used to predict survival rates and a 40-GEP test predicted metastasis risk for cutaneous squamous cell carcinoma. Regarding sunscreen, studies have shown the higher the SPF, the less the extent of DNA damage. Also, during the COVID-19 era diagnostic delay may lead to more advanced skin cancers, impacting mortality and morbidity.