



A Novel Biopsy Localization Device for Dermatologic Application



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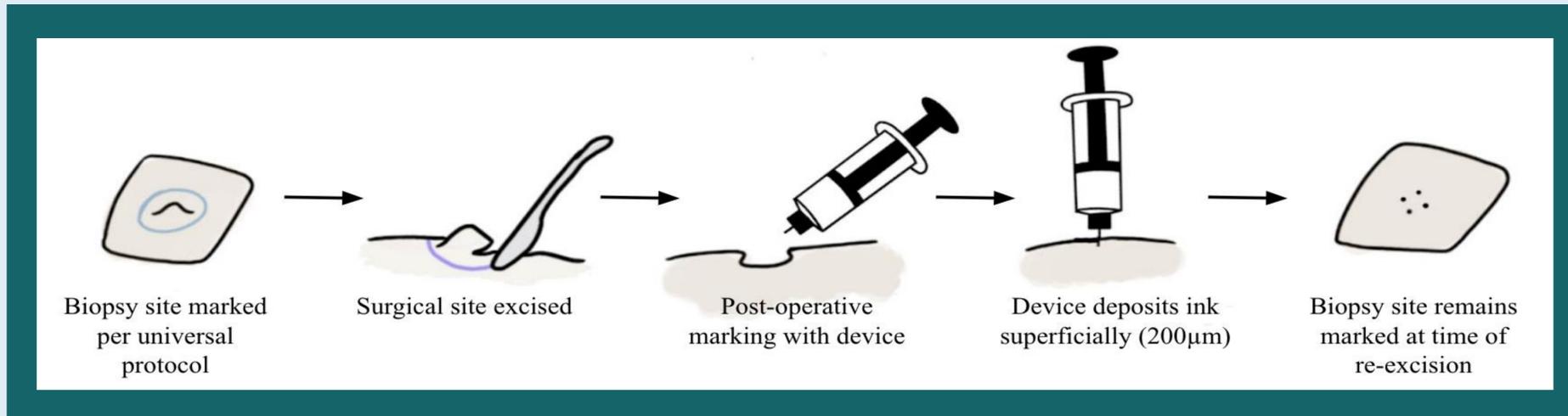
Background

Skin cancer is the **most common cancer** in the United States, affecting 5 million people annually. The most common method for diagnosing skin cancer is through diagnostic biopsies, in which tissue is extracted from the patient and analyzed by a pathologist. In subsequent visits with dermatologic surgeons, it is common for the patient's biopsy site to be misidentified, placing the patient at risk for **wrong-site surgeries** and the **spread of cancer**. It is our goal, with **Dermamark**, to allow for more accurate and precise biopsy localization and reduce the rate of wrong-site dermatologic surgery”

1. Seabury, S., Chandra, A., Lakdawalla, D., & Jena, A. B. (2012). Defense costs of medical malpractice claims. *The New England journal of medicine*, 366(14), 1354–1356. <https://doi.org/10.1056/NEJMc1114805>

2. Weinstein DA, Konda S, Coldiron BM. Use of Skin Biopsies Among Dermatologists. *Dermatol Surg*. 2017 Nov;43(11):1348-1357. doi: 10.1097/DSS.0000000000001188. PMID: 28562437.

The Patient Journey



Needs Statement

Surgical dermatologists thus need a way to **accurately identify post-operative biopsy sites** for further treatment to **reduce wrong-site dermatologic surgery**.

\$
\$64.8M¹
Potentially saved

2.25M²
Patients with malignant biopsy

Our Device



Dermamark – a preloaded syringe to inject ink around the biopsy site for localization

Results



Device can be used on **top 4 most biopsied locations**, representing **52% of body distribution**³

Benefits



Accurate – the device consistently marks the same layer of the skin each time



Visible – marking of the biopsy site is visible to the naked eye at desired time periods



Semipermanent – the marking stays visible for at least 3 weeks and up to 3 months



Safe – the ink has been tested for safety and the device is sterile and noninvasive

3. Rana, Vandana, Kanchan Kulhari, Disha Dabbas, Harish S. Murthy, and Puneet Takkar. "Frequency and spectrum of cutaneous metastases of visceral malignancies: A retrospective observational study of three years duration in a tertiary care hospital." *Indian Journal of Dermatology* 66, no. 5 (2021): 573.