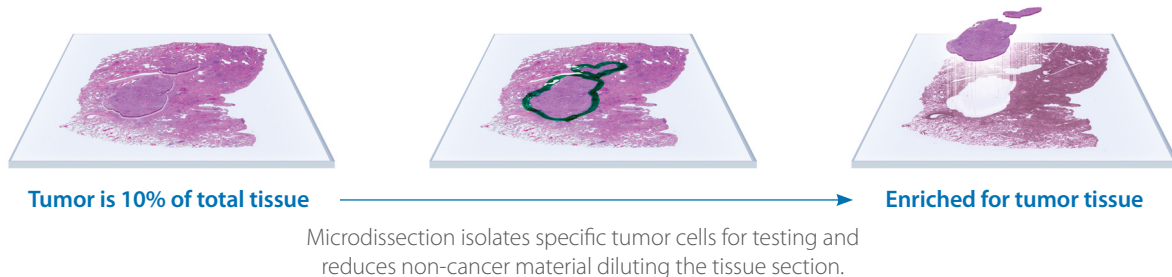




## The Caris Difference – Tissue Microdissection

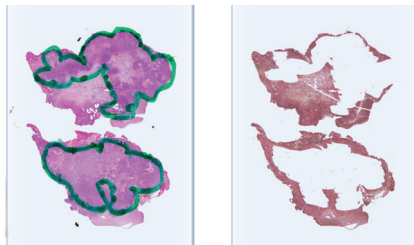
Did you know that Caris Life Sciences® **performs tissue microdissection for every case (where appropriate) to increase the proportion of tumor cells for testing?** With tissue microdissection, Caris is able to isolate specific tumor cells from a mixed population of cancer and non-cancer cells to increase the tumor nuclei required for testing (20% or more). This is critically important because microdissection can increase the chance of successful testing in certain limited tissue cases, as well as avoid testing with low density tumors that could result in missed alterations that could potentially impact treatment decisions made by oncologists.



**Case 1 – Extract the most clinically relevant content:** Helps maximize the clinical utility of every tissue sample.

### Example 1

- Tumor is ~70% of total tissue section
- Within the marked tumor area, 60% tumor nuclei cells vs 40% normal cells



### With Microdissection

- Test ONLY the tissue within the marked tumor area
- The final tumor DNA composition is 60%

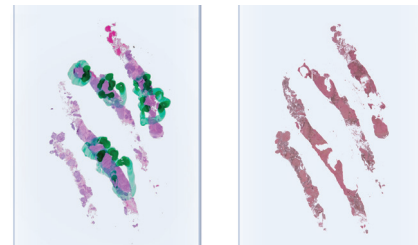
### Without Microdissection

- Test all the tissue
- The final tumor DNA composition is 42% ( $70\% \times 60\% = 42\%$ )

**Case 2 – Limited tissue capabilities:** Tumor enrichment to maximize available specimen for limited tissue cases.

### Example 2

- Tumor is ~10% of total tissue section
- Within the marked tumor area, 20% tumor nuclei cells vs 80% normal cells



### With Microdissection

- Test ONLY the tissue within the marked tumor area
- The final tumor DNA composition is 20%

### Without Microdissection

- Test all the tissue
- The final tumor DNA composition is 2% ( $10\% \times 20\% = 2\%$ ) and CANNOT be used (sample not sufficient for testing)

\* In a 2018 comparison of Tumor Mutational Burden (TMB) in NSCLC the Foundation Medicine Checkmate 227<sup>1</sup> success rate<sup>2</sup> was 60.9% compared to a success rate of 85.1% for Caris<sup>3</sup>, due in large part to the tissue microdissection enrichment at Caris Life Sciences.

1. Hellmann MD, Ciuleanu T-E, Pluzanski A, et al. Nivolumab plus ipilimumab in lung cancer with a high tumor mutational burden. N Engl J Med 2018;378:2093-104. DOI: 10.1056/NEJMoa1801946
2. TMB-Success rate = TMB Result Generated / Sufficient Tissue for Testing
3. Internal Data, NSCLC testing results in 2018. TMB-Success rate = TMB Result Generated / Sufficient Tissue for Testing

To order or learn more, visit [www.CarisMolecularIntelligence.com](http://www.CarisMolecularIntelligence.com).

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