Vacuum-Assisted Breast Biopsy Devices

Comparison of Tissue Sample Mass and the Potential Advantages of Larger Samples

There are many devices on the market for obtaining breast biopsy tissue samples. Each device produces tissue samples that have a range in appearance. Larger, less fragmented tissue samples can contribute to a pathologist making a more accurate diagnosis. For a pathologist, working with smaller fragmented samples can be like working with a disassembled jigsaw puzzle. Larger cores, with more intact histologic patterns, “require less mental reassembly of the histologic jigsaw puzzle, thus facilitating a more rapid specific diagnosis.”

Jason Hechtman, M.D., F.A.C.S., Medical Director, The Breast Institute at Brandon Regional Hospital, 15 breast biopsies weekly.

The EnCor EnSpire® Breast Biopsy System Obtained Samples Up to 150% Larger Than Other Systems In Simulated Use Testing†

<table>
<thead>
<tr>
<th>Device</th>
<th>Large Gauge</th>
<th>Medium Gauge</th>
<th>Small Gauge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bard Biopsy EnCor EnSpire® System</td>
<td>0.39</td>
<td>0.25</td>
<td>0.13</td>
</tr>
<tr>
<td>Hologic™ ATEC™/Eviva™ Systems</td>
<td>0.18</td>
<td>0.08</td>
<td></td>
</tr>
<tr>
<td>Devicor™ Mammotome™ System</td>
<td>0.28</td>
<td>0.10</td>
<td></td>
</tr>
</tbody>
</table>

Average Sample Size (grams)

“Increased size of individual biopsy fragment fosters accuracy of histopathologic assessment and can reduce number of procedures required for diagnosis and definitive treatment.”

Linda B. Griska, M.D., Director of Breast Health Services, Abington Health Medical Director, Mary T. Sachs Breast Center, 30 breast biopsies weekly.

“Our samples are of such high quality that our pathologists have told me that they are similar in quality to specimens obtained from an excisional biopsy.”

Data on file.

†See Study Description and Disclosures on side 2.
“When we first switched over to EnCor Enspire Breast Biopsy System, the pathologists commented on how large and intact the specimens were—great for diagnosis and obtaining prognostic panels”

S. Chace Lottich, M.D., Community Breast South Hospital, Indiana Surgeon, 10 breast biopsies weekly.

Variations in Gauge Measurement Methods

The manufacturer stated gauge of the probes included in the study was not always indicative of the actual outer diameter of the needles. The probe size is much larger than comparable EnCor Enspire Breast Biopsy System probes due to the Mammotome™ probe’s design, which holds the sample collection area above the vacuum.

Multiple Features Contribute to Higher Quality Samples

According to S. Chace Lottich, M.D., a number of system features combine to enable her to get larger samples with the EnCor Enspire Breast Biopsy System:

- Driver with built-in headlights
- Half-Sample Mode
- Dense Tissue Mode
- Sharp TriConcaVe™ Cutting Tip
- Automated sampling

“It’s all about targeting, efficiency, and getting adequate samples as painlessly as possible,” she explains. She credits the above as to all contributing to targeting and patient comfort. “Overall,” she says, the samples are “bigger and just easier to get.”

1. Rogers RW: Breast Biopsy: A Pathologist’s Perspective on Biopsy Acquisition Techniques and Devices with Mammographic-Pathologic Correlation. Seminars in Breast Disease: Radiologic, Pathologic and Surgical Considerations, Volume 8, issue 3 (September, 2005), p. 127-137.

2. EnCor® probes sizes: large gauge - 7g; medium gauge - 10g; small gauge - 12g.

3. ATEC™ and Eviva™ probe sizes: large gauge - n/a; medium gauge - 9g; small gauge - 12g.

4. Mammotome™ probe sizes: large gauge - 8g; medium gauge - 11g; small gauge - n/a.

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