When every millimeter counts

The right skin marker makes the difference
Radiologist uncertainty of findings causes 5-15% of patients to require additional testing, at a cost of $1.6 billion annually. The majority of these tests turn out normal.\(^1\) A quality skin marker may help prevent these uncertainties and their potentially health-threatening results.

\(^1\)Aabha Rathee, “False Breast Cancer Diagnosis Reduced when Doctors read more Mammograms”
Not all skin markers are created equal.

Mammographers consistently cite two key factors when choosing a skin marker: image quality and adhesion.²

Skin markers must not interfere with image quality so that important details are not overlooked. They should not cause artifact or obscure any tissue detail, as this can inhibit proper interpretation of the image.

Proper adhesion is key to a marker performing its job well, as otherwise it may shift or fall off. This can result in an unmarked image or an inaccurate communication of the area of concern, potentially resulting in costly and time-consuming repeat images.

Beekley Medical™ presents a high quality choice for mammographers who require clear, readable images the first time. Beekley SPOTS® skin markers for mammography are thin and translucent so they won’t obscure tissue detail or distract interpretation by physicians. Medical grade adhesive ensures they stay in place throughout the entire mammogram.

²Chelsea Fithian “Skin Marker Satisfaction Survey” Beekley Corporation, Bristol, CT January 2011
Smaller markers make a big difference.

The median size of breast cancers detected by screening mammography is 7.5mm, and the smallest detectable cancer is 3mm.\(^3\) Since the earliest signs of breast cancer can appear as tiny microcalcifications, skin markers must be transparent and cover as little surface area as possible, so as not to obscure tissue detail.

The Beekley Medical™ O-SPOT® (REF# 252) covers up to 67.2% less surface area than other brands.

<table>
<thead>
<tr>
<th></th>
<th>Beekley Medical O-SPOT</th>
<th>Other Product</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface Area</td>
<td>50.5sqmm</td>
<td>158.3sqmm</td>
<td>107.8sqmm</td>
</tr>
<tr>
<td>Skin Marker Size</td>
<td>1mm</td>
<td>3mm</td>
<td>2mm</td>
</tr>
</tbody>
</table>

\(^3\)James Michaelson, PhD et al., “Estimates of the Sizes at Which Breast Cancers Become Detectable on Mammographic and Clinical Grounds,” *Journal of Women’s Imaging*, Volume 5, Number 1, pp 3-10
Other Product:

Beekley Medical™ O-SPOT® (REF# 252):

Magnified view of 1mm Uniform Density marker

When asked which image they preferred, 24 out of 26 Radiologists indicated they preferred the Beekley Medical 2011 images.
In a study of actual mammograms, 26 radiologists were provided with same view images from two patients’ consecutive mammograms. The 2011 mammograms had been performed with a 1mm uniform density mole marker (Beekley Light Image™ O-SPOT®, REF# 252), while the prior year’s mammograms were conducted with another brand’s 3mm dual-density mole marker. 92% of respondents preferred the Beekley Medical skin marker images in both cases, 4% indicated no preference in both cases and 4% indicated they preferred the other brand in one instance but had no preference in the other.⁴

In a blind side-by-side phantom comparison study, Beekley’s thinner, uniform-density O-SPOT® mole marker was unanimously selected as the preferred image by a panel of 20 mammographers over the other brand’s thicker, dual-density mole marker.

**Representative comments on the Beekley Medical™ O-SPOT®:**
“The tissue underlying the marker is much clearer and easier to evaluate.”
“Less obstructive, more subtle. Does not take your eyes away from the main job.”

**Representative comments on the other brand’s product:**
“The double ring is unnecessary and could potentially obscure an underlying mass.”
“The contrast between the lighter ring and the darker ring is distracting.”

⁴Peter Papadopoulos, Sr. Research Consultant, “Patient Comparison Survey - Annuals” March 2011
A 41 year old woman presented in 2010 and 2011 for her routine screening mammogram.

A raised mole on her breast was marked both years but using different style skin markers.

*Shown left are her 2010 and 2011 CC images.*

A 49 year old woman presented in December 2009 and January 2011 for her routine screening mammogram.

A raised mole on her breast was marked both years but using different style skin markers.

*Shown left are her 2009 and 2011 MLO images.*

The 2011 mammograms performed with a 1mm uniform density Beekley Medical™ skin marker was selected as the preferred image.
Adhesion matters.

Beekley SPOTS® skin markers for mammography are proven to have greater adhesive strength than another brand. Over multiple tests, Beekley Medical™ mammography SPOTS® were compared to another brand. Each test followed the same method: 50 markers from each brand were sampled. Each marker was mechanically pulled at a 90° angle from an aluminum plate with precise measurements of the strength needed to fully remove the marker. The plate was cleaned after each pull and the room temperature remained constant at 71.2°F.

The test results showed that the Beekley SPOTS® had greater adhesion than the other brand:

**Beekley Medical Soft ‘n Stretchy® O-SPOT®** had 50.9% greater adhesive strength than the other brand’s mole marker. Beekley N-Free SPOT® had 34.2% greater adhesive strength and Beekley’s N-Free Soft ‘n Stretchy SPOT® had 40.2% greater adhesive strength than the other brand’s nipple marker products.
Test results.

Range of Peel Strength for Beekley N-Free SPOT® vs. Another Product

Beekley
Other
Peel Strength (lbs.) 0.20 0.25 0.30

Range of Peel Strength for Beekley N-SPOT® Soft ‘n Stretchy® vs. Another Product

Beekley
Other
Peel Strength (lbs.) 0.25 0.30 0.35 0.40 0.45 0.50 0.55

Range of Peel Strength for Beekley O-SPOT® Soft ‘n Stretchy vs. Another Product

Beekley
Other
Peel Strength (lbs.) 0.30 0.35 0.40 0.45 0.50 0.55 0.60 0.65 0.70 0.75 0.80

Average Peel Strength in Pounds:

<table>
<thead>
<tr>
<th>Product</th>
<th>Peel Strength (lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beekley Medical N-Free SPOT:</td>
<td>.34</td>
</tr>
<tr>
<td>Other Brand:</td>
<td>.24</td>
</tr>
<tr>
<td>Beekley Medical N-SPOT Soft ‘n Stretchy:</td>
<td>.47</td>
</tr>
<tr>
<td>Other Brand:</td>
<td>.35</td>
</tr>
<tr>
<td>Beekley Medical O-SPOT Soft ‘n Stretchy:</td>
<td>.67</td>
</tr>
<tr>
<td>Other Brand:</td>
<td>.45</td>
</tr>
</tbody>
</table>
Mammography skin markers must be trusted to stay in place throughout the exam so as to ensure the accuracy of information conveyed to the interpreting radiologist. If the skin marker falls off due to inadequate adhesion, this can lead to inaccurate readings, repeat images, wasted time, and higher costs to the facility.

In a 2010 national survey, 297 mammography technologists were asked how likely they were to recommend their current skin marker to an associate, and if so why.

87.7% of Beekley SPOTS® users were very likely to recommend their brand, versus only 58.4% of another brand users.

The top reason to recommend or not recommend a brand was adhesion. 90% of adhesion comments for Beekley Medical™ were positive, compared to just 27% of another brand.
Representative comments on Beekley Medical™ SPOTS®:

“Stays sticky and doesn’t fall off”

“Stretches with the breast during compression”

“They don’t hurt the patient when removed”

Representative comments on other brand’s products:

“Adhesive not as sticky, sometimes have to use two per patient”

“They don’t stick well and the scar markers bunch up with compression and change the appearance of the image”

“They don’t stick very well and when they do, they hurt coming off”

“Fall off very easily”
SPOTChecker™ plastic dispensers not available outside the U.S.A. and Canada

Call 1-800-233-5539 • Fax 1-800-735-1234
Visit www.beekley.com • Email info@beekley.com

Customers outside the U.S. – Contact your local distributor for pricing and product availability.
To locate a distributor call +1-860-583-4700 or email international@beekley.com

BEEKLEY MEDICAL
when your diagnosis must be right™

One Prestige Lane, Bristol, CT 06010 USA Tel: 1-800-233-5539 or +1-860-583-4700 Fax: 1-800-735-1234 www.beekley.com

All Beekley markers are latex-free, lead-free, hypoallergenic.

SPOT, SPOTS, DESIGNED FOR DIGITAL, SOFT N STRETCHY, FLORALS, and the color pink are Reg. U.S. Pat. & Tm. Off.

SPOT is a Registered Community Trademark.

© 2013 Beekley Corporation. All rights reserved.

REV: 04/13