“In 2014, Boca Raton Regional Hospital performed 1063 breast biopsies. As a result, we began taking steps to satisfy increased demand for both efficient excision procedures and to create an optimal patient experience. A key step in that effort was the adoption of Radioactive Seed Localization (RSL) and the use of Mammotome’s premium marker line, HydroMARK®, for all of our percutaneous biopsy procedures.

RSL is becoming increasingly popular for the localization of breast lesions. Rather than utilizing metallic hook wires to guide the surgeon, an I-125 radioactive seed is placed percutaneously adjacent to the breast abnormality and tissue marker prior to surgery. The seed is then located intraoperatively utilizing a hand-held gamma probe. The seed, marker and breast abnormality are excised by the surgeon and confirmed with specimen x-ray.”

“Our RSL program benefits the patient, surgeon and surgical team. The half-life of I-125 is 39.4 days and the radiation emitted is low (35.5 keV). The seed can be placed days prior to surgery with only nominal radiation exposure for the patient and surgical team. This time separation between localization and surgery allows our OR schedule to begin earlier in the day. It also improves the patient experience and gives our team additional scheduling flexibility.

RSL also provides clinical benefits from a surgical perspective including less migration of the seed compared to a hook wire, less normal tissue excised and fewer positive margins. Our experience is that the lesion is better centered within the specimen. This results in a higher rate of complete excision with fewer re-operations.

At Boca Raton Regional Hospital, our steps to initiate the RSL program went hand-in-hand with steps to maximize the number of patients who are candidates for ultrasound-guided seed placement. Compared to mammographic localization, ultrasound-guided procedures require no breast compression, making them faster and more comfortable. In addition, ultrasound localization requires a lower radiation dose to the breast and allows for real-time visualization of the release of the seed from the needle. Both of these align well with our goal of optimizing the patient experience.

HydroMARK® plays a critical role in achieving our best-in-class standard. This brand offers three unique shapes and can be accurately and successfully placed with all methods of percutaneous biopsy. The marker is housed in a biodegradable, polyethylene glycol based hydrogel, which is readily visible by ultrasound within 24 hours of placement and remains easily visible for up to 12 - 15 months in both fatty and fibrous breasts.

Today, the vast majority of localization procedures at Boca Raton Regional Hospital are completed quickly, precisely and painlessly with ultrasound guidance. Both patient and physician satisfaction have improved since launching this initiative, and we attribute that success to use of the RSL procedure and the adoption of Mammotome’s HydroMARK® as our marker of choice.”