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### **INTRODUCTION:**

Basal cell carcinomas and squamous cell carcinomas are the most common cancers in the United States, effecting over four million patients per year. In addition, the number of skin cancers is increasing faster than all cancers combined as every ten seconds a U.S. citizen turns 65 years old and half of these individuals may eventually develop a cutaneous cancer.

The sheer number of these cancers has the potential to significantly overwhelm the number of physician providers as the number of trained mohs dermatologic surgeons and plastic surgeon providers is actually decreasing.

Standard mohs surgery is expensive, physically demanding and labor intensive. We present the option of Superficial X-Ray Therapy (SRT) as an alternative to treat these cancers. Recent technological advancements have allowed this treatment modality to be office based, easy to use and potentially lucrative for plastic surgeons.

### **METHODS:**

We treated 50 histologically confirmed primary cutaneous basal cell carcinomas and squamous cell carcinomas with the Sensus SRT Technology in 2013 and 2014. Of these 40 lesions were basal cell carcinomas and 10 were squamous cell carcinomas. All lesions ranged in size from .5cm to 2 cm in width and ranged from .1mm to 2mm in depth. All histologic subtypes were treated.

### **RESULTS:**

Overall SRT offers a greater than 95% cure rate of BCCA and SCCA tumors. Of the 50 tumors we treated, 49 showed no evidence of recurrence. The single recurrent BCCA lesion was a nodular BCCA by histology 1.1cm in size and 1mm in depth. This lesion was ultimately retreated with mohs surgery and follow-up reconstruction.

The Sensus SRT Company has collective data on thousands of tumors followed over a ten-year period and shows similar recurrence rates. (1)

### **CONCLUSION:**

We conclude that superficial x-ray therapy is a viable non-surgical option for the treatment of basal cell carcinomas and squamous cell carcinomas.

Treatment rates are high at 95% and comparable to mohs results and recurrent rates.

Moreover, the SRT treatment allows plastic surgeons the opportunity to regain access to the lucrative skin cancer treatment market. We found that most patients when presented with the opportunity of SRT, desire a scar-less non-disfiguring easily performed treatment over traditional mohs surgery.

(1) Sensus SRT Company