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Keeping Local Health Care Strong

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Manny:

I have good news and bad news. The bad news is that I had to meet with my previous radioactive seed representative and tell him I had to change seeds. I was given a charge to find the optimum seed at the lowest cost; with the increasing number of I 125 and Pd 103 distributors it was not a task that I looked forward to.

After looking at all of the leading seeds I have come to one conclusion, this is the good news, BEST had the best. Here are the criteria I used:

- 1. How did the dose delivery at distance vary along an "axial" cut due to the seed's construction, etc.?
- 2. How did the average anisotropy vary along a "coronal" dose distribution due to its construction, etc.?
- 3. How well is the seed visualized on a radiograph or CT image for verification, pre-planning, and post-planning?
- 4. How well did the seed lend itself to accurate placement with unequal combinations of spacers and seeds?
- 5. Can I order any activity for any implant date, or do I have to tailor my planning to what bin sizes are available from the manufacturer?
- 6. Does the company do a "batch calibration" or measure all seeds individually for apparent activity?
- 7. Is the company stable or likely to fold?
- 8. What is the customer service level?
- 9. Who has the lowest price?

What I found is that BEST came on top in so many categories that there was no doubt who we needed to order seeds from:

- The dose rate constant (cGy/Hr*U) of the BEST seed and the higher than average radial dose function g(r) allows me to place seeds further away from the rectum and the urethra; I still get a uniform, prescribed dose and limit some of the unwanted effects.
- 2. More importantly, the higher average anisotropy factor Φ_{an} also allows me to place BEST seeds further away from the rectum and the urethra. Seeds do rotate inside the patient; it is good to know that the dose distribution changes that could occur, as a result, are limited.
- 3. The BEST seeds were very easy to verify on radiograph and CT images, this is not the case with some of the other seeds.
- 4. A unique aspect of the BEST seed is its 5mm length. They also provide 5mm laser-cut spacers, which do not have flared edges. These are supplied at no extra cost. Typically the other seeds are 4.5mm and the spacers are 5.5mm. With the BEST seed / spacer combination we can be more confident of accurate seed placement – especially when a needle load calls for an unequal number of seeds and spacers.
- I can order any Air Kerma Strength or I 125 apparent activity on any implant date and BEST will send me seeds that match that strength, typically +/-3%. Other companies do not do this.
- 6. BEST does a seed by seed apparent activity measurement, not a batch or a random sampling, of a seed order. Other companies do not do this.
- 7. BEST has been in the radioactive materials business for quite awhile. They are not new players to this game as some others are.
- 8. BEST has taken its time, it appears, from the evidence above to think about what the customer will want in a seed. Personal service, sending a free NIST-traceable seed for calibration, and engineering a really nifty seed holding device are additional examples of this. There was also no pressure to sign an exclusivity agreement.
- 9. All of this is done with a price per seed that is toward the bottom of the list. This is probably due to the elimination of the "middle-man".

Manny, thank you for this product. I look forward to working with you.

Sincerely,

Jeff Limmer, MS Ed, MSc Radiation Oncology Physicist UW Cancer Center – Wausau WI