COMMUNITY HEALTH CARE
UW Cancer Center
Wausau Hospital

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:

1. 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.
5. 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
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