

Saint Francis Regional Cancer Center
Radiation Oncology Department
94 Woodland Street
Hartford, CT 06105
Tel 860-714-4568
Fax 860-714-8019



Date: Sept. 12, 2007

To: Monica Orendi Mail Control

Fax # 610 337-5269

140786

Q-3

From: Dr. Ellen Wilcox

Of pages including cover page _____

06-00854-03
03001246

Message:

Dear Ms Orendi
Attached-confirmation of \$190 service
receipt and training record for
George Pavlonis.

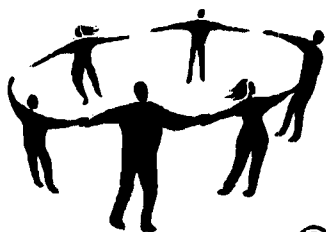
Please advise if everything received
is satisfactory? Sincerely
Ellen Wilcox



Joseph Colasanto, M.D.
Bruce Kaplan, M.D.
Richard Shumway, M.D.
Eric van Rooy, M.D.

140786

4350 International Boulevard Norcross, GA 30093 (770) 717-0904



Best®

healthcare for everyone

Date: 9/6/07

To: Dr. Ellen Wilcox

From: Chris Sherman

Subject: Confirmation of Receipt of Radioactive Sources

This letter is being sent to you as confirmation of receipt, by Best Vascular, of an active sources and transfer devices from **Saint Francis Regional Cancer Center**.

Transfer Device: 89347 with active source train: ZA709 was received on 3/11/05

Regards,

Chris Sherman
Lead, Radiation and Systems
(770) 717-0904 ext. 3120



Active Transfer Device within White Lead-Lined Storage Container



ORDER # (REF):TDA-2040

Jacketed Radiation Source Train (JRST)

Active Length: 40mm

Description: SICW.2.H 40 : series of 16 Model SICW.2 sealed sources jacketed in a stainless steel coil (0.47 mm OD) with non-radioactive radiopaque marker welded to each end.

Radionuclide: Sr-90

Total Activity: 2.09 GBq

Assay Date: 12Jun02

Recommended Radiation Treatment

Transfer Device Serial #: 89347

Radiation Source Train Serial #: ZA709

Effective Date	From: 09Nov04	To: 09May05		
	Maximum Balloon Diameter (mm)	Reference Vessel Diameter (mm)	Dose @ 2mm (Gray)	Dwell Time (Secs) or (Mins, Secs)
With Existing Stent	≥ 2.5 to < 3.5	≥ 2.7 to ≤ 3.35	18.4	190 3, 10
	≥ 3.5 to ≤ 4.0	> 3.35 to ≤ 4.0	23.0	238 3, 58

Use the following treatment chart ONLY after the required six month Leak Test is completed.

Effective Date	From: 10May05	To: 09Nov05		
	Maximum Balloon Diameter (mm)	Reference Vessel Diameter (mm)	Dose @ 2mm (Gray)	Dwell Time (Secs) or (Mins, Secs)
With Existing Stent	≥ 2.5 to < 3.5	≥ 2.7 to ≤ 3.35	18.4	193 3, 13
	≥ 3.5 to ≤ 4.0	> 3.35 to ≤ 4.0	23.0	241 4, 01

NOTE: If the ratio of the maximum balloon diameter to reference vessel diameter is between 1/1 and 1/1.2, dose can be prescribed according to balloon diameter. Dose can also be administered by visual assessment of reference vessel diameter.

Radiation Output: 0.1030 Gy-s⁻¹ ± 20% in H₂O at 2 mm from the center line of the Radiation Source Train. Date: 12Jun02

Result traceable to the National Institute of Standards and Technology. Uniformity verified +/- 10% along the middle portion of the Radiation Source Train.

Sealed Radioactive Source:

AEA Technology, QSA GmbH, Model SICW.2
Radionuclide: Sr-90 Activity: 0.131 GBq/Source

The contained activity per source is the product of the measured source train absorbed dose rate in Gy/sec, at 2mm from the source center line in water and the conversion factor 34.2mCi/seed (1.27GBq/seed) per Gy/sec. The contained activity in the source train is equal to the contained activity per source times the number of sources in the train.

Description: Sr-90 wire in sealed single stainless steel capsule.
Length: 2.5mm Diameter: 0.38mm ISO 2919 classification¹: C53X1,2,3 11

¹ Where X₁, X₂ and X₃ represent respective special "impact", "step" and "crush" tests simulated for circumstances that could reasonably be expected to exist outside the Beta-Cath™ 3.5F System during off-normal accident situations.

ISO Leak Test: ISO 9978, Notes, immersion into ultrasonic cleaning water with detergent solution at 70°C for at least 30 mins.
Result: <185 Bq Date: 12Apr02

Novoste Leak Test:
H₂O passed over the Radiation Source Train and then analyzed for radioactive content using liquid scintillation counting.
Result: <185 Bq Date: 09Nov04

*Do not use or ship the device unless a leak test has been performed within the previous six months. Follow the radiation safety and handling instructions in the User's Manual. Test the device for leakage at intervals not to exceed 6 months. Use a leak test method capable of detecting 185 Bq (0.005 uCi) of Sr/Y-90. Immediately withdraw a leaking device from use and store it for disposal and/or return to Novoste. File a report of any leaking device with the authority and notify Novoste. Retain leak test records.

Sales and Service:
Novoste Corporation
4350 International Boulevard
Norcross, Georgia
USA 30093
Tel: +1 800 Novoste

Certified by Novoste Corporation:
Elaine Boersma 11-9-04
Manufacturing Date
[Signature] 11/9/04
Quality Assurance Date

NON-STERILE



IPX1



FedEx Express *US Airbill*

FedEx Tracking Number

8473 7207 0541

1 From Please print and print large

Date 3/9/05 Sender's FedEx Account Number

Sender's Name Ellen Grein Phone (860) 7144568

Company Saint Francis Hospital & Med. Ctr.

Address 94 Woodland Street

City Hartford State CT ZIP 06105

2 Your Internal Billing Reference First 34 characters will appear on invoice. OPTIONAL

3 To
Recipient's Name Craig Reed Phone (770) 717-6086

Company NOVOSTE CORP/ RADIATION FAC

Recipient's Address 4350 INTERNATIONAL BLVD

Address NORCROSS

City NORCROSS State GA ZIP 30093-3017

Try online shipping at fedex.com
By using this Airbill you agree to the service conditions on the back of this Airbill and in our current Service Guide, including terms that limit our liability.
Questions? Visit our Web site at fedex.com
or call 1.800.GoFedEx 1.800.463.3339.

0288759124

Sender's Copy

4a Express Package Service
 FedEx Priority Overnight FedEx Standard Overnight
 FedEx 2Day FedEx Express Saver
FedEx Envelope rate not available. Minimum charge: One-pound rate.

4b Express Freight Service
 FedEx 1Day Freight FedEx 2Day Freight FedEx 3Day Freight

5 Packaging
 FedEx Envelope FedEx Pak FedEx Box FedEx Tube Other

6 Special Handling
 SATURDAY Delivery HOLD Weekday at FedEx Location HOLD Saturday at FedEx Location
Does this shipment contain dangerous goods?
 No Yes Yes Dry Ice Cargo Aircraft Only

7 Payment *BY* Sender Recipient Third Party Credit Card Cash/Check

FedEx Acc. No. 2255-8805-8 Exp. Date _____
Total Packages 1 Total Weight 25/65 Total Declared Value* 00

8 Sign to Authorize Delivery Without a Signature

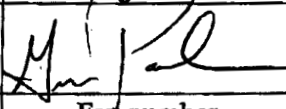
By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims. **466**

PULL AND RETAIN THIS COPY BEFORE AFFIXING TO THE PACKAGE.

Grantee Record

Customer Site Information:			
Facility Name	New Britain General Hospital		
Street Address	5 Highland St		
City	New Britain		
State or Prov.	CT	Postal Code	06050
Country	US		
Phone		Fax	
Date Of Course			

For the purposes of the training records list below all those receiving BrachyVision Training (to any level) along with job function (e.g. Oncologist, Physicist etc.), signature and initials.

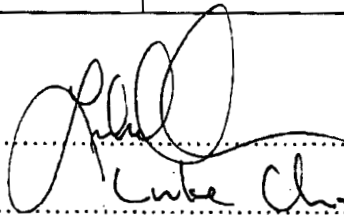
Name	Job Function	Signature	Initials
George Pavlounis	Physicist		GP
Email address	Phone number	Fax number	
gp219xx@yahoo.com	860 224-5520	860-2245717	

Name	Job Function	Signature	Initials
Email address	Phone number	Fax number	

Name	Job Function	Signature	Initials
Email address	Phone number	Fax number	

Name	Job Function	Signature	Initials
Email address	Phone number	Fax number	

Instructor

Name: 

Signature:  Initials: 

BrachyVision 4.5 Training Outline

Session 1 - BrachyVision

System Overview

Explain general aspects and structure of the BrachyVision software.

Integration of BrachyVision within the Vision / Eclipse product line

System capabilities

The basic Tasks

The basic workspaces

Focus and scope windows

Tool bars and menus

Trainers Initials: *lmj*

Attendees Initials: *ms*

Creating a plan from plane films (e.g. Bronchus)

Explain in detail all steps required to generate a simple plan from plane films.

Selection Workspace

Configuring Import Filters

Importing and connecting Images

Using a Vidar Scanner (for VXR16, leave for 90s after logging in)

Using a flatbed film scanner

Cropping an image

Scaling the image (to scale the pixels)

Trainers Initials: *lmj*

Attendees Initials: *ms*

Entry Workspace

Creating a plan



Discuss possible reconstruction methods and their requirements along with the advantages and disadvantages of each.



Inserting an imaging geometry including definition of all imaging parameters, particularly for the Reconstruction Jig if this is to be used.



Image Registration including a definition of the registration point



Demonstration of how to rotate an image if scanned in at an angle, including explanation that the image does not visibly rotate, just the orientation



Image processing



Demonstration of how to insert an applicator including a discussion on the possible sources of reconstruction error i.e. patient movement, incorrect geometry parameters, incorrect registration point entry.



Use of the zoom, pan and edit contour tool



Use of measurement tools emphasising that measurements are at film size (magnified).



Using a digitiser



Inserting the source positions (pen, applicator properties)



Inserting Reference points and lines stressing that Entry Workspace should only be used for anatomical reference points visible on the film and that geometric reference points should be entered in the Planning Workspace.



Applicator entry from co-ordinates



Using Template plans



Trainers Initials: *Wp*

Attendees Initials: *m*

Planning Workspace

Set all dwell times function



Show dwell controller



Inserting Reference points and normalising to them.



Inserting a reference line at a distance and optimising to it using a volume optimisation – magnification in the planning workspace is 1.0!!!



Use of the Shaper Tool



Normalising to reference points and basal dose points



Using dose measurement tools



Changing the Isodose values using Templates and individually plus 3D



Viewing 3D dose on Radiographs



Changing the 2D and 3D matrix



Changing materials etc



Viewing Plan Report including ways to reconfigure its output e.g. Hospital name or source co-ordinates.



Exporting to VariSource / Gammamed



Copying a plan



Trainers Initials: 

Attendees Initials: 

Session 2 - BrachyVision

Allow further familiarisation with the features of BrachyVision listed above with the development of a plan for a Vaginal Cylinder application and a Cervix application.

Explain the possible techniques for planning a cylinder application and show how this can be achieved with BrachyVision. Include the following methods: Uniform loading, optimise to a line at the side of the applicator, optimise to a line a covering the end of the applicator as well as the side.



Explain the possible techniques for planning a cervix application and show how this can be achieved with BrachyVision. Include the following methods: Simulation of Manchester or other low dose rate techniques and optimisation techniques.



Dose Prescription

Explain how the Prescribed Percentage and Prescribed Dose per fractions are used to set the isodoses i.e. if the Prescribed Percentage is 80% and the Prescribed Dose per fraction is 600cGy, the 100% isodose will display 750cGy.



If either of these values are then changed the dose will re-scale accordingly.

Dose fractionation.



Explain how the number of fractions can be set in two places and how the effects of changing the fractionation in these places is as follows:

1) Plan properties – This will keep the dose per fraction the same. The display will show the overall dose for the two fractions however the dwell times will be for the individual fractions.

2) Plan Organiser – This will divide the dose per fraction by 2 therefore dividing the dwell times per fraction by 2. Again the system will display the isodoses for the entire plan but the dwell times will display the dwell times for each fraction.

Trainers Initials:

Attendees Initials:

Session 3 - BrachyVision

Explain in detail how 3D CT based plans may be generated with BrachyVision using a prostate case as an example.

Selection Workspace

Configuring DICOM Deamon and the DICOM Import Filters

Importing and connecting Images

Creating a 3D data set

Trainers Initials: *W*

Attendees Initials:

Contouring Workspace

Creating 3D structures including use of the auto contouring tools, post processing tool, manual contouring tool, paint brush, eraser, splinesnake, livewire, contour editor, copying and pasting contours and interpolating contours.

Using segmentation wizard and Boolean operators

Generation of a PTV from a CTV through the use of the Margin tool

Trainers Initials: *W*

Attendees Initials:

Planning Workspace

Creating a plan

Inserting an applicator from the 3D image data

Using automatic catheter detection

Use of implant templates

Inserting the source positions (pen, applicator properties) including the use of the 3D image data to assist with this process.

Using automated source placement

Geometrical optimisation

Use of Shaper Tool followed by Normalisation

Changing materials etc

3D Dose calculation and visualisation

DVHs including adding structures

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Trainers Initials: *h*

Attendees Initials: *ml*

Session 4 - BrachyVision

Explain miscellaneous features of BrachyVision not covered in the previous sessions.

- Starting a new plan from an existing plan - Film
- Starting a new plan from an existing plan - CT
- Creating a plan with multiple films
- Creating a 3D plan from a hardcopy CT film - Scaling Image
- Generation and use of DRRs
- Copying Registration points from one plan to another
- Matching two 3D data sets -using manual and least squares fit
- Copying and Pasting structures from one data set to another
- Matching Film and CT
- Summing Plans including dose visualisation and DVH for summed plans
- Creation and use of Library Applicators
- Planning for seeds implants
- Creating template plans
- Planning from ultrasound
- Plan Evaluation workspace

Trainers Initials: *W*

Attendees Initials: *MS*

Session 5 - BrachyVision

Explain all aspects of the system configuration including back-up and archive procedures.

- Dose Unit configuration
- Source and Afterloader configuration
- Installing a new source wire
- Updating the source used in a plan
- Updating the treatment date
- Configuring Imaging Geometries
- Configuring Isodose Templates
- Configuring Structure Templates
- Configuring Applicator Templates
- User Configuration

Trainers Initials: *mb*

Attendees Initials: