

## HAPPY NEW YEAR!

Best<sup>®</sup> Medical Canada wishes you a wonderful holiday season and all the best for 2010. Our plans for the New Year include introducing new products, expanding our distribution network and of course ongoing research and collaboration with many leading experts in the field of radiotherapy.

## IN THE NEWS

### Suit Filed for Brain Perfusion Radiation Overexposure

A class action lawsuit was filed in October 2009 on behalf of 206 patients who received up to eight times the recommended radiation dose during their CT brain perfusion scans in California. Sadly, radiation overexposure is an ongoing problem worldwide. Exposure information is increasingly of value to not only protect patients but also to satisfy quality regulations.

The mobileMOSFET system or the new Portable system are both excellent options for busy radiotherapy centers who want to ensure their patients are not being overexposed. The software clearly indicates dose in real time and the system integrates easily with daily routine. All of these factors help to prevent overexposure, minimize liability and increase patient safety.

### New Publications, Abstracts & Presentations

The AAPM, ASTRO, ESTRO, COMP/CARO and RSNA annual meetings were a great success for Best<sup>®</sup> Medical Canada. Along with sharing our message for total solutions in radiotherapy, we were able to see a number of informative presentations and read various publications and abstracts on the MOSFET technology. An updated list of publications is available upon request. Email [bmcinfo@teambest.com](mailto:bmcinfo@teambest.com).

New publications include:

A. Cherpak et al. Evaluation of a novel 4D in vivo dosimetry system Paper, Medical Physics Volume 36, Issue 5, pp. 1672-1679 (May 2009)

Q. Zhen-Yu et al. In-vivo verification of superficial dose for head and neck treatments using intensity-modulated techniques

Paper, Medical Physics, Volume 36, Issue 1, January 2009

S. Oh et al. Measurements of dose discrepancies due to inhomogeneities and radiographic contrast in balloon catheter brachytherapy

Paper, Medical Physics, Volume 36, Issue 9, September 2009



# PRODUCT PROFILE

## The XWU-IMRT Phantom

The XWU-IMRT Phantom (TN-RD-52) is ideal for obtaining quantitative dose measurements for film and MOSFET dosimetry. This 20 cm x 20 cm block phantom houses film and nine MOSFET dosimeters on two orthogonal planes. One of the planes, containing five MOSFET detection points, is the dividing plane of the two sub-phantoms where the film is located. Five absolute MOSFET dose points on the plane of the film provide dose verification. Easy to use cassettes come with pre-manufactured slots for the dosimeters and allow for greater versatility. (An additional cartridge for ion chamber comparison is also available.) MOSFETs can be positioned in the XWU-IMRT Phantom for treatment planning QA of IMRT procedures. The MOSFET dosimeters can be used both in the phantom and on the patient for a complete dose verification system.

“A film dosimetry system is not necessary as the film is used to verify the pattern of dose distribution relatively. With five dose points’ samples on the film and four dose points on an orthogonal plan, this QA procedure is adequate in theory and in practice.” (Dr. Wu, University of Miami)

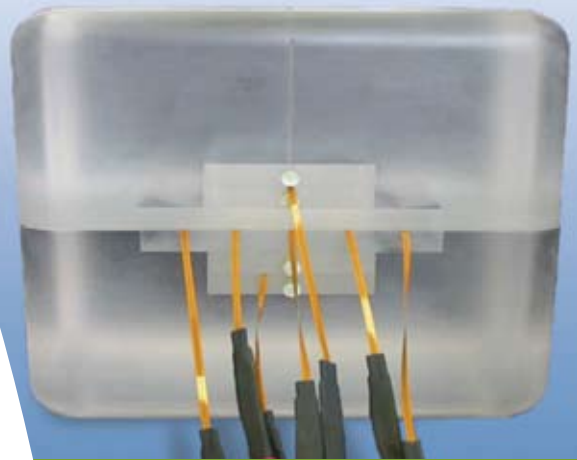
## Evaluation Results Of A Dmax MOSFET Calibration Phantom Prototype

Bayard Radiotherapy Centre located in Villeurbanne, France has recently completed an evaluation on a new calibration phantom prototype. They have concluded that this phantom makes it noticeably easier to do MOSFET calibrations for the following reasons; positioning on the apparatus is much easier and the time saved for measurements is considerable. Whatever measurement you want to do (repeatability, field size, wedge filter, DSP etc.) this phantom means they can be done very easily. The phantom is made from 1.01 high impact polystyrene (which has the same characteristics as RW3 type plates). A comparison was made between the RW3 plates and the phantom to check whether there was the same response and the greatest difference was 0.9%. The general dimensions are large enough for there to be backscattering and permit measurements for the sizes of fields which are routinely encountered in clinical practice. Overall, the phantom was found to be well thought out. The ergonomics and functionalities make it possible and easy to calibrate the MOSFETs.

## UPCOMING EVENTS

### WESCAN 2010 Winnipeg, MB March 24 – 27, 2010

BMC will be attending this meeting. Please stop by the booth and let us know what you're working on or what products you may be looking for.



XWU-IMRT Phantom



MOSFET Calibration Phantom Prototype

## March 2010

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
28	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
			<b>WESCAN</b>			
28	29	30	31	1	2	3

Best Medical Canada 413 March Road Ottawa, ON K2K 0E4 CANADA  
phone 613 591 2100 877 668 6636 fax 613 596 5243 www.mosfet.ca

AFRICA | ASIA | EUROPE | LATIN AMERICA | MIDDLE EAST | NORTH AMERICA



**Best**<sup>®</sup>

healthcare for everyone