



# DOSEMapper™ Digest: February 2020

## A brief overview for new readers

TRUEinVivo Ltd. has developed a technology to directly measure the actual received radiation doses at over 100 points in-body during a treatment fraction in radiotherapy. This enables clinicians to compare the actual doses to those expected by the treatment plan and correct for any inaccuracies in the next fraction. After the fraction, the beads (now known as DOSEMappers) are extracted and placed into our automated reader, which measures the amount of radiation absorbed by each bead, showing the exact dose delivered to the tumour or neighbouring healthy organs.



2D and 3D versions of the DOSEmapper™ have been developed for radiation measurement on surfaces and in body cavities respectively.

## Use Cases

Through our collaborations with four hospitals we are in the process of building up a portfolio of use cases for which our DOSEMappers can be used. These include breast, cervical, head & neck, and prostate cancers.

We are still seeking a number of further collaborations to determine the efficacy of our DOSEmappers across a range of use cases. If you are interested in finding out more please contact Dr Shakar Jafari at [shakardokht.jafari@trueinvivo.co.uk](mailto:shakardokht.jafari@trueinvivo.co.uk).

## Regulatory Progress

During January, we received our ISO13485 Medical Quality Management Certificate from BSI. We are currently in the process of completing CE marking of our automated DOSEmapper™ Reader, which we expect to be finalised by March. Our DOSEmappers are already CE marked as Class I medical devices.



## Bead reading service

We intend to launch a bead reading service in March, under which we provide users with a supply of DOSEmapper™ arrays/2D mesh/3D volume configurations in a suitable format for their application. Once exposed, the beads are returned to us for reading in a light-proof envelope. We expect to be able to process the DOSEmappers and provide results typically within one working day of receipt.

For further details, including pricing options, please contact Chris Budleigh at [chris.budleigh@trueinvivo.co.uk](mailto:chris.budleigh@trueinvivo.co.uk)

## Recognition of Bead Array technology

- A paper has been accepted for the Journal of Radiation Physics and Chemistry. "Using Micro Silica Bead TLDs in High Dose Rate Brachytherapy Dosimetry: a phantom study"
- A trial of a fixed-volume 3D DoseMapper™ involving 30 patients, has recently been completed in Tehran. A summary of the results has been submitted as a late breaking abstract to the ESTRO 39 conference, to be held in Vienna this April.
- There are now more than 50 peer-reviewed publications about bead array technology.
- Our DOSEmapper™ technology has been included in the recently published 8<sup>th</sup> Edition of the Textbook of Radiotherapy.

