



ELEKTA

## IMPORTANT NOTICE

Notice No : A279

Date : 1<sup>st</sup> November 2005

### Loss of DMP information after treatment delivery

Dear Customer,

We bring to your attention important information regarding the operation of your equipment. We advise all Users of the equipment to follow any instructions or recommendations covered in this Notice.

This document should be filed in the Important Notice section of the appropriate User Manual.

- Clinical Mode Users Manual R5.0. Manual No 4513 370 2006 02.
- Synergy Platform. Manual No 4513 370 2062 02.
- Clinical Mode Users Manual R5.1x Beam Modulator. Manual No 4513 370 2084 01
- Precise Treatment System Clinical Mode operators manual R4.2. Manual No 4513 370 1994 03.

This Important Notice is applicable to all users of Desktop Premium Therapy with dose recording and treatment sheets licensed. This Important Notice supercedes Important Notice A274

Following intensive investigation, it has been found that on occasions a break in the communication between the Desktop software and its database results in field delivery and DMP data getting lost. The exact cause of this issue is unknown, however our investigations have found this to occur when data is being written to the database. In this situation the field delivery information that is being written to the database is rolled back to the state before the delivery occurred, losing any record of delivery of that field and the dose accumulated.

The likelihood of this break in communication occurring is rare, however this has been found to be more likely where an aCDS backup occurs at the same time as treatment history is written to the database.

Please note that the Linac Record Print will always show the actual (correct) delivery of the fields.

Depending on whether the treatment sheet is printed at the time of treatment or at the end of the day, the loss of field data is displayed differently both on the Dose Contribution Tab and on the Treatment Sheet. These differences are outlined below:

Field Name	Dose Contribution to DMP – 2.0Gy
Field 1	0.8Gy
Field 2	0.7Gy
Field 3	0.5Gy

In the following examples all fields are delivered to normal termination. On Day 1, the DMPs are added up correctly and on Day 2, the data for Field 2 is lost.

#### Scenario 1 – Printing directly after field delivery

The treatment sheet is printed directly after the delivery of all the treatment fields by selecting 'Print Treatment Sheet' from the field termination dialogue box.

Treatment Day	Treatment Sequence of fields	DMP Dose per field	Total DMP Dose
Day 1	Field 1	0.8Gy	0.8
	Field 2	0.7Gy	1.5



	Field 3	0.5Gy	2.0
Day2	Field 1	0.8Gy	2.8Gy
	Field 2	0.7Gy	3.5Gy
	Field 3	0.5Gy	3.3Gy

On Day 2, The Treatment Sheet and the Dose Tab Page will show the correct accumulation of the doses for Field 1 and 2:  $0.8 + 0.7 = 1.5\text{Gy}$ . Then the dose from Field 3 will be added and at the same time the dose for Field 2 will be subtracted:  $1.5 + 0.5 - 0.7 = 1.3\text{Gy}$ . The total accumulated DMP dose for day 1 & 2 is shown as 3.3Gy, this is incorrect as the total accumulated DMP dose at the end of delivery on Day 2 should be 4.0Gy.

Please note that the Linac Record Print will correctly show the delivery of field 2.

#### Scenario 2 – Printing at the end of the day.

All fields are delivered to normal termination. The treatment sheet is printed at the end of day.

Day	Treatment sequence of fields	Dose per fraction	Total Dose
Day 1	Field 1	0.8Gy	0.8Gy
	Field 2	0.7Gy	1.5Gy
	Field 3	0.5Gy	2.0Gy
Day 2	Field 1	0.8Gy	2.8Gy
	Field 3	0.5Gy	3.3Gy

On Day 2, no record of the delivery of Field 2 will be found on the Treatment Sheet or on the Dose Tab Page, the total fraction dose for Day 2 will be 1.3Gy and the Total accumulated DMP Dose will be 3.3Gy. The Linac Record will correctly show the delivery of field 2.

In order to establish whether this situation has occurred, users should follow the instructions below: -

- Users should print treatment sheets as soon as possible after field delivery
- Check that the correct number of delivered fields have been recorded on the treatment sheet
- Check that the total DMP doses have correctly accumulated on the treatment sheet.
- If there are any discrepancies in the treatment sheet, check the Linac Record to verify that the treatment has been delivered correctly.
- Where delivery can not be confirmed, Elekta LTD can provide confirmation following supply of the machine log files captured through the Service Compression Tool.

Additionally, those users with aCDS configured should schedule the backups to the aCDS to take place at a time when patients are not being treated.

Elekta is committed to the continued maintenance and support of our software products. If you have any queries regarding this issue please contact your local Elekta Representative directly

Yours sincerely,

Alison Metcalfe  
Senior Applications Specialist – (Delivery Systems)