Associazione Italiana Radioterapia Oncologica

LA RADIOTERAPIA PALLIATIVA CON TECNICHE SPECIALI DELLA MALATTIA METASTATICA

TREVISO
7 giugno 2013

TRATTAMENTO NON CHIRURGICO DELLE OLIGOMETASTASI

TRATTAMENTO NON CHIRURGICO DELLE OLIGOMETASTASI

Dott. Giorgio Marazzato

ASL 9 TREVISO

Il **17/12/2004** mastectomia radicale sinistra con ricostruzione immediata per

Carcinoma duttale infiltrante G2

pT1C N1a (N+ 1/17)

Recettori positivi, Ki 67: 25%

Successiva chemioterapia con FEC.

Febbraio 2010 diagnosi di recidiva linfonodale sovraclaveare sinistra asportata.

Es. Istologico: metastasi da cr duttale,

Recettori: positivi, Ki 67: 20%

ERB2: non amplificato

Esegue chemioterapia con Taxolo+ Avastin per 6 cicli e inibitore dell'aromatasi.

Radioterapia sulla fossa sovra-sottoclaveare con 5000 cGy/ 25 frazioni

In dicembre comparsa di dolore alla colonna dorso lombare

RX rachide dorso lombare: negativo.

RX rachide dorso lombare: negativo.

Progressivo aumento della sintomatologia dolorosa e del marker per cui a **gennaio 2013** esegue scintigrafia ossea e TC PET, con evidenza di ripresa di malattia su L1 e altre 3 sedi.

La RM delle colonna conferma la lesione secondaria a L1 estesa al peduncolo vertebrale destro.

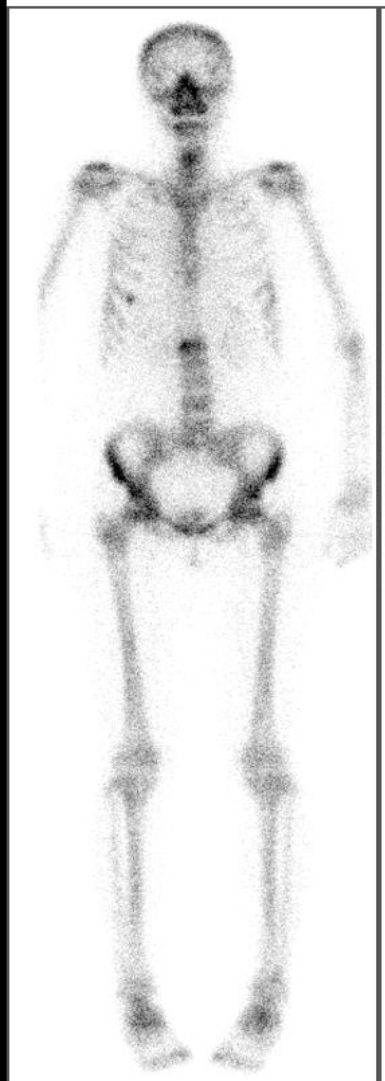
estesa al peduncolo vertebrale destro.

Considerata paziente oligometastatica (meno di 5 sedi di ripresa di malattia)

Considerata paziente oligometastatica (meno di 5 sedi di ripresa di malattia)

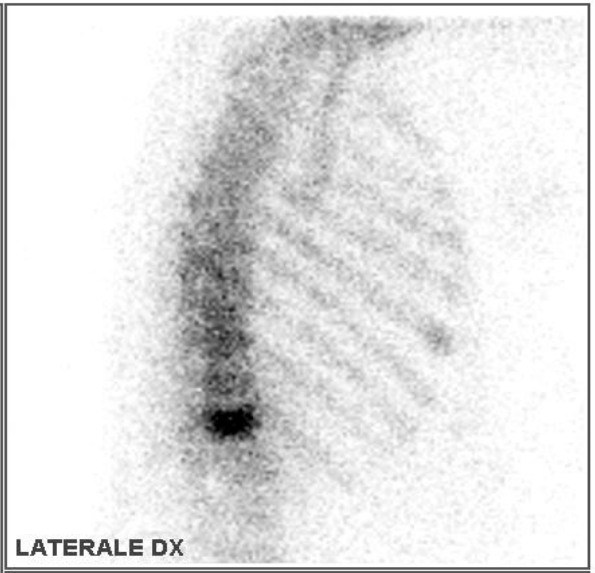
25/01/1959
53 YEAR
F

TB
23/01/2013 10.40.00
C60429135

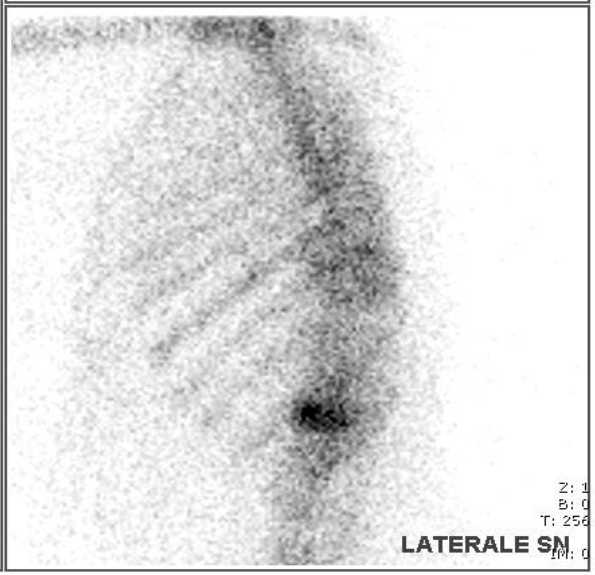


ANTERIORE

POSTERIORE

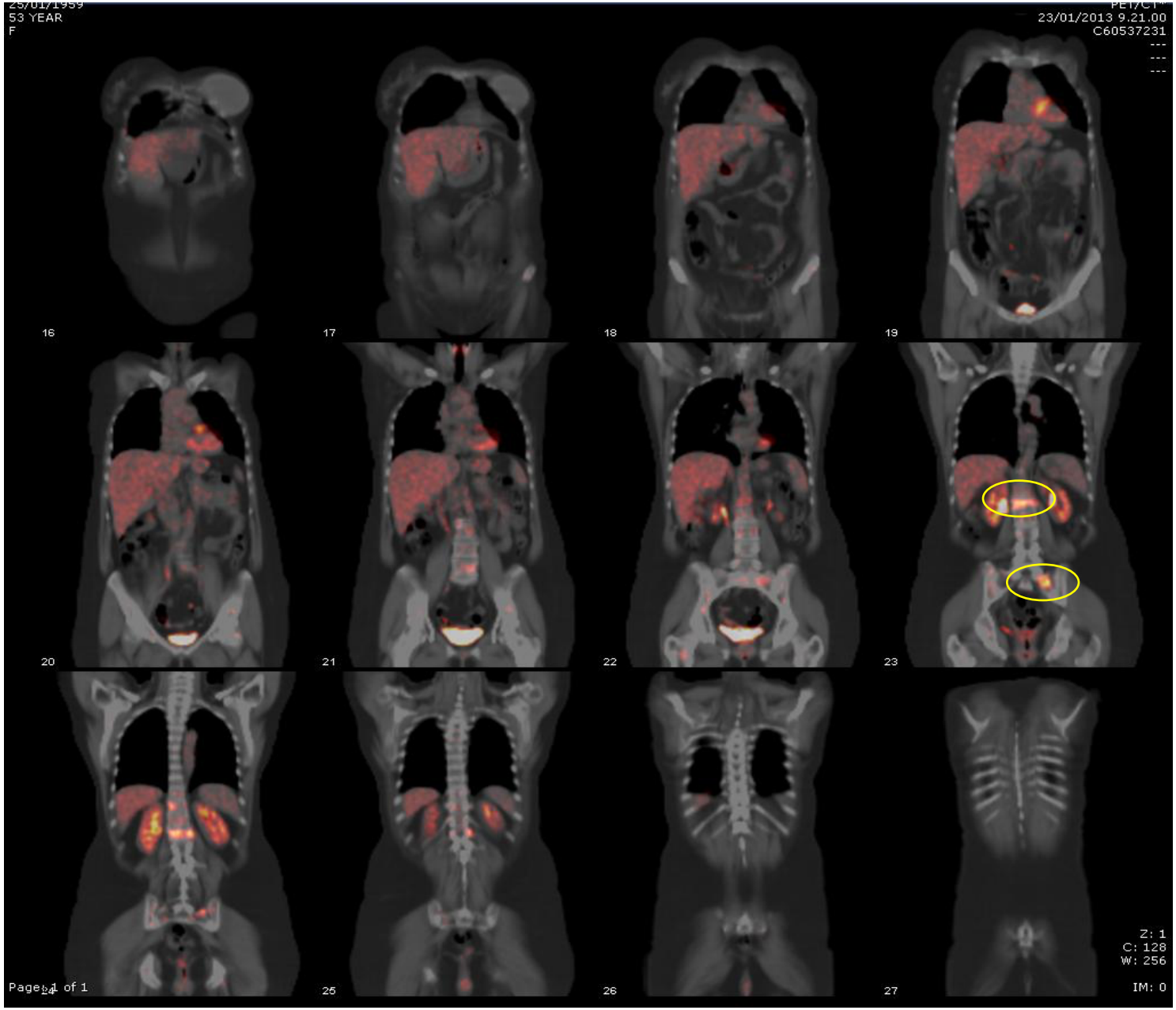


LATERALE DX



Z: 1
B: 0
T: 256
IM: 0

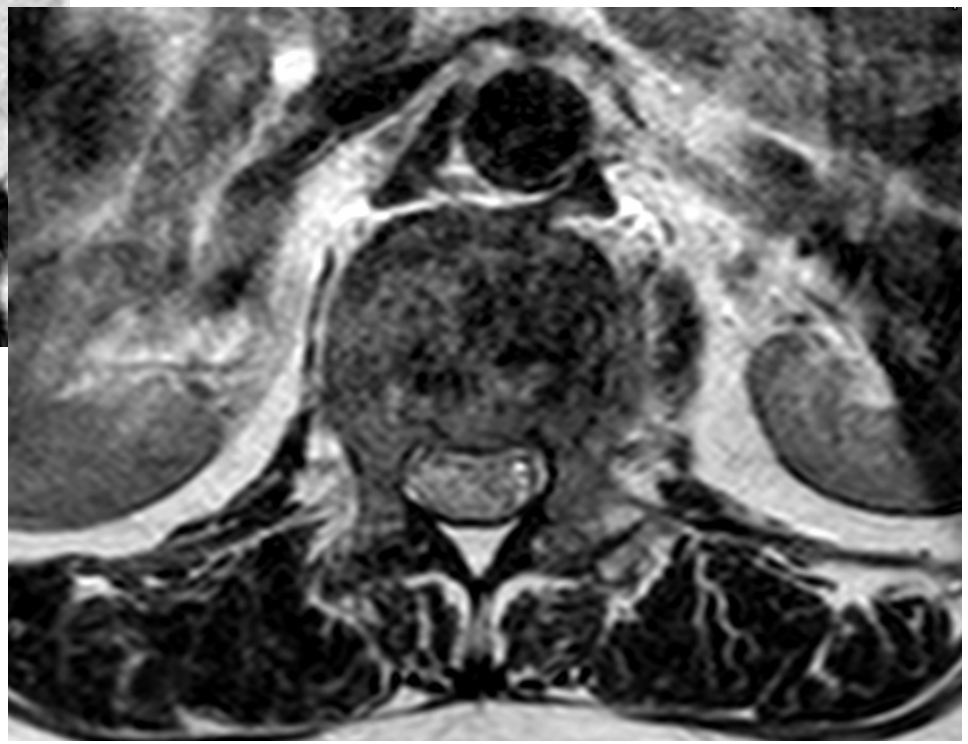
LATERALE SN


25/01/1959
53 YEAR
F
PET/CT
23/01/2013 9.21.00
C60537231

16
17
18
19
20
21
22
23
24
25
26
27
Z: 1
C: 128
W: 256
IM: 0
Page 1 of 1

RM rachide15-2-2013

RM rachide15-2-2013



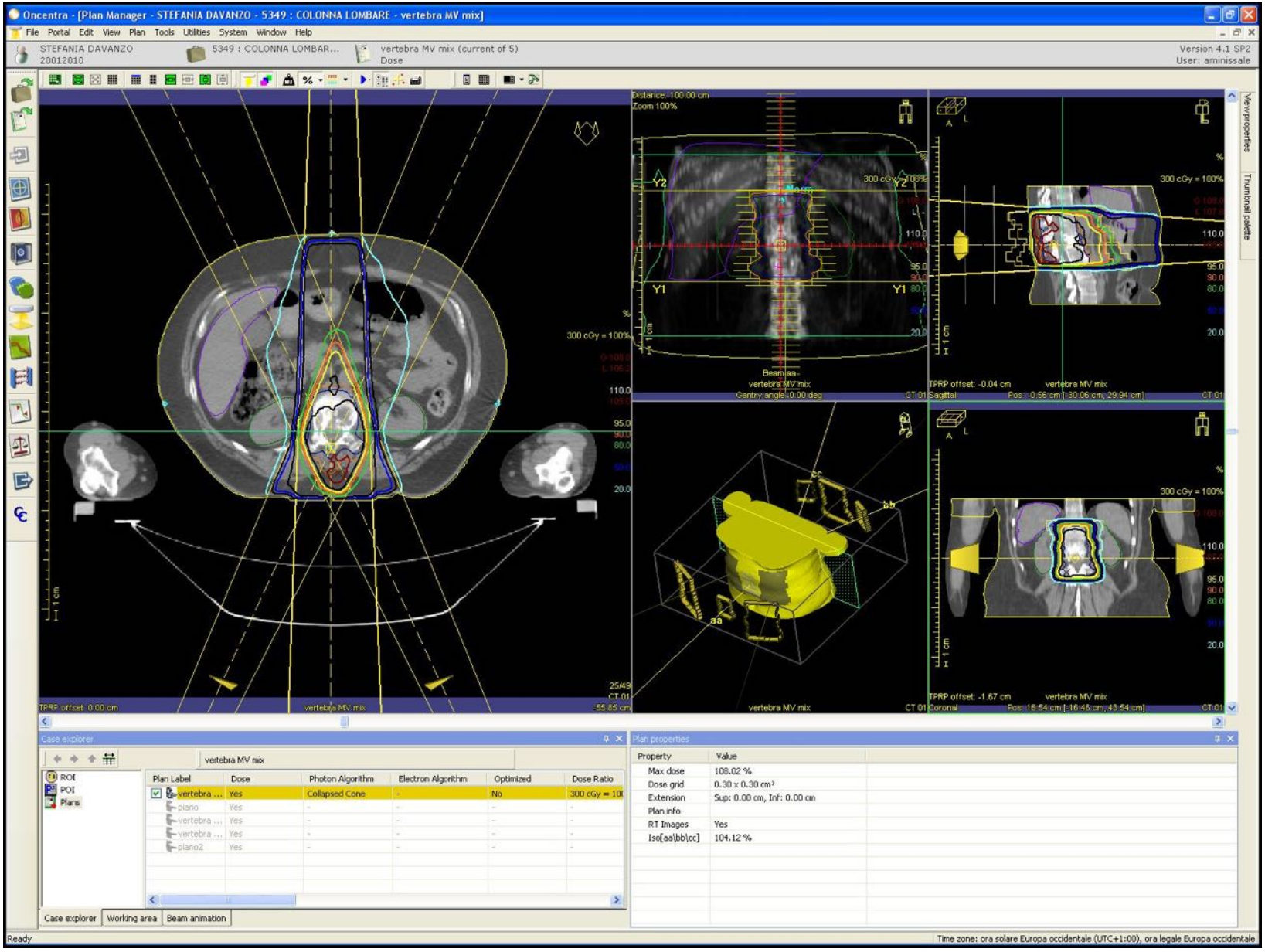
INDICAZIONI TERAPEUTICHE

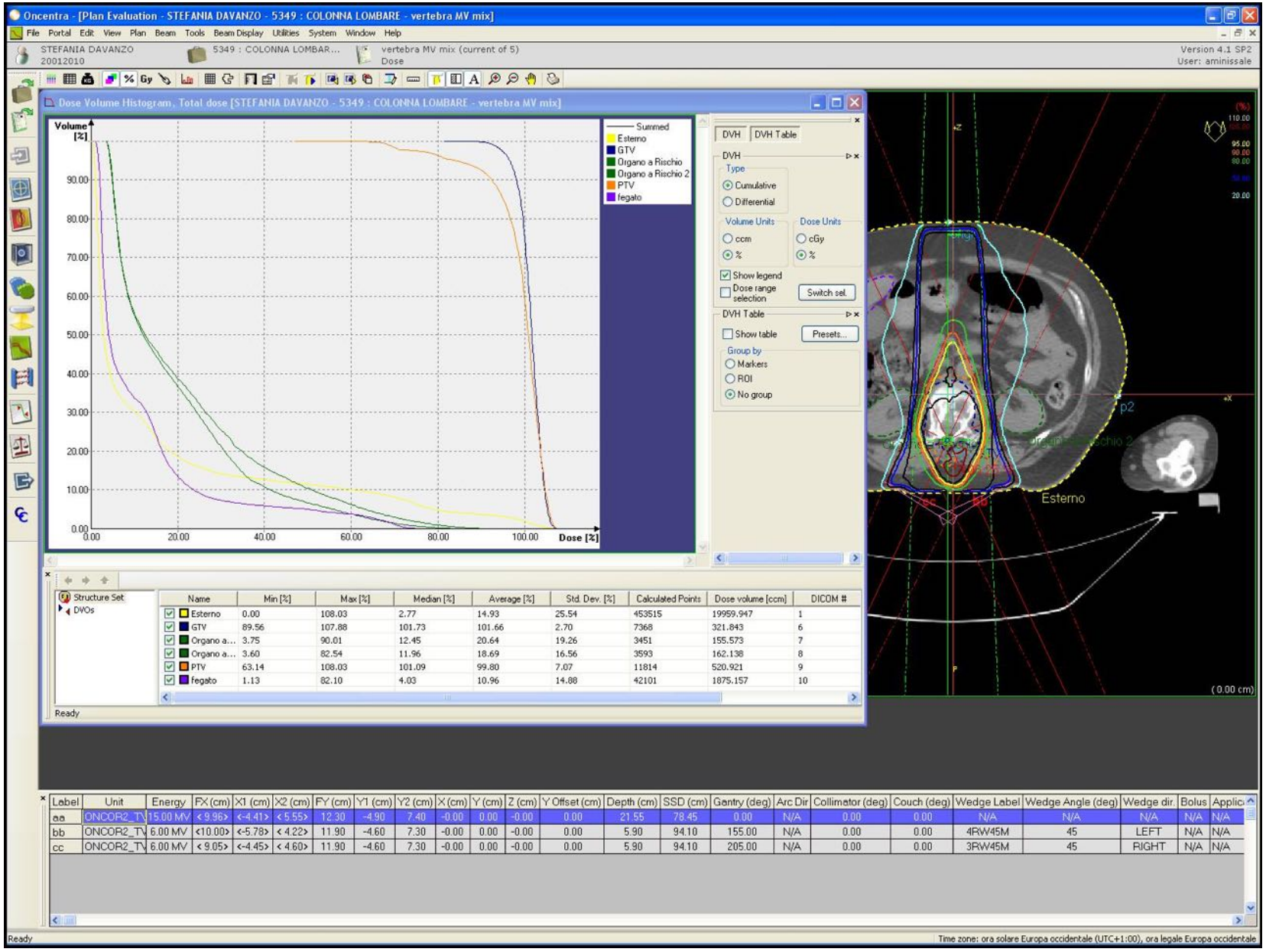
- Valutazione ortopedica: indicato busto CAMP C35
- Valutazione neurochirurgica: non indicata chirurgia decompressiva
- Valutazione in terapia antalgica: messa in terapia con ossicodone a rilascio controllato e fentanile transmucoso/FANS al bisogno.

INVIATA PER RADIOTERAPIA SU COLONNA LOMBARE

PROGRAMMA DI RTE:

20 GY/5 FRAZIONI SU COLONNA LOMBARE CON RTE 3D-CRT


Oncentra - [Plan Manager - STEFANIA DAVANZO - 5349 : COLONNA LOMBARE - vertebra MV mix]
File Portal Edit View Plan Tools Utilities System Window Help
STEFANIA DAVANZO
20012010
5349 : COLONNA LOMBAR...
vertebra MV mix (current of 5)
Dose
Version 4.1 SP2
User: aminissale
Distance: 100.00 cm
Zoom 100%
300 cGy = 100%
Beam aa
vertebra MV mix
Gantry angle 0.00 deg
TPRP offset: -0.04 cm
Sagittal
TPRP offset: 0.00 cm
TPRP offset: -1.67 cm
Coronal
Case explorer
Plan properties
ROI
POI
Plans
Plan Label
Dose
Photon Algorithm
Electron Algorithm
Optimized
Dose Ratio
Property
Value
Max dose 108.02 %
Dose grid 0.30 x 0.30 cm³
Extension Sup: 0.00 cm, Inf: 0.00 cm
Plan info
RT Images Yes
Iso[aa\bb\cc] 104.12 %
Case explorer
Working area
Beam animation
Ready
Time zone: ora solare Europa occidentale (UTC+1:00), ora legale Europa occidentale

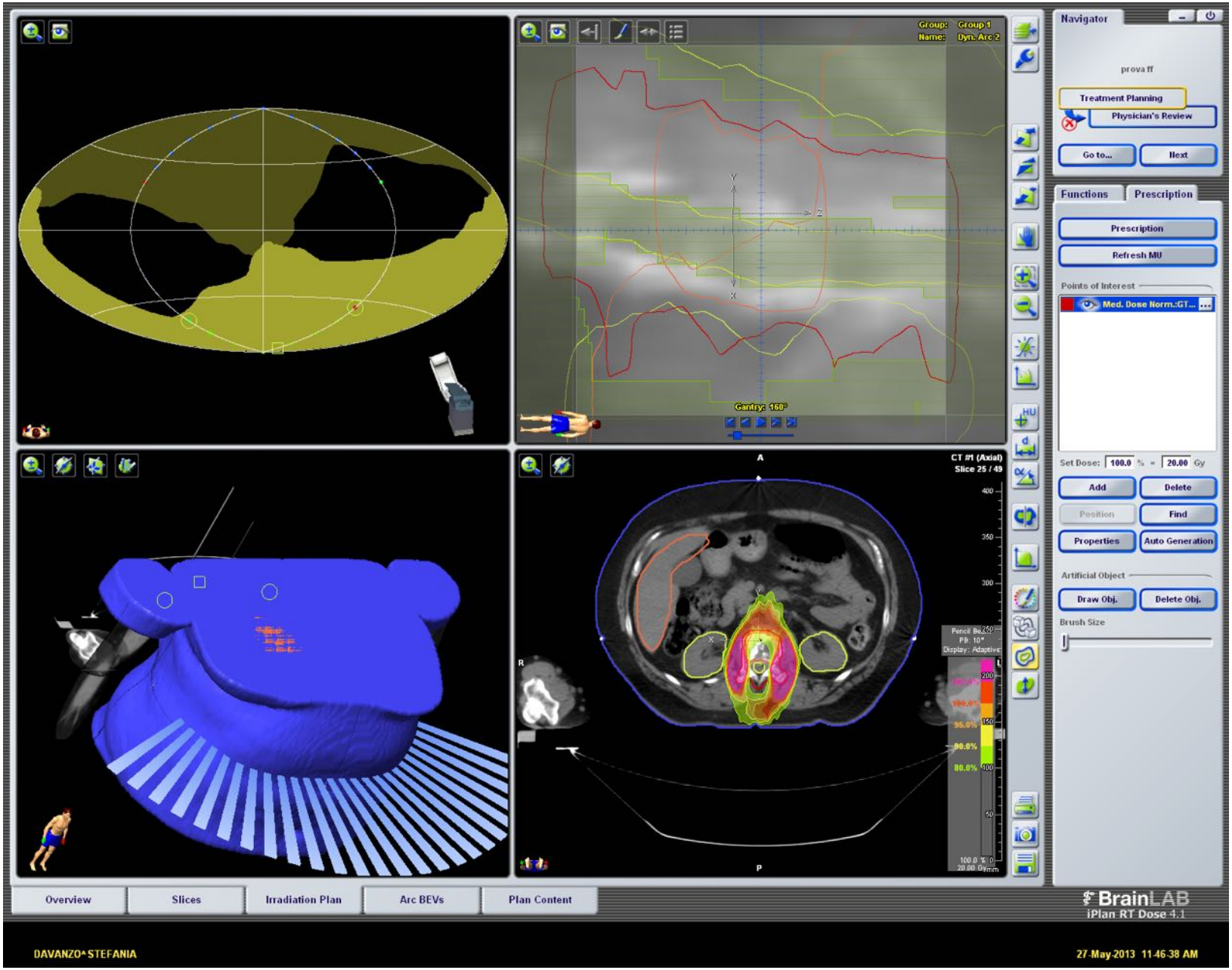

Oncentra - [Plan Evaluation - STEFANIA DAVANZO - 5349 : COLONNA LOMBARE - vertebra MV mix]
File Portal Edit View Plan Beam Tools Beam Display Utilities System Window Help
STEFANIA DAVANZO
20012010
5349 : COLONNA LOMBAR...
vertebra MV mix (current of 5)
Dose
Version 4.1 SP2
User: aminissale
Dose Volume Histogram, Total dose [STEFANIA DAVANZO - 5349 : COLONNA LOMBARE - vertebra MV mix]
Volume [%]
Dose [%]
Summed
Esterno
GTV
Organo a Rischio
Organo a Rischio 2
PTV
fegato
DVH
DVH Table
Type
Cumulative
Differential
Volume Units
ccm
%
Dose Units
cGy
%
Show legend
Dose range selection
Switch sel.
Show table
Presets...
Group by
Markers
ROI
No group
Structure Set
DVOs
Name
Min [%]
Max [%]
Median [%]
Average [%]
Std. Dev. [%]
Calculated Points
Dose volume [ccm]
DICOM #
Esterno 0.00 108.03 2.77 14.93 25.54 453515 19959.947 1
GTV 89.56 107.88 101.73 101.66 2.70 7368 321.843 6
Organo a... 3.75 90.01 12.45 20.64 19.26 3451 155.573 7
Organo a... 3.60 82.54 11.96 18.69 16.56 3593 162.138 8
PTV 63.14 108.03 101.09 99.80 7.07 11814 520.921 9
fegato 1.13 82.10 4.03 10.96 14.88 42101 1875.157 10
Ready
Esterno
(0.00 cm)
Label Unit Energy FX (cm) X1 (cm) X2 (cm) FY (cm) Y1 (cm) Y2 (cm) X (cm) Y (cm) Z (cm) Y Offset (cm) Depth (cm) SSD (cm) Gantry (deg) Arc Dir Collimator (deg) Couch (deg) Wedge Label Wedge Angle (deg) Wedge dir. Bolus Applic
aa ONCOR2_TV 15.00 MV <9.96> <-4.41> <5.55> 12.30 -4.90 7.40 -0.00 0.00 -0.00 0.00 21.55 78.45 0.00 N/A 0.00 0.00 N/A N/A N/A N/A N/A
bb ONCOR2_TV 6.00 MV <10.00> <-5.78> <4.22> 11.90 -4.60 7.30 -0.00 0.00 -0.00 0.00 5.90 94.10 155.00 N/A 0.00 0.00 4RW45M 45 LEFT N/A N/A
cc ONCOR2_TV 6.00 MV <9.05> <-4.45> <4.60> 11.90 -4.60 7.30 -0.00 0.00 -0.00 0.00 5.90 94.10 205.00 N/A 0.00 0.00 3RW45M 45 RIGHT N/A N/A
Ready
Time zone: ora solare Europa occidentale (UTC+1:00), ora legale Europa occidentale

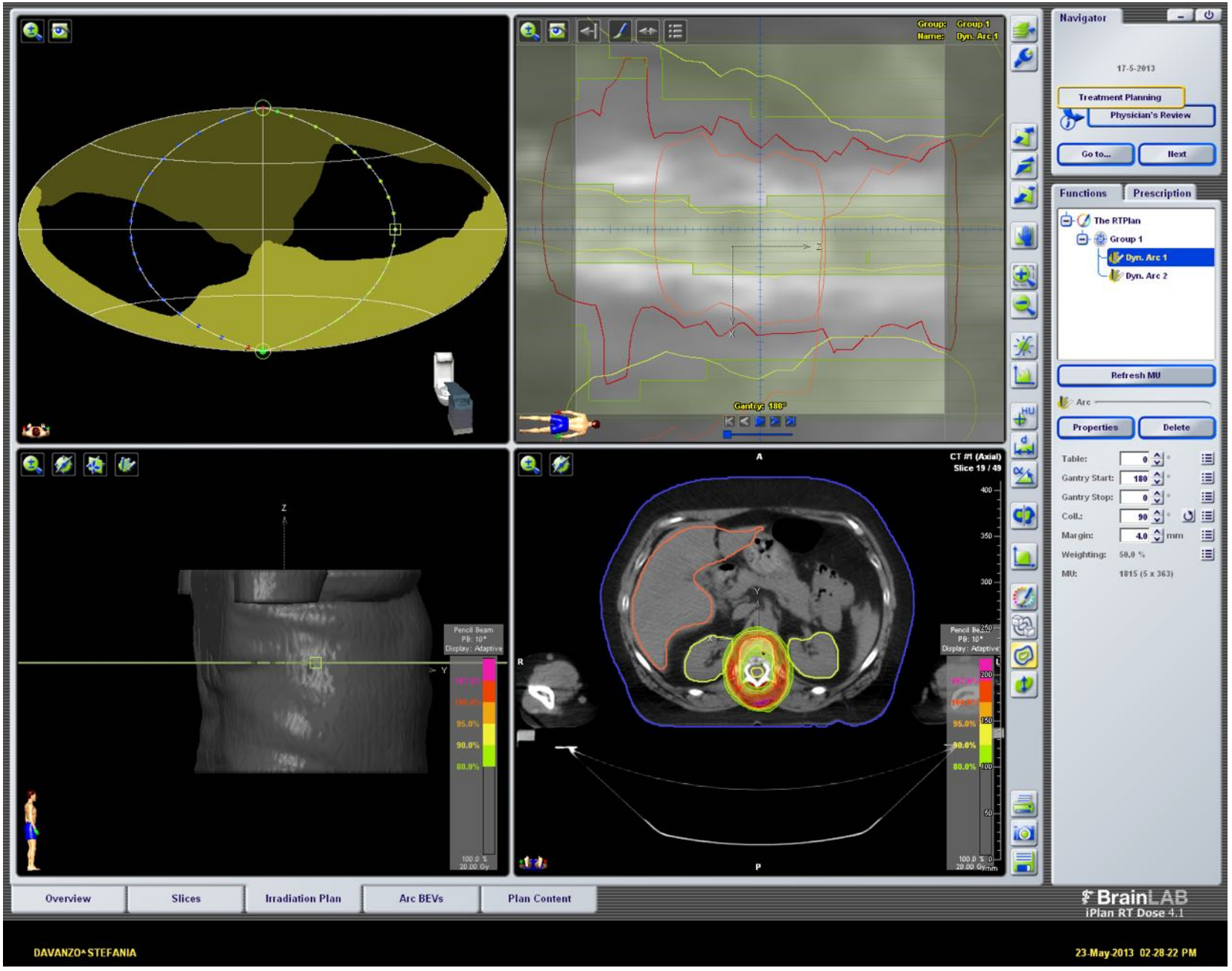
LA NOSTRA TECNOLOGIA

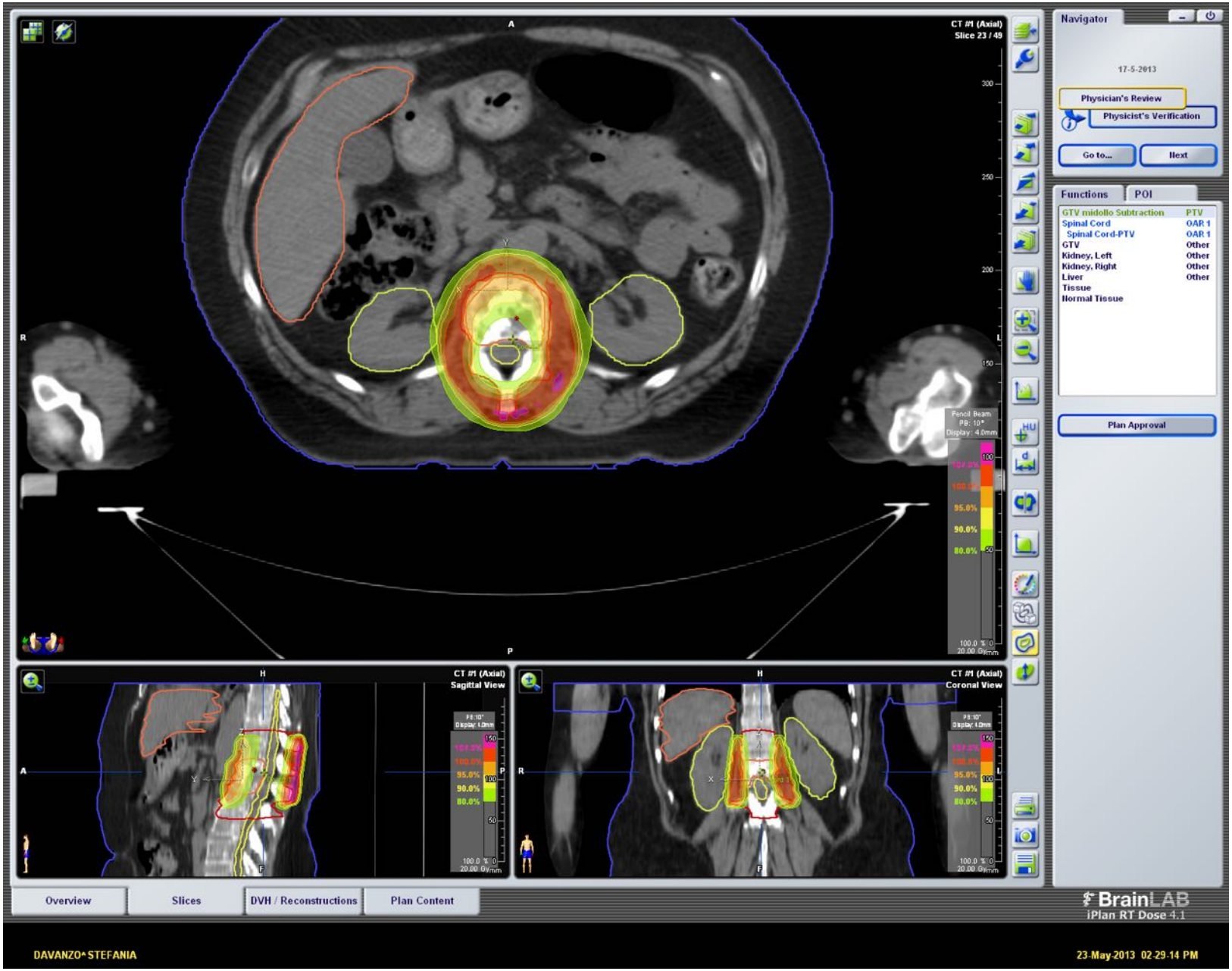
X-Ray 6D

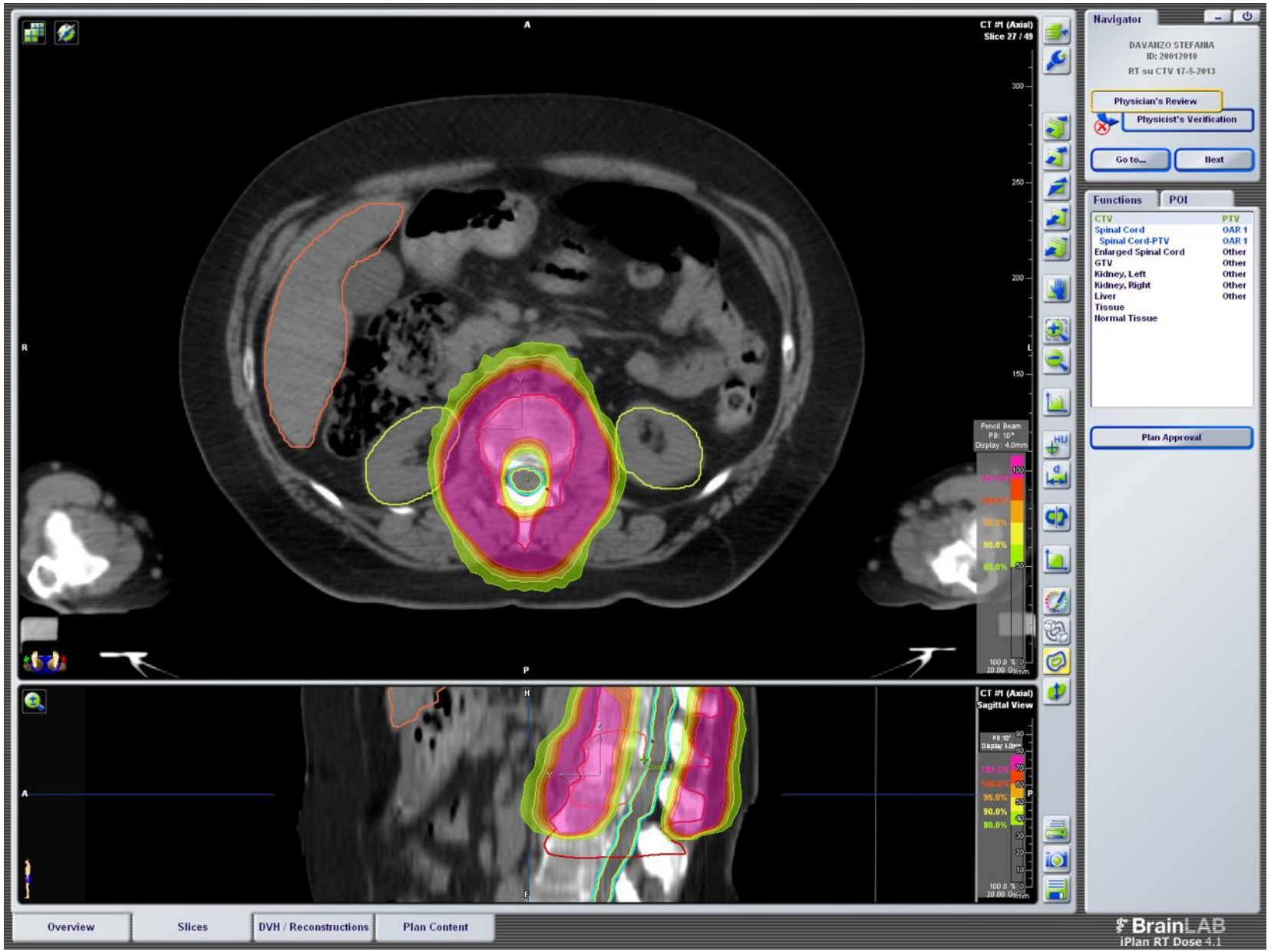
mMLC
BrainLAB

SimulTC
Philips

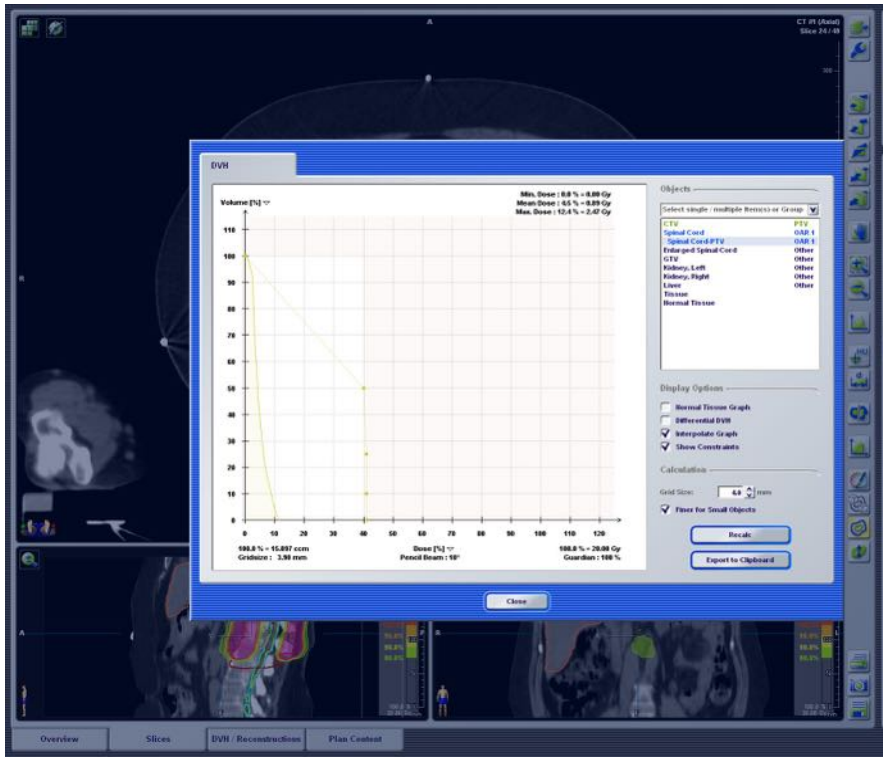

Group: Group 1
Name: Dyn. Arc 2
Gantry: 160°
CT #1 (Axial)
Slice 25 / 49
A
P
R
Navigator
prova ff
Treatment Planning
Physician's Review
Go to...
Next
Functions
Prescription
Prescription
Refresh MU
Points of Interest
Med. Dose Norm.:GT...
Set Dose: 100.0 % = 20.00 Gy
Add
Delete
Position
Find
Properties
Auto Generation
Artificial Object
Draw Obj.
Delete Obj.
Brush Size
Overview
Slices
Irradiation Plan
Arc BEVs
Plan Content
BrainLAB
iPlan RT Dose 4.1
DAVANZO^STEFANIA
27-May-2013 11:46:38 AM


Navigator
17-5-2013
Treatment Planning
Physician's Review
Go to...
Next
Functions
Prescription
The RTPlan
Group 1
Dyn. Arc 1
Dyn. Arc 2
Refresh MU
Arc
Properties
Delete
Table: 0
Gantry Start: 180
Gantry Stop: 0
Coll.: 90
Margin: 4.0 mm
Weighting: 50.0 %
MU: 1815 (5 x 363)
Group: Group 1
Name: Dyn. Arc 1
Gantry: 180°
CT #1 (Axial)
Slice 19 / 49
Pencil Beam
PB: 10*
Display: Adaptive
95.0%
90.0%
80.0%
Overview
Slices
Irradiation Plan
Arc BEVs
Plan Content
BrainLAB
iPlan RT Dose 4.1
DAVANZO^STEFANIA
23-May-2013 02:28:22 PM


CT #1 (Axial)
Slice 23 / 49
Navigator
17-5-2013
Physician's Review
Physicist's Verification
Go to...
Next
Functions
POI
GTV midollo Subtraction PTV
Spinal Cord OAR 1
Spinal Cord-PTV OAR 1
GTV Other
Kidney, Left Other
Kidney, Right Other
Liver Other
Tissue
Normal Tissue
Plan Approval
CT #1 (Axial)
Sagittal View
CT #1 (Axial)
Coronal View
Overview
Slices
DVH / Reconstructions
Plan Content
BrainLAB
iPlan RT Dose 4.1
DAVANZO^STEFANIA
23-May-2013 02:29:14 PM

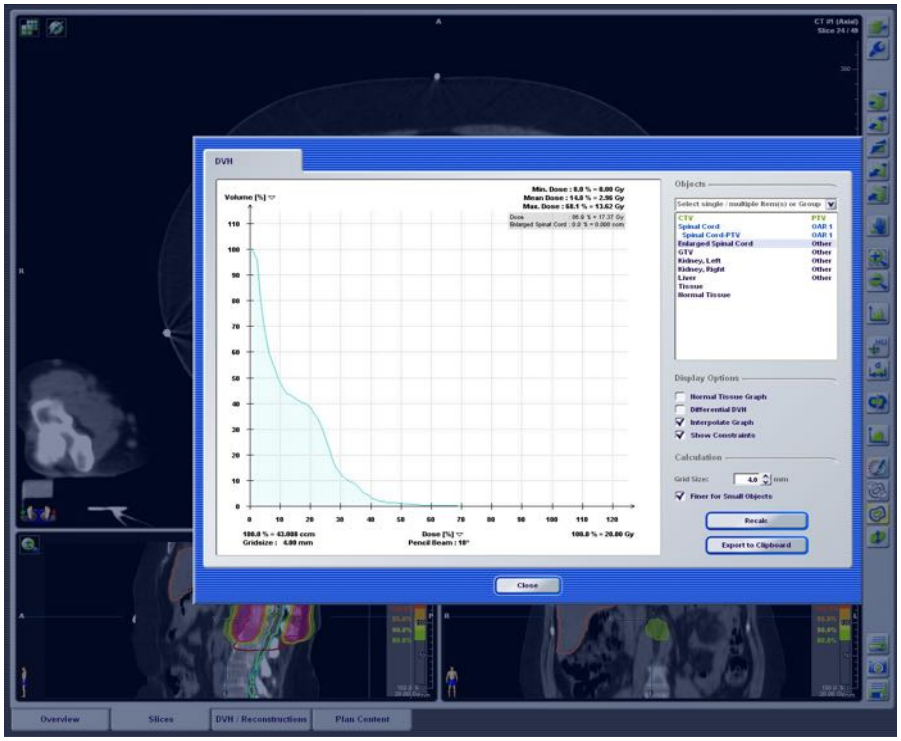

CT #1 (Axial)
Slice 27 / 49
A
R
L
P
300
250
200
150
Pencil Beam
PB: 10°
Display : 4.0mm
100
95.0%
90.0%
80.0%
60
100.0 % 0
20.00 Gymm
CT #1 (Axial)
Sagittal View
H
F
Navigator
DAVANZO STEFANIA
ID: 20012010
RT su CTV 17-5-2013
Physician's Review
Physicist's Verification
Go to...
Next
Functions
POI
CTV PTV
Spinal Cord OAR 1
Spinal Cord-PTV OAR 1
Enlarged Spinal Cord Other
GTV Other
Kidney, Left Other
Kidney, Right Other
Liver Other
Tissue
Normal Tissue
Plan Approval
Overview
Slices
DVH / Reconstructions
Plan Content
BrainLAB
iPlan RT Dose 4.1

Istogrammi midollo spinale e sacco durale

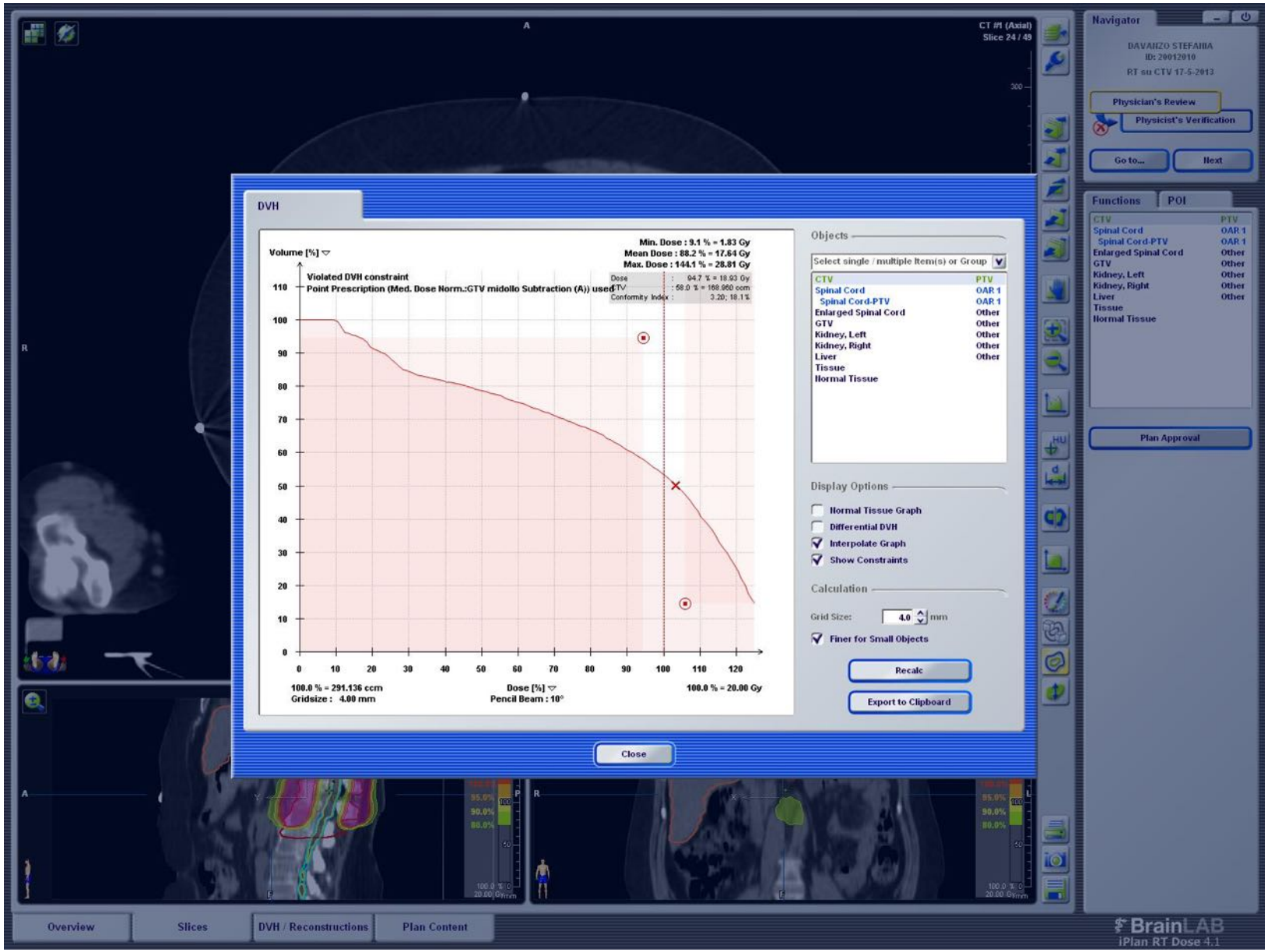


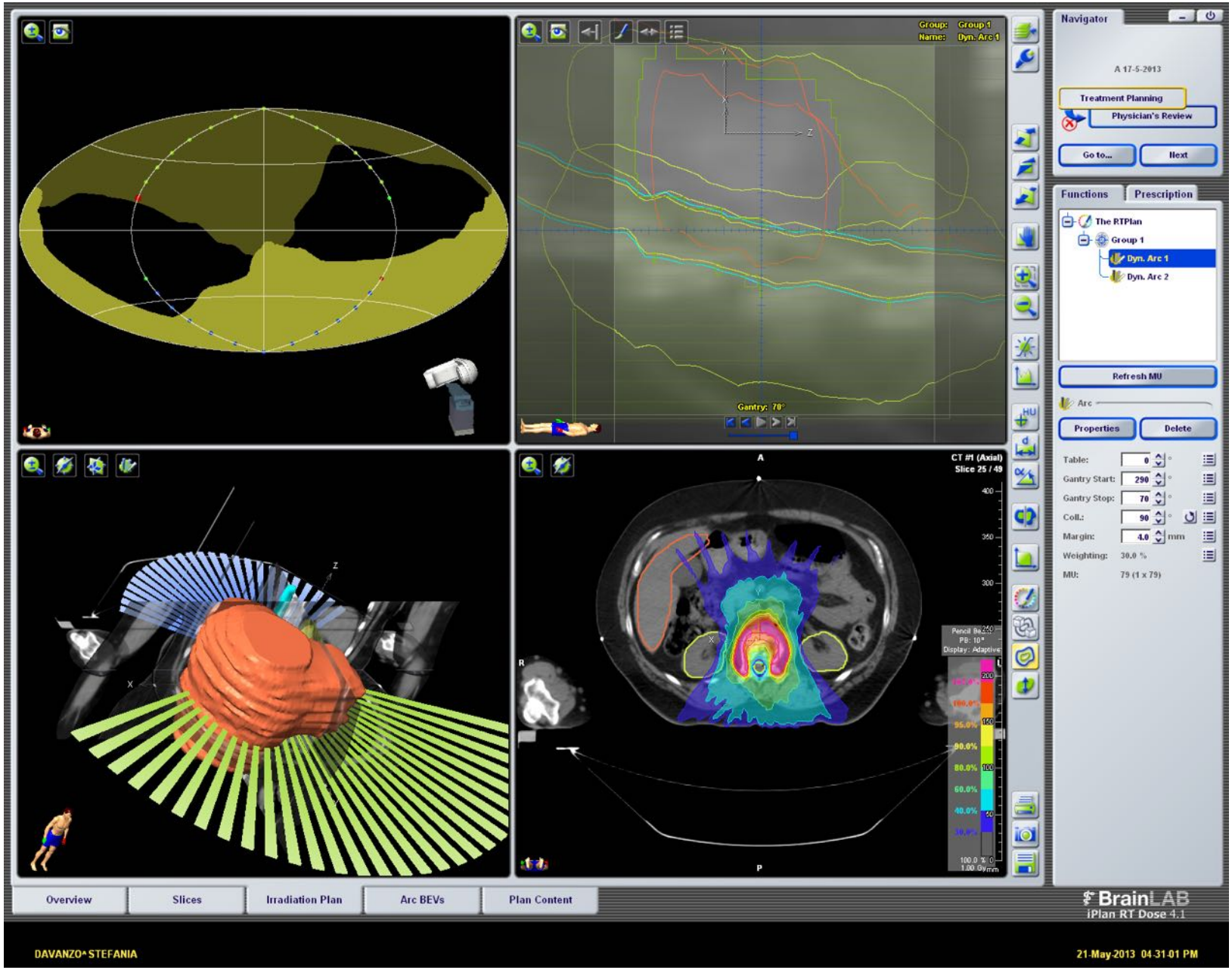
Istogrammi midollo spinale

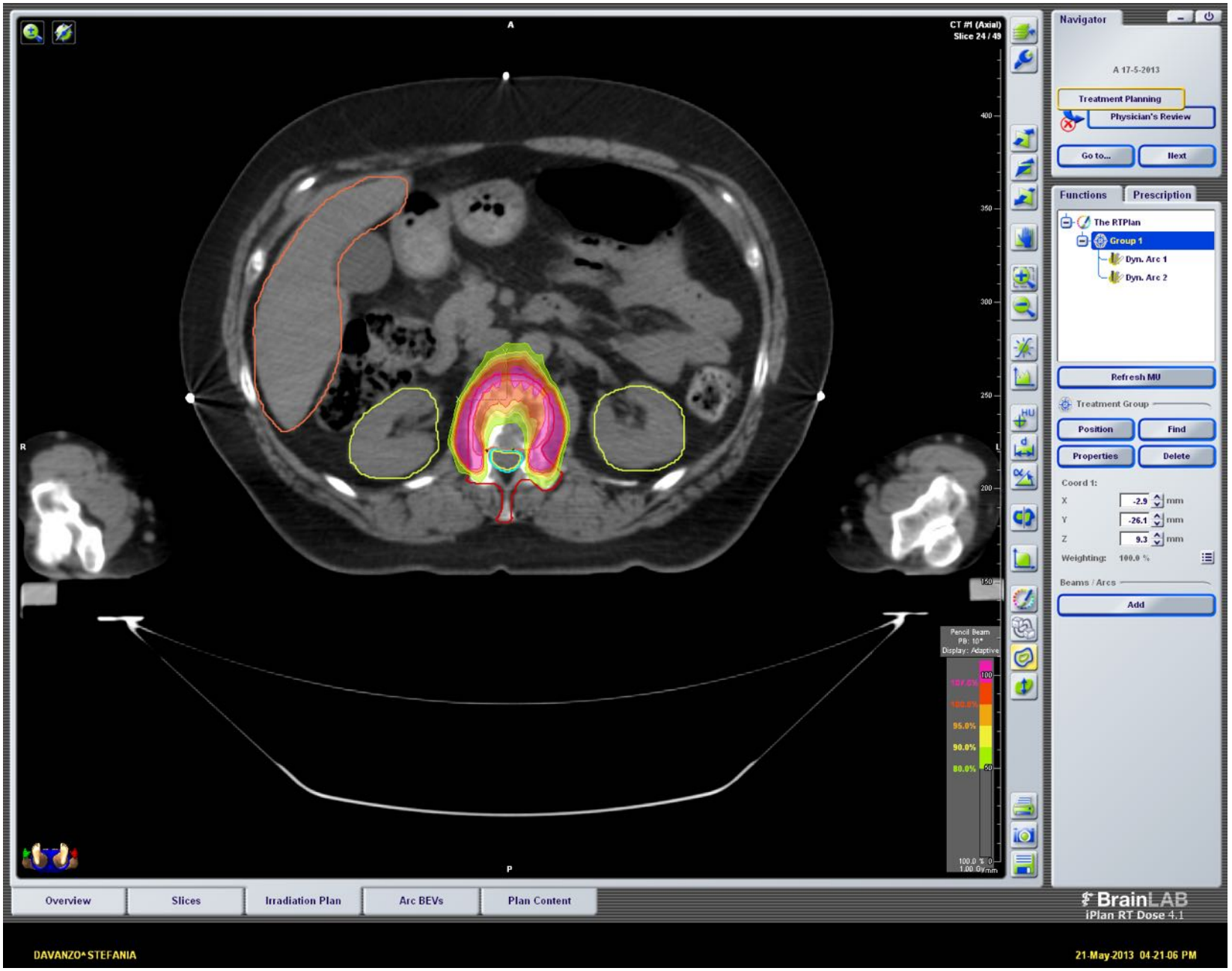
Istogrammi sacco durale

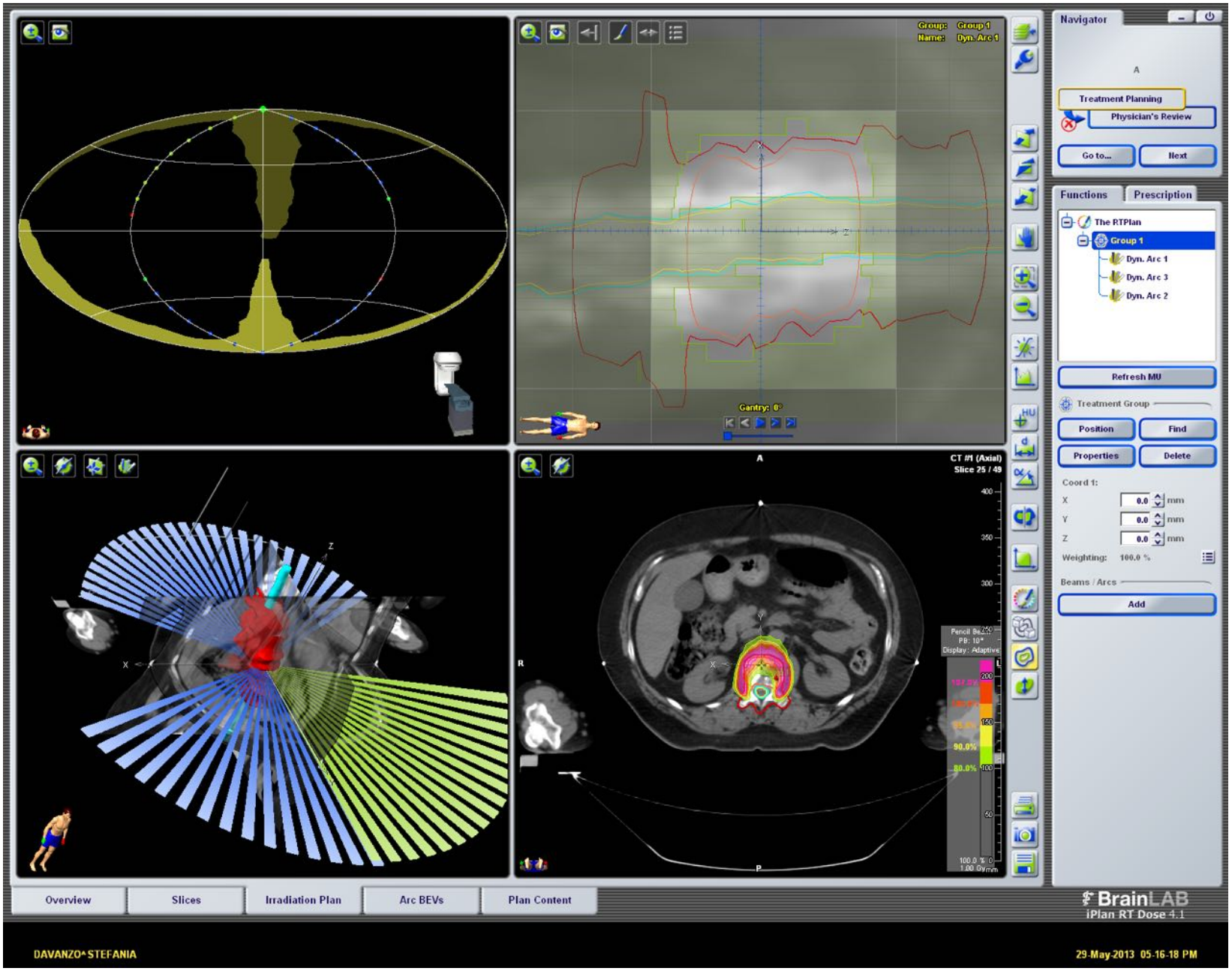


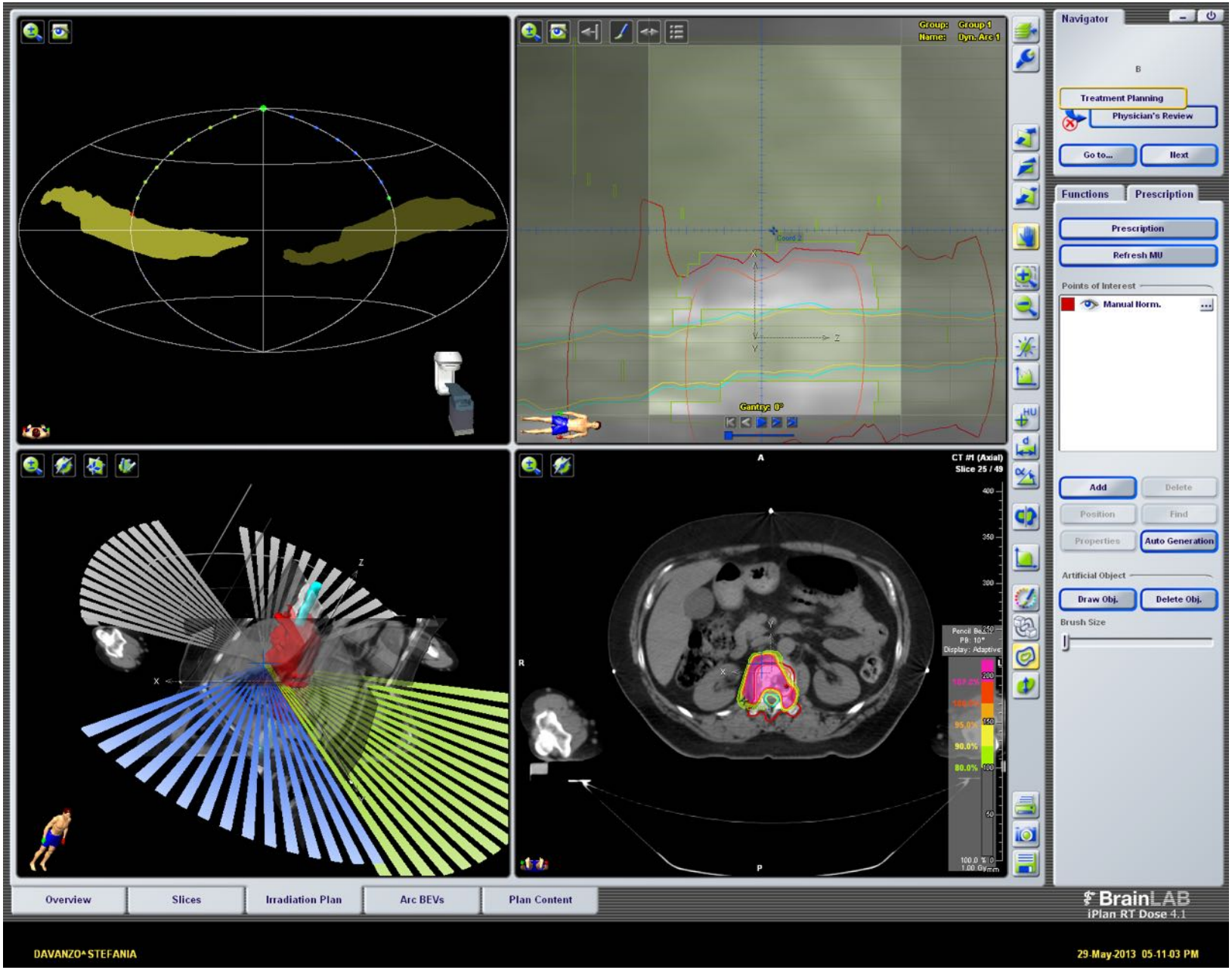
Istogramma target



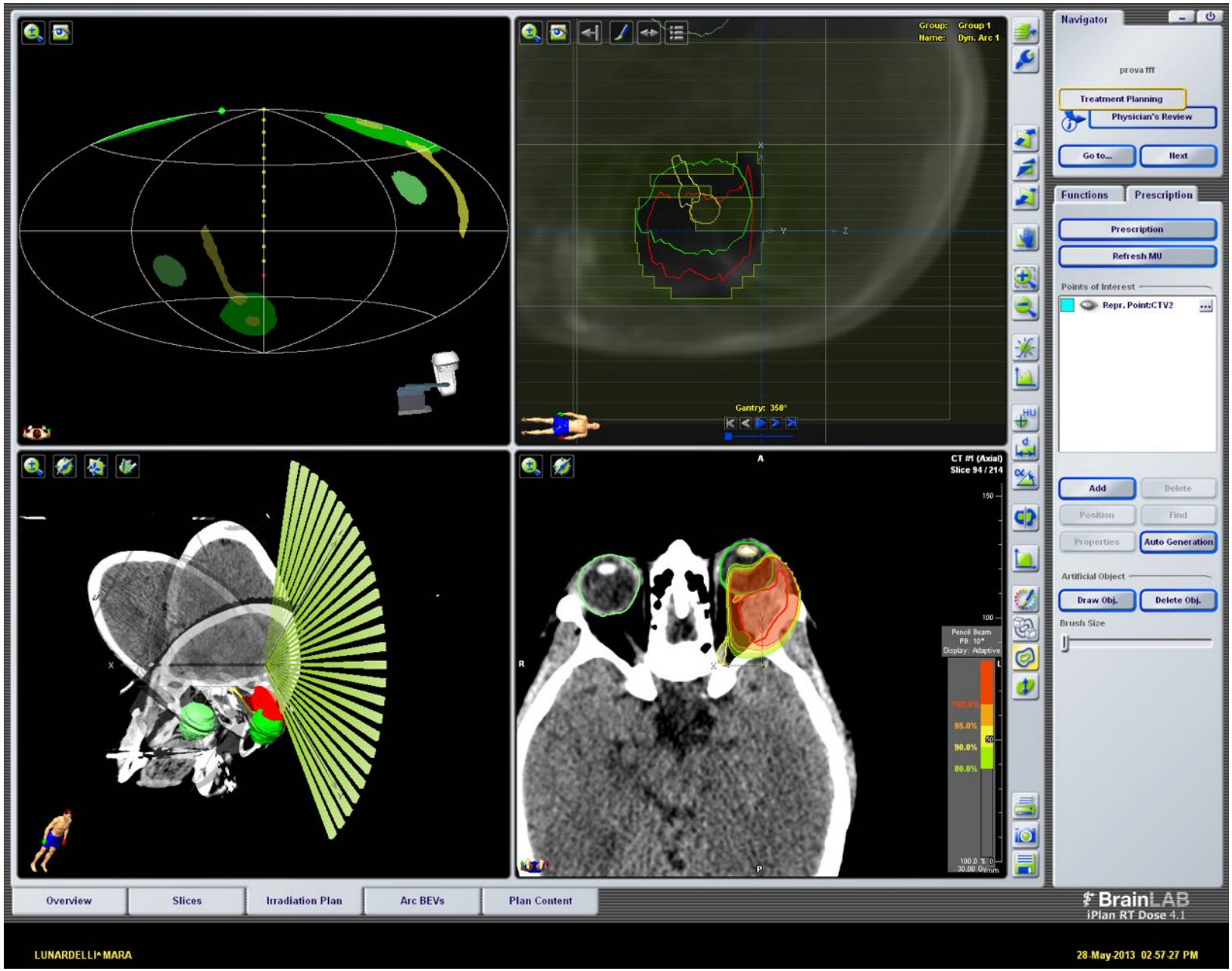

Navigator
A 17-5-2013
Treatment Planning
Physician's Review
Go to...
Next
Functions
Prescription
The RTPlan
Group 1
Dyn. Arc 1
Dyn. Arc 2
Refresh MU
Arc
Properties
Delete
Table: 0
Gantry Start: 290
Gantry Stop: 70
Coll.: 90
Margin: 4.0 mm
Weighting: 30.0 %
MU: 79 (1 x 79)
Group: Group 1
Name: Dyn. Arc 1
Gantry: 70°
CT #1 (Axial)
Slice 25 / 49
Overview
Slices
Irradiation Plan
Arc BEVs
Plan Content
BrainLAB
iPlan RT Dose 4.1
DAVANZO^STEFANIA
21-May-2013 04:31:01 PM


A
CT #1 (Axial)
Slice 24 / 49
400
350
300
250
200
150
R
L
P
Pencil Beam
PB: 10°
Display: Adaptive
100
95.0%
90.0%
80.0%
50
100.0 % 0
1.00 Gy/mm
Navigator
A 17-5-2013
Treatment Planning
Physician's Review
Go to...
Next
Functions
Prescription
The RTPlan
Group 1
Dyn. Arc 1
Dyn. Arc 2
Refresh MU
Treatment Group
Position
Find
Properties
Delete
Coord 1:
X -2.9 mm
Y -26.1 mm
Z 9.3 mm
Weighting: 100.0 %
Beams / Arcs
Add
Overview
Slices
Irradiation Plan
Arc BEVs
Plan Content
BrainLAB
iPlan RT Dose 4.1
DAVANZO^STEFANIA
21-May-2013 04:21:06 PM


Group: Group 1
Name: Dyn. Arc 1
Gantry: 0°
CT #1 (Axial)
Slice 25 / 49
Navigator
Treatment Planning
Physician's Review
Go to...
Next
Functions
Prescription
The RTPlan
Group 1
Dyn. Arc 1
Dyn. Arc 3
Dyn. Arc 2
Refresh MU
Treatment Group
Position
Find
Properties
Delete
Coord 1:
X
Y
Z
mm
Weighting:
100.0 %
Beams / Arcs
Add
Overview
Slices
Irradiation Plan
Arc BEVs
Plan Content
BrainLAB
iPlan RT Dose 4.1
DAVANZO^STEFANIA
29-May-2013 05-16-18 PM


Group: Group 1
Name: Dyn. Arc 1
Gantry: 0°
CT #1 (Axial)
Slice 25 / 49
Navigator
Treatment Planning
Physician's Review
Go to...
Next
Functions
Prescription
Prescription
Refresh MU
Points of Interest
Manual Norm.
Add
Delete
Position
Find
Properties
Auto Generation
Artificial Object
Draw Obj.
Delete Obj.
Brush Size
Overview
Slices
Irradiation Plan
Arc BEVs
Plan Content
BrainLAB
iPlan RT Dose 4.1
DAVANZO^STEFANIA
29-May-2013 05:11:03 PM

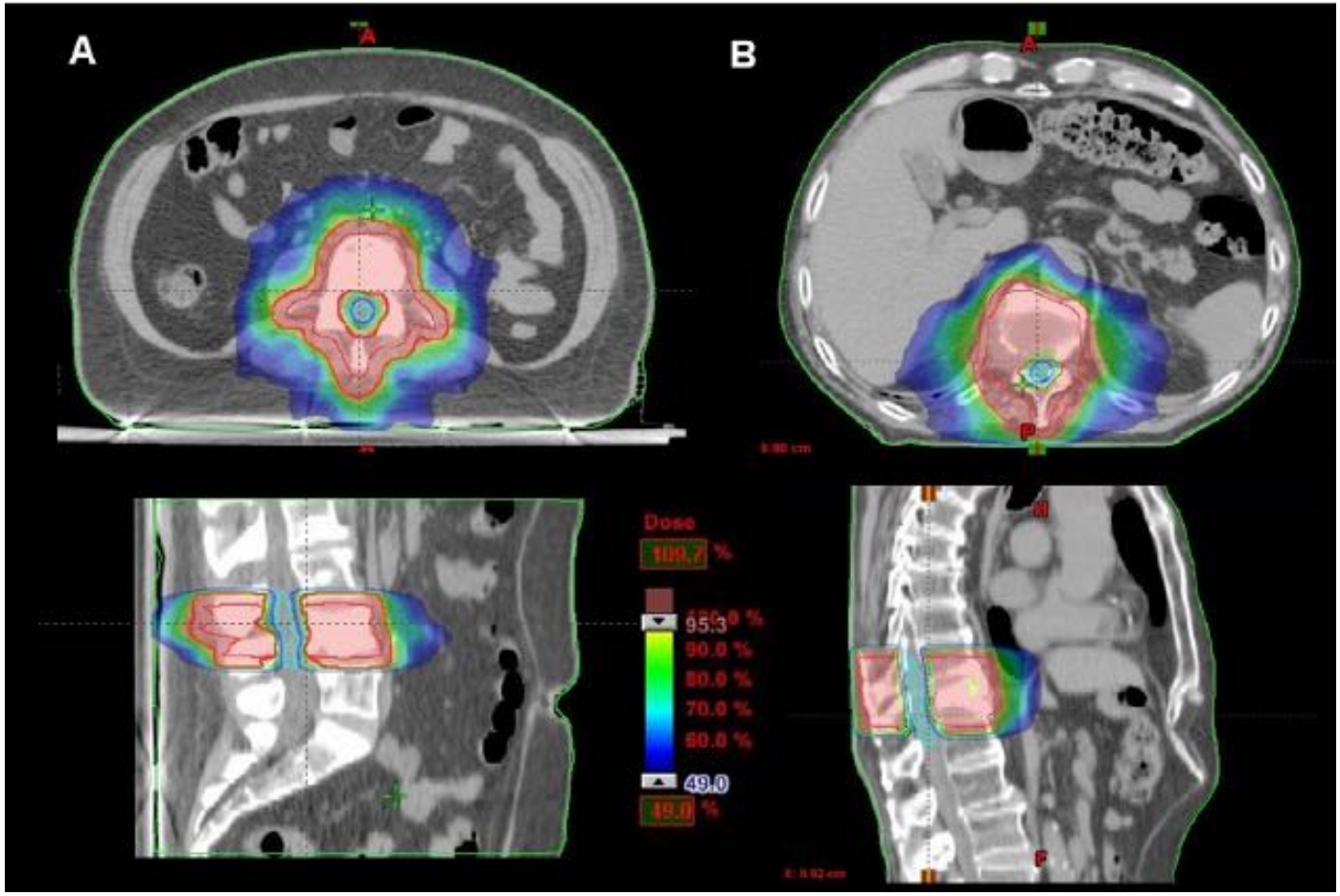
Lesione orbitaria da cr. mammella




TomoTherapy

Vertebral metastases reirradiation with volumetric-modulated arc radiotherapy

Pierina Navarria [a,*], Pietro Mancosu [a], Filippo Alongi [a], Sara Pentimalli [a], Angelo Tozzi [a], Giacomo Reggiori [a], Anna Maria Ascolese [a], Stefano Arcangeli [a], Francesca Lobefalo [a], Riccardo Rodriguez Y. Baena [b], Simona Castiglioni [a], Federico Pessina [b], Flavio Tancioni [b], Armando Santoro [c], Antonella Fogliata [d], Luca Cozzi [d], Marta Scorsetti [a]




AZIENDA
ULSS 9
TREVISO
LAVORI IN
CORSO
STIAMO LAVORANDO PER VOI