Live-Webinar Series

RayStation TPS

Organizer:
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Agenda

- The 2016 plan competition: Ahmad Nobah (5 min)
- RayStation Best Plan Presentation: Hugues Mailluex (France): 25 min
- Final Announcements: Ahmad Nobah (5 min)
Plan Competition
Plan Competition

A challenge
Reach your max
Reach your TPS Max
Plan Competition - Concept

[Diagram showing the process of plan competition with stages: Plan, Select Best Plans, Share Best Plans & Techniques.]

Download

Through Live-webinar and shared documents
Competition Cycle

Every Year

- Download
- Plan
- Upload
- Evaluation
- Webinars
- Plans’ Document
- Follow-Up Plan
- Register
- Every Year
The first edition of the Radiotherapy International Plan Competition:

- Statistics
- Case Description & Dosimetric Criteria
Treatment Planning Systems

No. Participants

- Eclipse
- XiO
- Pinnacle³
- Monaco
- RayStation
- Tomo
- MultiPlan
- Oncentra
- Others
- Multiple TPS
- Prowess Panther
Activities so far:

- Eclipse TPS Live-webinar
- Monaco TPS Live-webinar
- Pinnacle TPS Live-webinar
- Tomotherapy TPS Live-webinar
Website
Website


WhatsApp competition group. To join us, send a msg to the admin No: +966-531271245

To join our mailing list: Send email to anobah@kfshrc.edu.sa
Organizers’ Response

Decision has been made:
2017 Plan Competition will be Head & Neck case
Get Ready 😊

What site you suggest to be selected for our next competition?

- Brain: 11.8%
- Head & Neck: 68.3%
- Chest: 9.9%
- Pelvis: 4.3%
- Abdomen: 5.6%
Organizers’ Response

Was the time given to finish the plan (2 weeks) enough?

- Yes: 69.4%
- No: 30.6%

If the time was short, what do you suggest the period (weeks) to be for the next competition?

- Three weeks: 65.9%
- Four weeks: 28.4%
- Five weeks: 5.7%

2017 Plan Competition will have 3 weeks planning time
Case Description
Case Description

- Case diagnosis: Left Breast Cancer
- Treatment Site: Left breast with axilla and supraclavicular lymph nodes
- Target: PTV_TOT_EVAL
- Dose prescription: 50.0 Gy in 25 fr.
- Protocol followed: RTOG-1304 (Criteria squeezed more !)
- Techniques: 3D-CRT, IMRT, VMAT
- General plan criteria were set: # of fields, single isocenter, energies, ... etc
- Dose calculation grid should be less than 3 mm
- PB dose calculation is not allowed to be used
- Generated plan should be deliverable (no couch/patient collision)
Challenging Criteria

1. Target: (Total of 45 points out of 100)
   - DVH
   - Conformity Index
   - Homogeneity Index

2. OARs:
   - Heart: (Total of 20 points)
   - Left Lung: (Total of 19 points)
   - Contra-lat Breast: (Total of 6 points)
   - Right Lung: (Total of 4 points)
How to get started?
Contouring
Field Geometry
Optimization

TPS Processing

Good inputs → Good outputs
Mr. Hugues got the highest score in our competition

98.2/100

Let is find out more about his amazing plan and also learn some of his thinking methodology
Announcements

• IAEA Web: Human Health Campus (Medical Physics main page)
• Join us and subscribe to our YouTube Channel:
  *Radiotherapy Plan Competition & Medical Physics*
• Dropbox shared folder: Already sent (Webinars + Best Plans’ Templates)
• Your follow-up questions → Plz add them to the survey after webinar or send to Ahmad
• Follow-up re-plan will be in on Aug 14th, 2016 😊 get ready
Google Follow-up Document

- The main goal is to share the best practice per TPS for the Follow-up Re-Plan (Aug 14th, 2016), and compare your previous plan with the one created based on this document.
- LT Breast google document will be shared with you per TPS, soon – plz submit your questions
- Questions need to be related to the LT Breast plan
- Please do not answer the questions in the Google document, add your own questions 😊
Thank you

- Sun Nuclear Corp: Plan IQ software
- Saudi Oncology Society for their sponsorship and support
- King Faisal Specialist Hospital & Research Centre
- To all participants for being with us in this journey and we hope to see you in our next competition
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To join our mailing list:
Send email to Mr. Ahmad Nobah (anobah@kfshrc.edu.sa)
Share the competition with your colleagues
Let us make the next competition reach thousands

Thank you :)