



## 1st ESTRO Physics workshop: Science in development

17th-18th November 2017, Glasgow, (Scottish Event Campus, Exhibition Way)

### Dosimetry audit in radiation oncology – where to next?

Chairs: Catharine Clark (UK) and Eduard Gershkevitch (EE)

Day 1	Friday 17 November
08.30	Registration
Room: Lomond 10:00- 10:15	Introduction of the meeting. <i>Nuria Jornet (ES)</i> , <i>Physics Committee Chair</i> Welcome remarks from Glasgow, <i>Professor Dame Anna Dominiczak</i> and <i>Bailie Malcolm Balfour</i>
10:15- 11:00	<b>Opening lecture:</b> chair: <i>Claudio Fiorino (IT)</i> , <i>All participants</i> <b>The adaptive medical physicist: new challenges, new needs, new roles.</b> <i>David Thwaites (AU)</i>
<i>Breakout into different topics registered for</i>	
Room: Boisdale 2 11:15-13:15	Overview and planned outcomes, chair: <i>Catharine Clark (UK)</i>  <b><u>Dosimetry audit networks: The good, the bad and the ugly, focussing on the advantages and disadvantages of ....</u></b> chair: <i>Catharine Clark (UK)</i>  <ul style="list-style-type: none"> <li>• A region system: <i>Steve Bolton (UK)</i></li> <li>• A national system: <i>Irena Koniarova (CZ)</i></li> <li>• An international system: <i>Joanna Izewska (AT)</i></li> </ul>
13:15-14:30	<b>Lunch/commercial symposia</b>
14:30-16:30	<b><u>Uncertainty and errors in dosimetry audit</u></b> chair: <i>David Eaton (UK)</i>  <ul style="list-style-type: none"> <li>• Causes of failures in dosimetry audits: <i>Stephen Kry (US)</i></li> <li>• Uncertainty in dosimetry measurement: <i>Russell Thomas (UK)</i></li> <li>• TPS dose algorithms: <i>Joe Whitbourn (UK)</i></li> <li>• TPS commissioning uncertainties: <i>Victor Hernandez (ES)</i></li> </ul>

16:30 -17:00	Coffee
Room: Lomond 17:00-18:00	Wrap up of the different topic workshops (10 min per topic) <ul style="list-style-type: none"> <li>▪ Medical physics research, GATE Monte Carlo simulations and treatment planning development for therapy with scanned particle beams</li> <li>▪ Dosimetry audit in radiation oncology - where to next?</li> <li>▪ In vivo dosimetry methods for external beam radiotherapy and brachytherapy</li> <li>▪ Micro and nano dosimetry for radiotherapy</li> <li>▪ Automate or perish</li> </ul>

Social Event

Day 2	Saturday 18 November
Room: Boisdale 2 08:00 - 10:00	<b><u>Advanced audits and methodologies for advanced techniques and technologies</u></b> chair: <i>Jeroen van der Kamer (NL)</i> <ul style="list-style-type: none"> <li>• Overview of completed audits: <i>Eduard Gershkevitsh (EE)</i></li> <li>• Dosimetry audits in protons: <i>Antonio Carlino (AT)</i></li> <li>• Measurement issues for 4D and motion: <i>Coen Hurkmans (NL)</i></li> <li>• Non - dosimetry aspects to support dosimetry audits: <i>David Eaton (UK)</i></li> </ul>
10:00-10:30	Coffee
10:30-12:30	<b><u>Remote and virtual auditing techniques</u></b> chair: <i>Victor Hernandez (ES)</i> <ul style="list-style-type: none"> <li>• Overview of virtual techniques and streamlining: <i>Marlies Pasler (DE)</i></li> <li>• Can local QA systems be used for audit? <i>Jeroen van der Kamer (NL)</i></li> <li>• Plan reliability and robustness studies; how can these metrics help measurement? <i>Diego Jurado (ES) / Jordi Saez (ES)</i></li> <li>• Virtual audit comparison proposal: <i>Jeroen van der Kamer (NL)</i></li> </ul>
12:30 - 14:00	<b>Lunch/commercial symposia</b>
14:00 - 15:00	<b><u>Next steps</u></b> chair: <i>Eduard Gershkevitsh (EE)</i> <ul style="list-style-type: none"> <li>• Results of the survey part 2. What audits are needed? <i>Catharine Clark (UK)</i></li> <li>• The role of ESTRO in audit, next steps and collaborative proposals: <i>Eduard Gershkevitsh (EE) and Catharine Clark (UK)</i></li> </ul>
Room: Lomond 15:00 - 16:00	Wrap up of the different topic workshops (10 min per topic) <ul style="list-style-type: none"> <li>▪ Medical physics research, GATE Monte Carlo simulations and treatment planning development for therapy with scanned particle beams</li> <li>▪ Dosimetry audit in radiation oncology - where to next?</li> <li>▪ In vivo dosimetry methods for external beam radiotherapy and brachytherapy</li> </ul>

	<ul style="list-style-type: none"><li>▪ Micro and nano dosimetry for radiotherapy</li><li>▪ Automate or perish</li></ul>
16:00- 16:15	Closure

*ESTRO Physics Committee thanks:*

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