AAPM Brachytherapy Subcommittee Liaison
Report to BRAPHYQS: 2019 November 21

Subcommittee    BTSC        ESTRO + ABS + ABG + NIST + CLA + IROC
Working Groups  BD   BSR          BCA                RB      DCBA
Task Groups      292  221, 222, 236, 253, 267, 303, 317, 337  324  UN35

Societal Liaisons to the AAPM BTSC
European Society for Radiotherapy & Oncology (ESTRO): Frank-André Siebert
American Brachytherapy Society (ABS): Gil Cohen
Australasian Brachytherapy Group (ABG): Annette Haworth
National Institute of Standards and Technology (NIST): Michael Mitch
Calibration Laboratory Accreditation Subcommittee (CLA): Ronald Tosh
Imaging and Radiation Oncology Core (IROC) Houston QA Center: David Followill

Subcommittee

Working Group

Task Group      chair and vice chair/s

Brachytherapy Subcommittee (BTSC): Zoubir Ouhib and Regina Fulkerson/Ron Sloboda

Brachytherapy Dosimetry (WGBD): Wes Culberson and Chris Melhus
TG-292 Electronic brachytherapy dosimetry: Wes Culberson and Mark Rivard

Brachytherapy Source Registry (WGBSR): Facundo Ballester and Wes Culberson

Brachytherapy Clinical Applications (WGBCA): Mark Rivard and Chris Deufel
TG-221 Ocular brachytherapy: Rowan Thomson and Christopher Melhus
TG-222 Lung mesh brachytherapy: Wenzheng Feng and Hualin Zhang
TG-236 3D imaging-based treatment planning: Yongbok Kim and Dorin Todor/Yusung Kim
TG-253 Surface brachytherapy: Regina Fulkerson and Jose Perez-Calatayud
TG-267 Biophysical (radiobiology) models: Zhe (Jay) Chen and X. Allen Li
TG-303 MRI guidance on HDR brachytherapy: Firas Mourtada and Joann Prisciandaro
TG-317 Catheter/needle/applicator tracking technology: Luc Beaulieu and Adam Cunha
TG-337 Intensity modulated & anisotropic brachytherapy sources: Shirin Enger and William Song

Robotic Brachytherapy (WGRB): Tarun Podder and Adam Cunha
TG-342 Update on AAPM/GEC-ESTRO robotic brachytherapy: Tarun Podder and Adam Cunha

Model-Based Dose Calculation Algorithms (WGDCBA): Javier Vijande and Firas Mourtada
UN35 Commissioning model-based dose calculations: Luc Beaulieu and Javier Vijande
Brachytherapy Subcommittee

Phonecalls are held every other month to discuss new projects and overcoming hurdles for ongoing projects.

Brachytherapy Dosimetry working group

a) TG-292 is an AAPM-only report. They are investigating the Zeiss INTRABEAM source calibration and dose calculation protocols. An official letter was sent to Zeiss seeking clarifications of their methods. A rapid communication has been submitted to Medical Physics to clarify these issues for the readership.

Brachytherapy Source Registry working group

Nothing new to report.

Brachytherapy Clinical Applications working group

a) TG-221 is an AAPM-only report, which is under review within Medical Physics.
b) TG-222 is an AAPM-only report. The 5th review cycle by WGBCA+BTSC is completed, and the report is under review by TPC.
c) TG-236 is an AAPM-only report with two parts. The 1st review cycle by WGBCA+BTSC is complete and a revision is being prepared.
d) TG-253 is a joint AAPM+GEC-ESTRO report, which is under review within Medical Physics.
e) TG-267 is a joint AAPM+GEC-ESTRO report. Review will commence following completion of two sections.
f) TG-303 is an AAPM+ABS report, currently under revision following the 1st review cycle by WGBCA+BTSC.
g) TG-317 is a joint AAPM+GEC-ESTRO report with a 20201231 deadline. Collaboration was established in 2017 with the ACROP checklist approved in May 2018.
h) TG-337 was approved on 20190509 as an AAPM-only report on intensity modulated and anisotropic brachytherapy sources (IMABS). Sunset date is 20211231.

Robotic Brachytherapy working group

a) TG-342 is a joint AAPM+GEC-ESTRO report that was approved on 20191111 on robotic brachytherapy to update the 2014 recommendations in the TG-192 report by AAPM+GEC-ESTRO. European members include Jocelyne Troccaz and Rien Moerland. Sunset date is 20211231. Need to concern for the ACROP checklist.

Model-Based Dose Calculation Algorithms working group

The working group is coordinating test cases for several anatomic sites including breast, GYN, head-and-neck, ocular brachytherapy, and eBT. These collaborative projects are making good progress.
a) Unit 35 was approved May 2018 as a joint AAPM+GEC-ESTRO report. The ACROP checklist was approved June 2018. A draft report is being refined for submission in the next month.

Upcoming brachytherapy-related meetings in the U.S.

As the World Congress of Brachytherapy will be held in Vienna during the 2020 ESTRO annual meeting, the ABS will hold a Brachytherapy Summit in Big Sky, Montana (20200214 to 20200216)

https://www.americanbrachytherapy.org/meetings-events/summit-2020/