



2-4 April 2020  
Vienna, Austria

World Congress  
of Brachytherapy

**Workshop Proposal - GEC-ESTRO BC WG  
WCB 2020**

- **Title:** Practical approach of Accelerated Partial Breast Irradiation using multicatheter interstitial brachytherapy
- **Day and time:** Thursday, 2 April 2020 | 14:15 -16:15
- **Chair :** Jean-Michel Hannoun-Levi (JMHL), *Radiation Oncologist, Centre Antoine Lacassagne Radiation Therapy, Nice (FR)*
- **Additional presenters/experts:**
  - Cristina Gutiérrez Miguélez (CGM), *Radiation Oncologist, Insitut Català d'Oncologia, Barcelona (ES)*
  - Kristina Loessl (KL), *Radiation Oncologist, Inselspital, Universität Bern, Bern (CH)*
  - José-Louis Guinot (JLG), *Radiation Oncologist, Fundación Instituto Valenciano de Oncología, Valencia (ES)*
  - Peter Niehoff (PN), *Radiation Oncologist, Klinikum Offenbach GmbH, Offenbach am Main (DE)*
  - Tibor Major (TM), *Medical Physicist, National Institute of Oncology, Budapest (HU)*

The presentation team consists of radiation oncologists and medical physicist, from the GEC-ESTRO BC WG, expert in the field of multicatheter interstitial brachytherapy for breast cancer.

- **Rationale & aim for this workshop:**

Multicatheter interstitial brachytherapy (MIB) is the first brachytherapy technique used for breast cancer. Year after year, biological considerations as well as planification principles and technique developments reinforced the interest of this breast irradiation procedure.

The Breast Cancer Working Group of the GEC-ESTRO already produced consistent data regarding the use of MIB for boost, APBI and APBrI (for salvage therapy). Evidence-based medicine for MIB APBI reached a level 1 after the publication of the Phase III randomized trial results in 2016, which compared Whole breast versus partial breast irradiation for low-risk tumors (Lancet. 2016;387(10015):229-38). Currently MIB APBI is evolving to a more hypofractionated regimen, leading to carefully re-consider biological and technical issues.

With regard to breast boost irradiation, MIB appears to be the only technique able to deliver a significant higher dose to the tumor bed for high-risk breast cancers. Considering APBrI, in case of 2<sup>nd</sup> ipsilateral breast tumor event, MIB remains the first irradiation technique used in this indication giving the most mature results for avoiding salvage mastectomy.

The aim of this workshop is to give to attendees the opportunity to reconsider MIB APBI in the light of new technical and biological approaches. Based on short communications and practical sessions for implantation, it will be possible to share our experience and some tips and tricks in the frame of open, active and fruitful discussions.

- **Learning objectives:**

- By the end of this practical session, the participants will be able to:
- Describe the current standard of MIB APBI delivery technique
  - Develop hands-on experience in a MIB APBI
  - Share “tips and tricks” for a good MIB implant for APB.

- **Organization & Method of Presentation:**

- Oral presentations:

- ✓ MIB APBI Background JMHL 20 mn
    - ✓ MIB APBI biology JLG 20 mn
    - ✓ MIB APBI physics TM 20 mn
    - ✓ MIB APBI techniques CG 20 mn

- Practical sessions (CG, KL, JLG, PN, JMHL):

- Implants on phantoms 25 mn
    - Debriefing & remaining questions (open discussion) 15 mn

- **Materials needed:**

- Audiovisual equipment (standard computer and projector)
  - 5 Breast phantoms
  - Needles, catheters, fixation buttons, transfer tubes (from various providers)
  - 5 large tables with standing room (6 attendees/table – 1 expert/table)

- **Target audience:**

- Radiation Oncologists, Physicists, dosimetrists, technicians (max 30 attendees)
  - The audience will get a chance to use an anthropomorphic breast phantom for implant simulation.

- **List key words:** Interstitial Brachytherapy, APBI, Implant Simulation