



# BRACHYTHERAPY

## GEC-ESTRO Gynaecology

The GYN GEC ESTRO working group has through the last years increasingly become an efficient platform and network through which:

- Clinical studies are supported, providing clinical evidence for new treatment approaches through advanced technology including brachytherapy and external beam radiotherapy
- Research on a multi-centre basis is facilitated related to these studies
- Dissemination is promoted through international publications, presentations and educational and training activities (ESTRO School)
- Recommendations and guidelines

## GYN GEC ESTRO recommendations: new and ongoing efforts

One of the highlights of 2020 is that recommendations for a target concept for image guided brachytherapy in primary vaginal cancer have been published (Schmid et al). Further GYN GEC ESTRO initiatives within recommendations are ongoing efforts on:

- CT based target contouring for cervix cancer brachytherapy
- Treatment planning for cervix cancer brachytherapy
- Target concept recommendations for vaginal recurrences in collaboration between GEC ESTRO / ABS / CBG societies
- Joint multidisciplinary guidelines on vaginal cancer in collaboration between ESGO and ESTRO
- Joint multidisciplinary guidelines on endometrium cancer in collaboration with ESGO and ESMO

## Update on clinical studies and publications

### ***EMBRACE I (2008-2015)***

A total of 1416 patients have been accrued to the EMBRACE study from 24 centres and the study finalized accrual in 2015. The overall outcome analysis has been carried out and will be presented at the ESTRO2020 meeting and will also soon be published.

### ***EMBRACE II (2016-2021)***

EMBRACE II is prospectively assessing the clinical outcome of high quality radiotherapy including systematic use of IC/IS application techniques, dose prescription protocol for image guided adaptive brachytherapy, increased EBRT conformality through IMRT/VMAT and IGRT, and risk adaptive EBRT for elective nodal target selection. The EMBRACE II study initiated accrual of patients in March 2016 and 42 institutions have finished the EMBRACE II accreditation. By October 2020 >900 patients have been enrolled and the study will be ongoing until end of 2021.

### ***EMBRACE III+ studies (2022-)***

The next generation of EMBRACE studies is currently being discussed, and the aim is to have new study protocols ready for 2022 when the EMBRACE II study has finalized accrual.

### ***EMBRAVE (2021-)***

A prospective multi-centre clinical registration study on radiochemotherapy and IGABT in vaginal cancer (EMBRAVE) will be launched in 2021.

### ***Primary endometrium: retrospective data collection (-2018)***

A multicentric retrospective collection of data has been carried out. 183 patients have been collected and a publication is in progress.

## ***Publications related to EMBRACE and gyn working group***

A wealth of research papers have been published since 2015 from the gyn network; in total, 37 original manuscripts and 10 reviews/editorials.



**Chair: Kari Tanderup**

