Belgian Cancer Registry

Innovative RT - Breast - APBI and Boost

The variables with REQ in superscript are required.

The variables with a ❍ are single-select variables; only one answer can be selected.

The variables with a ❑ are multi-select variables; multiple answers can be selected.

Versie 04-10-2013

Administrative patient data

Hospital [REQ]: .....
Health insurance institution [REQ]: .....
NISS/INSZ number [REQ]: .....
Last name [REQ]: ..... First name [REQ]: .....
Postal code [REQ]: ..... City [REQ]: .....
Country [REQ]: ..... Health insurance number: .....
Date of birth [REQ]: …. / …. / …. (dd/mm/yyyy) Sex [REQ]: .....

❍ **I confirm that this registration meets the inclusion criteria of the project '2011-26 HTA_Innovative radiotherapy' and is in accordance with the convention for financing of the project 'Innovative techniques in radiotherapy'.** [REQ]
An overview of the techniques and cancer indications can be found in table 1 of the KCE Report 198C (https://kce.fgov.be/sites/default/files/page_documents/KCE_198C_Innovativeradiotherapy.pdf).
The inclusion and exclusion criteria for the registration can be found in attachment 1 of the convention for financing of the project 'Innovative techniques in radiotherapy'.

1. Diagnostics

A. Details primary tumor

Incidence date [REQ]: ..... / ..... / ..... (dd/mm/yyyy)

Basis for diagnosis [REQ]:
❑ 1 - Autopsy
❑ 2 - Histology of primary tumor
❑ 3 - Histology metastasis
❑ 4 - Cytology/hematology
❑ 5 - Technical (f.ex. CT scan, endoscopy, …)
❑ 6 - Clinical
❑ 7 - Tumor marker (f.ex. PSA, HCG, AFP, Ig, …)
❑ Unknown

WHO score at diagnosis [REQ]:
- ❍ 0 - Asymptomatic, normal activity
- ❍ 1 - Symptomatic, but ambulant
- ❍ 2 - Symptomatic, bedbound < 50% day
- ❍ 3 - Symptomatic, bedbound > 50% day
- ❍ 4 - Completely dependent, 100% bedbound
- ❍ Unknown

Primary tumor localization [REQ]:
- ❍ C50.0 Nipple
- ❍ C50.1 Central portion of the breast
- ❍ C50.2 Upper-inner quadrant of breast
- ❍ C50.3 Lower-inner quadrant of breast
- ❍ C50.4 Upper-outer quadrant of breast
- ❍ C50.5 Lower-outer quadrant of breast
- ❍ C50.6 Axillary tail of breast
- ❍ C50.8 Overlapping lesion of breast
- ❍ C50.9 Breast, NOS

Laterality [REQ]:
- ❍ Left
- ❍ Right

Histological diagnosis [REQ]:
- ❍ 8211/3 - Tubular carcinoma
- ❍ 8480/3 - Mucinous/colloid carcinoma
- ❍ 8500/3 - Invasive ductal carcinoma, NOS
- ❍ 8510/3 - Medullary carcinoma
- ❍ 8520/3 - Invasive lobular carcinoma

Tumor differentiation grade [REQ]:
- ❍ 1 - Well differentiated
- ❍ 2 - Moderately differentiated
- ❍ 3 - Poorly differentiated
- ❍ 4 - Undifferentiated
- ❍ Unknown

Clinical stage (cTNM): cT: …….. cN: ……. cM: ……..

Pathological stage (pTNM) [REQ]: pT: …….. pN: ……. pM: ……..

BRCA1/2 mutation status [REQ] : ❍ Present
❍ Not present
❍ Test performed but result could not be determined
❍ Unknown

Breast MRI performed [REQ] ? ❍ Yes
❍ No

Breast implants present in the irradiated breast [REQ]? ❍ Yes
❍ No

B. Radiotherapy details

Centre where the RT was performed [REQ] : ……..

Centre that referred the patient to the RT [REQ] : ……..

Number of fractions delivered [REQ] : ……

Total dose delivered [REQ] : …… Gy

Start date of RT [REQ] : …. /…… / …. (dd/mm/yyyy)

End date of RT [REQ] : …. /…. / …. (dd/mm/yyyy)

2. Treatment specifications

Type of treatment and RT technique [REQ]:

- ❍ 1. APBI - Low risk - IORT (electrons) (Complete sections: 3A, 5A, 5D)
- ❍ 2. APBI - Low risk - IORT (photons) (Intrabeam, Other) (Complete sections: 3B, 4, 5A, 5D)
- ❍ 3. APBI - Low risk - Brachytherapy - Interstitial Brachytherapy (Complete sections: 3C, 5B)
- ❍ 4. APBI - Low risk - Brachytherapy - Intracavitary Volume Implants (Complete sections: 3D, 5B)
- ❍ 5. APBI - Low risk - External Radiation Therapy (Complete sections: 3E, 4, 5C, 5D)
- ❍ 6. APBI - Intermediate risk - IORT (electrons) (Complete sections: 3A, 4, 5A, 5D)
- ❍ 7. APBI - Intermediate risk - IORT (photons) (Intrabeam, Other) (Complete sections: 3B, 4, 5A, 5D)
- ❍ 8. APBI - Intermediate risk - Brachytherapy - Interstitial Brachytherapy (Complete sections: 3C, 4, 5B)
- ❍ 9. APBI - Intermediate risk - Brachytherapy - Intracavitary Volume Implants (Complete sections: 3D, 4, 5B)
- ❍ 10. Boost - Low risk - IORT (electrons) (Complete section: 3A, 3F, 5A, 5D)
- ❍ 11. Boost - Low risk - IORT (photons) (Intrabeam, Other) (Complete section: 3B, 3F, 4, 5A, 5D)
- ❍ 12. Boost - Intermediate risk - IORT (electrons) (Complete section: 3A, 3F, 5A, 5D)
- ❍ 13. Boost - Intermediate risk - IORT (photons) (Intrabeam, Other) (Complete section: 3B, 3F, 4, 5A, 5D)

3. Applied technique

A. IORT - Electrons

Type of equipment (electrons)[REQ]:
- ❍ Mobetron
- ❍ Novac7
- ❍ LIAC
- ❍ Other

  Specify [REQ]: .....

Electron energy [REQ] : ..... MeV

B. IORT - Photons

Type of equipment (photons) [REQ] :
- ❍ Intrabeam
- ❍ Other

  Specify [REQ]: .....

Photon energy [REQ] : ..... kV

C. Brachytherapy - Interstitial Brachytherapy

Dose rate [REQ]: ❍ LDR
❍ PDR
❍ HDR

D. Brachytherapy - Intracavitary Volume Implants

Radiotherapy system – Intracavitary Volume Implants [REQ]: ❍ MammoSite Radiation Therapy System
❍ Contura
❍ ClearPath
❍ SAVI
❍ Axxent

E. External Radiation Therapy

Radiotherapy system - External Radiation Therapy [REQ]: ❍ 3D-CRT
❍ IMRT
❍ Rotational IMRT
❍ Rotational 3D
❍ Other
Specify [REQ]: ……

F. Boost

Immediate continuation of whole breast RT (no interruption = within 1 month after boost date) [REQ]?

❍ Yes
❍ No

4. Clinical trial details

Reference number of the ethics committee approval [REQ]: ……

Reference number of the public clinical trial registry [REQ]: ……

5. Technical aspects

A. Patient specific technical aspects - IORT

Thoracic wall protection [REQ]:
- ❍ Aluminium-lead shielding disk
- ❍ Surgical blankets including Tungsten
- ❍ None
- ❍ Other

  Specify [REQ]: ……

B. Patient specific technical aspects - Brachytherapy

Image guidance for treatment planning [REQ]:
- ❍ Mammography - Guided
- ❍ Template - Guided
- ❍ CT - Guided
- ❍ MRI - Guided
- ❍ Ultrasound - Guided

C. Technical aspects of tumor localization - External Radiation Therapy

Patient position [REQ]:
- ❍ Prone
- ❍ Supine
- ❍ Other

  Specify [REQ]: ……..

Personalized immobilization [REQ]?
- ❍ Yes
- ❍ No

Identification of tumor motion [REQ]:
- ❑ kV fluoroscopy
- ❑ 4D-CT scan
- ❑ Maximum inspiration/expiration breath hold CT
- ❑ None
- ❑ Other

  Specify [REQ]: ……

Tumor motion compensation strategy [REQ] :

- ❑ Abdominal compression
- ❑ Breath hold
- ❑ Gating
- ❑ Tracking
- ❑ None
- ❑ Other

  Specify [REQ]: …….

Image fusion for target delineation [REQ] ?

- ❍ Yes
- ❍ No

On-treatment imaging [REQ] :

- ❍ kV fluoroscopy
- ❍ EPID
- ❍ CBCT
- ❍ MVCT
- ❍ Exactrac
- ❍ Other

  Specify [REQ]: ……..

Markers [REQ]:

- ❑ Implanted markers
- ❑ External skin sensors
- ❑ No markers

D. Dose specific aspects

Dose calculation algorithm [REQ] :

- ❍ Pencil beam algorithm
- ❍ Convolution superposition algorithm: Anisotropic Analytic Algorithm – AAA
- ❍ Convolution superposition algorithm: Collapsed Cone Convolution – CCC
- ❍ Monte Carlo (f.ex. Voxel Monte Carlo – VMC+++)
- ❍ Other

  Specify [REQ]: ……

Patient specific Quality Assurance (QA) prior to start [REQ]:

- ❑ 1D (point) verification
- ❑ 2D verification
- ❑ 3D verification
- ❑ 4D verification
- ❑ None

6. Nomenclature

Nomenclature number(s) used [REQ]:

- ❑ 444172 or 444183
- ❑ 444253 or 444264
- ❑ 444312 or 444323
- ❑ 444393 or 444404