PRESENTATION OF NATIONAL SBRT SURVEY RESULTS

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2025

MATERIALS AND METHODS

Survey

- established to monitor SBRT practice in Belgian RT departments
- realized on the basis of two publications
  - *M Chetvertkov M et al. . NRG Oncology Survey on Practice and Technology Use in SRT and SBRT Delivery. Front Oncol. 2020*
  - *A Carver et al. Treatment planning and delivery practice of lung SBRT: Results of the 2022 ESTRO physics survey, Radiotherapy and Oncology*
- Survey sent in April 2025 to all departments

Input of B-STRO 2025 scientific committee

RESULTS

- 21/24 departments responded
- SBRT treatments compose +- 15% of all EBRT treatments (3 departments >20% and 1 department >30%)
- 12 departments have been delivering SBRT treatments > 10 years (others: 5-10 years)

!! Several departments made reference to intracranial stereotactic treatment (SRS) within their responses

TREATMENT SITES

For which sites is the stereotactic regimen (SBRT) used?

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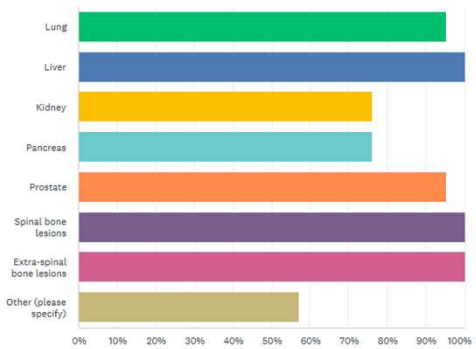

Others include: lymph nodes, adrenal glands, bladder, soft tissues, breast

TYPE OF EQUIPMENT USED

What type of equipment is used to treat deliver SBRT treatments?

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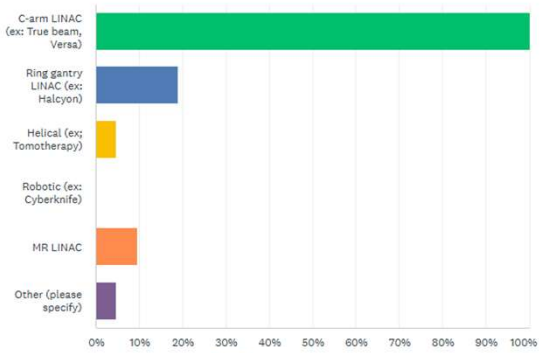

Others include: gamma knife (SRS)

EXTERNAL AUDIT

Has a specific external clinical audit been carried out before the clinical go-live of SBRT treatments (ex: BeldArt, Novalis, NPL, IROC...)?

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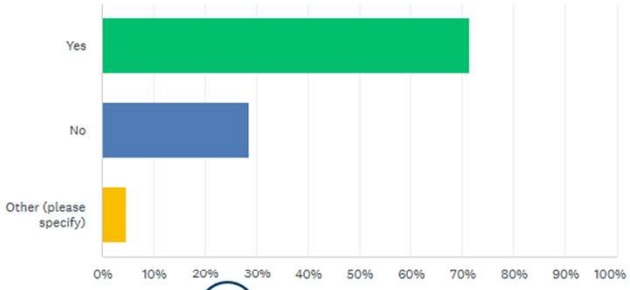
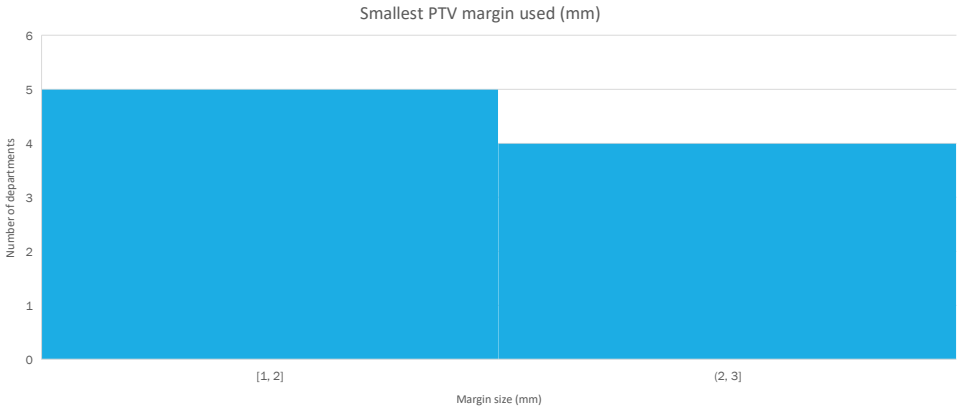


Others: BeldArt

USED PTV MARGIN (MINIMUM)



0 mm margin used by 1 department

SMALLEST LESION TREATED

- Unknown for 5 departments
- No limit for three departments (“visibility on CBCT”)
- 0,1 cc – 9cc ? (PTV excluded/included?)

PATIENT SPECIFIC QA

Are patient specific QA measurements performed before treatment?

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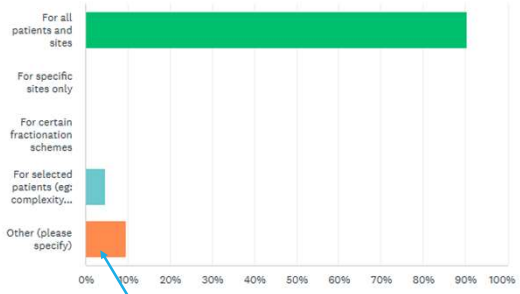

Others include:

- For SBRT Lung: the QA measurement before treatment is based on complexity metrics, all other SBRT indications do have a patient specific QA before treatment
- Except for gamma knife

TYPE OF PATIENT SPECIFIC QA

What type of patient specific QA is carried out?

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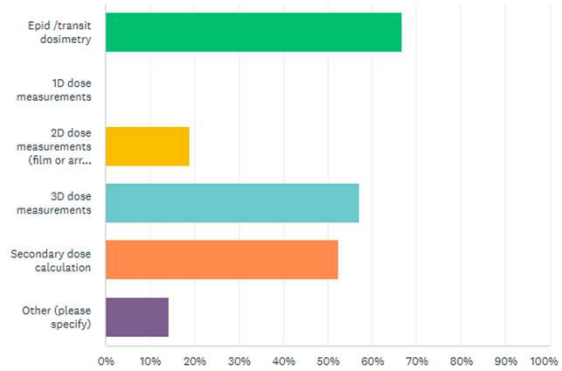

- Most departments use a combination of patient specific (ps)QA
- 5 departments perform “only” one type psQA
  - 3D dose measurements only (3 departments)
  - EPID/transit dosimetry only (2 departments)
- 11 departments make use of secondary dose calculations

IGRT

Is IGRT verified and validated by a RO before treatment delivery?

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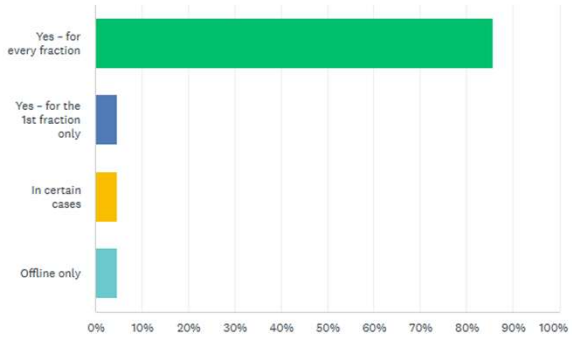

RO AND MPE PRESENCE

Is the presence of a RO required at the treatment unit during SBRT treatment delivery?

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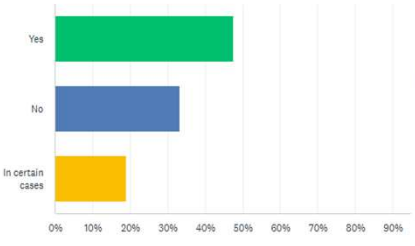

- Presence of RO during prostate SBRT (n=2)
- If RO absent → reachable, traffic light protocols
- MPE presence for complex cases or presence of MPE for specific cases (1 department - prostate and brain)

Is the presence of a MPE required at the treatment unit during SBRT treatment delivery?

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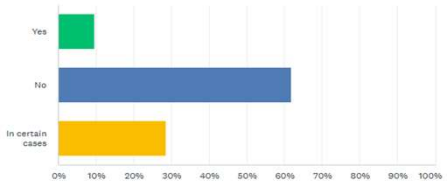

ANSWER CHOICES	RESPONSES	
Yes	9.52%	2
No	61.90%	13
In certain cases	28.57%	6
TOTAL		21

DEDICATED RTT STAFF

Is there a dedicated RTT team for SBRT treatments?

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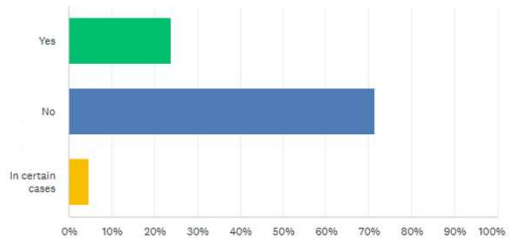

ANSWER CHOICES	RESPONSES	
Yes	23.81%	5
No	71.43%	15
In certain cases	4.76%	1
TOTAL		21

Dedicated team for:

- Specific treatments
- Implementation of new techniques

SOPs FOR IMMOBILIZATION

For SBRT treatments – does the department have standard procedures/protocols for immobilization depending on treatment site?

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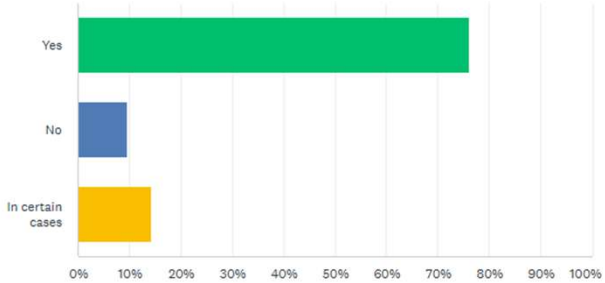

PATIENT POSITIONING

For SBRT treatments – are patients positioned using skin markings (tattoos or other)?

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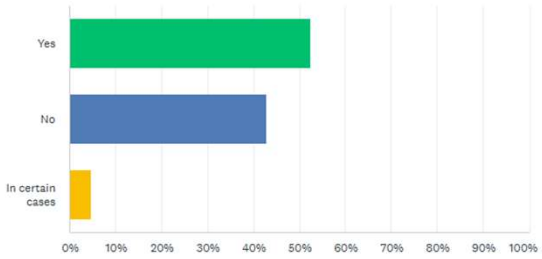

For 10 departments, use of SGRT

PATIENT MONITORING

Do you use a real-time patient monitoring system (SGRT) during treatment delivery?

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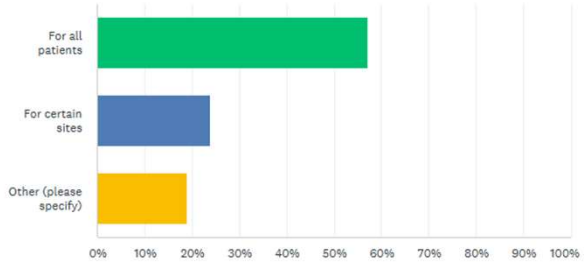

- Use of SGRT if possible (equipment dependent)
- RPM

INTRAFRACTION IGRT

Do you acquire additional imaging during the delivery of treatment session (CBCT, Exactrac, MRI)?

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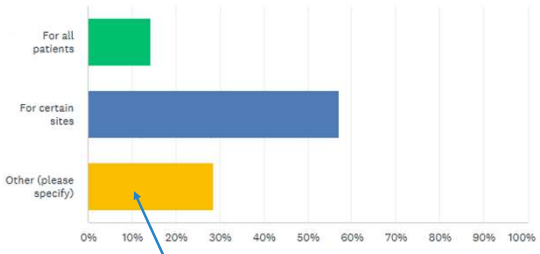

Some departments make use of post treatment CBCT