

SASCRO Statement on SBRT for oligo-metastatic prostate cancer

A request was made by a medical scheme to SASCRO on 14 January 2019 for comments on the role of SBRT for oligo-metastatic prostate cancer.

The request did not distinguish between irradiation of the prostate only, in the presence of oligo-metastatic disease or of irradiation of the oligo-metastases themselves. There is also a need to make a distinction between hypo fractionation and SBRT.

1. Prostate irradiation in oligo-metastatic disease

There is phase 3 data to support its use in low burden disease – STAMPEDE study:

[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(18\)32486-3/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)32486-3/fulltext)

An extract from the first paragraph of the Discussion of the STAMPEDE study (attached) reads:

“This randomised comparison of more than 2000 patients with metastatic prostate cancer showed that local radiotherapy to the prostate did not improve overall survival for unselected patients. However, a prespecified analysis showed that prostate radiotherapy did improve overall survival (from 73% to 81% at 3 years) in those with a low metastatic burden, which represented 40% of the comparison population.”

- This is now regarded as the standard of care.
- Patient selection is important.

2. The use of SBRT or hypofractionation for prostate irradiation

The ASTRO guidelines are at <http://ascopubs.org/doi/full/10.1200/JCO.18.01097>

A distinction is drawn between moderate-hypofractionation (240-340 cGy per fraction) and ultra-hypofractionation (500 cGy per fraction) – see below. Moderate-hypofractionation is supported while ultra-hypofractionation is regarded with circumspection.

An extract from the first paragraph of the ASTRO guidelines on hypofractionation in prostate cancer reads:

“This evidence-based clinical practice guideline was developed to make recommendations on the use of hypofractionated EBRT in the treatment of localized prostate cancer. To reflect current practice patterns, a distinction was made between moderate hypofractionation (240-340 cGy per fraction) and ultrahypofractionation (500 cGy per fraction). Several large-scale RCTs comparing moderately hypofractionated and conventionally fractionated EBRT have been completed. These demonstrate that, compared to conventional fractionation, moderate hypofractionation confers similar prostate-cancer-control outcomes, similar rates of late toxicity, and only a slight excess in acute gastrointestinal toxicity. Moderate hypofractionation holds important advantages in terms of patient convenience and resource utilization. On the basis of this high-quality evidence, a strong agreement has been reached within the task force that moderately hypofractionated EBRT should be offered to patients choosing EBRT for the treatment of their prostate cancer. This recommendation holds across all risk groups”.

A further extract from the discussion reads:

“The task force showed more uncertainty on the use of ultrahypofractionated EBRT. To date, the evidentiary base for ultrahypofractionation consists largely of prospective, single-arm trials conducted in low-risk and, to a lesser extent, intermediate risk localized disease and with limited follow-up. There are no published efficacy data from randomized trials available at this time. However, data from the Scandinavian HYPO-RT-PC trial may form the basis to review and update the ultrahypofractionation recommendations in the near future.”

3. SBRT directed at metastases in oligometastatic disease.

- SBRT is potentially beneficial in unusual settings where the treatment of an oligometastasis is logical in view of the clinical behaviour of the disease and the wish to avoid or delay potentially toxic systemic therapies. This is not readily amenable to Phase 3 studies. The literature contains only phase 2 studies and case studies with their associated limitations.

An extract from UPTODATE reads.

“Metastasis-directed therapy for oligometastatic disease — After prior definitive therapy, patients will occasionally present with metachronous oligometastatic disease, which most of the time, is diagnosed using positron emission tomography (PET)/computed tomography (CT). There are no high-quality data on the optimal management of patients in this situation. In particular, the role of metastasis-directed therapy (eg, surgery and/or radiation therapy [RT] for an isolated lymph node, stereotactic RT for bone metastasis) remains uncertain for any population of these patients. Decisions regarding treatment must be individualized, taking into account a wide range of patient-specific factors (eg, site of metastasis, disease-free interval, patient age, comorbidity).”

- SBRT of oligo-metastatic disease should be considered in carefully selected patients.

SASCRO does not get involved in the details of patient selection and restricts comments to general principles.

9 Feb 2018