



Minimum Requirements for Participation in EORTC Radiation Oncology Group Clinical Activities

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Introduction:

All Centres (whether or not members of the EORTC Radiation Oncology Group) wishing to enter patients in studies where radiotherapy is part of protocol treatment, are subject to the following minimum requirements for accreditation purposes.

These requirements are indicative in nature and may be subject to considerable variations depending on the complexity of treatment planning, the proportion of patients entered in research trials, the academic commitment (including the number of radiation oncologists in training), the number of multidisciplinary meetings and the general involvement in research and development of the institution.

1. Institutional requirements

EORTC accredited radiation oncology departments (those contributing actively to the clinical studies of the Radiation Oncology Group) can be university divisions, departments in a public hospital or cancer centre, or a private practice unit provided it has a formal collaboration with a state-recognized hospital. Departments or hospitals must fulfil also the general requirements for EORTC membership.

It is required that submission of data for accreditation of the radiation oncology department is handled through a responsible person of the department itself.

2. Human resources and workload

The minimum number of full-time equivalent (FTE) radiation oncologists in an EORTC radiation oncology department should be 3. The maximum mean number of patients treated per year per full-time radiation oncologist is 250 (with an absolute maximum of 300).

The EORTC accredited radiation oncology department must have at least 1.3 FTE qualified radiation physicists. They are responsible for checking all radiation physics parameters and dosimetry within the department. The mean workload per qualified radiation physicist should not exceed 500 patients per year (this number can be higher in the case of adequate support from additional staff (e.g. dosimetrists, clinical engineers), which should be made clear in the submission).

The minimum number of radiation technologists present during treatment administration, per treatment unit, should be 2. Additional staff should be available as necessary for other activities including treatment preparation.

3. Equipment and workload

The minimum requirements impose that at least two megavoltage treatment units are available that enable daily radiotherapy treatments (according to the protocol), also during maintenance and unscheduled downtime of a treatment machine.

An EORTC accredited radiation oncology department must have

- at least one simulator (classical or virtual CT-simulator),

- a 3D treatment planning system,

- access to CT scanning and optionally (depending on the protocol) other imaging equipment

- two megavoltage treatment units preferably less than 10 years old (maximum 15 years old). At least two units must be equipped with portal imaging and multileaf collimator (or equivalent), and should be able to perform conformal radiotherapy

The maximum workload of patients per year should not exceed 1200 per conventional simulator and 2400 per CT(simulator) unit (based on normal working hours).

The maximum workload of patients per year/per megavoltage unit is 600 (based on normal working

hours).

NOTE: Units with a Cobalt source may not be used to treat trial patients.

4. Quality assurance

An institutional Quality Assurance Programme is mandatory. This should comprise periodic checks of treatment equipment (beam calibration, output checks) and treatment related processes (patient chart review, *in vivo* dosimetry). Details of this programme must be provided.

Regular External Reference Dosimetry Audits (at least every 2 years) are mandatory and results must be provided. Levels of accuracy: 0-3% is optimal; 3-5% is tolerance; >5% unacceptable. Data for photons should always be provided; data for electrons may be requested, depending on the trial protocol.

All centres participating in trials of the EORTC Radiation Oncology Group (and joint studies with other EORTC Groups) must provide information on their radiotherapy treatment infrastructure. This information must be kept updated at least every 2 years or earlier when equipment is replaced or if circumstances change. This can be done by requesting the upgrade link at facilityquest@eortc.be. The necessary documents giving the results of external reference dosimetry audits may be uploaded during submission (see previous point).