# Lecture plan – WP 3



### Rationale and description of the lectures:

The results of the data collected as part of WP3 (Assessment of the linear accelerator radiographer competencies developed in education institutions) showed that the least developed competency across the EU was Pharmacology. In specific, taking responsibility in this area, administering pharmaceuticals and responding to complications. Therefore, this lecture will include a depth explanation of the pharmaceuticals most commonly used to treat acute side-effects of Radiotherapy (RT).

# EQF level: 6

ECTS credits: 0.5 ECTS (Note: the total number of ECTS of the webinar series will be calculated when WPs 3 to 8 are completed)

# **Teaching methods:**

Online lectures (webinar) – 3h

Self-study - 10h

Method of assessment: Online exam (multiple-choice questions)

Coordinating lecturer: Jose Guilherme Couto (UM)

### Learning outcomes (Knowledge):

At the end of the unit, the student should be able to understand the following aspects, for each of the most commonly used pharmaceuticals in RT:

- 1. Mode of action
- 2. Indications related to radiotherapy
- 3. Contra-indications
- 4. Mode of administration and posology
- 5. Management of complications resulting from the use of these pharmaceuticals

The following pharmaceuticals are going to be covered:

- Paracetamol
- Hydrocortisone 1% cream
- Dexamethasone
- Chlorhexidine digluconate (oral rinse)
- Metoclopramide
- Loperamide
- Tamsulosin

# Learning outcomes (Skills):

At the end of the unit, the student should be able to perform the following tasks:

- Identify when a RT patient develops side-effects which benefit from these pharmaceuticals
- Provide advice to the patient regarding the use of these pharmaceuticals
- Assess possible contra-indications
- If necessary, refer the patient to another professional

# Learning outcomes (Competencies):

At the end of the unit, the student should be able to be autonomous and take responsibility for:

- Ensuring the patient is provided with the best care regarding management of side-effects

# References

Acute Side Effects of Radiation Therapy: A Guide to Management. A. Sourati, A. Ameri, M. Malekzadeh. 2017. Springer International Publishing. DOI: 10.1007/978-3-319-55950-6

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