

Tests, treatments and procedures at risk of inappropriateness in Italy that Physicians and Patients should talk about.

Five Recommendations from the Italian Association of Radiation Oncology (AIRO)

1	<p>Do not define a treatment program that includes radiation therapy without the involvement of the radiation oncologist from the beginning (usually, at time of the tumour first diagnosis) in the definition of the program.</p> <p>Modern oncology is represented by surgery, radiation therapy and systemic therapies (hormone therapy, chemotherapy, target therapy, immunotherapy). Radiation oncologists are able to manage radiations when used as elective treatment and/or together with systemic therapies. The radiation oncologist is the medical doctor specialised and entitled to prescribe radiation treatments. Nowadays, most of therapeutic approaches are represented by multimodal treatments, with various integrations. Radiation therapy is used in almost 70% of tumours so that not involving a radiation oncologist from the beginning in defining the whole therapeutic program may cause significant errors in terms of recommendations, correct evaluation of side effects and/or timing of sequential treatments. Unfortunately, such mistakes are commonly not recoverable by the subsequent therapeutic choices and may affect clinical outcomes.</p>
2	<p>Do not recommend the use of “special” techniques or radiation therapy machines without having previously obtained the recommendation by a radiation oncologist.</p> <p>Actually, the high level of technologies widely used by the radiation oncologist’ community represents a very important opportunity and benefit for oncological patients because it permits to achieve interesting results in selected subgroups. These results are robust and guarantee the safety of each radiation therapy technology if used following recognized recommendations.</p> <p>Today, the modern RT tools are available in the vast majority of the Italian Centres. All available technologies, even when used for simple radiation treatment planning, are regularly checked for quality assurance. The use of last generation accelerators and /or sophisticated and expensive techniques, only available in high level Italian Centres, should be used only in selected cases in which a deep radiation oncologist’ expertise is required.</p>
3	<p>Do not neglect to offer radiotherapy delivered with hypofractionated schedules when the scientific evidence is already available.</p> <p>Several clinical studies reported that moderately hypofractionated radiation therapy (reducing the total number of fractions with daily fraction >2Gy) may be as effective as conventional fractionation in selected subgroups of patients affected by early stage breast or prostate cancer treated with curative intent. Furthermore, stereotactic radiation treatment seems to be superior to conventional approach in early stage unresectable non small cell lung cancer.</p> <p>Hypofractionated schemes, being as effective as the conventional ones, may be less expensive in terms of economic and social costs, increasing patient’ compliance and reducing the waiting list of the Radiotherapy Centres.</p>
4	<p>Do not use, to the extent possible, prolonged radiation therapy for palliative treatments in frail patients with a short life expectancy</p> <p>Several clinical studies showed that a prolonged treatment regimen including radiotherapy and/or chemotherapy does not provide any survival benefit in cancer patients having a short life expectancy.</p> <p>However, radiotherapy plays a crucial role in providing patients with symptoms relief, with a high chance of clinical benefit (in case of pain, bleeding, and spinal cord compression).</p> <p>Nevertheless, prolonged treatment regimens may reduce the available lifetime for patients outside the hospital, with consequent detrimental effects on patient’s quality of life and family balance. Hence, radiotherapy should be given employing short schedules in these clinical settings.</p>
5	<p>Limit the use of diagnostic procedures in case of low-risk prostate and breast cancer. Avoid the use of serum biomarkers in early stage breast cancer.</p> <p>Proper staging is crucial in cancer patients. However, in specific clinical settings such a low-risk breast and prostate cancer, a complete staging work-out can be avoided. Inappropriate diagnostic procedures may increase costs and delay meaningful treatments such as radiation therapy. The use of serum biomarkers in low-risk breast cancer patients has shown to have no benefit. The possible presence of false positive cases may induce the overprescription of medical exams, may lead to overtreatment with consequent psychological effects. This situation should be avoided whenever possible.</p>

Please note that these items are provided only for information and are not intended as a substitute for consultation with a clinician. Patients with any specific questions about the items on this list or their individual situation should consult their clinician.

Released: 1 March 2014 last updated: 1 June 2021

How this list was created

After the request by the SLOW MEDICINE to the AIRO President, the methodology applied to identify the five practices at risk of inappropriateness was the creation of a special committee within the Board of Directors. A document has been proposed by this Commission to the entire Board and after group discussion and amendments, the final document has been validated. The document was updated in June 2021.

Sources

1	<ol style="list-style-type: none"> 1. Valentini V, Bourhis J, Hollywood D, ESTRO 2012 Strategy Meeting: Vision for Radiation Oncology. <i>Radiotherapy and Oncology</i> 103 (2012) 99–102 2. NCCN guidelines at http://www.nccn.org/professionals/physician_gls/f_guidelines.asp 3. Kozower BD, Lamer JM, Detterbeck FC, et al. Special treatment issues in non-small cell lung cancer: Diagnosis and management of lung cancer, 3rd ed: American College of Chest Physicians evidence-based clinical practice guidelines. <i>Chest</i>. 2013 May;143(5 Suppl):e369S-99S. 4. van de Velde CJ, Aristei C, Boelens PG et al. EURECCA colorectal: Multidisciplinary Mission statement on better care for patients with colon and rectal cancer in Europe. <i>Eur J Cancer</i>. 2013 Sep; 49(13): 2784-90. 5. https://mariecurielegacy.org/wp-content/uploads/2018/11/Radiotherapy_seizing_the_opportunity_in_cancer_care.pdf. Accessed 25th April 2021
2	<ol style="list-style-type: none"> 1. L'appropriatezza in Radioterapia Oncologica: indicazioni e considerazioni dell'Associazione Italiana di Radioterapia Oncologica (AIRO) http://www.radioterapiaitalia.it/index.php?L=&ID=703&CERCA=appropriatezza#703 2. Seung SK, Larson DA, Galvin JM, et al. American College of Radiology (ACR) and American Society for Radiation Oncology (ASTRO) Practice Guideline for the Performance of Stereotactic Radiosurgery (SRS). <i>Am J Clin Oncol</i>. 2013 Jun; 36(3): 310-5. 3. Garibaldi C. et al. Recent advances in radiotherapy. <i>Ecancermedicalscience</i>. 2017 Nov 30;11:785
3	<ol style="list-style-type: none"> 1. Morgan SC et al. Hypofractionated Radiation Therapy for Localized Prostate Cancer: Executive Summary of an ASTRO, ASCO and AUA Evidence-Based Guideline. <i>J Urol</i> 2019 Mar;201(3):528-534. 2. Mottet N. et al. EAU-EANM-ESTRO-ESUR-SIOG Guidelines on Prostate Cancer-2020 Update. Part 1: Screening, Diagnosis, and Local Treatment with Curative Intent. <i>Eur Urol</i> 2021 Feb;79(2):243-262 3. Fang M et al. Hypofractionated and hyper-hypofractionated radiation therapy in postoperative breast cancer treatment. <i>Rev Assoc Med Bras (1992)</i> 2020 Sep;66(9):1301-1306 4. Ball D. et al. Stereotactic ablative radiotherapy versus standard radiotherapy in stage 1 non-small-cell lung cancer (TROG 09.02 CHISEL): a phase 3, open-label, randomised controlled trial. <i>Lancet Oncol</i> 2019;20:494-503.
4	<ol style="list-style-type: none"> 1. La Radioterapia nel trattamento delle metastasi ossee (Linee Guida AIOM-AIRO) http://www.aiom.it/area+pubblica/area+medica/prodotti+scientifici/linee+guida 2. ACR Appropriateness Criteria® spinal bone metastases. Expert Panel on Radiation Oncology-Bone Metastases, Lo SS, Lutz ST, Chang EL, Galanopoulos N, Howell DD, Kim EY, Konski AA, Pandit-Taskar ND, Rose PS, Ryu S, Silverman LN, Sloan AE, Van Poznak C. <i>J Palliat Med</i>. 2013 Jan; 16(1): 9-19. 3. ACR Appropriateness Criteria® non-spine bone metastases. Expert Panel On Radiation Oncology-Bone Metastases, Lutz ST, Lo SS, Chang EL, Galanopoulos N, Howell DD, Kim EY, Konski AA, Pandit-Taskar ND, Ryu S, Silverman LN, Van Poznak C, Weber KL. <i>J Palliat Med</i>. 2012 May; 15(5): 521-6. 4. Lutz S, Berk L, Chang E, et al. Palliative radiotherapy for bone metastases: an ASTRO evidence-based guideline. <i>Int J Radiat Oncol Biol Phys</i> 2011; 79(4): 965e976.
5	<ol style="list-style-type: none"> 1. Mottet N. et al. EAU-EANM-ESTRO-ESUR-SIOG Guidelines on Prostate Cancer-2020 Update. Part 1: Screening, Diagnosis, and Local Treatment with Curative Intent. <i>Eur Urol</i> 2021 Feb;79(2):243-262 (pag. 248, tab. 8) 2. National Comprehensive Cancer Network: NCCN clinical practice guidelines in oncology (NCCN Guidelines)- Prostate Cancer Version 2.2021 (pag.PROS-2). 3. National Comprehensive Cancer Network: NCCN clinical practice guidelines in oncology (NCCN Guidelines)- Breast Cancer Version 2.2021 (pag BINV-1) 4. Schnipper LE, Smith TJ, Raghavan D, Blayney DW, Ganz PA, Mulvey TM, Wollins DS. American Society of Clinical Oncology identifies five key opportunities to improve care and reduce costs: the top five list for oncology. <i>J Clin Oncol</i>. 2012 May 10;30(14):1715-24. doi: 10.1200/JCO.2012.42.8375. Epub 2012 Apr 3. PMID: 22493340. 5. Runowicz C et al ACS/ASCO Breast Cancer Survivorship Care Guidelines. doi: 10.3322/caac.21319. Available online at cancerjournal.com tab 1, pag 5 (racc 1.3) 6. Cardoso F et al Early breast cancer: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up. <i>Annals of Oncology</i> 30: 1194–1220, 2019, doi:10.1093/annonc/mdz173. (pag 1198)

Slow Medicine, an Italian movement of health professionals, patients and citizens promoting a Measured, Respectful and Equitable Medicine, launched the campaign “**Doing more does not mean doing better-Choosing Wisely Italy**” in Italy at the end of 2012, similar to Choosing Wisely in the USA. The campaign aims to help physicians, other health professionals, patients and citizens engage in conversations about tests, treatments and procedures at risk of inappropriateness in Italy, for informed and shared choices. The campaign is part of the Choosing Wisely International movement. Partners of the campaign are the National Federation of Medical Doctors' and Dentists' Orders (FNOMCeO), that of Registered Nurses' Orders (FNOPI), the Academy of Nursing Sciences (ASI), National Union of Radiologists (SNR), Tuscany regional health agency, PartecipaSalute, Altroconsumo, the Federation for Social Services and Healthcare of Aut. Prov. of Bolzano, Zadig. www.choosingwiselyitaly.org; www.slowmedicine.it

The **Italian Association of Radiation Oncology (AIRO)** has as main purpose to contribute to the progress and development of the Radiotherapy and Clinical Oncology in Italy. It promotes scientific research and teaching in the oncology disciplines and supports cultural and scientific upgrading of the members. The Society develops guidelines, trials and scientific research in collaboration with regional agencies, scientific societies and other organizations or institutions. It enhances the professionalism of the radiation oncologist and promotes rational qualitative and quantitative increase of Radiation Oncology Centres. It promotes collaboration with the Ministry of Health, Regions, Health Authorities and other organizations or institutions for the purpose of better development of Radiation Oncology. www.radioterapiaitalia.it