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

Five Recommendations from the Italian Society of Medical and Interventional Radiology (SIRM) – 1st List

1	**Don't perform magnetic resonance imaging (MRI) of the spine within the first six weeks in patients with low back pain in the absence of warning signs or symptoms (red flags).**
	Usually, MRI is prescribed at the first complaint of back pain and sciatica, without performing a first-line conservative treatment with both pharmacologic and nonpharmacological (e.g., exercises, remaining active) therapy. In the absence of serious neurological or systemic symptoms, lumbosacral MRI for both acute and chronic lower back pain and sciatica is not routinely recommended, but should be considered only if there are persistent or progressive symptoms during or following 6 weeks of conservative treatment. If MRI shows no pathological findings, it should not be repeated within 24months. In the absence of red flags (such as cord compression or spinal cord injury) in patient history or physical examination, an MRI or other imaging techniques in the first six weeks, usually don't modify the therapeutic approach but could lead to incidental findings, to perform other unnecessary examinations or surgery, or to ionizing radiation exposition; all representing a high cost for society and environmental harm.
2	**Don't perform routine magnetic resonance imaging (MRI) of the knee in the event of acute pain from trauma or chronic pain.**
	MRI of the knee is often prescribed before an orthopaedic clinical examination or specialist request, to patients of any age. Patient history, accurate physical examination and knee radiography, appropriate as a first-line diagnostic examination if an imaging evaluation is deemed necessary, are usually sufficient for diagnosing most of knee injuries that will benefit from a conservative medical and physical treatment. In the absence of clinical signs of alarm, performing a MRI of the knee in the first 4-6weeks in acute pain from trauma or early in chronic pain, does not modify the therapeutic approach, but could lead to incidental findings, to further tests and even to unnecessary surgery; all representing a high cost for society and environmental harm. MRI should be considered after assessment by radiological examination, only when it is intended to guide the choice between effective therapeutic alternatives deemed reasonable based on clinical data and the patient's age, always exercising the utmost caution regarding surgical indication in elderly patients, in view of the more limited therapeutic outcomes and the higher risk of postoperative complications.
3	**Don't perform magnetic resonance imaging (MRI) for non-traumatic headache in the absence of warning clinical signs.**
	Too many MRIs are performed at the first sign of non-traumatic headache; in addition, the clinical suspicion is rarely mentioned in the request, which would suggest how to perform an appropriate examination, as there are different ways to perform an MRI examination depending on the question to resolve. Performing an MRI (with and without contrast agents) in patients with a headache, without specific risk factors for structural diseases, does not change the management nor improve clinical outcomes, but represents a high cost for society and environmental harm. Patients with a significant probability of structural sickness that require immediate attention are identified by clinical history and/or examination. Eventual incidental findings as a result of MRI examination may lead to further additional testing and expensive treatments that don't improve the welfare of the patient.
4	**Don't perform preoperative chest x-rays in the absence of clinical signs or symptoms which indicate diseases that could affect the clinical outcomes.**
	Routine preoperative chest X-rays are not recommended, regardless of the clinical evidence and the type of procedure, as well as the degree of complexity, unless specifically justified by the clinical patient's history and/or physical examination. In the absence of cardiopulmonary signs or symptoms, routine preoperative chest radiographs uncommonly result in significant changes in clinical management or improvement in patient outcomes, while exposing patients to ionizing radiation, incidental findings and high costs for society and environmental harm. The decision to perform a chest radiograph should principally derive from the needing to investigate a clinical suspicion for acute or stable chronic cardiopulmonary disease in advanced patient age (especially >70 years). The indication for examination should also correlate with preoperative anesthesiologic assessment and with the complexity of the surgical procedure.
5	**Don't perform routine radiology of the skull in minor head injury.**
	Minor traumatic brain injury (TBI) is defined as a head injury with or without a history of loss of consciousness, amnesia or confusion, with a Glasgow Coma Score (GCS) of 14 or 15; excluding patients with focal neurological deficit, suspected sunk fracture or with clinical signs of basilar skull fracture. X-ray of the skull can identify fractures associated with an increased intracranial bleeding risk, but does not identify the intracranial bleeding. Therefore it is not routinely indicated in minor TBI, while Computed Tomography (CT) is considered the reference examination to detect lesions of immediate clinical importance. Performing inappropriate skull radiography in head trauma can delay the execution of CT or other urgent tests and exposes the patient to ionizing radiations unnecessarily, with high costs for society and environmental harm. Despite the demonstrated not usefulness of those examinations, skull radiographs continue to be requested. A GCS score of 15 (patient fully conscious) absence of risk factors and no symptoms except pain at the point of impact, contraindicate even the immediate execution of CT.

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.

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How this list was created

In occasion of the Executive Board meeting on 8 July 2013 the **Italian Society of Medical Radiology – SIRM** – has officially published 5 high-risk practices of inappropriateness identified by Slow Medicine under the project "Doing more does not mean doing better."
A review of the literature was carried out based on common clinical practices that do not, in most cases, determine a clinical decision. The practices selected were chosen based on lack of efficacy, risk of damage from exposure to ionizing radiation, risk of over-diagnosis and over-treatment, and high diffusion in Italy; also inherently characterized by high costs. The identification of the procedures took into account the ACR appropriateness criteria https://www.acr.org/Clinical-Resources/Clinical-Tools-and-Reference/Appropriateness-Criteria and the agreement between the Italian Minister of Health, the Italian Regions and Autonomous Provinces of Trento and Bolzano on the document entitled "Guidelines for diagnostic imaging" based on art. 4 of Legislative Decree of the 28th of August 1997, n.281.
Sources were reviewed in December 2022, and the document was further updated in January 2026, with approval by the SIRM Executive Board.
Although the "legge 101/ 2020" states that the justification of these practices is a responsibility of the MD Radiologist together with the prescriber, the case law and the daily practice make it difficult to consistently reject these requests in the absence of an appropriate awareness of prescribing doctors and general population.

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Slow Medicine ETS, an Italian Third Sector organization 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, Altroconsumo, the Federation for Social Services and Healthcare of Aut. Prov. of Bolzano, Zadig.
www.choosingwiselyitaly.org
www.slowmedicine.it

The **Italian Society of Medical and Interventional Radiology – SIRM** – was founded in 1913 and counts over 12,000 members. Its purpose is scientific research, cultural updating and training in the study of biomedical imaging, in its physical, biological, diagnostic, radiation protection and IT aspects.
The President remains in office for two years and the twelve councillors for four years. The organization is present throughout Italy and is divided into 18 Regional Groups and 20 Subspecialty Sections (e.g. Breast Care, Thoracic Radiology, Musculoskeletal Radiology, Urgency, Ethics, MRI, Radiology Informatics and AI etc.).
The official media branch is the "La Radiologia Medica" the professional scientific journal published in English with IF 4.8. Other radiological open access publication is: Journal of Medical Imaging and Interventional Radiology.
The National Congress is held every two years and is attended by around 4,500 members.
The official site: www.sirm.org can provide further details.