

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

Five Recommendations from the Italian Society of Clinical Biochemistry and Clinical Molecular Biology (SIBIOC)

1	<p>Don't perform serum protein electrophoresis nor search of urinary Bence-Jones protein as laboratory test before contrast media administration.</p> <p>The only real drawback for the administration of contrast media is renal insufficiency. It can be diagnosed measuring serum creatinine (increased) and calculating the glomerular filtration rate (eGFR). These are the only laboratory tests to perform. Patients with multiple myeloma or other plasmacellular diseases (situation in which Bence-Jones proteinuria can be present) may have renal insufficiency, but not all these patients have reduced renal function. For this reason these diseases do not constitute a risk factor for contrast media induced nephropathy. Thus it is not necessary to perform specific tests to exclude plasmacellular diseases (serum protein electrophoresis, Bence-Jones protein analysis), moreover because none of these test is sufficient to exclude these diseases.</p> <p>* disorders characterized by plasmacellular proliferation.</p>
2	<p>Don't ask for AST, LDH, total CK, CK-MB or myoglobin for the diagnosis of acute myocardial infarction.</p> <p>The only laboratory test that really contributes to the diagnosis of acute myocardial infarction is the cardiac troponin (I or T). Especially with the more recent formulations at elevated analytical sensitivity this test presents characteristics of diagnostic specificity and sensitivity higher than any other diagnostic test presently available.</p>
3	<p>Don't perform the determination of urine glucose for the monitoring of diabetes mellitus.</p> <p>Urinary glucose measurement lacks the requested diagnostic sensitivity. The test of choice for monitoring diabetic patients is glycated hemoglobin (HbA1c).</p>
4	<p>Don't ask for the determination of serum biomarkers like CEA, CA-125, HE4, CA-15.3, α-fetoprotein or CA-19.9 for the diagnosis of neoplastic disease in asymptomatic individuals.</p> <p>The diagnostic sensitivity and specificity of these biomarkers are not sufficient to allow their use in a population with a low prevalence of neoplastic diseases. Their use is recommended for the monitoring of the neoplasias that express the specific biomarker (Colon – rectal: CEA; Ovarian: CA-125 and / or HE4; Breast cancer: CA-15.3; Haepatocarcinoma: α-fetoprotein; Pancreatic: CA-19.9).</p>
5	<p>Don't ask for the measurement of pancreatic enzymes in people who have no suspicion of acute pancreatic disease and, in the case of suspected acute pancreatitis, don't ask the associated measure of amylase and lipase.</p> <p>Pancreatic lipase has diagnostics performances better than amylase, both as sensitivity and specificity and is the only test to request when suspecting acute pancreatitis.</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.

How this list was created

Through the consultation of the members of the SIBioC executive board, discussing and selecting the numerous proposal received. The selected recommendations present clear and irrefutable evidences internationally recognized.

Some of those practices (number 1) represent a bad habit almost exclusively Italian, others (number 2) are more international and are related to the common attitude of introducing new tests without abandoning the old ones.

Sources

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2	<ol style="list-style-type: none"> 1. Hamm CW, et al. ESC guidelines for the management of acute coronary syndromes in patients presenting without persistent ST-segment elevation. <i>European Heart Journal</i> 2011;32:2999-3054. 2. Panteghini M, Belloni A, Botta M, et al. Strategie per l'impiego ottimale dei biomarcatori cardiaci: raccomandazioni e protocolli operativi. <i>Biochim Clin</i> 2005;29:419-28. 3. Thygesen K, Alpert JS, Jaffe AS, et al. on behalf of the Joint ESC/ACCF/AHA/WHF task force for the universal definition of myocardial infarction. Third universal definition of myocardial infarction. <i>J Am Coll Cardiol</i> 2012;60:1581-98.
3	<ol style="list-style-type: none"> 1. Associazione Medici Diabetologi (AMD) - Società Italiana di Diabetologia (SID) - Standard italiani per la cura del diabete mellito 2014; 2. Sacks DB, Arnold M, Bakris GL et al. Guidelines and recommendations for laboratory analysis in the diagnosis and management of diabetes mellitus. <i>Clin Chem</i> 2011;57:e1-e47
4	<ol style="list-style-type: none"> 1. Gion M, Trevisiol C, Pregno S, Fabricio ASC. La Guida all'uso clinico dei biomarcatori in oncologia 2010: premesse e generalità. <i>Biochim Clin</i> 2011;35:97-106; 2. Gion M, Trevisiol C, Pregno S, Fabricio ASC. Guida all'uso clinico dei biomarcatori in oncologia: metodi di misura e interpretazione. <i>Biochim Clin</i> 2011;35:199-206; Gion M, Trevisiol C, Pregno S, Fabricio ASC. Guida all'uso clinico dei biomarcatori in oncologia: i marcatori nelle diverse neoplasie - Parte I. <i>Biochim Clin</i> 2011;35:394-403. 3. Gion M, Trevisiol C, Pregno S, Fabricio ASC. Guida all'uso clinico dei biomarcatori in oncologia: i marcatori nelle diverse neoplasie - Parte II. <i>Biochim Clin</i> 2011;35:465-73.
5	<ol style="list-style-type: none"> 1. Panteghini M & al, Tietz Textbook of Clinical Chemistry & Molecular Diagnostics, 5th ed.

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 Professional Society **“SIBioC (Italian Society of Clinical Chemistry and Clinical Molecular Biology)”**, founded in 1969, official member of the International Federation of Clinical Chemistry and Laboratory Medicine – IFCC – has the following goals:

- bring together professionals working in the field of Clinical Biochemistry and Laboratory Medicine;
- improve the education, favor the professional development and the organization of clinical laboratory workers;
- work for the establishment of courses of specialization with unified programs nationwide;
- promote scientific research in the field of Laboratory Medicine;
- promote the creation of reference laboratories;
- collaborate with National and International Scientific Societies and Federations;
- organize scientific meetings.

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