

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

Five recommendations from SIPMeL
Italian Society of Clinical Pathology and Laboratory Medicine
Study Group on Autoimmunology (SIPMeL GdS-AI)

1	In the case of autoimmune thyrotoxicosis / hyperthyroidism, anti-TPO and anti-Tg antibodies should not be sought; search instead for anti-TSHR antibodies (TRAb). Do not request anti-TPO (anti-thyroid peroxidase) and anti-Tg (anti-thyroglobulin) antibody tests in the monitoring of autoimmune thyroid disease. In the diagnosis of hyperthyroidism, the research of anti-TPO and anti-Tg is widely requested as a first test, while the diagnostic antibody is the one directed towards the TSH receptor. The research of anti-TPO is useful only in case of negativity of TRAb (possible diagnosis of non-Graves thyrotoxicosis). The repetition over time of anti-TPO and anti-Tg antibodies for follow-up, in case of diagnosed autoimmune thyrotoxicosis, has no clinical utility.
2	Do not order the HEp-2 indirect immunofluorescence test for ANA (antibodies to cellular antigens) as a screening test in patients with suspected autoimmune myositis. The use of ANA IIF as the sole screening method for MSA/MAA (Myositis-Specific Ab/Myositis-Associated Ab) is not recommended due to low sensitivity, very low specificity and/or lack of antigen expression by HEp-2 cells. Therefore, in case of clinical suspicion of autoimmune myositis, the first-line serological test to be performed should be a multispecific immunometric test for the full spectrum of MSA/MAA antibodies.
3	When myasthenia gravis is suspected, specific autoantibodies (AChR, MuSK, Lrp4) should not be searched as a profile, but the initial test is represented only by anti-AChR antibodies. Since the three autoantibodies are mutually exclusive, it is not useful to simultaneously request the determination of all three antibodies, because about 80% of patients with myasthenia have only anti-AChR, 16% only anti-MuSK and the remaining 4% only anti-Lrp4 antibodies. The determination of anti-MuSK antibodies should then be reserved for anti-AChR negative patients, while that of anti-Lrp4 antibodies should be limited to anti-AChR and anti-MuSK negative patients.
4	Do not search for IgA class antibodies to deamidated gliadin peptide (DGP) to screen for celiac disease in the general population. In people following a gluten-containing diet, the test for IgA anti-gliadin deamidated peptide (GDP) antibodies has lower diagnostic sensitivity and specificity for celiac disease than the test for IgA anti-transglutaminase (TG) antibodies. Therefore, the test for IgA anti-TG antibodies, together with or preceded by the measurement of total serum IgA to exclude selective IgA deficiency, is considered the best first-level screening test for celiac disease. The determination of IgA anti-endomysial (EMA) antibodies is an excellent confirmatory test.
5	In the case of suspected late-onset autoimmune diabetes (LADA) or gestational diabetes mellitus, the search for anti-insular cell antibodies (ICA) and anti-insulin antibodies (IAA) should not be performed. Search instead simultaneously for anti-GAD, anti-IA2 and anti-ZnT8 antibodies. The finding of even one antibody positivity among anti-GAD, anti-IA2 and anti-ZnT8 is a diagnostic criterion of LADA and suggests an autoimmune pathogenesis in gestational diabetes mellitus.

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: October 2018 - last updated: October 2025

How this list was created

The SIPMeL Study Group on Autoimmunology (GdS-AI) reviewed the five procedures at greatest risk of inappropriateness in the field of laboratory autoimmune diagnostics that had been first produced by the GdS-AI in 2018. The review of the proposals took place in a consensus conference organized in Florence in March 2025. Of the five proposals presented in 2018, the first two were merged into a single recommendation, two were confirmed and two new ones were inserted.

Sources

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2	1. Damoiseaux J, Vulsteke JB, Tseng CW, et al. Autoantibodies in idiopathic inflammatory myopathies: Clinical associations and laboratory evaluation by mono- and multispecific immunoassays. <i>Autoimmun Rev</i> 2019; 18:293-305. doi: 10.1016/j.autrev.2018.10.004. 2. Palterer B, Vitiello G, Carraresi A, et al. Bench to bedside review of myositis autoantibodies. <i>Clin Mol Allergy</i> 2018; 16:5 https://doi.org/10.1186/s12948-018-0084-9. 3. Damoiseaux J, Mammen AL, Piette Y, et al; ENMC 256th Workshop Study Group. 256th ENMC international workshop: Myositis specific and associated autoantibodies (MSA-ab): Amsterdam, The Netherlands, 8-10 October 2021. <i>Neuromuscul Disord</i> 2022; 32:594-608. doi: 10.1016/j.nmd.2022.05.011.
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4	1. Rubio-Tapia A, Hill ID, Semrad C, et al. American College of Gastroenterology guidelines update: diagnosis and management of celiac disease. <i>Am J Gastroenterol</i> 2023; 118:59-76. doi: 10.14309/ajg.0000000000002075. 2. Catassi C, Verdu EF, Bai JC, et al. Coeliac disease. <i>Lancet</i> 2022; 399:2413-26. doi: 10.1016/S0140-6736(22)00794-2. 3. Al-Toma A, Volta U, Auricchio R, et al. European Society for the Study of Coeliac Disease (ESsCD) guideline for coeliac disease and other gluten-related disorders. <i>United European Gastroenterol J</i> 2019; 7:583-613. doi: 10.1177/2050640619844125. 4. Zingone F, Maimaris S, Auricchio R, et al. Guidelines of the Italian societies of gastroenterology on the diagnosis and management of coeliac disease and dermatitis herpetiformis. <i>Dig Liver Dis</i> 2022; 54:1304-19. doi: 10.1016/j.dld.2022.06.023. 5. Husby S, Koletzko S, Korponay-Szabó I, et al. European Society Paediatric Gastroenterology, Hepatology and Nutrition Guidelines for Diagnosing Coeliac Disease 2020. <i>J Pediatr Gastroenterol Nutr</i> 2020; 70:141-56. doi: 10.1097/MPG.0000000000002497.
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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, PartecipaSalute, Altroconsumo, the Federation for Social Services and Healthcare of Aut. Prov. of Bolzano, Zadig. www.choosingwiselyitaly.org; www.slowmedicine.it

The Italian Society of Clinical Pathology and Laboratory Medicine (SIPMeL) is a national medical/scientific association of professionals working in clinical laboratories. SIPMeL was established in 2014, as a reunification of SIMeL (Italian Society of Laboratory Medicine), founded in 1986, and AIPaCMeM (Italian Association of Clinical Pathology and Molecular Medicine), historical continuity of the Italian Association of Analysts and Pathologists (founded in 1947) and the Italian Society of Clinical Pathology operating since 1970. The structure of the society, which has about 2000 members, is federal and includes three professional components: doctors, graduates specialized in scientific disciplines (DSLb) and biomedical laboratory technicians (STLB). It is the task of the Society to develop and disseminate the professional standards on which "good practice" in the laboratory depends. The training activities recognize training credits to participants, in accordance with the Continuing Medical Education Program of the Ministry of Health. Scientific research and training production activities are promoted and maintained by 22 study groups.