

Title	Appropriateness of prescribing erythrocyte sedimentation rate (ESR) – Are there any remaining indications?
Agency	HAS, French National Authority for Health (Haute Autorité de santé) 5 avenue du Stade de France – F 93218 La Plaine Cedex, France Tel: +33 (0)1 55 93 70 00 – Fax: +33 (0)1 55 93 74 35, contact.seap@has-santé.fr , www.has-sante.fr
Reference	ISBN number: 978-2-11-179598-3 , link to full report: Pertinence de prescrire la vitesse de sédimentation (VS) – Reste-t-il des indications à la VS ?

Aim

To assess the medical utility of the ESR test and to clarify its appropriate and inappropriate indications in routine clinical practice. The aim was to consider a potential change to its status in the Nomenclature des Actes de Biologie Médicale (list of funded procedures in laboratory medicine - NABM), or even remove it.

Conclusions and results

A total of 14 systematic reviews, one technology assessment, and 48 professional guidelines were included and analysed. Overall, the methodological quality of these sources was low, and the risk of bias was generally rated as unclear or high.

ESR measurement did not demonstrate medical benefit for any of the remaining indications evaluated:

- as part of routine laboratory testing prescribed during a general practice consultation for an asymptomatic patient;
- nor for other remaining indications assessed, including:
 - Giant cell arteritis (GCA) and/or polymyalgia rheumatica (PMR).
 - Systemic lupus erythematosus.
 - Rheumatoid arthritis (RA).
 - Juvenile idiopathic arthritis (JIA) / Still's disease.
 - Hodgkin lymphoma.
 - Multiple myeloma and other monoclonal gammopathies including MGUS.

This evaluation highlighted several drawbacks associated with ESR measurement:

- Low reproducibility: results can vary significantly depending on the technique used. Even when the same technique is used, coefficients of variation may reach 30%. Newer methods (e.g. measuring aggregation rates) can produce different results and reference ranges from those of traditional ESR measurement methods.
- Low specificity: ESR is influenced by numerous physiological or pathological factors unrelated to inflammation.
- Slow kinetics: ESR may remain normal at the onset of an inflammatory process, and may remain elevated long after the inflammatory process has resolved.

Recommendations

Given its numerous drawbacks and the availability of more accurate alternatives (such as other inflammatory biomarkers or imaging studies), ESR measurement should no longer be routinely prescribed in clinical care, whether for diagnosis, prognosis, or patient monitoring.

Following clinical examination, if the patient's condition warrants testing for inflammation markers, C-reactive protein -a rapid-response marker- is generally preferred as the first-line test for acute inflammation.

Methods

The assessment was based on a critical appraisal of synthetic literature (systematic reviews published between 2000 and 2025; professional guidelines published between 2015 and 2025), identified through a systematic search of Medline, Embase, the Cochrane Database, and specialised websites, and selected using explicit criteria. Individual expert opinions were collected and formalised through a single-round rating process. This was followed by feedback from professional organisations and patient/user associations concerned by the topic, relating to the provisional conclusion.

Further research/reviews required

To develop professional guidelines on the appropriate selection and sequencing of inflammatory markers in both outpatient and hospital settings.

Written by

Valérie Lindecker-Cournil, HAS, French National Authority for Health (Haute Autorité de santé), France