

## **Guideline for the Ordering of Erythrocyte Sedimentation Rate (ESR)**

The Ontario Association of Medical Laboratories' (OAML) guidelines are intended to provide community physicians with information on the appropriate use of Erythrocyte Sedimentation Rate (ESR) tests. The guidelines represent the consensus thinking of a panel of experts in the field. Guidelines are, by their nature, general in focus and cannot apply in every clinical situation. They do not serve as a substitute for sound clinical judgement. **These guidelines are appropriate at the time of writing and are applicable in most clinical situations.**

### **1. Background**

The Erythrocyte Sedimentation Rate (ESR) is a laboratory test which should be ordered in only a few clinical situations.

### **2. Limitations**

There is no evidence to support the use of the ESR as a screening test in asymptomatic individuals. The test should not be ordered in this situation.

### **3. Indications**

Evaluation of the ESR is accepted as a diagnostic adjunct in Temporal Arteritis and Polymyalgia Rheumatica and may be used to monitor the activity of these conditions.

The ESR is a component of some clinical indices of Rheumatoid Arthritis and may be used to follow the activity of this condition or other connective tissue disorders.

The ESR may be used to monitor patients with treated Hodgkin's Disease and to monitor certain infections such as Tuberculosis and Osteomyelitis.

### **4. Interpretation**

Slightly elevated ESR results must be interpreted with caution, particularly in patients with negative physical examinations. Extensive diagnostic work-ups are not indicated. A markedly elevated ESR is often present in patients with significant infectious, inflammatory and malignant disease but, is rarely the sole indicator of the presence of such diseases.

## 5. Recommendations:

It is recommended that the ESR not be used as a screening test in asymptomatic patients. In specific clinical situations, ESR is a relevant test for diagnosis and disease monitoring. Test results must be interpreted with caution.

## 6. References:

1. Constantino, B.T., Erythrocyte Sedimentation Rate: What Technologists Need to Know, CJMT, Vol. 56, P. 161-169 (1994)
2. Green, C.J., Friesen, K.D., et al. The Erythrocyte Sedimentation Rate – An Examination of the Evidence. B.C. Medical Journal, Vol. 36, No. 2, P. 108-112, February 1994.
3. Saade, H.C., The Erythrocyte Sedimentation Rate, Southern Medical Journal, Vol. 91, No. 3, P. 220-225 (1998)

### The Ontario Association of Medical Laboratories

The Ontario Association of Medical Laboratories (OAML) represents the community-based laboratory sector in Ontario.

Its mission is to promote excellence in the provision of laboratory services and, as an essential component of the health care system, to contribute to shaping the future of health care in Ontario.

The OAML encourages the highest level of professional and ethical integrity and technical excellence among laboratory owners, operators and staff in the provision of laboratory services for the benefit of the people of Ontario.

<p><b>Guidelines for Clinical Laboratory Practice</b></p> <p>The OAML, through its Quality Assurance of Clinical Laboratory Practice Committee, co-ordinates the development and dissemination, implementation and evaluation of Guidelines for Clinical Laboratory Practice.</p> <p>This guideline, in its original form, was developed jointly by the Ontario Association of Medical Laboratories and the Ontario Medical Association and was issued in August 1994. A re-formatted issue was distributed in November 1995. The current re-issue has been revised as to content and supersedes the previously issued CLP003.</p> <p><b>Approved guidelines</b> are distributed to Community-based Laboratories and by them to their client physicians.</p> <p>There may be additional educational materials produced, if it is thought that they might be useful, and these are distributed with the guideline.</p>	<p><b>The comments of end users</b> are essential to the development of guidelines and will encourage adherence. You are strongly encouraged to submit your comments on this or on any other OAML Guideline to:</p> <p>Chair Quality Assurance of Clinical Laboratory Practice Committee Ontario Association of Medical Laboratories 5160 Yonge Street, Suite 710 North York, Ontario M2N 6L9</p> <p>Tel: (416) 250-8555 Fax: (416) 250-8464 E-mail: oaml@oaml.com Internet: www.oaml.com</p>
---	---