

# Abnormal Haematology Results

## Introduction

Clearly abnormal haematology results requiring investigation or referral to a specialist for management are relatively straightforward to deal with. Determining the clinical significance of mildly abnormal results, lying just outside the statistical range of normality (commonly the 95<sup>th</sup> centile), is more challenging. A particular issue is a just abnormal result, in a person with non-specific symptoms, or an asymptomatic patient after 'well-person' screening.

Management strategies for these include: repeating mildly abnormal results after an interval determined by the underlying physiological processes; applying a 'clinical filter' to assess the pre-test and post-test probabilities of the differential diagnoses raised by the result; and informing patients of the limited discriminant value of a single slightly abnormal test result<sup>1</sup>.

The module cases deal with three specific patterns of abnormality found on routine full blood counts identified as priority areas by a discussion group of clinicians.

1. thrombocytopenia
2. neutropenia
3. effects of chronic disease and/or malignancy on haematological parameters

The module's aims are to prompt discussion about managing abnormal haematology results, assessing urgency, and when to refer for expert advice. Detailed information about individual differential diagnoses is beyond the scope of this module but some background information about possible underlying causes is included. Cases, and case commentaries, are longer than in other modules, so there are three cases rather than four.

Note that there are regional variations in lab reference ranges. For the purposes of discussion, normal ranges are in brackets in the cases below, and these may differ from local ranges.