Abstract

The differential counting of white blood cell provides invaluable information to pathologist for diagnosis and treatment of many diseases manually counting of white blood cell is a tiresome, time-consuming and susceptible to error procedure due to the tedious nature of this process, an automatic system is preferable in this automatic process, segmentation and classification of white blood cell are the most important stages. The objective of the present study is to develop an automatic tool to identify and classify the white blood cells namely, lymphocytes, monocytes and neutrophil in digital microscopic images. We have proposed color
Automated Identification and Classification of White Blood Cells (Leukocytes) in Digital Microscopic Images

A based segmentation method and the geometric features extracted for each segment are used to identify and classify the different types of white blood cells. The experimental results are compared with the manual results obtained by the pathologist and demonstrate the efficacy of the proposed method.

Reference


Index Terms

Computer Science

Pattern Recognition
Key words

segmentation

image analysis

leukocytes

lymphocyte

monocyte

neutrophil

color segmentation

White blood cells