Appendices (1)

**Principle of Sysmex XS 800i**

Counts were performing by Sysmex XS 800i automated analyzer. Principal is based on the fluorescence technology, the RNA and DNA components in the cell are stained with special fluorescence dyes, patented by Sysmex, without destroying the cell. It is thus possible to measure with suitable detectors, the nucleic acid percentage of each cell as a physical characteristic of this cell. Thus, the cell nucleus will be analysed together with the cytoplasm which goes far beyond the simple differentiation according to the size and internal density or, respectively, the granularity of the cell. This will be realized with specific reagents, special semiconductor lasers and detectors. In addition to the fluorescence technology for optimal white blood cells differentiation, other proven methods have also been kept in the XS 800i. This includes keeping a dedicated measuring channel for haemoglobin. The detergent here used (sodium lauryl sulphate) does not only lyses the red blood cells included in the sample, but also the white blood cells. Thus, pronounced leukocytoses are no reason for having to dilute the samples since the measured haemoglobin value is reliable. HCT was measured by integration volume of RBCs.
Appendices (2)

سُنِّدَةٌ عَلَمِيَّةٌ لِلاَكْتِشَافِ وَالرَّحْمَةِ

Sudan University of Science and Technology

Collage of Graduate Studies

Questionnaire to measure CBC of pregnant women in first trimester attended in Bahri locality

NO (  )

Personal data:

Name: ……………………………… Age: ………………

Residence: ……………………………………………………

Months of pregnancy: …………… Number of pregnancy: ……………

Abortion: Yes (  ) No (  ) If yes, how many times: ……………

Supplementation intake: Yes regular (  ) Yes irregular (  ) No (  )

Visit to clinic: Yes (  ) No (  )

Suffer from other disease: Malaria (  ) Anemia (  ) Typhoid (  )

Other: …………………………………………………….

Previous blood transfusion: Yes (  ) No (  ) If yes, when: ……………

Result:

RBCs …………. WBC …………. ...

HGB …………. NEUT …………. ...

HCT …………. MXD …………. ...

MCV …………. LYMPH …………. ...

MCH …………. NEUT …………. ...

MCHC …………. MXD …………. ...

LYMPH …………. PLT ………….
Appendices (3)

بسم الله الرحمن الرحيم

جامعة السودان للعلوم والتكنولوجيا
كلية الدراسات العليا - برنامج الماجستير - مختبرات طبية
تخصص علم أمراض الدم ومبحث المناعة الدموية
براءة أخلاقية

الاسم:

سوف يتم اخذ من الدم (3 مل) من الوريد كل الأدوات المستخدمة لأخذ العينة معقمة ومتبع فيها

وسائل السلامة العملية

وانا اقر بأن هذه العينات يتم فقط تحليلها لغرض البحث

أوافق أنا المذكور أعلاه اخذ عينة لإجراء الدراسة

الإمضاء:

التاريخ: