HAEMATOLOGY 436

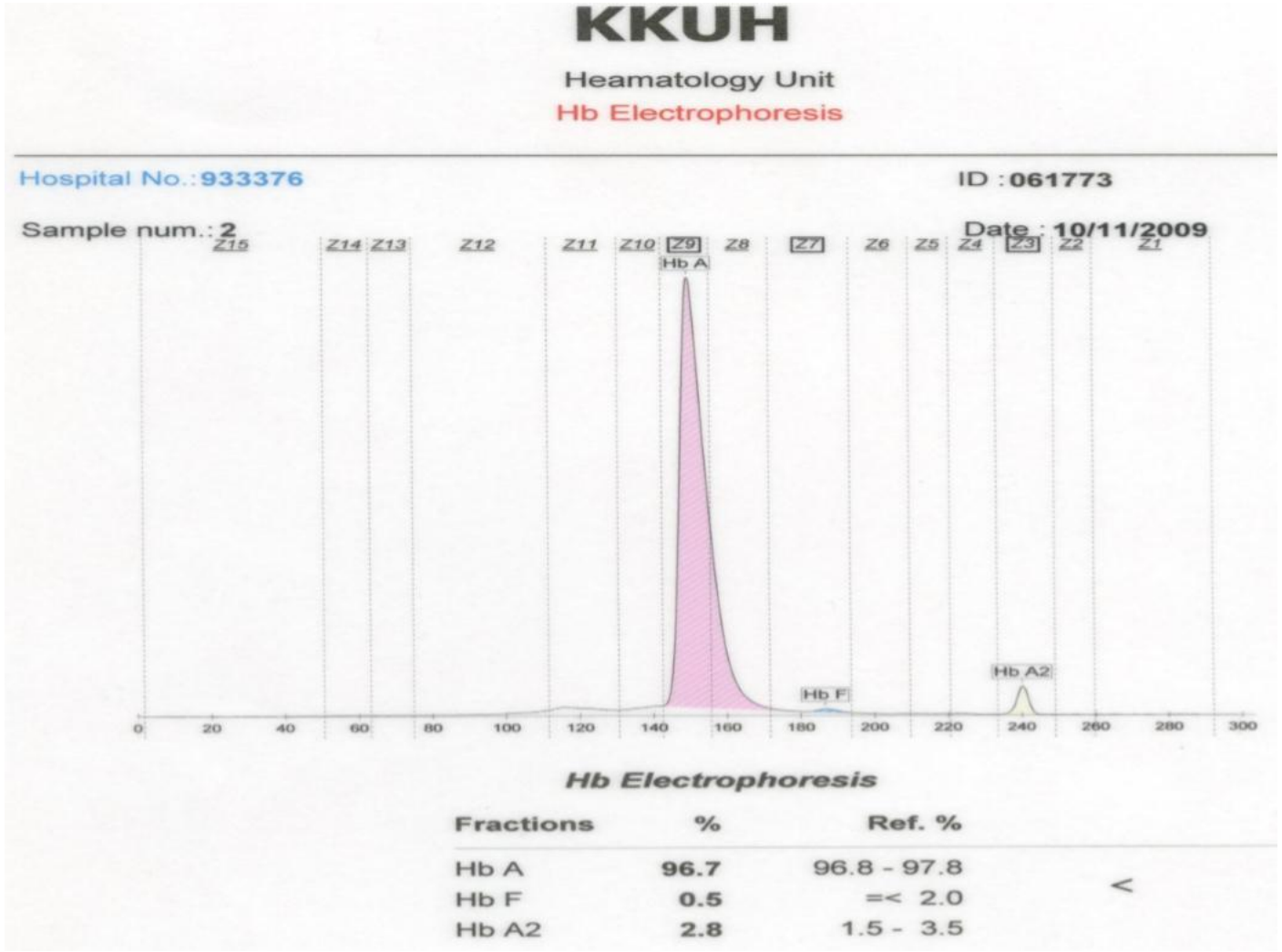
436
MEDICINE
KING SAUD UNIVERSITY

OSPE FILE (HAEMATOLOGY)

Notes:

- Each single word in this file is important especially the findings You have to write them all even the normal!
- You have to write the word **DISEASE** in the cases of sickle cells anemia to differentiate it from sickle cell trait
- There are some RED Color in the file this indicate that don’t ignore these informations and you have to write it in the Exam

Hemoglobin	Normal Values
Hb A	96.8 – 97.8
Hb F	< 2.0
Hb A2	α-thal < 1.5 – 3.5 < β-thal
Any other Hb = ABNORMAL	

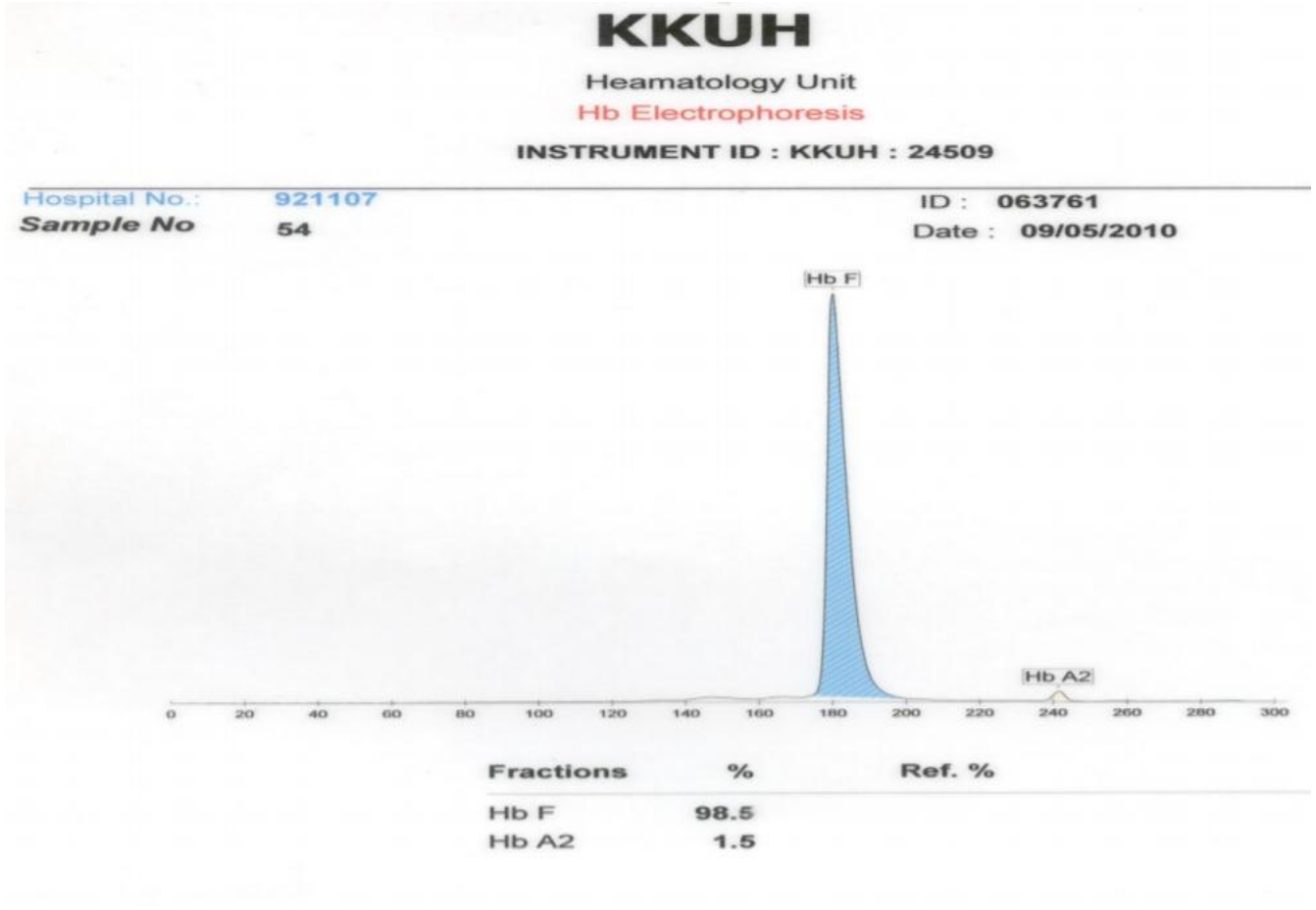


What is the name of test performed?
Hemoglobin electrophoresis

What are the findings?
Hb A: normal
Hb F: normal
Hb A2: normal

What is the most likely diagnosis?
Normal electrophoresis

What further investigations will you order?
NONE

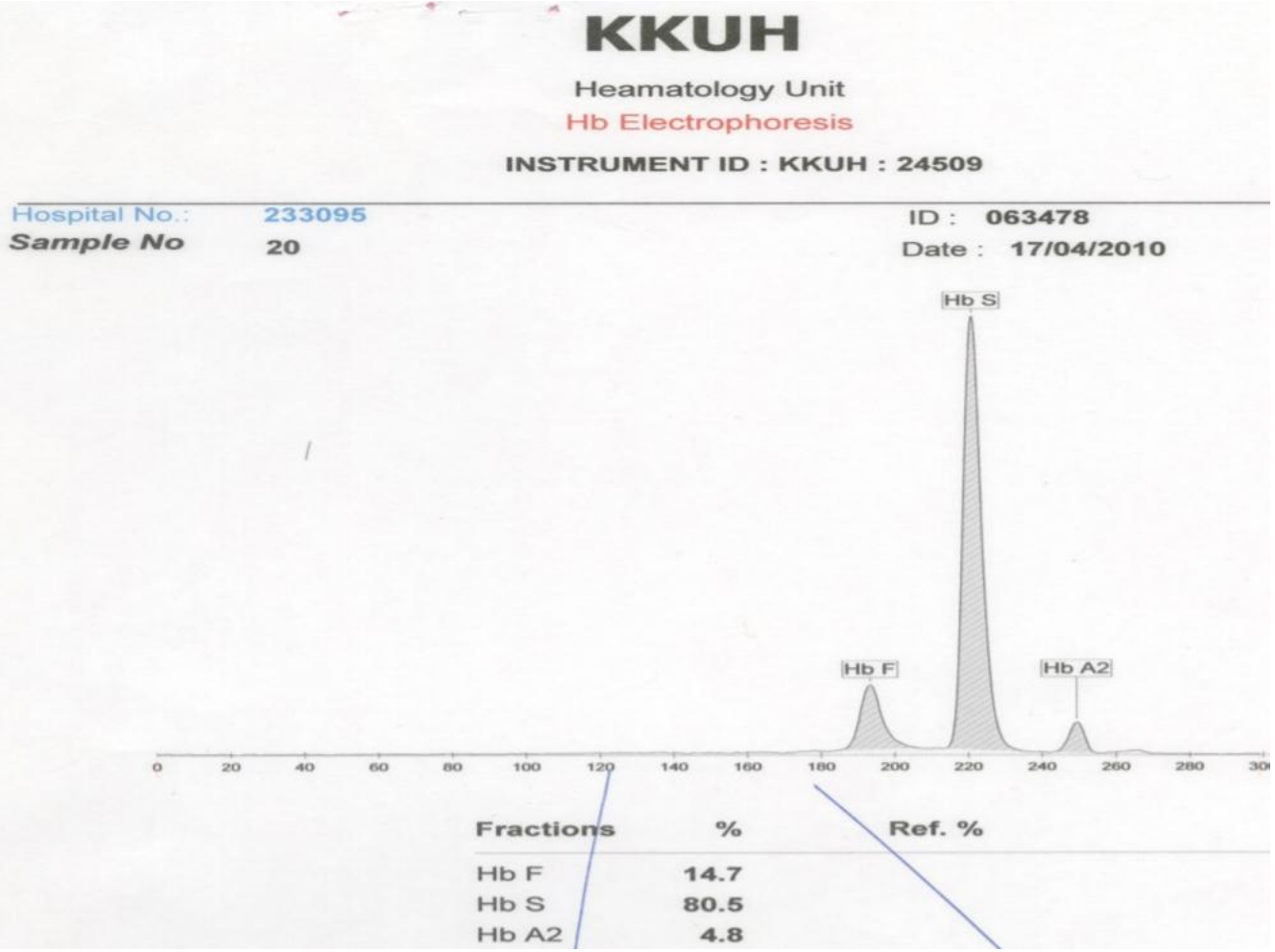


What is the name of test performed?
Hemoglobin electrophoresis

What are the findings?
Hb A: absent
Hb F: very high
Hb A2: normal

What is the most likely diagnosis?
High persistent HB F disease **OR** Normal fetus

What further investigations will you order?
Blood smear
Genetic study
Family study

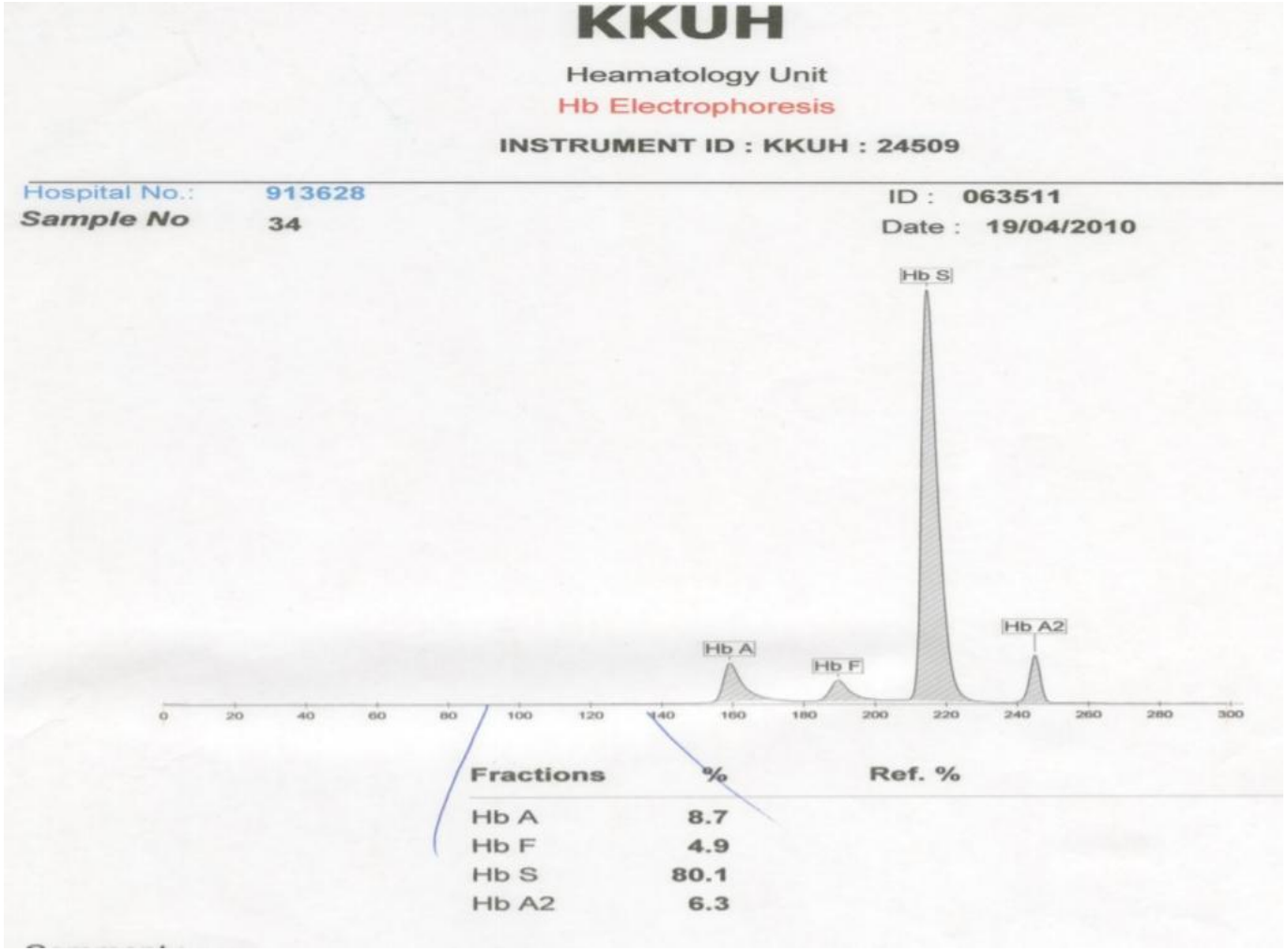


What is the name of test performed?
Hemoglobin electrophoresis

What are the findings?
Hb A: absent
Hb F: high
Hb A2: high
Abnormal Hb: Hb S high → sickle cell disease

What is the most likely diagnosis?
Sickle cell anemia disease with beta thalassemia

What further investigations will you order?
Solubility test
Blood smear
Genetic study
Family study

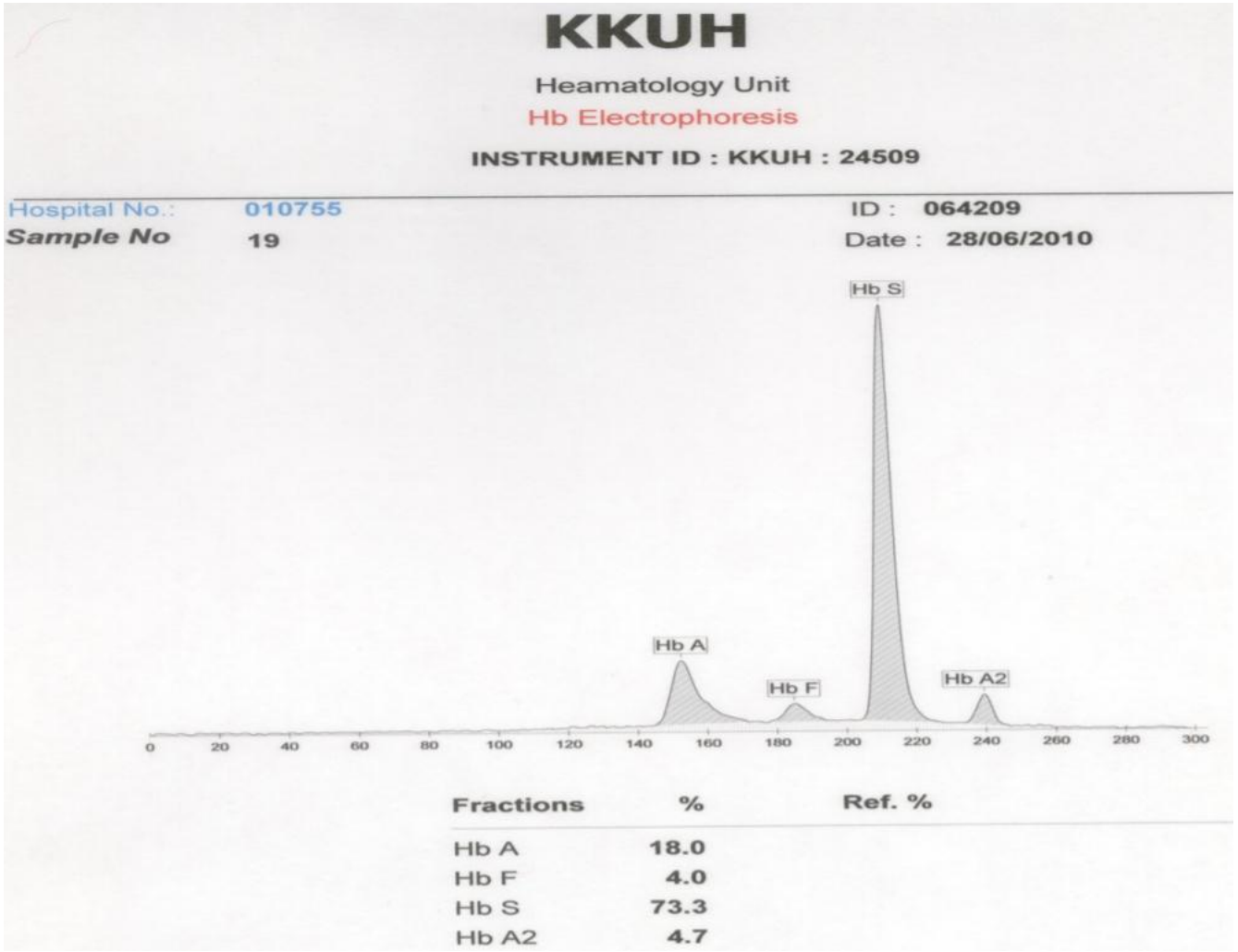


What is the name of test performed?
Hemoglobin electrophoresis

What are the findings?
Hb A: very low
Hb F: high
Hb A2: high
Abnormal Hb: Hb S high → sickle cell disease

What is the most likely diagnosis?
Sickle cell anemia disease with beta thalassemia
(with Hb A from blood transfusions)

What further investigations will you order?
Solubility test
Blood smear
Genetic study
Family study

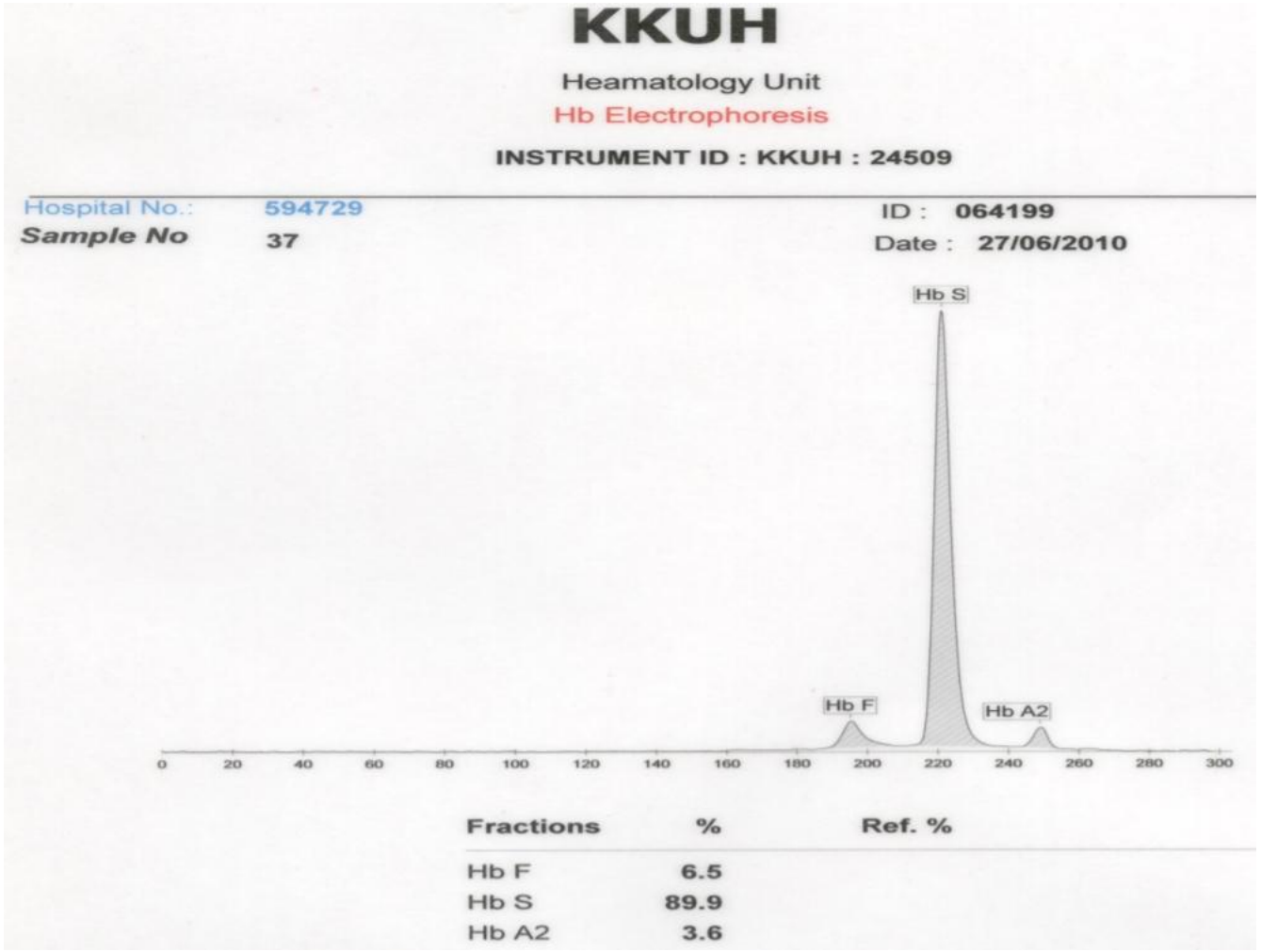


What is the name of test performed?
Hemoglobin electrophoresis

What are the findings?
Hb A: very low
Hb F: high
Hb A2: high
Abnormal Hb: Hb S high → sickle cell disease

What is the most likely diagnosis?
Sickle cell anemia disease with beta thalassemia
(with Hb A from blood transfusions)

What further investigations will you order?
Solubility test
Blood smear
Genetic study
Family study

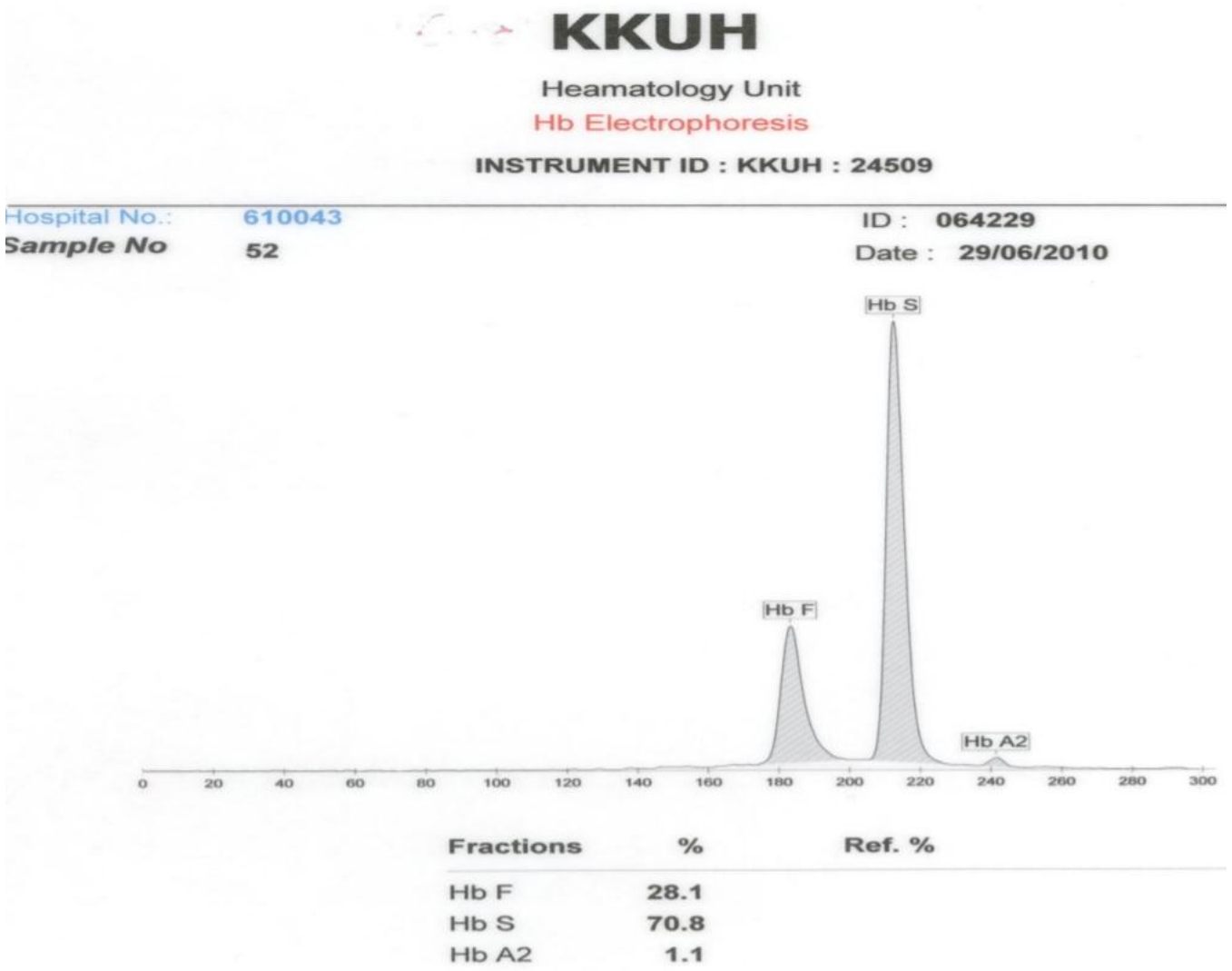


What is the name of test performed?
Hemoglobin electrophoresis

What are the findings?
Hb A: absent
Hb F: high
Hb A2: normal
Abnormal Hb: Hb S high → sickle cell disease

What is the most likely diagnosis?
Sickle cell anemia disease

What further investigations will you order?
Solubility test
Blood smear
Genetic study
Family study

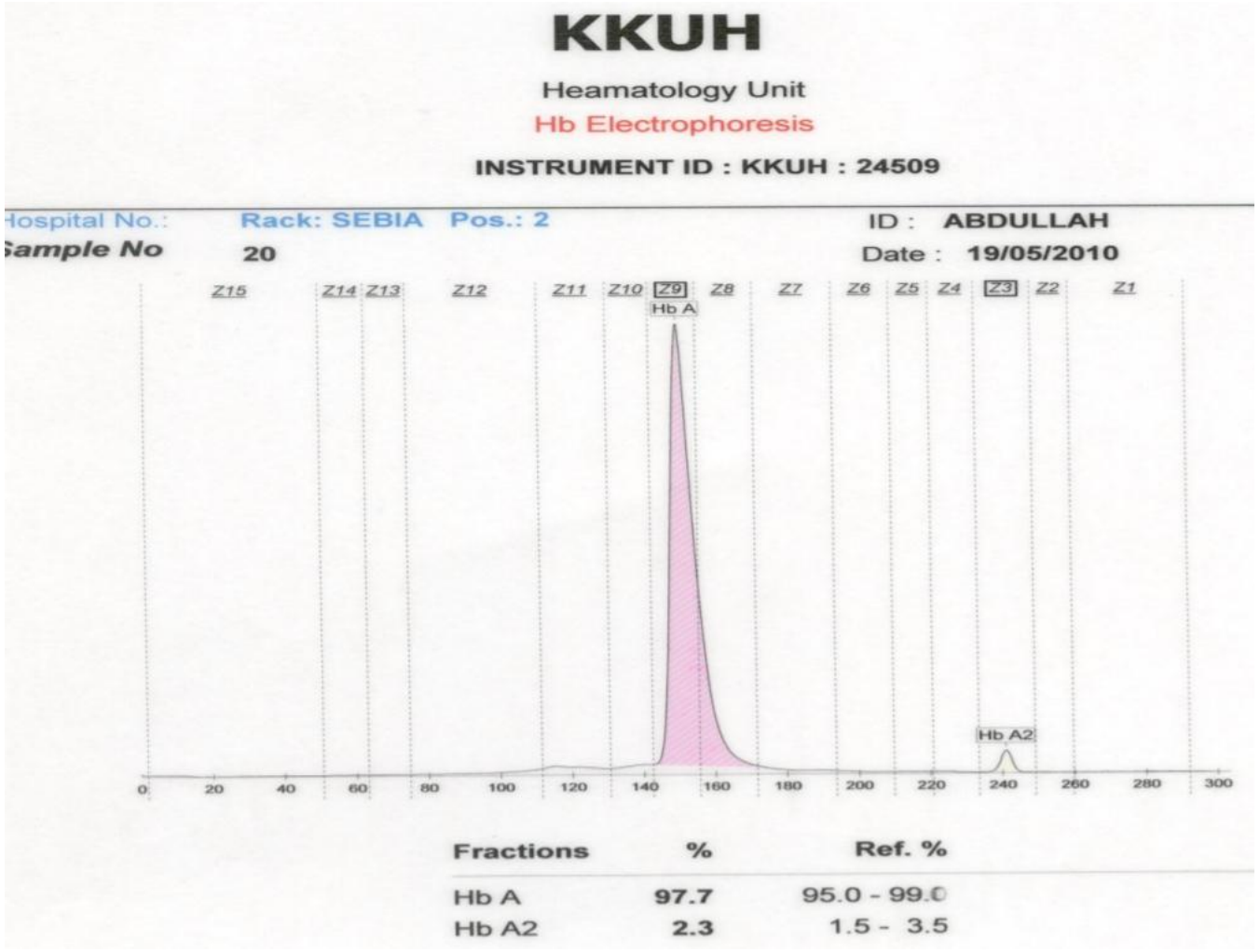


What is the name of test performed?
Hemoglobin electrophoresis

What are the findings?
Hb A: absent
Hb F: high
Hb A2: low
Abnormal Hb: Hb S high → sickle cell disease

What is the most likely diagnosis?
Sickle cell anemia disease with alpha thalassemia
with high Hb F

What further investigations will you order?
Solubility test
Blood smear
Genetic study
Family study

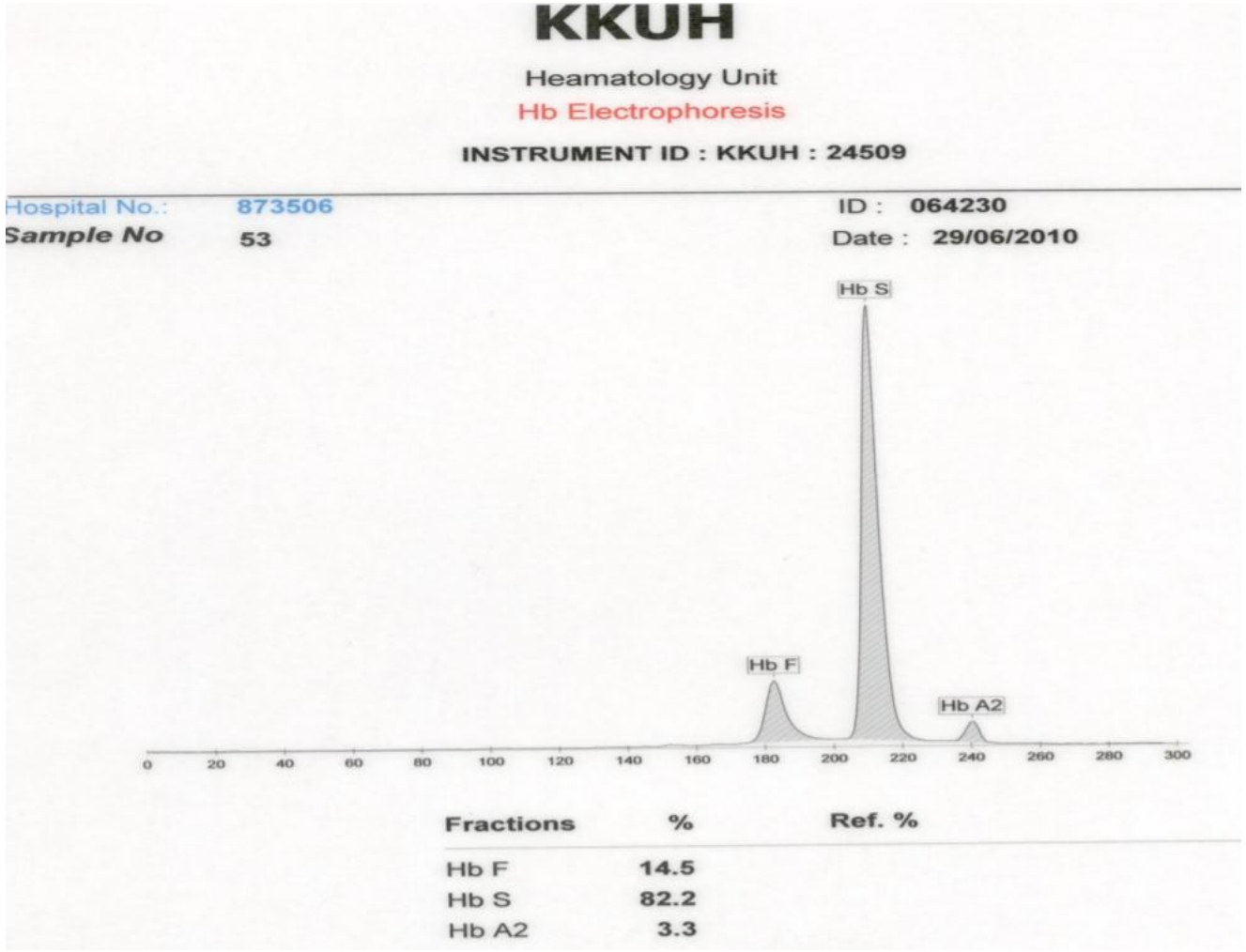


What is the name of test performed?
Hemoglobin electrophoresis

What are the findings?
Hb A: normal
Hb F: absent
Hb A2: normal

What is the most likely diagnosis?
Normal electrophoresis (even with HbF absence)

What further investigations will you order?
NONE

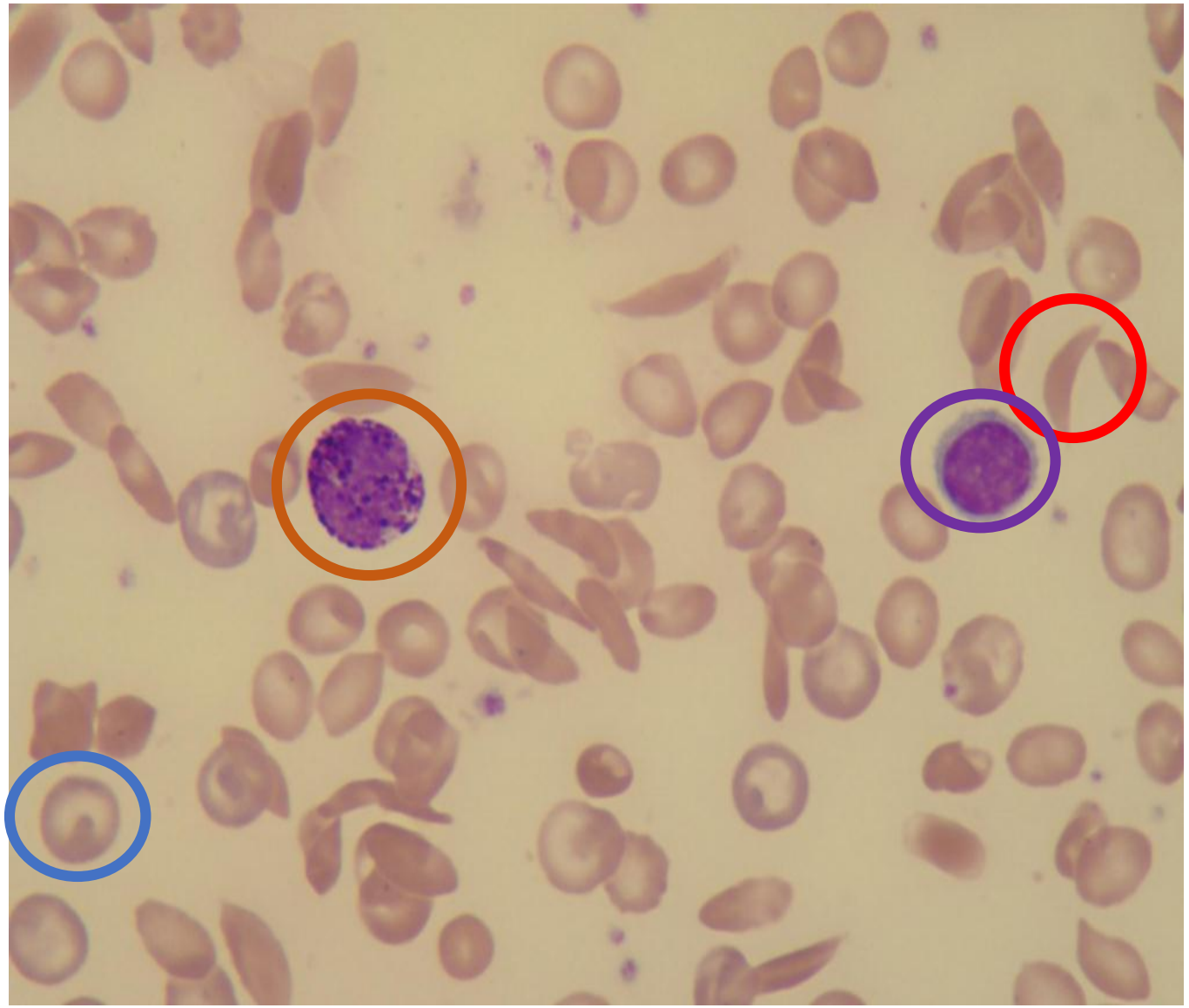


What is the name of test performed?
Hemoglobin electrophoresis

What are the findings?
Hb A: absent
Hb F: high
Hb A2: normal
Abnormal Hb: Hb S high → sickle cell disease

What is the most likely diagnosis?
Sickle cell anemia disease, with high Hb F

What further investigations will you order?
Solubility test
Blood smear
Genetic study
Family study

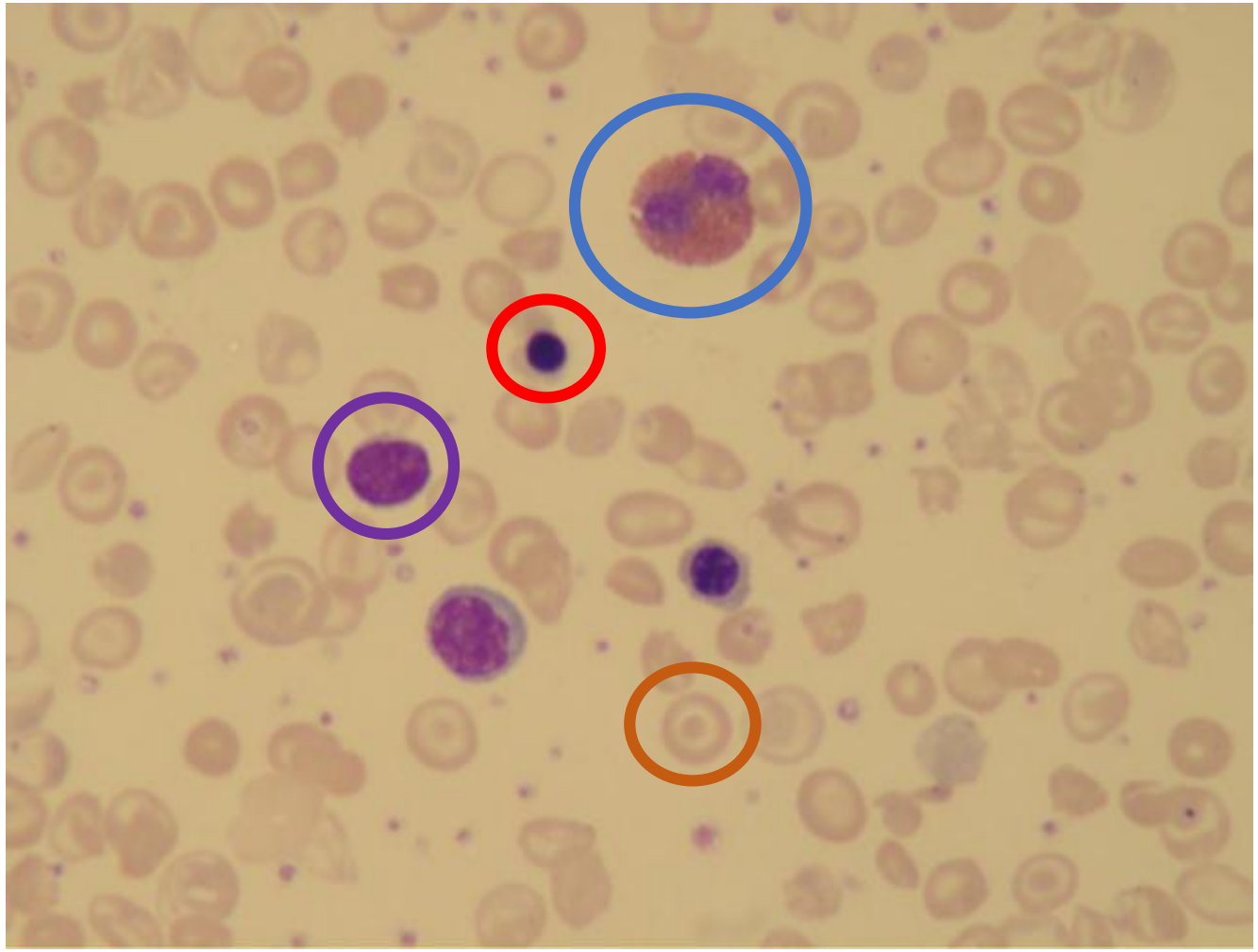


What is the name of test performed?
Blood smear/film

What are the findings?
Sickled cells
Target cells
Basophil
Lymphocyte

What is the most likely diagnosis?
Sickle cell anemia disease

What further investigations will you order?
Solubility test
Hemoglobin electrophoresis
Genetic study
Family study



What is the name of test performed?

Blood smear/film

What are the findings?

Nucleated RBCs

Hypochromsia

Microcytosis

Esinophils - lymphocytes

Anisocytosis (variation in size)

Poikilocytosis (variation in shape).

Target cells

What is the most likely diagnosis?

Beta thalassemia major

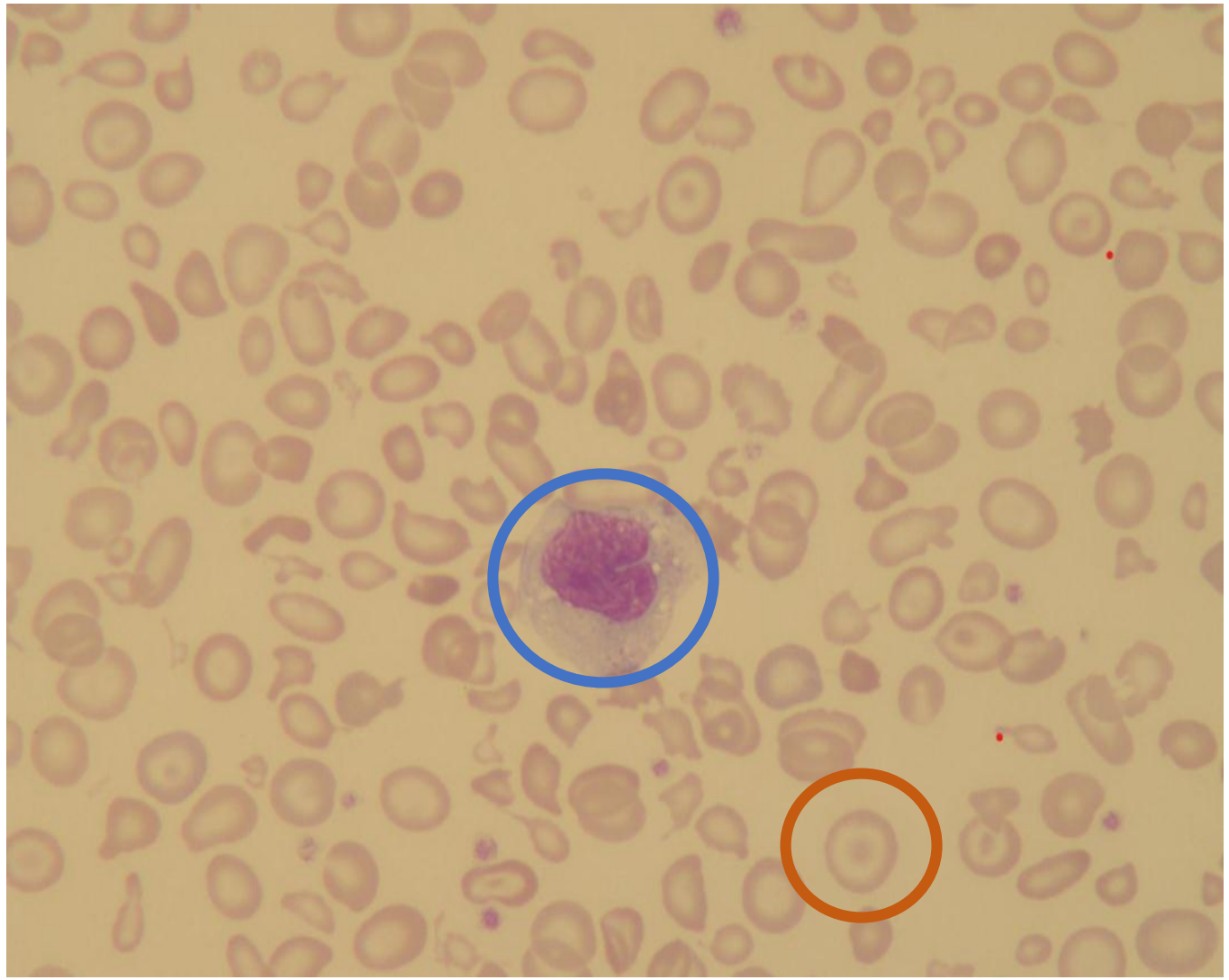
What further investigations will you order?

Iron profile

Hemoglobin electrophoresis

Genetic study

Family study



What is the name of test performed?
Blood smear/film

What are the findings?
Hypochromsia
Microcytosis
Monocytes
Anisocytosis (variation in size)
Poikilocytosis (variation in shape).
Target cells

What is the most likely diagnosis?
Alpha thalassemia

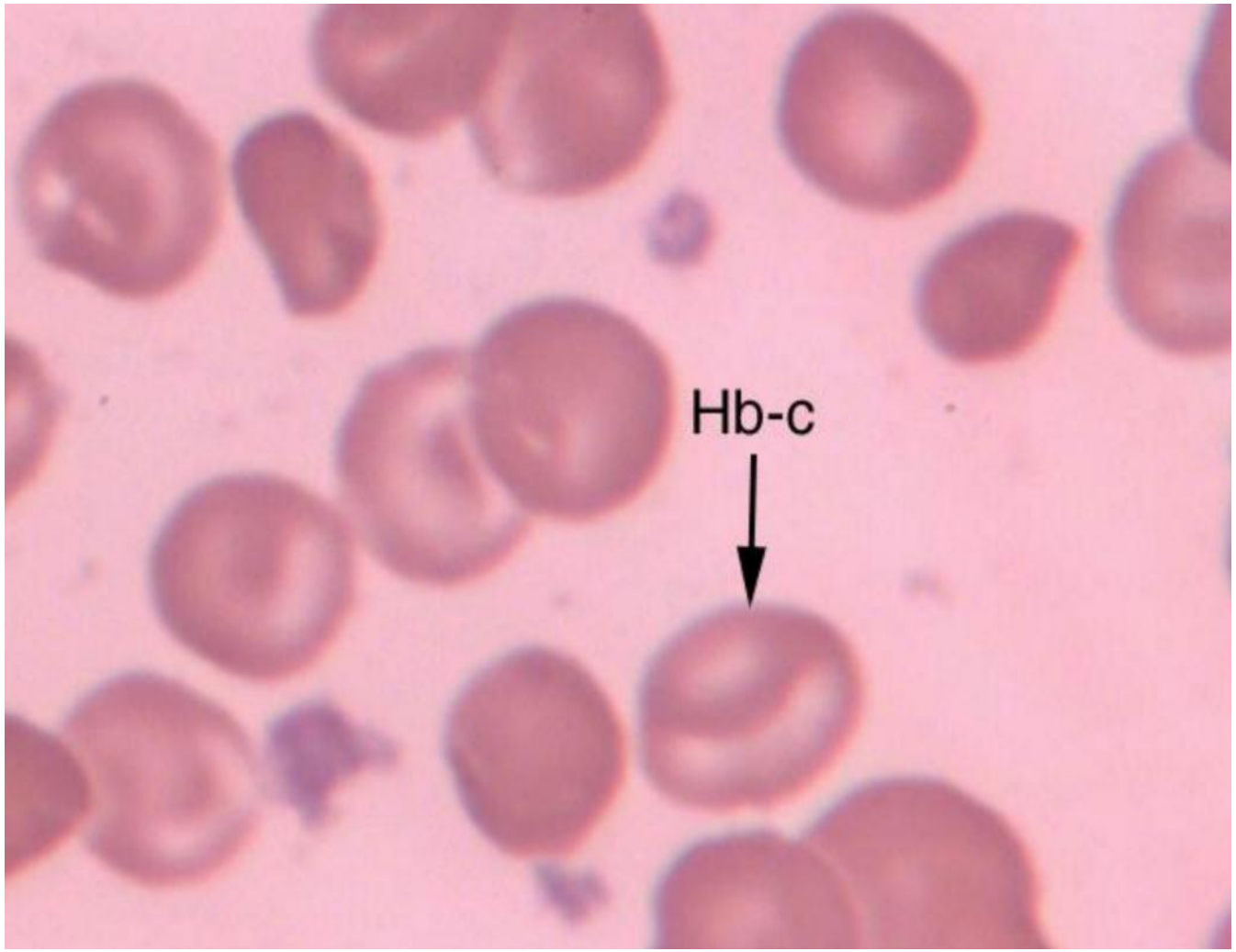
What further investigations will you order?
Iron profile
Hemoglobin electrophoresis
Genetic study
Family study

What is the name of test performed?
Peripheral blood smear/film with supravital stain

What are the findings?
RBCs with dark granules (golf ball appearance)

What is the most likely diagnosis?
Hemoglobin H (alpha thalassemia with 3 gene deletions)

What further investigations will you order?
Iron profile
Hemoglobin electrophoresis
Genetic study
Family study



What is the name of test performed?
Peripheral blood smear/film

What are the findings?
Target cells
Rhomboidal / crystal RBC

What is the most likely diagnosis?
Hemoglobin C disease

What further investigations will you order?
Hemoglobin electrophoresis
Genetic study
Family study

Finished ? Examine your self : HERE

Good Luck!

Done by: Jawaher Abanumy

Revised by:
Abdulaziz Al-Hussainy
Safa Al-Osaimi