

# Hb S + Beta-thal.

Patient under transfusion therapy.  
Profile was done just before  
exchange transfusion

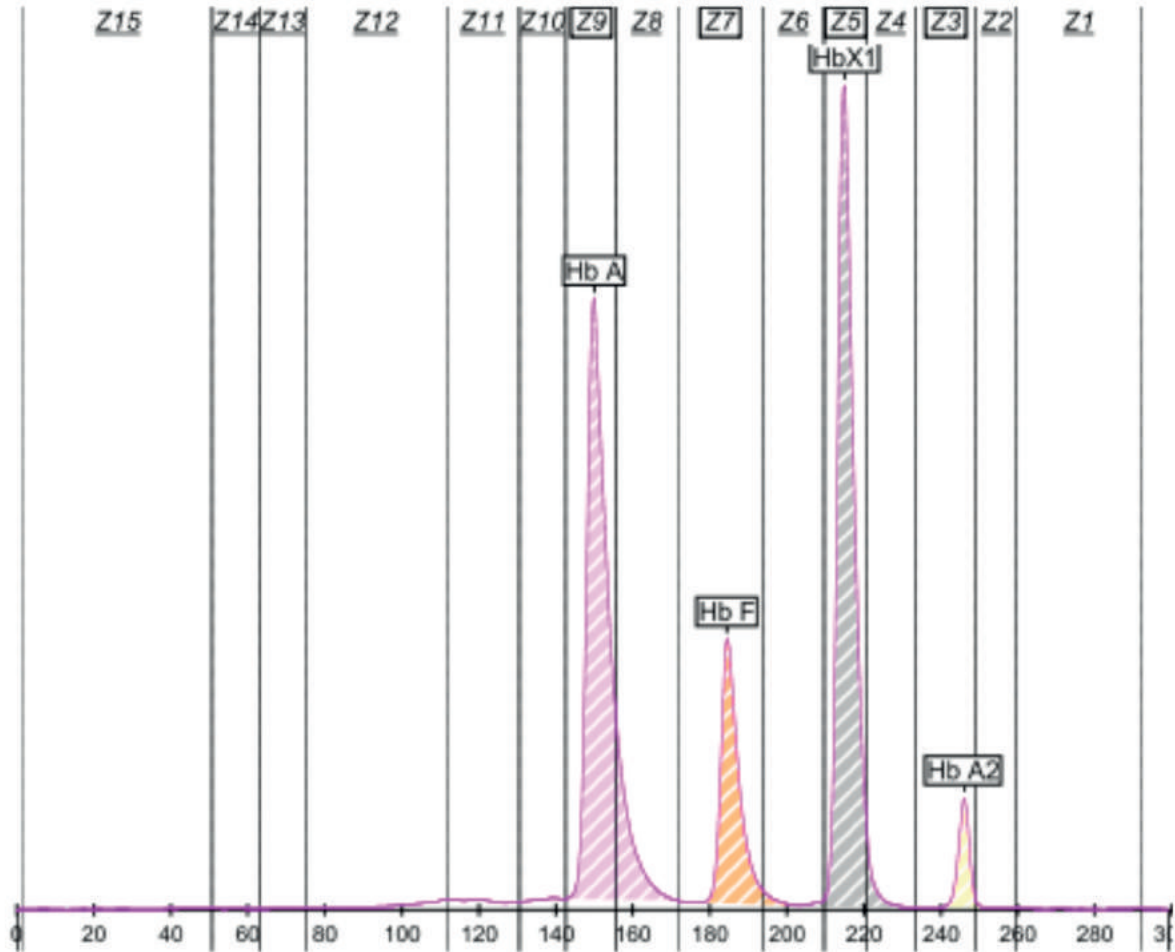
Globin chain(s) involved: **Beta**

Status: **Compound heterozygous**

Migration in zone(s): **Z(S) (=Z5)**

Migration in position(s): **214**

Peak position may vary +/- 1

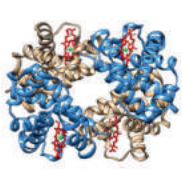


Z2 = Z(C)  
Z3 = Z(A2)  
Z4 = Z(E)  
Z5 = Z(S)  
Z6 = Z(D)  
Z7 = Z(F)  
Z9 = Z(A)

### Capillary Electrophoresis

| Fractions    | Value % |
|--------------|---------|
| Hb A         | 40,4    |
| Hb F         | 14,6    |
| Hb S (Hb X1) | 41,3    |
| Hb A2        | 3,7     |

**Comments on this profile:** Hb A comes from the last transfusion. Hb F is elevated. Hb A2 measurement has no clinical significance due to transfusion.



# Hb S + Beta-thal.

Patient under transfusion therapy.  
Profile was done shortly after  
exchange transfusion

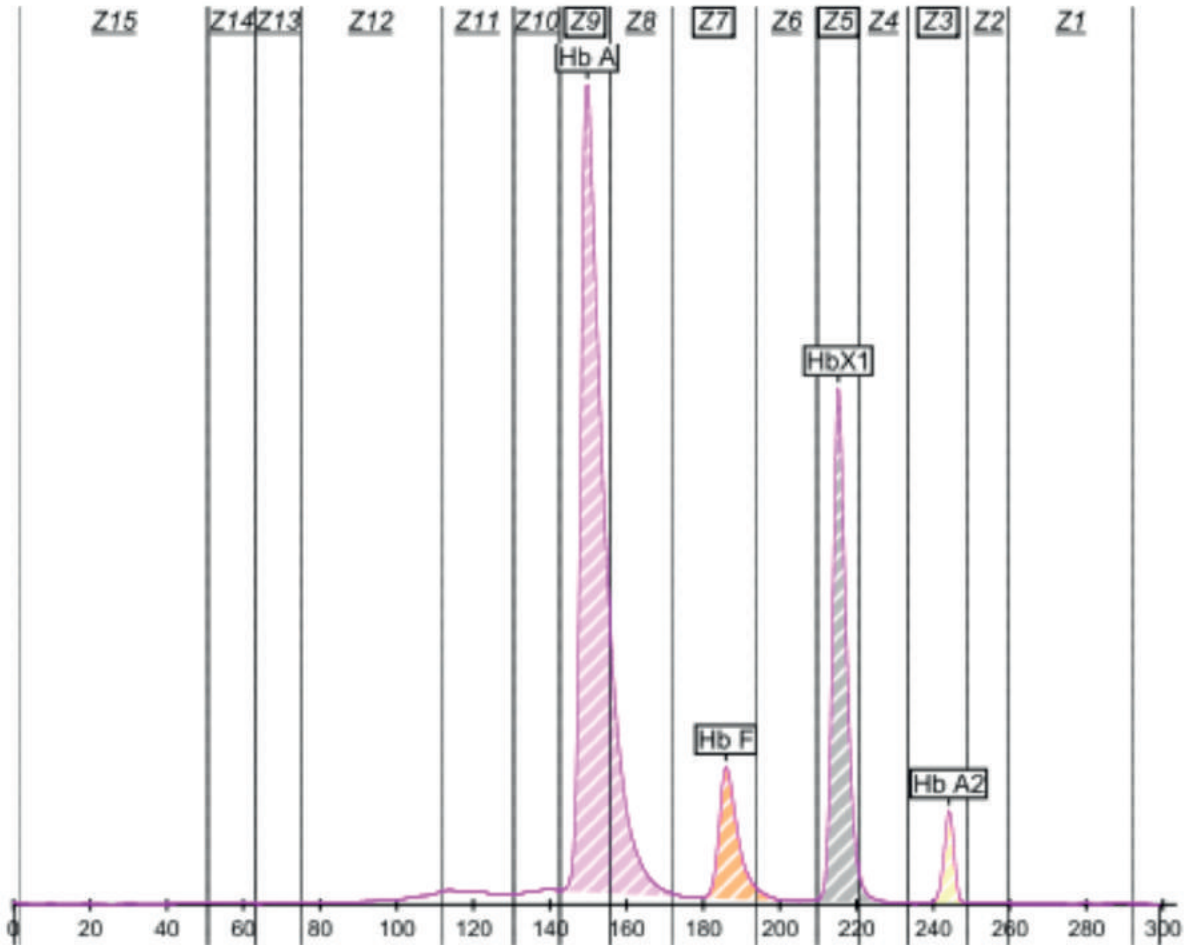
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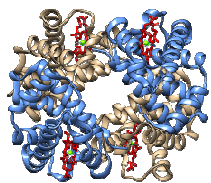


Z2 = Z(C)  
Z3 = Z(A2)  
Z4 = Z(E)  
Z5 = Z(S)  
Z6 = Z(D)  
Z7 = Z(F)  
Z9 = Z(A)

## Capillary Electrophoresis

| Fractions    | Value % |
|--------------|---------|
| Hb A         | 63,8    |
| Hb F         | 8,6     |
| Hb S (Hb X1) | 24,4    |
| Hb A2        | 3,2     |

**Comments on this profile:** Hb F and Hb A2 are reduced due to transfusion.



# Hb S + $\beta$ -thalassemia

## Patient under transfusion therapy

### Mutation data

|                                                            |                                                                                                                                                           |
|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Status:                                                    | Compound heterozygous                                                                                                                                     |
| <b>Hb S</b>                                                |                                                                                                                                                           |
| Mutation                                                   | Beta 6 (A3) Glu>Val                                                                                                                                       |
| Nomenclature                                               | HBB:c.20A>T                                                                                                                                               |
| In combination with: <b><math>\beta</math>-thalassemia</b> |                                                                                                                                                           |
| Mutation                                                   | One of the many described Beta gene defects reported on <a href="http://globin.cse.psu.edu/hbvar/menu.html">http://globin.cse.psu.edu/hbvar/menu.html</a> |
| Nomenclature                                               |                                                                                                                                                           |

### Comments:

### Hematology

| Hematological parameters | Results |
|--------------------------|---------|
| RBC                      |         |
| Hemoglobin               |         |
| Hematocrit               |         |
| MCV                      |         |

| Hematological parameters | Results      |
|--------------------------|--------------|
| MCH                      |              |
| Blood smear              | Sickle cells |
| Serum iron and ferritin  |              |

### Comments on hematology:

Sickle cell test positive. Due to transfusion, hematological parameters should not be taken into account.

### Other information

|                            |                                                                                                                               |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| <b>Clinical context:</b>   |                                                                                                                               |
| Clinical presentation      | No data                                                                                                                       |
| Genetic risk               | Severe risk in combination with Hb S, Hb C, Hb E, Hb D, Beta-thalassemia, Hb Lepore and other less common hemoglobin variants |
| Advice                     | Partner and family analysis                                                                                                   |
| <b>About this variant:</b> |                                                                                                                               |
| Stability                  | No data                                                                                                                       |
| Oxygen affinity            | No data                                                                                                                       |
| Found in                   | Black, Asian, Mediterranean populations                                                                                       |

### Comments:

### References: -