

### 3.14.2 A Confirmatory Hemoglobin Results Interpretation For SIS Entry

	<b>"Interpretation" Selected from Drop-down List</b>	<b>Full Interpretation Printed on Hemoglobin Confirmatory Test Results Mailer (PDF in SIS)</b>
1	FA, normal newborn	The hemoglobin electrophoretic pattern FA is consistent with normal hemoglobin in a newborn.
2	AF, normal infant	The hemoglobin electrophoretic pattern AF is consistent with normal hemoglobin in an infant.
3	AF, transfused; DNA pending	The hemoglobin electrophoretic pattern is AF. This result is in a transfused patient. DNA analysis will be done.
4	A, normal adult	The hemoglobin electrophoretic pattern is consistent with normal hemoglobin.
5	F + family tests, beta thal major	The hemoglobin electrophoretic pattern F and family studies are consistent with homozygous beta <sup>o</sup> thalassemia (beta thalassemia major; Cooley's Anemia) in a newborn. Beta thalassemia major results in severe, transfusion-dependent anemia.
6	F; DNA pending	The hemoglobin electrophoretic pattern F is consistent with homozygous beta <sup>o</sup> thalassemia (beta thalassemia major; Cooley's Anemia) in a newborn. DNA analysis will be done.
7	FC; DNA pending	The hemoglobin electrophoretic pattern FC is consistent with homozygous hemoglobin C (Hb CC), hemoglobin C/beta <sup>o</sup> thalassemia, or Hb C-Hereditary Persistence of Fetal Hemoglobin in a newborn. DNA analysis will be done.
8	FC + family tests, CC	The hemoglobin electrophoretic pattern FC and family studies (mother: AC, father: AC) are consistent with homozygous hemoglobin C (Hb CC) in a newborn. Although hemoglobin CC is usually a benign condition, it can be associated with hemolytic anemia and aplastic episodes.
9	FC + family tests, C/b <sup>o</sup> thal	The hemoglobin electrophoretic pattern and family studies are consistent with hemoglobin C/b <sup>o</sup> thalassemia in a newborn. This condition can result in mild to moderate hemolytic anemia and moderate to marked splenomegaly.
10	FC + family tests, C/HPFH	The hemoglobin electrophoretic pattern and family studies are consistent with hemoglobin C/Hereditary Persistence of Fetal Hemoglobin (Hb C/HPFH) in a newborn. Hb C/HPFH is a benign condition.
11	FCA + family tests, C/b <sup>+</sup> thal	The hemoglobin electrophoretic pattern FCA and family studies are consistent with hemoglobin C/beta <sup>+</sup> thalassemia in a newborn. This diagnosis assumes the patient was not transfused. Microcytosis and mild anemia are associated with Hb C/ beta <sup>+</sup> thalassemia.
12	FCA; DNA pending	The hemoglobin electrophoretic pattern FCA is consistent with hemoglobin C/beta <sup>+</sup> thalassemia in a newborn. This diagnosis assumes the patient was not transfused. DNA analysis will be done.
13	FD; DNA pending	The hemoglobin electrophoretic pattern FD is suggestive for homozygous hemoglobin D (Hb DD), hemoglobin D-beta <sup>o</sup> thalassemia, or Hemoglobin D-Hereditary Persistence of Fetal Hemoglobin in a newborn. DNA analysis will be done.

### 3.14.2 A Confirmatory Hemoglobin Results Interpretation For SIS Entry

14	FD + family tests, DD	The hemoglobin electrophoretic pattern FD and family studies are consistent with homozygous hemoglobin D (Hb DD) in a newborn. Hemoglobin DD is a clinically benign condition, with no reported association with anemia or hemolysis.
15	FD + family tests, D/b <sup>0</sup> thal	The hemoglobin electrophoretic pattern FD and family studies are consistent with hemoglobin D/b <sup>0</sup> thalassemia in a newborn. This condition may cause microcytosis and mild anemia.
16	FDA + family tests, D/b <sup>+</sup> thal	The hemoglobin electrophoretic pattern FDA and family studies are consistent with hemoglobin D/beta <sup>+</sup> thalassemia in a newborn. This condition can result in mild to moderate hemolytic anemia and moderate to marked splenomegaly.
17	FE; DNA pending	The hemoglobin electrophoretic pattern FE is consistent with homozygous hemoglobin E (Hb EE) or hemoglobin E/beta <sup>0</sup> thalassemia in a newborn. DNA analysis will be done.
18	FE + family tests, EE	The hemoglobin electrophoretic pattern FE and family studies are consistent with homozygous hemoglobin E (hb EE) in a newborn. Hemoglobin EE is clinically benign, with microcytosis and occasionally mild anemia.
19	FE + family tests, E/b <sup>0</sup> thal	The hemoglobin electrophoretic pattern FE and family studies are consistent with hemoglobin E/beta <sup>0</sup> thalassemia in a newborn. Hemoglobin E/beta <sup>0</sup> thalassemia is a clinically significant hemoglobinopathy that may result in a transfusion-dependent thalassemia syndrome.
20	E (adult); DNA pending	The hemoglobin electrophoretic pattern E and marked microcytosis are consistent with homozygous hemoglobin E (Hb EE) or hemoglobin E/beta <sup>0</sup> thalassemia. DNA analysis will be done.
21	FEA + family tests, E/b <sup>+</sup> thal	The hemoglobin electrophoretic pattern FEA and family studies are consistent with hemoglobin E/beta <sup>+</sup> thalassemia in a newborn. This diagnosis assumes the patient was not transfused. DNA analysis will be performed. Hemoglobin E/beta <sup>+</sup> thalassemia is a clinically significant hemoglobinopathy that may result in a transfusion-dependent thalassemia syndrome.
22	FEA; DNA pending	The hemoglobin electrophoretic pattern FEA is consistent with hemoglobin E/beta <sup>+</sup> thalassemia in a newborn. This diagnosis assumes the patient was not transfused. DNA analysis will be performed.
23	FA + Barts; DNA pending	The hemoglobin electrophoretic pattern FA Bart's is consistent with alpha thalassemia in a newborn. The percentage of Bart's hemoglobin is suggestive of hemoglobin H disease. In order to establish the alpha globin status of this individual, DNA analysis will be done.
24	FS; DNA pending	The hemoglobin electrophoretic pattern FS is consistent with homozygous hemoglobin S (Hb SS), Hb S/beta <sup>0</sup> thalassemia, Hb S/delta beta thalassemia, or Hb S-Hereditary Persistence of Fetal Hemoglobin in a newborn. DNA analysis will be done.

### 3.14.2 A Confirmatory Hemoglobin Results Interpretation For SIS Entry

25	FS + family tests, SS	The hemoglobin electrophoretic pattern FS and family studies (mother: AS, father: AS) are consistent with sickle cell anemia (homozygous hemoglobin S, Hb SS) in a newborn. Sickle cell anemia is the most common type of sickle cell disease and generally has the most marked clinical severity.
26	FS + family tests, S/b <sup>0</sup> thal	The hemoglobin electrophoretic pattern FS and family studies are consistent with hemoglobin S/beta <sup>0</sup> thalassemia in a newborn. Hemoglobin S/beta <sup>0</sup> thalassemia is a sickle cell disorder with moderate to marked clinical severity.
27	FS + family tests, S/HPFH	The hemoglobin electrophoretic pattern FS and family studies are consistent with hemoglobin S/Hereditary Persistence of Fetal Hemoglobin in a newborn. DNA analysis will be done. Hb S/HPFH is usually a benign condition in childhood.
28	FSA; DNA pending	The hemoglobin electrophoretic pattern FSA is consistent with hemoglobin S/beta+ thalassemia in a newborn. This diagnosis assumes the patient was not transfused. DNA analysis will be performed.
29	FSA + family tests, S/b <sup>+</sup> thal	The hemoglobin electrophoretic pattern FSA and family studies are consistent with hemoglobin S/beta+ thalassemia in a newborn. This diagnosis assumes the patient was not transfused. DNA analysis will be performed. Hemoglobin S/b+ thalassemia is a sickle cell disorder with mild to moderate clinical severity.
30	FSC	The hemoglobin electrophoretic pattern FSC is consistent with hemoglobin SC disease in a newborn.
31	FSC + family tests, SC	The hemoglobin electrophoretic pattern FSC and family studies are consistent with hemoglobin SC disease in a newborn. Hemoglobin SC disease is a sickle cell disorder with mild to moderate clinical severity.
32	FSD; DNA pending	The hemoglobin electrophoretic pattern FSD is suggestive for hemoglobin SD disease. DNA analysis will be performed.
33	FSD + family tests, SD	The hemoglobin electrophoretic pattern FSD and family studies are suggestive for hemoglobin SD disease. DNA analysis will be performed. Hemoglobin SDLos Angeles disease is a sickle cell disorder with moderate to marked clinical severity.
34	FSE; DNA pending	The hemoglobin electrophoretic pattern FSE is consistent with hemoglobin SE disease (sickle-hemoglobin E disease) in a newborn. DNA analysis will be performed.
35	FSE + family tests, SE	The hemoglobin electrophoretic pattern FSE and family studies are consistent with hemoglobin SE disease (sickle-hemoglobin E disease) in a newborn. Hb SE disease is associated with microcytosis, minimal anemia and few symptoms. Complications have been reported in association with infection.
36	FSV; other studies pending	The hemoglobin electrophoretic pattern FSV is consistent with hemoglobin S inherited in compound heterozygous fashion with a hemoglobin variant in a newborn. In order to identify the hemoglobin variant and determine its clinical significance, further analysis will be done.

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### 3.14.2 A Confirmatory Hemoglobin Results Interpretation For SIS Entry

37	FSV + family tests; other studies pending	The hemoglobin electrophoretic pattern FSV and family studies are consistent with hemoglobin S inherited in compound heterozygous fashion with a hemoglobin variant in a newborn. In order to identify the hemoglobin variant and determine its clinical significance, further analysis will be done.
38	FV + family tests, FV/b <sup>0</sup> thal	The hemoglobin electrophoretic pattern FV and family studies are consistent with the diagnosis of a beta globin chain variant inherited in a compound heterozygous fashion with beta <sup>0</sup> thalassemia in a newborn. In order to identify the hemoglobin variant and determine its clinical significance, further analysis will be done.
39	FV <sub>1</sub> V <sub>2</sub> ; other tests pending	The hemoglobin electrophoretic pattern FV <sub>1</sub> V <sub>2</sub> is consistent with compound heterozygosity for two different hemoglobin chain variants in a newborn. The clinical consequences of co-inheritance of two different hemoglobin variants are unknown. Further analysis will be done to identify the variants.
40	FV <sub>1</sub> V <sub>2</sub> + family tests; other tests pending	The hemoglobin electrophoretic pattern FV <sub>1</sub> V <sub>2</sub> and family studies are consistent with compound heterozygosity for two different hemoglobin chain variants in a newborn. The clinical consequences of co-inheritance of two different hemoglobin variants are unknown. Further analysis will be done to identify the variants.
41	FAC	The hemoglobin electrophoretic pattern FAC is consistent with hemoglobin C trait in a newborn. Hemoglobin traits are clinically benign carrier conditions.
42	AC (adult)	The hemoglobin electrophoretic pattern AC is consistent with hemoglobin C trait. Hemoglobin traits are clinically benign carrier conditions.
43	FAD	The hemoglobin electrophoretic pattern FAD and DNA studies are consistent with hemoglobin D trait in a newborn. Hemoglobin traits are clinically benign carrier conditions.
44	AD (adult)	The hemoglobin electrophoretic pattern AD and DNA studies are consistent with hemoglobin D trait. Hemoglobin traits are clinically benign carrier conditions.
45	AE (adult)	The hemoglobin electrophoretic pattern AE is consistent with hemoglobin E trait. Hemoglobin traits are clinically benign carrier conditions. Hb E trait causes microcytosis and may be associated with mild anemia. Unless the individual also has iron deficiency anemia, iron supplementation is usually not recommended.
46	FAV	The hemoglobin electrophoretic pattern FAV is consistent with a hemoglobin variant trait in a newborn. Most variant traits are clinically benign carrier conditions.
47	AV (adult), beta variant	The hemoglobin electrophoretic pattern AV is consistent with a hemoglobin variant trait. The percent of the variant is suggestive for a beta globin variant trait. Most variant traits are clinically benign carrier conditions.
48	AV (adult), alpha variant	The hemoglobin electrophoretic pattern AV is consistent with a hemoglobin variant trait. The percent of the variant is suggestive for an alpha globin variant trait. Most variant traits are clinically benign carrier conditions.

### 3.14.2 A Confirmatory Hemoglobin Results Interpretation For SIS Entry

49	AV (adult)	The hemoglobin electrophoretic pattern AV is consistent with a hemoglobin variant trait. Most variant traits are clinically benign carrier conditions.
50	FAS	The hemoglobin electrophoretic pattern FAS is consistent with sickle cell trait in a newborn. Hemoglobin traits are clinically benign carrier conditions.
51	Barts (low %), alpha deletion	The low percent of Bart's hemoglobin present may indicate a concomitant alpha gene deletion.
52	possible alpha thal trait (adult)	Hematological evaluation reveals microcytic anemia with normal hemoglobin A2 and F, and a normal FEP suggestive of a possible concomitant alpha thalassemia trait.
53	possible beta thal trait (adult); DNA pending	The normal hemoglobin electrophoretic pattern, microcytic anemia, and the elevated hemoglobin A2 and/or F is consistent with a diagnosis of beta-thalassemia trait. DNA analysis will be done.
54	AS (adult)	The hemoglobin electrophoretic pattern AS is consistent with sickle trait. Hemoglobin traits are clinically benign carrier conditions.
55	High Bart's; DNA pending	The hemoglobin electrophoretic pattern Bart's only and the high percent of Bart's hemoglobin is consistent with Alpha Thalassemia Major. In order to establish the alpha globin status of this individual, DNA analysis will be done.