

**5.1: Hemoglobin Electrophoresis, G-6-PD, Betke-Kleihauer Stains,
Globin Chain Synthesis – “Record 6”**

CSSCD Forms (Collection) and Datasets (Storage) Relating to Laboratory Study

<u>Record #</u>	<u>Name of Form</u>	<u>Collected</u>	<u>Patient Population</u>	<u>SAS Dataset</u>
“06”	“Hemoglobin Electrophoresis”	03/79-09/88	All at entry; repeat at age 2 if entry age < 6 months; repeat at age 5 if entry age < 6 months	R06.SD2
“06”	G-6-PD Studies	03/79-09/81	All at entry if entry age > 9 months; at age 9 months if entered at < 9 months.	R06.SD2
“06”	Acid-Elution Stains	03/79-12/81	Age > 1 if HbF > 10%	R06.SD2
“06”	Globin Chain Synthesis	03/79-3/82	Age > 1 with MCV < 80 or A ₂ > 3.5%	R06.SD2
“07”	Pocked RBC count	03/79-11/85	All patients at time of routine visits through 11/83; After 11/83, at time of routine visits until PRBC > 5%; at time of spleen scan; at time of splenic sequestration and bacterial infection	R07.SD2
“08”	Iron-Lead	10/81-08/82	All	R08.SD2
“27”	Alloantibodies	03/79-12/85	At entry for patients with history of transfusion prior to entry; immediately prior to and 2-6 weeks after transfusion for patients transfused during study; every 3 months for patients on chronic transfusion; at time of diagnosis of pregnancy, at time of delivery, and 2-6 weeks after delivery.	R27.SD2
“95”	Density Gradient	1984-1986	All (optional)	R95.SD2
“04”	α Globin Gene Mapping/β ^s Haplotyping	01/84-09/88	SS & S/β ^s thalassemia patients; chronically transfused patients with no CDC Hb diagnosis	R04.SD2

See Appendix G for Central Laboratories section of Manual of Operations.

- A. List of variables deleted **CDCINIT F06LASTU F06NDATE DBC**
- B. List of variables modified **NONE**
- C. List of variables modified with a name change **NONE**

5.1: Hemoglobin Electrophoresis, G-6-PD, Betke-Kleihauer Stains, Globin Chain Synthesis – “Record 6”

D. Old name

E. New name

F. List of variables modified date to days since DOE

G. Old name **DBC**

H. New name **JDBC**

I. Collection Information:

- Samples for hemoglobin electrophoresis performed by the National Hemoglobinopathy Standardization Laboratories at the Centers for Disease Control (CDC) were to be collected
 1. at entry into the study if untransfused at time of entry;
 2. 6 months after “last” transfusion if transfused at time of entry;
 3. at age 2 (repeat test for patients enrolled as infants);
 4. at age 5 (HbF only for patients who turned 5 between 02/84 and 09/88).
- Samples for G-6-PD testing performed by the VA Hospital in Jackson, MS (Dr. Martin Steinberg) were to be collected
 1. at entry if patient was entered at ≥ 9 months of age;
 2. at age 9 months or older if patient was entered at < 9 months of age and turned 9 months by September 1981.
- Samples for Acid Elution (Betke-Kleihauer) stains performed locally were to be collected only once on patients > 1 year of age whose CDC HbF level was $> 10\%$. Betke-Kleihauer stains and a copy of results from the local laboratory were forwarded to the Chair of the Laboratory Committee (Dr. Martin Steinberg) for review. If the HbF distribution was pancellular, the patient was considered to have hereditary persistence of fetal hemoglobin (HPFH) and ineligible for study participation. However, these patients did continue to be followed.
- Samples for globin chain synthesis studies performed by the VA Hospital in Jackson, MS (Dr. Martin Steinberg) were done only once if the CDC Hb diagnosis was not definitely SS—i.e., phenotype $S + A_2 > 3.5\%$ or $MCV < 80$ fl in patients > 1 year of age.

See Appendix G for Central Laboratories section of Manual of Operations.

J. Date Collection Period:

- Hemoglobin Electrophoresis: 03/79 – 09/88

**5.1: Hemoglobin Electrophoresis, G-6-PD, Betke-Kleihauer Stains,
Globin Chain Synthesis – “Record 6”**

- G-6-PD: 03/79 – 09/81
- Acid Elution Stains: 03/79 – 12/81
- Globin Chain Synthesis: 03/79 – 3/82

**5.1: Hemoglobin Electrophoresis, G-6-PD, Betke-Kleihauer Stains,
Globin Chain Synthesis – “Record 6”**

K. Form Version Dates:

- CDC Hemoglobin Electrophoresis Report Form: 12/78, 04/87
- G-6-PD: N/A
- Acid Elution Stains: N/A
- Globin Synthesis: N/A

L. Files Used to Store Information:

SAS System File: **R06.SD2**

Format File: **R06.FMT**

M. Unique Record Identifiers: **ANONID, CDCCYCLE**

Records within the dataset are sorted by **ANONID** and **CDCCYCLE**.

N. Number of Observations (Patients) in SAS Dataset: 4603 (3884)

O. Contents of SAS Dataset:

- Alphabetical Listing of Variables: See pp. 5-6
- Listing of Variables by Position: See p. 7

P. Notes About Selected Variables:

- **DENS** – is the name of the % CDC Densitometry S variable. In general, a value for % S was provided only if the hemoglobin diagnosis was S/ β^+ thalassemia (**HEMO=3** in **R09.SD2**) or recent transfusion was suspected (**STRANS=1**).
- **DENF** – is the name of the % CDC Densitometry F variable. Percentage F was not always reported for infants < 6 months of age.
- **DENA2** – is the name of the % CDC Densitometry A₂ variable. Percentage A₂ is not applicable for patients with HbSC (**HEMO=2** in **R09.SD2**) and was not always reported for infants < 6 months of age.
- **DENA** – is the name of the % CDC Densitometry A variable. Percentage A is not applicable for patients with (**HEMO=1, 2, 4, 5, 6, 7, or 8** in **R09.SD2**) unless a recent transfusion was suspected (**STRANS=1**).
- **FSTUDY** – is the variable name for the full densitometry study (**FSTUDY=1** (yes) if full densitometry study was performed). In general, only a partial densitometry study was performed (**FSTUDY=2** (no)).
- **MULTRA2** – is the variable name for whether or not multiple A₂ readings were provided on the CDC report. Two A₂ results were reported if both partial and

5.1: Hemoglobin Electrophoresis, G-6-PD, Betke-Kleihauer Stains, Globin Chain Synthesis – “Record 6”

complete densitometry were performed. If results for both were present, results from the complete densitometry were entered.

- **MULTRF** – is the variable name for whether multiple F readings were included on the CDC report. If values were quantitated because both partial and complete densitometry were performed, results from the complete densitometry were entered.

Q. Computed Variables: None

R. Inter-Relationship With Other Datasets:

- Other forms which collected hemoglobin electrophoresis results performed locally include

Phase 1 Forms	SAS Dataset	See Section
Form 16	R16.SD2	4.1
Form 16E	R24.SD2	4.2
Forms 17, 19, 20	R1722.SD2	4.5
Form 25	R25.SD2	4.6
Form 83	R83.SD2	9.1
Form 84	R84.SD2	9.2

- The CDC hemoglobin diagnosis (**HEMO**) is stored in **R09.SD2** (See Section 1).
- G-6-PD deficiency status (**G6PD**) is stored in **R09.SD2** (See Section 1).

CODEBOOK FOR CSSCD "RECORD 6"

SPECIAL LABORATORY STUDIES

CSSCD INFANT COHORT PATIENTS

CONTENTS OF SAS DATASET: R06.SD2

DATA FROM CSSCD RECORD 06 - SPECIAL LABORATORY STUDIES

CDC HEMOGLOBIN ELECTROPHORESIS, BETKE-KLEIHAUER, G-6-PD, GLOBIN CHAIN SYNTHESIS

VARIABLES ARE LISTED IN ALPHABETICAL ORDER AND IN ORDER OF THEIR POSITION

IN THE SAS DATASET

The SAS System

16:03 Thursday, October 12, 2006 4

The CONTENTS Procedure

Data Set Name	OUT1.R06	Observations	4603
Member Type	DATA	Variables	24
Engine	V9	Indexes	0
Created	16:35 Thursday, October 12, 2006	Observation Length	192
Last Modified	16:35 Thursday, October 12, 2006	Deleted Observations	0
Protection		Compressed	NO
Data Set Type		Sorted	NO
Label			
Data Representation	WINDOWS		
Encoding	wlatin1 Western (Windows)		

Engine/Host Dependent Information

Data Set Page Size	16384
Number of Data Set Pages	55
First Data Page	1
Max Obs per Page	85
Obs in First Data Page	65
Number of Data Set Repairs	0
File Name	r06.sas7bdat
Release Created	9.0000M0
Host Created	XP_PRO

Alphabetic List of Variables and Attributes

#	Variable	Type	Len	Label
4	ACETPHOS	Num	8	CDC ACETATE PHOSPHORESIS
20	AESCLIN	Num	8	ACID ELUTION STAINS
21	AESQUAL	Num	8	ACID ELUTION STAINS
19	AESTAIN	Num	8	WAS ACID ELUTION STAINS DONE
5	AGARPHOS	Num	8	CDC AGAR PHOSPHORESIS
1	ANONID	Char	8	ANONYMIZED ID #
3	CDC	Num	8	WAS CDC DONE
2	CDCCYCLE	Num	8	RECORD 6 CYCLE #
10	DENA	Num	8	CDC DENSITOMETRY - A
9	DENA2	Num	8	CDC DENSITOMETRY - A2
8	DENC	Num	8	CDC DENSITOMETRY - C
7	DENF	Num	8	CDC DENSITOMETRY - F
6	DENS	Num	8	CDC DENSITOMETRY - S
11	FSTUDY	Num	8	CDC FULL DENS. STUDY
15	G6PD	Num	8	WAS G-6-PD REPORT DONE
17	G6PDACT	Num	8	G-6-PD ACTIVITY
16	G6PDPHOS	Num	8	G-6-PD PHOSPHORESIS
22	GLOBIN	Num	8	WAS GLOBIN CHAIN DONE

CODEBOOK FOR CSSCD "RECORD 6"

SPECIAL LABORATORY STUDIES

CSSCD INFANT COHORT PATIENTS

18	HEXACT	Num	8	G-6-PD HEXOKINASE ACTIVITY
24	JDBC	Num	8	CDC DATE BLOOD COLLECTED - DAYS SINCE DO
12	MULTRA2	Num	8	CDC MULT. READINGS - A2
13	MULTRF	Num	8	CDC MULT. READINGS - F
23	RATIO	Num	8	GLOBIN ALPHA - NON ALPHA RATIO
14	STRANS	Num	8	CDC SUSPECTED TRANSFUSION

CODEBOOK FOR CSSCD "RECORD 6"
SPECIAL LABORATORY STUDIES
 CSSCD FULL COHORT PATIENTS

```
*****
*****
* R06.FMT contains value labels for numerical codes assigned to
categorical*
* variables in the SAS dataset R06.SD2
*
*****
****;
```

* SIR/DBMS 2.2 SAS PROC STEP FROM DATABASE: CSSCD 06/12/99 13:33:28;

PROC FORMAT;

* FORMAT TYPE IS DEFINED FOR VARIABLES ACETPHOS AGARPHOS;

```
VALUE TYPE
 1          = 'S'
 2          = 'F'
 3          = 'S,F'
 4          = 'C'
 5          = 'S,C'
 7          = 'S,F,C'
 8          = 'A2'
 9          = 'S,A2'
11          = 'S,F,A2'
15          = 'S,F,C,A2'
16          = 'A'
17          = 'S,A'
18          = 'F,A'
19          = 'S,F,A'
21          = 'S,C,A'
24          = 'A2,A'
25          = 'S,A2,A'
26          = 'F,A2,A'
27          = 'S,F,A2,A';
```

* FORMAT FSTUDY IS DEFINED FOR VARIABLE FSTUDY;

```
VALUE FSTUDY
 1          = 'YES'
 2          = 'NO'
 4          = 'YES, OUT OF RANGE';
```

* FORMAT NO_YES IS DEFINED FOR VARIABLES CDC MULTRA2 MULTRF STRANS
 G6PD AESTAIN GLOBIN;

VALUE NO_YES

CODEBOOK FOR CSSCD "RECORD 6"
SPECIAL LABORATORY STUDIES
CSSCD FULL COHORT PATIENTS

1 = 'YES'
2 = 'NO' ;

* FORMAT G6PDPHOS IS DEFINED FOR VARIABLE G6PDPHOS ;

VALUE G6PDPHOS

1 = 'A'
2 = 'B'
3 = 'AB'
4 = 'O'
8 = 'TYPE PROBLEM' ;

* FORMAT AES IS DEFINED FOR VARIABLES AESCLIN AESQUAL ;

VALUE AES

1 = 'PANCELLULAR'
2 = 'HETEROCELLULAR' ;

* FORMAT ACETPHOS AGARPHOS TYPE.

FSTUDY FSTUDY.

CDC MULTRA2 MULTRF STRANS G6PD AESTAIN GLOBIN NO_YES.

G6PDPHOS G6PDPHOS.

AESCLIN AESQUAL AES. ;

RUN ;

QUIT ;

CODEBOOK FOR CSSCD "RECORD 6"
PART I: CDC HEMOGLOBIN ELECTROPHORESIS
 CSSCD FULL COHORT PATIENTS

CDCCYCLE ----- RECORD 6 CYCLE #

type: numeric (float)
 range: [1,7] units: 1
 unique values: 5 coded missing: 0 / 4603

tabulation:	Freq.	Value
	3826	1
	646	2
	71	3
	3	4
	57	7

CDC ----- WAS CDC DONE

type: numeric (float)
 label: CDC
 range: [1,1] units: 1
 unique values: 1 coded missing: 57 / 4603

tabulation:	Freq.	Numeric	Label
	4546	1	YES

ACETPHOS ----- CDC ACETATE PHOSPHORESIS

type: numeric (float)
 label: ACETPHOS
 range: [1,27] units: 1
 unique values: 13 coded missing: 57 / 4603

tabulation:	Freq.	Numeric	Label
	86	1	S
	0	2	F
	380	3	S,F
	0	4	C
	722	5	S,C
	294	7	S,F,C
	0	8	A2
	880	9	S,A2
	1836	11	S,F,A2
	1	15	S,F,C,A2
	0	16	A'
	26	17	S,A
	1	18	F,A
	32	19	S,F,A
	4	21	S,C,A
	0	24	A2,A
	145	25	S,A2,A
	0	26	F,A2,A
	139	27	S,F,A2,A

ACETPHOS:

1. BINARY CODED VARIABLE: Refer to explanation of 'binary coding' in PART II.

CODEBOOK FOR CSSCD "RECORD 6"
PART I: CDC HEMOGLOBIN ELECTROPHORESIS
 CSSCD FULL COHORT PATIENTS

AGARPHOS ----- CDC AGAR PHOSPHORESIS

type: numeric (float)
 label: AGARPHOS
 range: [1,29] units: 1
 unique values: 15 coded missing: 57 / 4603

tabulation:	Freq.	Numeric	Label
	1015	1	S
	2	2	F
	2127	3	S,F
	0	4	C
	748	5	S,C
	269	7	S,F,C
	21	9	S,A2
	1	10	
	20	11	S,F,A2
	0	15	S,F,C,A2
	1	16	A
	156	17	S,A
	3	18	F,A
	175	19	S,F,A
	3	21	S,C,A
	0	24	A2,A
	0	25	S,A2,A
	0	26	F,A2,A
	4	27	S,F,A2,A
	1	29	

AGARPHOS:

1. BINARY CODED VARIABLE: Refer to explanation of 'binary coding' in PART II.

DENS ----- CDC DENSITOMETRY - S

type: numeric (float)
 range: [22.3,93] units: .1
 unique values: 116 coded missing: 4465 / 4603

mean: 65.7543
 std. dev: 12.8131

percentiles:	10%	25%	50%	75%	90%
	43.4	59.4	70.15	74.1	77.9

DENF ----- CDC DENSITOMETRY - F

type: numeric (float)
 range: [.1,71.5] units: .01
 unique values: 365 coded missing: 612 / 4603

mean: 8.69183
 std. dev: 9.51005

percentiles:	10%	25%	50%	75%	90%
	1.5	2.9	5.6	10.6	19

CODEBOOK FOR CSSCD "RECORD 6"
PART I: CDC HEMOGLOBIN ELECTROPHORESIS
 CSSCD FULL COHORT PATIENTS

DENC ----- CDC DENSITOMETRY - C

type: numeric (float)

range: [37.6,46.6] units: .1
 unique values: 2 coded missing: 4601 / 4603

mean: 42.1
 std. dev: 6.36396

percentiles:	10%	25%	50%	75%	90%
	37.6	37.6	42.1	46.6	46.6

DENA2 ----- CDC DENSITOMETRY - A2

type: numeric (float)

range: [.4,8.4] units: .01
 unique values: 77 coded missing: 1409 / 4603

mean: 3.12008
 std. dev: .958507

percentiles:	10%	25%	50%	75%	90%
	2.1	2.6	3	3.4	4.3

DENA ----- CDC DENSITOMETRY - A

type: numeric (float)

range: [4.4,75.9] units: .01
 unique values: 96 coded missing: 4466 / 4603

mean: 22.7235
 std. dev: 7.81005

percentiles:	10%	25%	50%	75%	90%
	15.7	18.6	21.9	24.8	29.9

FSTUDY ----- CDC FULL DENS. STUDY

type: numeric (float)
 label: FSTUDY

range: [1,2] units: 1
 unique values: 2 coded missing: 599 / 4603

tabulation:	Freq.	Numeric	Label
	110	1	YES
	3894	2	NO

CODEBOOK FOR CSSCD "RECORD 6"
PART I: CDC HEMOGLOBIN ELECTROPHORESIS
 CSSCD FULL COHORT PATIENTS

MULTRA2 ----- CDC MULT. READINGS - A2

type: numeric (float)
 label: MULTRA2

range: [1,2] units: 1
 unique values: 2 coded missing: 599 / 4603

tabulation:	Freq.	Numeric	Label
	98	1	YES
	3906	2	NO

MULTRF ----- CDC MULT. READINGS - F

type: numeric (float)
 label: MULTRF

range: [1,2] units: 1
 unique values: 2 coded missing: 599 / 4603

tabulation:	Freq.	Numeric	Label
	18	1	YES
	3986	2	NO

STRANS ----- CDC SUSPECTED TRANSFUSION

type: numeric (float)
 label: STRANS

range: [1,2] units: 1
 unique values: 2 coded missing: 448 / 4603

tabulation:	Freq.	Numeric	Label
	28	1	YES
	4127	2	NO

CODEBOOK FOR CSSCD "RECORD 6"

PART II: G-6-PD

CSSCD FULL COHORT PATIENTS

G6PD ----- WAS G-6-PD REPORT DONE

type: numeric (float)
 label: G6PD
 range: [1,2] units: 1
 unique values: 2 coded missing: 1249 / 4603

tabulation:	Freq.	Numeric	Label
	3025	1	YES
	329	2	NO

G6PDPHOS ----- G-6-PD PHOSPHORESIS

type: numeric (float)
 label: G6PDPHOS
 range: [1,8] units: 1
 unique values: 5 coded missing: 1578 / 4603

tabulation:	Freq.	Numeric	Label
	636	1	A
	1845	2	B
	517	3	AB
	17	4	O
	10	8	TYPE PROBLEM

G6PDACT ----- G-6-PD ACTIVITY

type: numeric (float)
 range: [0,36.27] units: .01
 unique values: 855 coded missing: 3414 / 4603

mean: 13.0737
 std. dev: 6.69505

percentiles:	10%	25%	50%	75%	90%
	2.83	8.82	13.54	17.15	21.16

G6PDACT:

1. Not required if G6PDPHOS=2.

HEXACT ----- G-6-PD HEXOKINASE ACTIVITY

type: numeric (float)
 range: [.12,5.68] units: .01
 unique values: 241 coded missing: 3416 / 4603

mean: 1.25275
 std. dev: .566354

percentiles:	10%	25%	50%	75%	90%
	.62	.84	1.16	1.56	1.98

HEXACT:

1. Not required if G6PDPHOS=2.

CODEBOOK FOR CSSCD "RECORD 6"

PART III: BETKE-KLEIHAUER

CSSCD FULL COHORT PATIENTS

AESTAIN ----- WAS ACID ELUTION STAINS DONE

type: numeric (float)
label: AESTAIN

range: [1,1] units: 1
unique values: 1 coded missing: 4402 / 4603

tabulation:	Freq.	Numeric	Label
	201	1	YES

AESCLIN ----- ACID ELUTION STAINS

type: numeric (float)
label: AESCLIN

range: [1,2] units: 1
unique values: 2 coded missing: 4403 / 4603

tabulation:	Freq.	Numeric	Label
	22	1	PANCELLULAR
	178	2	HETEROCELLULAR

AESQUAL ----- ACID ELUTION STAINS

type: numeric (float)
label: AESQUAL

range: [2,2] units: 1
unique values: 1 coded missing: 4602 / 4603

tabulation:	Freq.	Numeric	Label
	1	2	HETEROCELLULAR

5.2: Vesiculated (Pocked) RBC Count – “Record 7”

GLOBIN ----- WAS GLOBIN CHAIN DONE

type: numeric (float)
label: GLOBIN

range: [1,1] units: 1
unique values: 1 coded missing: 4341 / 4603

tabulation: Freq. Numeric Label
262 1 YES

RATIO ----- GLOBIN ALPHA - NON ALPHA RATIO

type: numeric (float)

range: [.5,2.38] units: .01
unique values: 84 coded missing: 4341 / 4603

mean: 1.01408
std. dev: .309619

percentiles: 10% 25% 50% 75% 90%
.72 .83 .93 1.1 1.5

_dta:

1. Run on 08/23/99.

A. List of variables deleted **F07DATE F07DTP F07BEFDT F07AFTDT**

B. List of variables modified **NONE**

C. List of variables modified with a name change **NONE**

D. Old name

E. New name

F. List of variables modified date to days since DOE

G. Old name **F07DATE F07DTP**

H. New name **JF07DATE JF07DTP**

I. Collection Information:

Samples for pocked red blood cell counts were to be collected

- at the time of routine visits;
- at the time of spleen scan;
- at the time of splenic sequestration and bacterial infection events.

All samples were sent to Yale University (Dr. Howard Pearson) for assessment by interference phase contrast microscopy.

J. Data Collection Period: 03/79 – 11/85

5.2: Vesiculated (Pocked) RBC Count – “Record 7”

After 11/83, pocked RBC counts were required at the time of routine visits only if previous pocked RBC counts had not exceeded 5% or if a sample had never been submitted for testing.

Note: Results of tests performed prior to 12/80 should not be included in analyses since it was determined that there was a problem with the methodology prior to this time.

K. Form Version Dates: N/A

L. Files Used to Store Information:

SAS System File: **R07.SD2**

Format File: N/A

M. Unique Record Identifiers: **ANONID, F07DATE**

Records within the dataset are sorted by **ANONID** and **F07DATE**.

N. Number of Observations (Patients) in SAS Dataset: 8330 (3091)

O. Contents of SAS Dataset:

- Alphabetical Listing of Variables: See p. 19
- Listing of Variables by Position: See p. 20

P. Notes About Selected Variables: None

Q. Computed Variables:

- **F07VAR, F07BEFC, F07BEFDT** – were computed by searching through the routine visit datasets (**R1121.SD2, R1222.SD2, R16.SD2, R24.SD2, R1722.SD2** and **R25.SD2**) to identify the closest preceding visit date to the date of the pocked RBC count and making **F07VAR**=the “record” number of the closest preceding routine visit, **F07BEFC**=the cycle number of the closest preceding cycle, and **F07BEFDT**=the date of the closest preceding routine visit.
- **F07AFTC, F07AFTDT** – were computed by searching through the routine visit datasets to identify the closest routine visit following the pocked RBC count and making **F07AFTC**=the cycle number of the closest visit after the date of the pocked RBC counts and **F07AFTDT**=the date of the closest visit following the date of the pocked RBC count.

R. Inter-Relationship With Other Datasets:

5.2: Vesiculated (Pocked) RBC Count – “Record 7”

Pocked RBC counts performed within 3 days of a routine visit are also stored in the corresponding routine visit dataset (**R16.SD2, R24.SD2, R1722.SD2, or R25.SD2**)

CODEBOOK FOR CSSCD "RECORD 7"
VESICULATED (POCKED) RBC RECORD

CSSCD FULL COHORT PATIENTS

CONTENTS OF SAS DATASET: R07.SD2

DATA FROM CSSCD RECORD 07 - VESICULATED (POCKED) RBC RECORD
VARIABLES ARE LISTED IN ALPHABETICAL ORDER AND IN ORDER OF THEIR POSITION
IN THE SAS DATASET

The SAS System 16:03 Thursday, October 12, 2006 5

The CONTENTS Procedure

Data Set Name	OUT1.R07	Observations	8330
Member Type	DATA	Variables	7
Engine	V9	Indexes	0
Created	15:56 Tuesday, October 10, 2006	Observation Length	56
Last Modified	15:56 Tuesday, October 10, 2006	Deleted Observations	0
Protection		Compressed	NO
Data Set Type		Sorted	NO
Label			
Data Representation	WINDOWS		
Encoding	wlatin1 Western (Windows)		

Engine/Host Dependent Information

Data Set Page Size	8192
Number of Data Set Pages	58
First Data Page	1
Max Obs per Page	145
Obs in First Data Page	112
Number of Data Set Repairs	0
File Name	r07.sas7bdat
Release Created	9.0000MO
Host Created	XP_PRO

Alphabetic List of Variables and Attributes

#	Variable	Type	Len	Label
1	ANONID	Char	8	ANONYMIZED ID #
5	F07AFTC	Num	8	NEAREST LATER VISIT CYCLE
4	F07BEFC	Num	8	NEAREST EARLIER VISIT CYCLE
2	F07PIT	Num	8	% PITTED RBC
3	F07VAR	Num	8	RECORD # WITH NEAREST EARLIER VISIT
6	JF07DATE	Num	8	DATE BLOOD DRAWN - DAYS SINCE DOE
7	JF07DTP	Num	8	DATE TEST PERFORMED - DAYS SINCE DOE

CODEBOOK FOR CSSCD "RECORD 7"
 VESICULATED (POCKED) RBC RECORD
 CSSCD FULL COHORT PATIENTS

F07PIT ----- % PITTED RBC

type:	numeric (float)				
range:	[0,56.4]	units:	.01		
unique values:	310	coded missing:	0 / 8330		
mean:	8.84242				
std. dev:	7.93501				
percentiles:	10%	25%	50%	75%	90%
	.8	1.8	7	13.8	19.8

F07VAR ----- RECORD # WITH NEAREST EARLIER VISIT

type:	numeric (float)		
range:	[0,25]	units:	1
unique values:	7	coded missing:	0 / 8330
tabulation:	Freq.	Value	
	105	0	
	1298	11	
	379	12	
	1427	16	
	3638	17	
	584	24	
	899	25	

F07VAR:
 1. See section on computed variables.

F07BEFC ----- NEAREST EARLIER VISIT CYCLE

type:	numeric (float)		
range:	[0,37]	units:	1
unique values:	34	coded missing:	105 / 8330
tabulation:	Freq.	Value	
			52 8
	1	0	175 9
	24	1	64 10
	87	2	60 11
	53	3	186 12
	154	4	53 13
	63	5	45 14
	173	6	151 15
	62	7	63 16

CODEBOOK FOR CSSCD "RECORD 7"
VESICULATED (POCKED) RBC RECORD
CSSCD FULL COHORT PATIENTS

tabulation:	Freq.	Value		
			1404	25
	43	17	738	26
	159	18	1445	27
	60	19	972	29
	43	20	427	30
	170	21	476	31
	56	22	399	33
	7	23	280	35
	5	24	75	37

F07BEFC:

1. See section on computed variables.

CODEBOOK FOR CSSCD "RECORD 7"
VESICULATED (POCKED) RBC RECORD
CSSCD FULL COHORT PATIENTS

F07AFTC ----- NEAREST LATER VISIT CYCLE

type: numeric (float)

range: [1,41] units: 1
unique values: 36 coded missing: 85 / 8330

tabulation: Freq. Value

16	1
65	2
46	3
142	4
47	5
157	6
62	7
46	8
172	9
61	10
57	11
178	12
54	13
42	14
161	15
61	16
45	17
185	18

tabulation: Freq. Value

69	19
42	20
155	21
50	22
2	23
3	24
804	25
961	26
1235	27
1	28
1360	29
538	30
494	31
403	33
331	35
165	37
27	39
8	41

5.3: Iron/Lead – “Record 8”

F07AFTC:

1. See section on computed variables.

_dta:

1. Run on 08/24/99.

A. List of variables deleted **F08DATE F08LASTU F08LASTE F08ESTAT
F08CDCID F08DBR F08BEFDT F08AFTDT**

B. List of variables modified **NONE**

C. List of variables modified with a name change **NONE**

D. Old name

E. New name

F. List of variables modified date to days since DOE

G. Old name **F08DATE**

H. New name **JF08DATE**

I. Collection Information:

Samples for iron and lead studies were sent to the CDC for testing. In general, lead studies were performed only for patients ≤ 5 years of age. Not all centers participated in this study. Less than one-third of CSSCD participants and only 61 infant cohort patients have iron data.

J. Data Collection Period: 10/81 – 08/82

K. Form Version Dates: N/A

L. Files Used to Store Information:

SAS System File: **R08.SD2**

Format File: **R08.FMT**

M. Unique Record Identifiers: **ANONID, F08DATE**

Records within the dataset are sorted by **ANONID** and **F08DATE**.

N. Number of Observations (Patients) in SAS Dataset: 1543 (1463)

O. Contents of SAS Dataset:

- Alphabetical Listing of Variables: See p. 25
- Listing of Variables by Position: See p. 26

P. Notes About Selected Variables: None

Q. Computed Variables:

5.3: Iron/Lead – “Record 8”

- **F08BEFC, F08BEFDT** – were computed by searching through the routine visit datasets (**R16.SD2, R24.SD2, R1121.SD2, R1222.SD2, R1722.SD2, R25.SD2**) to identify the closest preceding cycle number and date to the date blood was drawn for the iron/lead studies and making **F08BEFC**=the closest preceding cycle number and **F08BEFDT**=the closest preceding date.
- **F08AFTC, F08AFTDT** – were computed by searching through the routine visit datasets to identify the closest cycle # and routine visit date following the date blood was drawn for the iron/lead studies and making **F08AFTC**=the closest cycle number and **F08AFTDT**=the closest date following the date of the blood draw for the iron/lead studies.

5.3: Iron/Lead – “Record 8”

J. Inter-Relationship With Other Datasets:

Other forms that collected information about history of elevated blood lead level and/or iron overload include:

<u>Phase 1 Forms</u>	<u>SAS Dataset</u>
Form 26	R20.SD2

CODEBOOK FOR CSSCD "RECORD 8"

IRON/LEAD

CSSCD FULL COHORT PATIENTS

CONTENTS OF SAS DATASET: R08.SD2

DATA FROM CSSCD RECORD 08 - SPECIAL LABORATORY STUDIES: IRON/LEAD
VARIABLES ARE LISTED IN ALPHABETICAL ORDER AND IN ORDER OF THEIR POSITION
IN THE SAS DATASET

The SAS System 16:03 Thursday, October 12, 2006 6

The CONTENTS Procedure

Data Set Name	OUT1.R08	Observations	1543
Member Type	DATA	Variables	12
Engine	V9	Indexes	0
Created	11:45 Wednesday, October 11, 2006	Observation Length	96
Last Modified	11:45 Wednesday, October 11, 2006	Deleted Observations	0
Protection		Compressed	NO
Data Set Type		Sorted	NO
Label			
Data Representation	WINDOWS		
Encoding	wlatin1 Western (Windows)		

Engine/Host Dependent Information

Data Set Page Size	8192
Number of Data Set Pages	19
First Data Page	1
Max Obs per Page	84
Obs in First Data Page	59
Number of Data Set Repairs	0
File Name	r08.sas7bdat
Release Created	9.0000M0
Host Created	XP_PRO

Alphabetic List of Variables and Attributes

#	Variable	Type	Len	Label
1	ANONID	Char	8	ANONYMIZED ID #
11	F08AFTC	Num	8	NEAREST CYCLE AFTER
10	F08BEFC	Num	8	NEAREST CYCLE BEFORE
8	F08FEP	Num	8	FREE ERYTHROCYTE PROTOPORPHYRIN
2	F08HCT	Num	8	HEMATOCRIT
9	F08PB	Num	8	LEAD
5	F08SERFR	Num	8	SERUM FERRITIN NG DL
3	F08SERIR	Num	8	SERUM IRON UG DL
4	F08TIBC	Num	8	TOTAL IRON BINDING CAPACITY UG DL
6	F08TRNSF	Num	8	TRANSFERRIN
7	F08ZNP	Num	8	ZINC PROTOPORPHYRIN
12	JF08DATE	Num	8	DATE BLOOD COLLECTED - DAYS SINCE DOE

CODEBOOK FOR CSSCD "RECORD 8"

IRON/LEAD

CSSCD FULL COHORT PATIENTS

* **R08.FMT** contains value labels for numerical codes assigned to categorical*
* variables in the SAS dataset **R08.SD2** *
*****;

* SIR/DBMS 2.2 SAS PROC STEP FROM DATABASE: CSSCD 08/22/99 10:50:19;

PROC FORMAT PRINT;

* FOMAT CYCLE IS DEFINED FOR VARIABLES F08BEFC F08AFTC;

VALUE CYCLE

-1 = 'NO SUBSEQUENT CYCLES';

5.3: Iron/Lead – “Record 8”

F08HCT ----- HEMATOCRIT

type: numeric (float)

range: [8.4,47.3] units: .1
unique values: 267 coded missing: 43 / 1543

mean: 27.3795
std. dev: 6.0631

percentiles: 10% 25% 50% 75% 90%
20.2 23 26.3 31.5 35.8

F08SERIR ----- SERUM IRON UG|DL

type: numeric (float)

range: [11,352] units: 1
unique values: 214 coded missing: 123 / 1543

mean: 96.3331
std. dev: 46.7454

percentiles: 10% 25% 50% 75% 90%
48 64 85 118 158

F08TIBC ----- TOTAL IRON BINDING CAPACITY UG|DL

type: numeric (float)

range: [21,552] units: 1
unique values: 293 coded missing: 206 / 1543

mean: 248.447
std. dev: 66.0805

percentiles: 10% 25% 50% 75% 90%
170 208 245 289 328

F08SERFR ----- SERUM FERRITIN NG|DL

type: numeric (float)

range: [1,8447] units: 1
unique values: 554 coded missing: 82 / 1543

mean: 319.57
std. dev: 717.407

percentiles: 10% 25% 50% 75% 90%
26 49 118 298 582

5.3: Iron/Lead – “Record 8”

F08TRNSF ----- TRANSFERRIN

type: numeric (float)

range: [89,848] units: 1
unique values: 278 coded missing: 287 / 1543

mean: 240.463
std. dev: 68.9873

percentiles: 10% 25% 50% 75% 90%
164 196.5 235 274 317

F08ZNP ----- ZINC PROTOPORPHYRIN

type: numeric (float)

range: [2,1000] units: 1
unique values: 489 coded missing: 117 / 1543

mean: 201.11
std. dev: 166.455

percentiles: 10% 25% 50% 75% 90%
39 77 154 282 421

F08FEP ----- FREE ERYTHROCYTE PROTOPORPHYRIN

type: numeric (float)

range: [13,776] units: 1
unique values: 275 coded missing: 101 / 1543

mean: 120.974
std. dev: 77.2868

percentiles: 10% 25% 50% 75% 90%
49 69 102.5 147 216

F08PB ----- LEAD

type: numeric (float)

range: [2.2,59.9] units: .1
unique values: 145 coded missing: 1313 / 1543

mean: 14.3578
std. dev: 8.47295

percentiles: 10% 25% 50% 75% 90%
6.05 8.5 12.55 17.6 25.75

5.3: Iron/Lead – “Record 8”

F08BEFC ----- NEAREST CYCLE BEFORE

```
      type: numeric (float)
      label: F08BEFC
      range: [-1,30]                units: 1
unique values: 18                  coded missing: 0 / 1543
  tabulation: Freq.  Numeric  Label
                1      -1    NO SUBSEQUENT CYCLES
                1       6
                1       8
                1       9
                1      10
                1      11
                9      12
                2      13
                3      15
                1      18
                3      21
                4      22
                1      23
                38     25
                40     26
                245    27
                542    29
                649    30
```

F08BEFC:

1. See section on computed variables.

F08AFTC ----- NEAREST CYCLE AFTER

```
      type: numeric (float)
      label: F08AFTC
      range: [-1,30]                units: 1
unique values: 18                  coded missing: 0 / 1543
  tabulation: Freq.  Numeric  Label
                457    -1    NO SUBSEQUENT CYCLES
                1       6
                1      10
                1      11
                8      12
                2      13
                2      15
                1      16
                2      18
                1      19
                1      21
                2      22
                1      23
                26     25
                22     26
                117    27
                465    29
                433    30
```

F08AFTC:

1. See section on computed variables.

_dta:

1. Run on 08/24/99.

5.3: Iron/Lead – “Record 8”

R. List of variables deleted **F08DATE F08LASTU F08LASTE F08ESTAT
F08CDCID F08DBR F08BEFDT F08AFTDT**

S. List of variables modified **NONE**

T. List of variables modified with a name change **NONE**

U. Old name

V. New name

W. List of variables modified date to days since DOE

X. Old name **F08DATE**

Y. New name **JF08DATE**

Z. Collection Information:

 Samples for iron and lead studies were sent to the CDC for testing. In general, lead studies were performed only for patients ≤ 5 years of age. Not all centers participated in this study. Less than one-third of CSSCD participants and only 61 infant cohort patients have iron data.

AA. Data Collection Period: 10/81 – 08/82

BB. Form Version Dates: N/A

CC. Files Used to Store Information:

 SAS System File: **R08.SD2**

 Format File: **R08.FMT**

DD. Unique Record Identifiers: **ANONID, F08DATE**

 Records within the dataset are sorted by **ANONID** and **F08DATE**.

EE. Number of Observations (Patients) in SAS Dataset: 1543 (1463)

FF. Contents of SAS Dataset:

- Alphabetical Listing of Variables: See p. 25
- Listing of Variables by Position: See p. 26

GG. Notes About Selected Variables: None

HH. Computed Variables:

- **F08BEFC, F08BEFDT** – were computed by searching through the routine visit datasets (**R16.SD2, R24.SD2, R1121.SD2, R1222.SD2, R1722.SD2, R25.SD2**) to identify the closest preceding cycle number and date to the date blood was

5.3: Iron/Lead – “Record 8”

drawn for the iron/lead studies and making **F08BEFC**=the closest preceding cycle number and **F08BEFDT**=the closest preceding date.

- **F08AFTC, F08AFTDT** – were computed by searching through the routine visit datasets to identify the closest cycle # and routine visit date following the date blood was drawn for the iron/lead studies and making **F08AFTC**=the closest cycle number and **F08AFTDT**=the closest date following the date of the blood draw for the iron/lead studies.

5.3: Iron/Lead – “Record 8”

J. Inter-Relationship With Other Datasets:

Other forms that collected information about history of elevated blood lead level and/or iron overload include:

<u>Phase 1 Forms</u>	<u>SAS Dataset</u>
Form 26	R20.SD2

CODEBOOK FOR CSSCD "RECORD 8"

IRON/LEAD

CSSCD FULL COHORT PATIENTS

CONTENTS OF SAS DATASET: R08.SD2

DATA FROM CSSCD RECORD 08 - SPECIAL LABORATORY STUDIES: IRON/LEAD
VARIABLES ARE LISTED IN ALPHABETICAL ORDER AND IN ORDER OF THEIR POSITION
IN THE SAS DATASET

The SAS System 16:03 Thursday, October 12, 2006 6

The CONTENTS Procedure

Data Set Name	OUT1.R08	Observations	1543
Member Type	DATA	Variables	12
Engine	V9	Indexes	0
Created	11:45 Wednesday, October 11, 2006	Observation Length	96
Last Modified	11:45 Wednesday, October 11, 2006	Deleted Observations	0
Protection		Compressed	NO
Data Set Type		Sorted	NO
Label			
Data Representation	WINDOWS		
Encoding	wlatin1 Western (Windows)		

Engine/Host Dependent Information

Data Set Page Size	8192
Number of Data Set Pages	19
First Data Page	1
Max Obs per Page	84
Obs in First Data Page	59
Number of Data Set Repairs	0
File Name	r08.sas7bdat
Release Created	9.0000M0
Host Created	XP_PRO

Alphabetic List of Variables and Attributes

#	Variable	Type	Len	Label
1	ANONID	Char	8	ANONYMIZED ID #
11	F08AFTC	Num	8	NEAREST CYCLE AFTER
10	F08BEFC	Num	8	NEAREST CYCLE BEFORE
8	F08FEP	Num	8	FREE ERYTHROCYTE PROTOPORPHYRIN
2	F08HCT	Num	8	HEMATOCRIT
9	F08PB	Num	8	LEAD
5	F08SERFR	Num	8	SERUM FERRITIN NG DL
3	F08SERIR	Num	8	SERUM IRON UG DL
4	F08TIBC	Num	8	TOTAL IRON BINDING CAPACITY UG DL
6	F08TRNSF	Num	8	TRANSFERRIN
7	F08ZNP	Num	8	ZINC PROTOPORPHYRIN
12	JF08DATE	Num	8	DATE BLOOD COLLECTED - DAYS SINCE DOE

CODEBOOK FOR CSSCD "RECORD 8"

IRON/LEAD

CSSCD FULL COHORT PATIENTS

* R08.FMT contains value labels for numerical codes assigned to categorical*
* variables in the SAS dataset R08.SD2 *
*****;

* SIR/DBMS 2.2 SAS PROC STEP FROM DATABASE: CSSCD 08/22/99 10:50:19;

PROC FORMAT PRINT;

* FOMAT CYCLE IS DEFINED FOR VARIABLES F08BEFC F08AFTC;

VALUE CYCLE

-1 = 'NO SUBSEQUENT CYCLES';

5.4: Alloantibodies – “Form” 27

F08HCT ----- HEMATOCRIT

type: numeric (float)

range: [8.4,47.3] units: .1
unique values: 267 coded missing: 43 / 1543

mean: 27.3795
std. dev: 6.0631

percentiles: 10% 25% 50% 75% 90%
20.2 23 26.3 31.5 35.8

F08SERIR ----- SERUM IRON UG|DL

type: numeric (float)

range: [11,352] units: 1
unique values: 214 coded missing: 123 / 1543

mean: 96.3331
std. dev: 46.7454

percentiles: 10% 25% 50% 75% 90%
48 64 85 118 158

F08TIBC ----- TOTAL IRON BINDING CAPACITY UG|DL

type: numeric (float)

range: [21,552] units: 1
unique values: 293 coded missing: 206 / 1543

mean: 248.447
std. dev: 66.0805

percentiles: 10% 25% 50% 75% 90%
170 208 245 289 328

F08SERFR ----- SERUM FERRITIN NG|DL

type: numeric (float)

range: [1,8447] units: 1
unique values: 554 coded missing: 82 / 1543

mean: 319.57
std. dev: 717.407

percentiles: 10% 25% 50% 75% 90%
26 49 118 298 582

5.4: Alloantibodies – “Form” 27

F08TRNSF ----- TRANSFERRIN

type: numeric (float)

range: [89,848] units: 1
unique values: 278 coded missing: 287 / 1543

mean: 240.463
std. dev: 68.9873

percentiles: 10% 25% 50% 75% 90%
164 196.5 235 274 317

F08ZNP ----- ZINC PROTOPORPHYRIN

type: numeric (float)

range: [2,1000] units: 1
unique values: 489 coded missing: 117 / 1543

mean: 201.11
std. dev: 166.455

percentiles: 10% 25% 50% 75% 90%
39 77 154 282 421

F08FEP ----- FREE ERYTHROCYTE PROTOPORPHYRIN

type: numeric (float)

range: [13,776] units: 1
unique values: 275 coded missing: 101 / 1543

mean: 120.974
std. dev: 77.2868

percentiles: 10% 25% 50% 75% 90%
49 69 102.5 147 216

F08PB ----- LEAD

type: numeric (float)

range: [2.2,59.9] units: .1
unique values: 145 coded missing: 1313 / 1543

mean: 14.3578
std. dev: 8.47295

percentiles: 10% 25% 50% 75% 90%
6.05 8.5 12.55 17.6 25.75

5.4: Alloantibodies – “Form” 27

F08BEFC ----- NEAREST CYCLE BEFORE

```
      type: numeric (float)
      label: F08BEFC
      range: [-1,30]                units: 1
unique values: 18                  coded missing: 0 / 1543
  tabulation: Freq.  Numeric  Label
                1      -1  NO SUBSEQUENT CYCLES
                1       6
                1       8
                1       9
                1      10
                1      11
                9      12
                2      13
                3      15
                1      18
                3      21
                4      22
                1      23
                38     25
                40     26
                245    27
                542    29
                649    30
```

F08BEFC:

1. See section on computed variables.

F08AFTC ----- NEAREST CYCLE AFTER

```
      type: numeric (float)
      label: F08AFTC
      range: [-1,30]                units: 1
unique values: 18                  coded missing: 0 / 1543
  tabulation: Freq.  Numeric  Label
                457    -1  NO SUBSEQUENT CYCLES
                1       6
                1      10
                1      11
                8      12
                2      13
                2      15
                1      16
                2      18
                1      19
                1      21
                2      22
                1      23
                26     25
                22     26
                117    27
                465    29
                433    30
```

F08AFTC:

1. See section on computed variables.

_dta:

1. Run on 08/24/99.

5.4: Alloantibodies – “Form” 27

- A. List of variables deleted **F27DATE F27INIT F27NDATE F27LASTU F27LASTE
F27ESTAT F27VDATE F27LTRAN F27PREG F27DPERF F27SDATE**
- B. List of variables modified **NONE**
- C. List of variables modified with a name change **NONE**
- D. Old name
- E. New name
- F. List of variables modified date to days since DOE
- G. Old name **F27DATE F27LTRAN F27PREG F27DPERF**
- H. New name **JF27DATE J27LTRAN JF27PREG J27DPERF**
- I. Collection Information:
Samples for antibody screening were to be collected
- at entry for patients with a history of transfusion prior to entry;
 - immediately prior to and 2-6 weeks after each transfusion for patients transfused during the study;
 - every 3 months for patients on chronic transfusion;
 - at the time of diagnosis of pregnancy, at time of delivery, and 2-6 weeks after delivery.
- Samples for detection of alloantibodies were to be sent to Duke University (Dr. Wendell Rosse). However, because compliance with this requirement was poor, a request was sent to centers in January 1985 asking that local results of antibody screens performed during the study be submitted to the SCC.
- J. Data Collection Period: 03/79 - 12/85
- K. Form Version Dates: 03/29/79, 01/29/80, 03/28/80 (Duke)
12/31/84 (version for collection of local results)
- L. Files Used to Store Information:
SAS System File: **R27.SD2**
Format File: **R27.FMT**
- M. Unique Record Identifiers: **ANONID, F27DATE**
Records within the dataset are sorted by **ANONID** and **F27DATE**.
- N. Number of Observations (Patients) in SAS Dataset: 10875 (2187)
- O. Contents of SAS Dataset:

5.4: Alloantibodies – “Form” 27

- Alphabetical Listing of Variables: See pp. 33-35
- Listing of Variables by Position: See pp. 36-37

P. Notes About Selected Variables: None

Q. Computed Variables: None

R. Inter-Relationship With Other Datasets:

Forms which collected transfusion and pregnancy history information include

Phase 1 Forms	SAS Dataset	See Section
Form 10	R10.SD2, R29.SD2	2.3, 2.4
Form 14	R14.SD2, R29.SD2	2.1, 2.4
Form 15	R15.SD2, R29.SD2	2.2, 2.4
Form 84	<u>R84.SD2</u>	9.2.1
“Chronic Transfusion Summary”	<u>R85.SD2</u>	9.2.2
Form 16E	<u>R24.SD2</u>	4.2
Forms 17, 19, 20, 21, 24	<u>R1722.SD2</u>	4.5
Form 25	<u>R25.SD2</u>	4.6
Form 82	<u>R82.SD2</u>	N/A

In addition, the majority of acute event forms include questions regarding transfusion status at time of event and/or treatment with transfusion [See Section 7].

CODEBOOK FOR CSSCD "FORM" 27

ALLOANTIBODIES

CSSCD INFANT COHORT PATIENTS

CONTENTS OF SAS DATASET: R27.SD2
DATA FROM CSSCD RECORD 27 - SPECIAL LABORATORY STUDIES
ALLOANTIBODIES
VARIABLES ARE LISTED IN ALPHABETICAL ORDER AND IN ORDER OF THEIR POSITION
IN THE SAS DATASET AND ON FORM 27

The SAS System 16:50 Thursday, October 12, 2006 1

The CONTENTS Procedure

Data Set Name	OUT1.R27	Observations	10875
Member Type	DATA	Variables	64
Engine	V9	Indexes	0
Created	14:52 Wednesday, October 11, 2006	Observation Length	496
Last Modified	14:52 Wednesday, October 11, 2006	Deleted Observations	0
Protection		Compressed	NO
Data Set Type		Sorted	NO
Label			
Data Representation	WINDOWS		
Encoding	wlatin1 Western (Windows)		

Engine/Host Dependent Information

Data Set Page Size	16384
Number of Data Set Pages	341
First Data Page	1
Max Obs per Page	32
Obs in First Data Page	16
Number of Data Set Repairs	0
File Name	r27.sas7bdat
Release Created	9.0000MO
Host Created	XP_PRO

Alphabetic List of Variables and Attributes

#	Variable	Type	Len	Label
1	ANONID	Char	8	ANONYMIZED ID #
33	F27ATGEN	Num	8	OTHER ANTIGENS PHENOTYPED?
2	F27CABO	Num	8	BLOOD GROUP - CLINIC
7	F27CC	Num	8	ANTI-C - CLINIC
6	F27CD	Num	8	ANTI-D - CLINIC
8	F27CE	Num	8	ANTI-E - CLINIC
12	F27CF	Num	8	ANTI-F - CLINIC
15	F27CFYA	Num	8	ANTI-FYA - CLINIC
16	F27CFYB	Num	8	ANTI-FYB - CLINIC
26	F27CI	Num	8	ANTI-I - CLINIC
24	F27CJKA	Num	8	ANTI-JKA - CLINIC
25	F27CJKB	Num	8	ANTI-JKB - CLINIC
27	F27CJSA	Num	8	ANTI-JSA - CLINIC
28	F27CJSB	Num	8	ANTI-JSB - CLINIC
21	F27CK	Num	8	ANTI-K - CLINIC

CODEBOOK FOR CSSCD "FORM" 27

ALLOANTIBODIES

CSSCD FULL COHORT PATIENTS

22	F27CKPA	Num	8	ANTI-KPA - CLINIC
23	F27CKPB	Num	8	ANTI-KPB - CLINIC
9	F27CLC	Num	8	ANTI-c - CLINIC
10	F27CLE	Num	8	ANTI-e - CLINIC
13	F27CLEA	Num	8	ANTI-LEA - CLINIC
14	F27CLEB	Num	8	ANTI-LEB - CLINIC
20	F27CLS	Num	8	ANTI-s - CLINIC
17	F27CM	Num	8	ANTI-M - CLINIC
18	F27CN	Num	8	ANTI-N - CLINIC
29	F27COTH1	Char	4	ANTI-OTHER1 - CLINIC
30	F27COTH2	Char	4	ANTI-OTHER2 - CLINIC
3	F27CRH	Num	8	RH - CLINIC

CODEBOOK FOR CSSCD "FORM" 27

ALLOANTIBODIES

CSSCD FULL COHORT PATIENTS

The SAS System

16:50 Thursday, October 12, 2006

2

The CONTENTS Procedure

Alphabetic List of Variables and Attributes

#	Variable	Type	Len	Label
19	F27CS	Num	8	ANTI-S - CLINIC
5	F27CSCRN	Num	8	ANTIBODY SCREEN - CLINIC
11	F27CV	Num	8	ANTI-V - CLINIC
31	F27DABO	Num	8	BLOOD GROUP - DUKE
36	F27DC	Num	8	ANTI-C - DUKE
35	F27DD	Num	8	ANTI-D - DUKE
37	F27DE	Num	8	ANTI-E - DUKE
41	F27DF	Num	8	ANTI-F - DUKE
44	F27DFYA	Num	8	ANTI-FYA - DUKE
45	F27DFYB	Num	8	ANTI-FYB - DUKE
55	F27DI	Num	8	ANTI-I - DUKE
53	F27DJKA	Num	8	ANTI-JKA - DUKE
54	F27DJKB	Num	8	ANTI-JKB - DUKE
56	F27DJSA	Num	8	ANTI-JSA - DUKE
57	F27JJSB	Num	8	ANTI-JSB - DUKE
50	F27DK	Num	8	ANTI-K - DUKE
51	F27DKPA	Num	8	ANTI-KPA - DUKE
52	F27DKPB	Num	8	ANTI-KPB - DUKE
38	F27DLC	Num	8	ANTI-c - DUKE
39	F27DLE	Num	8	ANTI-e - DUKE
42	F27DLEA	Num	8	ANTI-LEA - DUKE
43	F27DLEB	Num	8	ANTI-LEB - DUKE
49	F27DLS	Num	8	ANTI-s - DUKE
46	F27DM	Num	8	ANTI-M - DUKE
47	F27DN	Num	8	ANTI-N - DUKE
58	F27DOTH1	Char	4	ANTI-OTHER1 - DUKE
59	F27DOTH2	Char	4	ANTI-OTHER2 - DUKE
32	F27DRH	Num	8	RH - DUKE
48	F27DS	Num	8	ANTI-S - DUKE
34	F27DSCRN	Num	8	ANTIBODY SCREEN - DUKE
40	F27DV	Num	8	ANTI-V - DUKE
60	F27NSAMP	Num	8	NEW SAMPLE REQUESTED
4	F27TRANS	Num	8	ESTIMATED # OF TRANSFUSIONS
64	J27DPERF	Num	8	DATE TEST PERFORMED AT DUKE - DAYS SINCE DOE
62	J27LTRAN	Num	8	
61	JF27DATE	Num	8	CLINIC SAMPLE DATE - DAYS SINCE DOE
63	JF27PREG	Num	8	DATE OF LAST PREGNANCY - DAYS SINCE DOE

CODEBOOK FOR CSSCD "FORM" 27

ALLOANTIBODIES

CSSCD FULL COHORT PATIENTS

* R27.FMT contains value labels for numerical codes assigned to categorical*
* variables in the SAS dataset R27.SD2 *
*****;

* SIR/DBMS 2.2 SAS DATA STEP FROM DATABASE: CSSCD 07/01/99 13:58:48;

PROC FORMAT;

*FORMAT SCREEN IS CREATED FOR VARIABLES F27CSCRN F27DSCRN F27CRH F27DRH;

VALUE SCREEN

1 = 'NEGATIVE'
2 = 'POSITIVE';

*FORMAT RESULT IS CREATED FOR VARIABLES F27CD F27CC F27CE F27CLC
F27CLE F27CV F27CF
F27CM F27CN F27DJSA
F27CJSB F27DJSB F27DI
F27CJKB F27DKPA F27DFYA
F27CI F27DKPB F27DFYB
F27CJSA F27DJKA F27DJKB
F27CLEA F27CLEB F27CFYA F27CFYB
F27CS F27CLS F27DM F27DLE
F27CK F27DN F27DV F27DD
F27CKPA F27DS F27DF F27DC
F27CKPB F27DLS F27DLEA F27DE
F27CJKA F27DK F27DLEB F27DLC;

VALUE RESULT

0 = 'NEGATIVE'
1 = 'POSITIVE';

*FORMAT NO_YES IS CREATED FOR VARIABLES F27ATGEN F27NSAMP;

VALUE NO_YES

1 = 'NO'
2 = 'YES';

*FORMAT F27ABO IS CREATED FOR VARIABLES F27CABO F27DABO;

VALUE F27ABO

1 = 'O'
2 = 'A'
3 = 'B'
4 = 'AB';

CODEBOOK FOR CSSCD "FORM" 27

ALLOANTIBODIES

CSSCD FULL COHORT PATIENTS

```
*   FORMAT JF27DATE JF27LTRAN JF27PREG JF27DPERF MMDDYY8.  
      F27CSCRN F27DSCRN F27CRH   F27DRH   SCREEN.  
      F27CD    F27CC    F27CE    F27CLC   F27CLE   F27CV    F27CF  
      F27CLEA  F27CLEB  F27CFYA  F27CFYB F27CM    F27CN    F27DJSA  
      F27CS    F27CLS   F27DM    F27DLE  F27CJSB  F27DJSB  F27DI  
      F27CK    F27DN    F27DV    F27DD   F27CJKB  F27DKPA  F27DFYA  
      F27CKPA  F27DS    F27DF    F27DC   F27CI    F27DKPB  F27DFYB  
      F27CKPB  F27DLS   F27DLEA  F27DE   F27CJSA  F27DJKA  F27DJKB  
      F27CJKA  F27DK    F27DLEB  F27DLC  RESULT.  
      F27ATGEN F27NSAMP NO_YES.  
      F27CABO  F27DABO  F27ABO. ;
```

```
RUN;  
QUIT;
```

CODEBOOK FOR CSSCD "FORM" 27

ALLOANTIBODIES

CSSCD FULL COHORT PATIENTS

F27VDATE ----- VERSION DATE **DELETED**

type: numeric (int)
label: datelab

range: [6999,9131] units: 1
unique values: 5 coded missing: 0 / 10875

tabulation:	Freq.	Numeric	Label
	59	6999	03/01/79
	813	7027	03/29/79
	323	7333	01/29/80
	2122	7392	03/28/80
	7558	9131	12/31/84

F27CABO ----- BLOOD GROUP - CLINIC

type: numeric (float)
label: F27CABO

range: [1,4] units: 1
unique values: 4 coded missing: 8752 / 10875

tabulation:	Freq.	Numeric	Label
	1128	1	0
	533	2	A
	383	3	B
	79	4	AB

F27CABO:

1. Not required if F27VDATE=12/31/84.

F27CRH ----- RH - CLINIC

type: numeric (float)
label: F27CRH

range: [1,2] units: 1
unique values: 2 coded missing: 8768 / 10875

tabulation:	Freq.	Numeric	Label
	149	1	NEGATIVE
	1958	2	POSITIVE

F27CRH:

1. Not required if F27VDATE=12/31/84.

CODEBOOK FOR CSSCD "FORM" 27

ALLOANTIBODIES

CSSCD FULL COHORT PATIENTS

F27TRANS ----- ESTIMATED # OF TRANSFUSIONS

type: numeric (float)

range: [0,99]

units: 1

unique values: 87

coded missing: 9822 / 10875

tabulation:	Freq.	Value	tabulation:	Freq.	Value	tabulation:	Freq.	Value
	1	0		2	29		1	63
	128	1		13	30		1	64
	121	2		1	31		3	65
	71	3		1	32		2	66
	53	4		1	34		1	68
	79	5		3	35		2	69
	23	6		1	36		15	70
	34	7		2	37		2	72
	38	8		3	38		2	73
	18	9		1	39		4	74
	90	10		5	40		9	75
	6	11		1	41		3	76
	11	12		1	43		1	77
	3	13		2	44		3	78
	10	14		2	45		1	79
	22	15		1	46		10	80
	4	16		1	47		3	81
	2	17		12	48		5	83
	8	18		2	49		3	84
	4	19		43	50		4	85
	25	20		2	51		4	86
	2	21		1	53		2	89
	2	22		8	55		6	90
	4	23		4	56		5	92
	2	24		1	57		1	95
	17	25		1	58		3	96
	1	26		5	60		1	97
	3	27		1	61		2	98
	3	28		4	62		44	99

F27TRANS:

1. Not required if F27VDATE=12/31/84.
2. 99 entered if >= 99 transfusions.

F27GSCRN ----- ANTIBODY SCREEN - CLINIC

type: numeric (float)

label: F27GSCRN

range: [1,2]

units: 1

unique values: 2

coded missing: 1266 / 10875

tabulation:	Freq.	Numeric	Label
	7425	1	NEGATIVE
	2184	2	POSITIVE

CODEBOOK FOR CSSCD "FORM" 27

ALLOANTIBODIES

CSSCD FULL COHORT PATIENTS

F27CD ----- ANTI-D - CLINIC

type: numeric (float)
label: F27CD
range: [0,1] units: 1
unique values: 2 coded missing: 8687 / 10875

tabulation:	Freq.	Numeric	Label
	1746	0	NEGATIVE
	442	1	POSITIVE

F27CD:

1. Required if F27CSCRN=2.

F27CC ----- ANTI-C - CLINIC

type: numeric (float)
label: F27CC
range: [0,1] units: 1
unique values: 2 coded missing: 8688 / 10875

tabulation:	Freq.	Numeric	Label
	1767	0	NEGATIVE
	420	1	POSITIVE

F27CC:

1. Required if F27CSCRN=2.

F27CE ----- ANTI-E - CLINIC

type: numeric (float)
label: F27CE
range: [0,1] units: 1
unique values: 2 coded missing: 8689 / 10875

tabulation:	Freq.	Numeric	Label
	1476	0	NEGATIVE
	710	1	POSITIVE

F27CE:

1. Required if F27CSCRN=2.

F27CLC ----- ANTI-c - CLINIC

type: numeric (float)
label: F27CLC
range: [0,1] units: 1
unique values: 2 coded missing: 8689 / 10875

tabulation:	Freq.	Numeric	Label
	2154	0	NEGATIVE
	32	1	POSITIVE

F27CLC:

1. Required if F27CSCRN=2.

CODEBOOK FOR CSSCD "FORM" 27

ALLOANTIBODIES

CSSCD FULL COHORT PATIENTS

F27CLE ----- ANTI-e - CLINIC

type: numeric (float)
label: F27CLE
range: [0,1] units: 1
unique values: 2 coded missing: 8689 / 10875

tabulation:	Freq.	Numeric	Label
	2172	0	NEGATIVE
	14	1	POSITIVE

F27CLE:

1. Required if F27CSCRN=2.

F27CV ----- ANTI-V - CLINIC

type: numeric (float)
label: F27CV
range: [0,1] units: 1
unique values: 2 coded missing: 8689 / 10875

tabulation:	Freq.	Numeric	Label
	2142	0	NEGATIVE
	44	1	POSITIVE

F27CV:

1. Required if F27CSCRN=2.

F27CF ----- ANTI-F - CLINIC

type: numeric (float)
label: F27CF
range: [0,1] units: 1
unique values: 2 coded missing: 8690 / 10875

tabulation:	Freq.	Numeric	Label
	2184	0	NEGATIVE
	1	1	POSITIVE

F27CF:

1. Required if F27CSCRN=2.

F27CLEA ----- ANTI-LEA - CLINIC

type: numeric (float)
label: F27CLEA
range: [0,1] units: 1
unique values: 2 coded missing: 8689 / 10875

tabulation:	Freq.	Numeric	Label
	1905	0	NEGATIVE
	281	1	POSITIVE

F27CLEA:

1. Required if F27CSCRN=2.

CODEBOOK FOR CSSCD "FORM" 27

ALLOANTIBODIES

CSSCD FULL COHORT PATIENTS

F27CLEB ----- ANTI-LEB - CLINIC

type: numeric (float)
label: F27CLEB
range: [0,1] units: 1
unique values: 2 coded missing: 8690 / 10875

tabulation:	Freq.	Numeric	Label
	2030	0	NEGATIVE
	155	1	POSITIVE

F27CLEB:

1. Required if F27CSCRN=2.

F27CFYA ----- ANTI-FYA - CLINIC

type: numeric (float)
label: F27CFYA
range: [0,1] units: 1
unique values: 2 coded missing: 8689 / 10875

tabulation:	Freq.	Numeric	Label
	1978	0	NEGATIVE
	208	1	POSITIVE

F27CFYA:

1. Required if F27CSCRN=2.

F27CFYB ----- ANTI-FYB - CLINIC

type: numeric (float)
label: F27CFYB
range: [0,1] units: 1
unique values: 2 coded missing: 8690 / 10875

tabulation:	Freq.	Numeric	Label
	2129	0	NEGATIVE
	56	1	POSITIVE

F27CFYB:

1. Required if F27CSCRN=2.

F27CM ----- ANTI-M - CLINIC

type: numeric (float)
label: F27CM
range: [0,1] units: 1
unique values: 2 coded missing: 8688 / 10875

tabulation:	Freq.	Numeric	Label
	2059	0	NEGATIVE
	128	1	POSITIVE

F27CM:

1. Required if F27CSCRN=2.

CODEBOOK FOR CSSCD "FORM" 27

ALLOANTIBODIES

CSSCD FULL COHORT PATIENTS

F27CN ----- ANTI-N - CLINIC

type: numeric (float)
label: F27CN
range: [0,1] units: 1
unique values: 2 coded missing: 8689 / 10875

tabulation:	Freq.	Numeric	Label
	2173	0	NEGATIVE
	13	1	POSITIVE

F27CN:

1. Required if F27CSCRN=2.

F27CS ----- ANTI-S - CLINIC

type: numeric (float)
label: F27CS
range: [0,1] units: 1
unique values: 2 coded missing: 8689 / 10875

tabulation:	Freq.	Numeric	Label
	2086	0	NEGATIVE
	100	1	POSITIVE

F27CS:

1. Required if F27CSCRN=2.

F27CLS ----- ANTI-s - CLINIC

type: numeric (float)
label: F27CLS
range: [0,1] units: 1
unique values: 2 coded missing: 8689 / 10875

tabulation:	Freq.	Numeric	Label
	2178	0	NEGATIVE
	8	1	POSITIVE

F27CLS:

1. Required if F27CSCRN=2.

F27CK ----- ANTI-K - CLINIC

type: numeric (float)
label: F27CK
range: [0,1] units: 1
unique values: 2 coded missing: 8689 / 10875

tabulation:	Freq.	Numeric	Label
	1513	0	NEGATIVE
	673	1	POSITIVE

F27CK:

1. Required if F27CSCRN=2.

CODEBOOK FOR CSSCD "FORM" 27

ALLOANTIBODIES

CSSCD FULL COHORT PATIENTS

F27CKPA ----- ANTI-KPA - CLINIC

type: numeric (float)
label: F27CKPA
range: [0,1] units: 1
unique values: 2 coded missing: 8689 / 10875

tabulation:	Freq.	Numeric	Label
	2150	0	NEGATIVE
	36	1	POSITIVE

F27CKPA:

1. Required if F27CSCRN=2.

F27CKPB ----- ANTI-KPB - CLINIC

type: numeric (float)
label: F27CKPB
range: [0,1] units: 1
unique values: 2 coded missing: 8689 / 10875

tabulation:	Freq.	Numeric	Label
	2164	0	NEGATIVE
	22	1	POSITIVE

F27CKPB:

1. Required if F27CSCRN=2.

F27CJKA ----- ANTI-JKA - CLINIC

type: numeric (float)
label: F27CJKA
range: [0,1] units: 1
unique values: 2 coded missing: 8690 / 10875

tabulation:	Freq.	Numeric	Label
	2171	0	NEGATIVE
	14	1	POSITIVE

F27CJKA:

1. Required if F27CSCRN=2.

F27CJKB ----- ANTI-JKB - CLINIC

type: numeric (float)
label: F27CJKB
range: [0,1] units: 1
unique values: 2 coded missing: 8689 / 10875

tabulation:	Freq.	Numeric	Label
	2049	0	NEGATIVE
	137	1	POSITIVE

F27CJKB:

1. Required if F27CSCRN=2.

CODEBOOK FOR CSSCD "FORM" 27

ALLOANTIBODIES

CSSCD FULL COHORT PATIENTS

F27CI ----- ANTI-I - CLINIC

type: numeric (float)
label: F27CI

range: [0,1] units: 1
unique values: 2 coded missing: 8688 / 10875

tabulation:	Freq.	Numeric	Label
	2103	0	NEGATIVE
	84	1	POSITIVE

F27CI:

1. Required if F27CSCRN=2.

F27CJSA ----- ANTI-JSA - CLINIC

type: numeric (float)
label: F27CJSA

range: [0,1] units: 1
unique values: 2 coded missing: 8688 / 10875

tabulation:	Freq.	Numeric	Label
	2172	0	NEGATIVE
	15	1	POSITIVE

F27CJSA:

1. Required if F27CSCRN=2.

F27CJSB ----- ANTI-JSB - CLINIC

type: numeric (float)
label: F27CJSB

range: [0,1] units: 1
unique values: 2 coded missing: 8689 / 10875

tabulation:	Freq.	Numeric	Label
	2183	0	NEGATIVE
	3	1	POSITIVE

F27CJSB:

1. Required if F27CSCRN=2.

CODEBOOK FOR CSSCD "FORM" 27

ALLOANTIBODIES

CSSCD FULL COHORT PATIENTS

F27C0TH1 ----- ANTI-OTHER1 - CLINIC

type: string (str4)

unique values: 43

coded missing: 10410 / 10875

tabulation: Freq. Value

17	"AB"
3	"IS"
1	"AIB"
6	"DOB"
4	"MUR"
1	"A"
7	"A1"
1	"AGGL"
2	"AHG"
26	"ATYP"
146	"AUTO"
23	"BG"
7	"BGA"
1	"BGB"
7	"BGC"
7	"COB"
11	"COLD"
13	"CW"
1	"DAT"
1	"FY3"
1	"H"
3	"HLA"

tabulation: Freq. Value

26	"HTLA"
9	"HW"
2	"ICT"
2	"IGGW"
1	"IGMP"
1	"IH"
1	"JKS"
1	"L"
1	"LISS"
1	"LUA"
8	"MCCA"
23	"P"
1	"P1"
4	"POLY"
6	"POSS"
41	"SDA"
1	"T"
8	"U"
31	"UNID"
7	"WARM"
1	"WRA"

5.5: Density Gradient – “Record 95”

F27C0TH2 ----- ANTI-OTHER2 - CLINIC

type: string (str4)

unique values: 13

coded missing: 10795 / 10875

tabulation:	Freq.	Value
	1	"A"
	3	"ALB"
	4	"HUT"
	1	"AGGI"
	1	"AGGL"
	26	"AUTO"
	3	"BG"
	2	"CW"
	19	"DAT"
	17	"HTLA"
	1	"LISS"
	1	"LUA"
	1	"LW"

5.5: Density Gradient – “Record 95”

F27DABO ----- BLOOD GROUP - DUKE

type: numeric (float)

label: F27DABO

range: [1,4]

units: 1

unique values: 4

coded missing: 8791 / 10875

tabulation:	Freq.	Numeric	Label
	1126	1	0
	509	2	A
	372	3	B
	77	4	AB

F27DABO:

1. Required only if F27DSCRN >= 1.

F27DRH ----- RH - DUKE

type: numeric (float)

label: F27DRH

range: [1,2]

units: 1

unique values: 2

coded missing: 8796 / 10875

tabulation:	Freq.	Numeric	Label
	122	1	NEGATIVE
	1957	2	POSITIVE

F27DRH:

1. Required only if F27DSCRN >= 1.

F27ATGEN ----- OTHER ANTIGENS PHENOTYPED?

type: numeric (float)

label: F27ATGEN

range: [1,2]

units: 1

unique values: 2

coded missing: 9325 / 10875

tabulation:	Freq.	Numeric	Label
	1355	1	NO
	195	2	YES

F27ATGEN:

1. Required only if F27DSCRN >= 1.

5.5: Density Gradient – “Record 95”

F27DSCRN ----- ANTIBODY SCREEN - DUKE

type: numeric (float)
label: F27DSCRN
range: [0,2] units: 1
unique values: 3 coded missing: 8801 / 10875

tabulation:	Freq.	Numeric	Label
	2	0	
	1712	1	NEGATIVE
	360	2	POSITIVE

F27DD ----- ANTI-D - DUKE

type: numeric (float)
label: F27DD
range: [0,1] units: 1
unique values: 2 coded missing: 10574 / 10875

tabulation:	Freq.	Numeric	Label
	286	0	NEGATIVE
	15	1	POSITIVE

F27DD:

1. Required only if F27DSCRN=2.

F27DC ----- ANTI-C - DUKE

type: numeric (float)
label: F27DC
range: [0,1] units: 1
unique values: 2 coded missing: 10577 / 10875

tabulation:	Freq.	Numeric	Label
	251	0	NEGATIVE
	47	1	POSITIVE

F27DC:

1. Required only if F27DSCRN=2.

F27DE ----- ANTI-E - DUKE

type: numeric (float)
label: F27DE
range: [0,1] units: 1
unique values: 2 coded missing: 10576 / 10875

tabulation:	Freq.	Numeric	Label
	183	0	NEGATIVE
	116	1	POSITIVE

F27DE:

1. Required only if F27DSCRN=2.

5.5: Density Gradient – “Record 95”

F27DLC ----- ANTI-c - DUKE

type: numeric (float)
label: F27DLC
range: [0,1] units: 1
unique values: 2 coded missing: 10577 / 10875

tabulation:	Freq.	Numeric	Label
	295	0	NEGATIVE
	3	1	POSITIVE

F27DLC:

1. Required only if F27DSCRN=2.

F27DLE ----- ANTI-e - DUKE

type: numeric (float)
label: F27DLE
range: [0,1] units: 1
unique values: 2 coded missing: 10577 / 10875

tabulation:	Freq.	Numeric	Label
	294	0	NEGATIVE
	4	1	POSITIVE

F27DLE:

1. Required only if F27DSCRN=2.

F27DV ----- ANTI-V - DUKE

type: numeric (float)
label: F27DV
range: [0,1] units: 1
unique values: 2 coded missing: 10577 / 10875

tabulation:	Freq.	Numeric	Label
	297	0	NEGATIVE
	1	1	POSITIVE

F27DV:

1. Required only if F27DSCRN=2.

F27DF ----- ANTI-F - DUKE

type: numeric (float)
label: F27DF
range: [0,0] units: 0
unique values: 1 coded missing: 10577 / 10875

tabulation:	Freq.	Numeric	Label
	298	0	NEGATIVE

F27DF:

1. Required only if F27DSCRN=2.

5.5: Density Gradient – “Record 95”

F27DLEA ----- ANTI-LEA - DUKE

type: numeric (float)
label: F27DLEA
range: [0,1] units: 1
unique values: 2 coded missing: 10576 / 10875

tabulation:	Freq.	Numeric	Label
	257	0	NEGATIVE
	42	1	POSITIVE

F27DLEA:

1. Required only if F27DSCRN=2.

F27DLEB ----- ANTI-LEB - DUKE

type: numeric (float)
label: F27DLEB
range: [0,1] units: 1
unique values: 2 coded missing: 10576 / 10875

tabulation:	Freq.	Numeric	Label
	274	0	NEGATIVE
	25	1	POSITIVE

F27DLEB:

1. Required only if F27DSCRN=2.

F27DFYA ----- ANTI-FYA - DUKE

type: numeric (float)
label: F27DFYA
range: [0,1] units: 1
unique values: 2 coded missing: 10577 / 10875

tabulation:	Freq.	Numeric	Label
	264	0	NEGATIVE
	34	1	POSITIVE

F27DFYA:

1. Required only if F27DSCRN=2.

F27DFYB ----- ANTI-FYB - DUKE

type: numeric (float)
label: F27DFYB
range: [0,1] units: 1
unique values: 2 coded missing: 10577 / 10875

tabulation:	Freq.	Numeric	Label
	288	0	NEGATIVE
	10	1	POSITIVE

F27DFYB:

1. Required only if F27DSCRN=2.

5.5: Density Gradient – “Record 95”

F27DM ----- ANTI-M - DUKE

type: numeric (float)
label: F27DM
range: [0,1] units: 1
unique values: 2 coded missing: 10574 / 10875

tabulation:	Freq.	Numeric	Label
	290	0	NEGATIVE
	11	1	POSITIVE

F27DM:

1. Required only if F27DSCRN=2.

F27DN ----- ANTI-N - DUKE

type: numeric (float)
label: F27DN
range: [0,0] units: 0
unique values: 1 coded missing: 10577 / 10875

tabulation:	Freq.	Numeric	Label
	298	0	NEGATIVE

F27DN:

1. Required only if F27DSCRN=2.

F27DS ----- ANTI-S - DUKE

type: numeric (float)
label: F27DS
range: [0,1] units: 1
unique values: 2 coded missing: 10577 / 10875

tabulation:	Freq.	Numeric	Label
	292	0	NEGATIVE
	6	1	POSITIVE

F27DS:

1. Required only if F27DSCRN=2.

F27DLS ----- ANTI-s - DUKE

type: numeric (float)
label: F27DLS
range: [0,1] units: 1
unique values: 2 coded missing: 10577 / 10875

tabulation:	Freq.	Numeric	Label
	296	0	NEGATIVE
	2	1	POSITIVE

F27DLS:

1. Required only if F27DSCRN=2.

5.5: Density Gradient – “Record 95”

F27DK ----- ANTI-K - DUKE

type: numeric (float)
label: F27DK
range: [0,1] units: 1
unique values: 2 coded missing: 10578 / 10875

tabulation:	Freq.	Numeric	Label
	223	0	NEGATIVE
	74	1	POSITIVE

F27DK:

1. Required only if F27DSCRN=2.

F27DKPA ----- ANTI-KPA - DUKE

type: numeric (float)
label: F27DKPA
range: [0,1] units: 1
unique values: 2 coded missing: 10577 / 10875

tabulation:	Freq.	Numeric	Label
	292	0	NEGATIVE
	6	1	POSITIVE

F27DKPA:

1. Required only if F27DSCRN=2.

F27DKPB ----- ANTI-KPB - DUKE

type: numeric (float)
label: F27DKPB
range: [0,0] units: 0
unique values: 1 coded missing: 10577 / 10875

tabulation:	Freq.	Numeric	Label
	298	0	NEGATIVE

F27DKPB:

1. Required only if F27DSCRN=2.

F27DJKA ----- ANTI-JKA - DUKE

type: numeric (float)
label: F27DJKA
range: [0,1] units: 1
unique values: 2 coded missing: 10577 / 10875

tabulation:	Freq.	Numeric	Label
	295	0	NEGATIVE
	3	1	POSITIVE

F27DJKA:

1. Required only if F27DSCRN=2.

5.5: Density Gradient – “Record 95”

F27DJKB ----- ANTI-JKB - DUKE

type: numeric (float)
label: F27DJKB
range: [0,1] units: 1
unique values: 2 coded missing: 10577 / 10875

tabulation:	Freq.	Numeric	Label
	288	0	NEGATIVE
	10	1	POSITIVE

F27DJKB:

1. Required only if F27DSCRN=2.

F27DI ----- ANTI-I - DUKE

type: numeric (float)
label: F27DI
range: [0,1] units: 1
unique values: 2 coded missing: 10577 / 10875

tabulation:	Freq.	Numeric	Label
	270	0	NEGATIVE
	28	1	POSITIVE

F27DI:

1. Required only if F27DSCRN=2.

F27DJSA ----- ANTI-JSA - DUKE

type: numeric (float)
label: F27DJSA
range: [0,1] units: 1
unique values: 2 coded missing: 10577 / 10875

tabulation:	Freq.	Numeric	Label
	296	0	NEGATIVE
	2	1	POSITIVE

F27DJSA:

1. Required only if F27DSCRN=2.

F27DJSB ----- ANTI-JSB - DUKE

type: numeric (float)
label: F27DJSB
range: [0,1] units: 1
unique values: 2 coded missing: 10579 / 10875

tabulation:	Freq.	Numeric	Label
	293	0	NEGATIVE
	3	1	POSITIVE

F27DJSB:

1. Required only if F27DSCRN=2.

5.5: Density Gradient – “Record 95”

F27D0TH1 ----- ANTI-OTHER1 - DUKE

type: string (str4)

unique values: 13

coded missing: 10848 / 10875

tabulation: Freq. Value

1	"P"
1	"A1"
5	"AHG"
3	"BG"
3	"BGA"
1	"BGB"
1	"CW"
1	"DAT"
3	"HTLA"
1	"IH"
3	"LUA"
2	"SDA"
2	"UNID"

F27D0TH2 ----- ANTI-OTHER2 - DUKE

type: string (str4)

unique values: 1

coded missing: 10874 / 10875

tabulation: Freq. Value

1	"SDA"
---	-------

F27NSAMP ----- NEW SAMPLE REQUESTED

type: numeric (float)

label: F27NSAMP

range: [1,2]

units: 1

unique values: 2

coded missing: 9298 / 10875

tabulation: Freq. Numeric Label

1451	1	NO
126	2	YES

_dta:

1. Run on 08/19/99.

A. List of variables deleted **F95DATE F95INIT F95NDATE F95LASTU F95LASTE
F95ESTAT**

B. List of variables modified **NONE**

C. List of variables modified with a name change **NONE**

D. Old name

E. New name

F. List of variables modified date to days since DOE

5.5: Density Gradient – “Record 95”

G. Old name **F95DATE**

H. New name **JF95DATE**

I. Collection Information:

Samples for this “ancillary” study were sent to George Washington University (Dr. Joseph Kuranstin-Mills) for testing. Very few patients participated in this “optional” ancillary study (< 300 in the full cohort and only 33 in the infant cohort).

J. Data Collection Period: 1984 – 1986

K. Form Version Dates: N/A

L. Files Used to Store Information:

SAS System File: **R95.SD2**

Format File: **R95.FMT**

M. Unique Record Identifiers: **ANONID, F95DATE**

Records within the dataset are sorted by **ANONID** and **F95DATE**.

N. Number of Observations (Patients) in SAS Dataset: 800 (289)

O. Contents of SAS Dataset:

- Alphabetical Listing of Variables: See p. 57
- Listing of Variables by Position: See p. 58

P. Notes About Selected Variables: None

Q. Computed Variables: None

R. Inter-Relationship With Other Datasets: N/A

5.6: α Globin Gene Mapping and β^s Haplotyping – “Record 4”

CONTENTS OF SAS DATASET: R95.SD2
DATA FROM CSSCD RECORD 95 - DENSITY GRADIENT REPORT
VARIABLES ARE LISTED IN ALPHABETICAL ORDER AND IN ORDER OF THEIR POSITION
IN THE SAS DATASET
The SAS System 16:50 Thursday, October 12, 2006 3

The CONTENTS Procedure

Data Set Name	OUT1.R95	Observations	800
Member Type	DATA	Variables	7
Engine	V9	Indexes	0
Created	15:00 Wednesday, October 11, 2006	Observation Length	56
Last Modified	15:00 Wednesday, October 11, 2006	Deleted Observations	0
Protection		Compressed	NO
Data Set Type		Sorted	NO
Label			
Data Representation	WINDOWS		
Encoding	wlatin1 Western (Windows)		

Engine/Host Dependent Information

Data Set Page Size	8192
Number of Data Set Pages	6
First Data Page	1
Max Obs per Page	145
Obs in First Data Page	112
Number of Data Set Repairs	0
File Name	r95.sas7bdat
Release Created	9.0000M0
Host Created	XP_PRO

Alphabetic List of Variables and Attributes

#	Variable	Type	Len	Label
1	ANONID	Char	8	ANONYMIZED ID #
6	F95D50	Num	8	MEDIAN DENSITY
3	F95DCF	Num	8	DENSE CELL FRACTION
4	F95LCF	Num	8	LIGHT CELL FRACTION
2	F95STAT	Num	8	STATUS AT TIME OF STUDY
5	F95T60	Num	8	60% TRANSITIONAL DENSITY RANGE
7	JF95DATE	Num	8	DATE OF DENSITY PROFILE - DAYS SINCE DO

* R95.FMT contains value labels for numerical codes assigned to
categorical*

5.6: α Globin Gene Mapping and β^s Haplotyping – “Record 4”

```
* variables in the SAS dataset R95.SD2
*
*****
****;

* SIR/DBMS 2.2 SAS PROC STEP FROM DATABASE: CSSCD    07/01/99 14:35:57;

PROC FORMAT;

*   FORMAT F95STAT IS DEFINED FOR VARIABLE F95STAT;

VALUE F95STAT
  1          = 'STEADY STATE'
  2          = 'POST-TRANSFUSION'
  3          = 'PREGNANT'
  4          = 'PAIN CRISIS'
  5          = 'PRE-TRANSFUSION'
  6          = 'OTHER' ;

*   FORMAT
      F95ESTAT F95ESTAT.
      F95STAT F95STAT. ;

RUN;
QUIT;
```

5.6: α Globin Gene Mapping and β^s Haplotyping – “Record 4”

F95STAT ----- STATUS AT TIME OF STUDY

type: numeric (float)
 label: F95STAT

range: [1,6] units: 1

unique values: 6 coded missing: 0 / 800

tabulation:	Freq.	Numeric	Label
	599	1	STEADY STATE
	68	2	POST-TRANSFUSION
	5	3	PREGNANT
	104	4	PAIN CRISIS
	10	5	PRE-TRANSFUSION
	14	6	OTHER

F95DCF ----- DENSE CELL FRACTION

type: numeric (float)

range: [0,.3493] units: .0001

unique values: 710 coded missing: 0 / 800

mean: .145247
 std. dev: .082107

percentiles:	10%	25%	50%	75%	90%
	.0369	.08065	.1406	.2081	.2554

F95LCF ----- LIGHT CELL FRACTION

type: numeric (float)

range: [.007,1.5949] units: .0001

unique values: 692 coded missing: 0 / 800

mean: .588523
 std. dev: .095618

percentiles:	10%	25%	50%	75%	90%
	.50335	.53275	.58345	.63755	.68735

F95T60 ----- 60% TRANSITIONAL DENSITY RANGE

type: numeric (float)

range: [0,1.0892] units: .0001

unique values: 231 coded missing: 0 / 800

mean: .015431
 std. dev: .042747

percentiles:	10%	25%	50%	75%	90%
	.0067	.00805	.0108	.01635	.0236

F95D50 ----- MEDIAN DENSITY

type: numeric (float)

5.6: α Globin Gene Mapping and β^s Haplotyping – “Record 4”

range: [1.0092,5.7004] units: .0001
unique values: 216 coded missing: 0 / 800

mean: 1.10394
std. dev: .162822

percentiles: 10% 25% 50% 75% 90%
 1.09205 1.09505 1.0977 1.1016 1.1051

_dta:

1. Codebook created on 10/13/00

- A. List of variables deleted **NONE**
- B. List of variables modified **NONE**
- C. List of variables modified with a name change **NONE**
- D. Old name
- E. New name
- F. List of variables modified date to days since DOE **NONE**
- G. Old name
- H. New name
- I. Collection Information:

α Globin Gene Mapping and β^s Haplotyping were to be performed on all subjects with a CDC Hb diagnosis of SS or S/ β^0 thalassemia and subjects who did not have a CDC diagnosis because of continual transfusion since study entry. Samples were sent to the CORE laboratory at San Francisco General Hospital (Dr. Stephen Embury) for testing.

- J. Data Collection Period: 01/84 – 09/88*

*Samples continued to be collected during Phases 2 and 3 for subjects for whom no samples were submitted during Phase 1.

- K. Form Version Dates: N/A

- L. Files Used to Store Information:

SAS System File: **R04.SD2**

Format File: None

- M. Unique Record Identifiers: **ANONID**

- N. Number of Observations (Patients) in SAS Dataset: 2226 (2226)

5.6: α Globin Gene Mapping and β^s Haplotyping – “Record 4”

O. Contents of SAS Dataset:

- Alphabetical Listing of Variables: See p. 65
- Listing of Variables by Position: See p. 66

P. Notes About Selected Variables:

- **F04REV** – is the variable name for whether or not α -globin gene mapping was performed locally or centrally. Although the majority of studies were performed by the CORE laboratory, some studies performed at 2 participating centers (Columbia Presbyterian and University of Mississippi) were considered acceptable for inclusion on the database. The value of **F04REV**=1 if the study was performed locally rather than centrally.
- **C_HAP5, C_HAP7** – are the variable names for β^s haplotyping results based on 5 and 7 RFLP site respectively. The algorithms used for classification are presented in the next table:

β^s HAPLOTYPE BASED ON 5 RFLP SITES

FORMULA					<u>RESULTS</u>
ϵ	G γ	A γ	$\psi\beta$	3' ψ β	
n/n	n/n	n/n	n/n	y/y	BEN/BEN
n/n	y/n	n/n	n/n	y/n	BEN/CAR
n/n	y/n	n/n	y/n	y/y	BEN/SEN
n/n	y/n	y/n	n/n	y/y	BEN/CAM
y/n	y/n	n/n	y/n	y/y	BEN/SAU
n/n	y/y	n/n	n/n	n/n	CAR/CAR
n/n	y/y	n/n	y/n	y/n	CAR/SEN
n/n	y/y	y/n	n/n	y/n	CAR/CAM
y/n	y/y	n/n	y/n	y/n	CAR/SAU
n/n	y/y	n/n	y/y	y/y	SEN/SEN
n/n	y/y	y/n	y/n	y/y	SEN/CAM
y/n	y/y	n/n	y/y	y/y	SEN/SAU
n/n	y/y	y/y	n/n	y/y	CAM/CAM
y/n	y/y	y/n	y/n	y/y	CAM/SAU
y/y	y/y	n/n	y/y	y/y	SAU/SAU

5.6: α Globin Gene Mapping and β^s Haplotyping – “Record 4”

β^s HAPLOTYPE BASED ON 7 RFLP SITES

FORMULA

ϵ	Xmn	G γ	A γ	$\psi\beta$	3' $\psi\beta$	F	<u>RESULTS</u>
n/n	n/n	n/n	n/n	n/n	y/y	y/y	BEN/BEN
n/n	n/n	y/n	n/n	n/n	y/n	y/y	BEN/CAR
n/n	y/n	y/n	n/n	y/n	y/y	y/y	BEN/SEN
n/n	n/n	y/n	y/n	n/n	y/y	y/n	BEN/CAM
y/n	y/n	y/n	n/n	y/n	y/y	y/n	BEN/SAU
n/n	n/n	y/y	n/n	n/n	n/n	y/y	CAR/CAR
n/n	y/n	y/y	n/n	y/n	y/n	y/y	CAR/SEN
n/n	n/n	y/y	y/n	n/n	y/n	y/n	CAR/CAM
y/n	y/n	y/y	n/n	y/n	y/n	y/n	CAR/SAU
n/n	y/y	y/y	n/n	y/y	y/y	y/y	SEN/SEN
n/n	y/n	y/y	y/n	y/n	y/y	y/n	SEN/CAM
y/n	y/y	y/y	n/n	y/y	y/y	y/n	SEN/SAU
n/n	n/n	y/y	y/y	n/n	y/y	n/n	CAM/CAM
y/n	y/n	y/y	y/n	y/n	y/y	n/n	CAM/SAU
y/y	y/y	y/y	n/n	y/y	y/y	n/n	SAU/SAU

- **C_AGAM, C_EPS, C_GGAM, C_HAPF, C_PSIB, C_PSIB3, C_XMN** – are variable names for the RFLP sites. A value of “-9” entered for missing values of RFLP sites in cases where a non-missing value for at least one RFLP site was available.
- **PROBRSLT** – is the variable name for whether or not there is a problem with the β^s haplotyping classification. In some cases, where more than one sample was sent to the CORE lab for β^s haplotyping, the results were different for values of one or more RFLP sites. If this is the case, the value of **PROBRSLT** will be “YES” and the differences will be specified in the variables: **DISCREP1, DISCREP2, DISCREP3, DISCREP4**. Because the discrepancies are unresolved, β^s haplotyping results for patients with **PROBRSLT=“YES”** should be excluded from analyses if the discrepancy involves an RFLP site which is used to make the haplotyping classification (See table above).

Q. Computed Variables:

- **C_HAP5, C_HAP7** – See table above for algorithms used to compute β^s haplotypes based on 5 and 7 RFLP sites respectively.

5.6: α Globin Gene Mapping and β^s Haplotyping – “Record 4”

R. Inter-Relationship With Other Datasets:

The variable **HEMO** in **R09.SD2** reflects the CDC hemoglobin diagnosis in combination with α -globin gene mapping results for patients with SS or S/ β^0 thalassemia. Note that there are patients with a CDC diagnosis of SS or SS α -thal who do not have α -globin gene mapping results. Results of α globin gene mapping performed on patients with SC or S/ β^+ thalassemia (not required) are NOT reflected in the value for **HEMO**.

CODEBOOK FOR CSSCD "RECORD 4"
ALPHA GENE MAPPING & BETA S HAPLOTYPING RESULTS

CSSCD FULL COHORT PATIENTS

CONTENTS OF SAS DATASET: R04.SD2

DATA FROM CSSCD "FORM" 04 - ALPHA GENE MAPPING & BETA S HAPLOTYPING RESULTS
 VARIABLES ARE LISTED IN ALPHABETICAL ORDER AND IN ORDER OF THEIR POSITION
 IN THE SAS DATASET

The SAS System 16:03 Thursday, October 12, 2006 1

The CONTENTS Procedure

Data Set Name	OUT1.R04	Observations	2226
Member Type	DATA	Variables	19
Engine	V9	Indexes	0
Created	15:23 Wednesday, October 11, 2006	Observation Length	136
Last Modified	15:23 Wednesday, October 11, 2006	Deleted Observations	0
Protection		Compressed	NO
Data Set Type		Sorted	NO
Label			
Data Representation	WINDOWS		
Encoding	wlatin1 Western (Windows)		

Engine/Host Dependent Information

Data Set Page Size	12288
Number of Data Set Pages	26
First Data Page	1
Max Obs per Page	90
Obs in First Data Page	65
Number of Data Set Repairs	0
File Name	r04.sas7bdat
Release Created	9.0000MO
Host Created	XP_PRO

Alphabetic List of Variables and Attributes

#	Variable	Type	Len	Label
1	ANONID	Char	8	ANONYMIZED ID #
5	C_AGAM	Char	2	HIND III-A GAMMA RESULT
2	C_EPS	Char	2	HINC II - EPSILON RESULT
4	C_GGAM	Char	2	HIND III - G GAMMA RESULT
9	C_HAP5	Char	12	HAPLOTYPE BASED ON 5 RFLP SITES
10	C_HAP7	Char	12	HAPLOTYPE BASED ON 7 RFLP SITES
8	C_HAPF	Char	2	HINF I 5 B RESULT
6	C_PSIB	Char	2	HINC II - PSI BETA RESULT
7	C_PSIB3	Char	2	HINC II - 3 PSI BETA RESULT
3	C_XMN	Char	2	XMN-G GAMMA RESULT
14	DISCREP1	Char	14	DISCREPANCY 1
15	DISCREP2	Char	14	DISCREPANCY 2
16	DISCREP3	Char	14	DISCREPANCY 3
17	DISCREP4	Char	14	DISCREPANCY 4
18	F04ALPHA	Num	8	NUMBER OF ALPHA GENES
19	F04REV	Num	8	REVIEWED
12	HAP5COMP	Char	3	HAS RESULTS BASED ON 5 RFLP SITES
11	HAPCOMPL	Char	12	HAPLOTYPING STATUS BASED ON 7 RFLP SITES
13	PROBRSLT	Char	3	PROBLEM WITH "DUPLICATE" RESULTS?

CODEBOOK FOR CSSCD "RECORD 4"
ALPHA GENE MAPPING & BETA S HAPLOTYPING RESULTS
CSSCD FULL COHORT PATIENTS

5.0: Special Laboratory Studies - Overview

C_EPS ----- HINC II - EPSILON RESULT

type: string (str2)

unique values: 4

coded missing: 410 / 2226

tabulation:	Freq.	Value
	147	"-9"
	1553	"nn"
	104	"yn"
	12	"yy"

C_XMN ----- XMN-G GAMMA RESULT

type: string (str2)

unique values: 4

coded missing: 410 / 2226

tabulation:	Freq.	Value
	107	"-9"
	1431	"nn"
	254	"yn"
	24	"yy"

C_GGAM ----- HIND III - G GAMMA RESULT

type: string (str2)

unique values: 4

coded missing: 410 / 2226

tabulation:	Freq.	Value
	127	"-9"
	732	"nn"
	751	"yn"
	206	"yy"

C_AGAM ----- HIND III-A GAMMA RESULT

type: string (str2)

unique values: 4

coded missing: 410 / 2226

tabulation:	Freq.	Value
	61	"-9"
	1620	"nn"
	131	"yn"
	4	"yy"

5.0: Special Laboratory Studies - Overview

C_PSIB ----- HINC II - PSI BETA RESULT
type: string (str2)

unique values: 5 coded missing: 410 / 2226

tabulation:	Freq.	Value
	122	"-g"
	1423	"nn"
	1	"ny"
	238	"yn"
	32	"yy"

C_PSIB3 ----- HINC II - 3 PSI BETA RESULT
type: string (str2)

unique values: 4 coded missing: 410 / 2226

tabulation:	Freq.	Value
	249	"-g"
	150	"nn"
	550	"yn"
	867	"yy"

C_HAPF ----- HINF I 5 B RESULT
type: string (str2)

unique values: 4 coded missing: 410 / 2226

tabulation:	Freq.	Value
	159	"-g"
	1152	"nn"
	433	"yn"
	72	"yy"

C_HAP5 ----- HAPLOTYPE BASED ON 5 RFLP SITES
type: string (str12)

5.0: Special Laboratory Studies - Overview

unique values: 19

coded missing: 410 / 2226

```
tabulation: Freq. Value
             69 "BEN"
             485 "BEN/BEN"
             51 "BEN/CAM"
            307 "BEN/CAR"
              3 "BEN/SAU"
            123 "BEN/SEN"
              1 "CAM"
              2 "CAM/CAM"
             17 "CAR"
             18 "CAR/CAM"
             57 "CAR/CAR"
              1 "CAR/SAU"
             28 "CAR/SEN"
            390 "INCOMPLETE"
            230 "NO MATCH"
              5 "SEN"
             14 "SEN/CAM"
              1 "SEN/SAU"
             14 "SEN/SEN"
```

C_HAP7 ----- HAPLOTYPE BASED ON 7 RFLP SITES

type: string (str12)

unique values: 11

coded missing: 410 / 2226

```
tabulation: Freq. Value
             83 "BEN"
             45 "BEN/CAM"
              1 "BEN/SAU"
              1 "CAM"
             17 "CAR"
             17 "CAR/CAM"
            448 "INCOMPLETE"
           1179 "NO MATCH"
             11 "SEN"
              5 "SEN/CAM"
              9 "SEN/SEN"
```

HAPCOMPL ----- HAPLOTYPING STATUS BASED ON 7 RFLP SITES

type: string (str12)

5.0: Special Laboratory Studies - Overview

```
tabulation: Freq. Value
             1 "C_AGAM=nn"
             1 "C_AGAM=yn"
             1 "C_EPS=yy"
             3 "C_GGAM=nn"
             3 "C_GGAM=yn"
             1 "C_GGAM=yy"
             4 "C_HAPF=yn"
             1 "C_HAPF=yy"
             8 "C_PSIB3=nn"
             7 "C_PSIB3=yn"
             2 "C_PSIB3=yy"
             1 "C_PSIB=nn"
             1 "C_PSIB=ny"
             1 "C_PSIB=yy"
             1 "C_XMN=nn"
             2 "C_XMN=yn"
```

DISCREP1:

1. Applicable only if PROBRSLT='YES.'

DISCREP2 ----- DISCREPANCY 2

type: string (str14)

unique values: 12 coded missing: 2205 / 2226

```
tabulation: Freq. Value
             7 "CHAP5=NO MATCH"
             1 "C_GGAM=yn"
             1 "C_GGAM=yy"
             2 "C_HAP5=BEN/BEN"
             1 "C_HAP5=BEN/CAR"
             1 "C_HAP7=BEN/SEN"
             1 "C_HAPF=nn"
             2 "C_HAPF=yn"
             2 "C_PSIB3=nn"
             1 "C_PSIB3=yy"
             1 "C_PSIB=nn"
             1 "C_PSIB=yn"
```

DISCREP2:

1. Applicable only if PROBRSLT='YES.'

DISCREP3 ----- DISCREPANCY 3

type: string (str14)

unique values: 6 coded missing: 2217 / 2226

5.0: Special Laboratory Studies - Overview

```
tabulation: Freq. Value
              3 "CHAP5=NO MATCH"
              1 "C_AGAM=nn"
              1 "C_HAP5=BEN/SEN"
              1 "C_HAP5=CAR/CAR"
              2 "C_HAPF=nn"
              1 "C_PSIB3=yn"
```

DISCREP3:

1. Applicable only if PROBRSLT='YES.'

DISCREP4 ----- DISCREPANCY 4

type: string (str14)

unique values: 1 coded missing: 2225 / 2226

```
tabulation: Freq. Value
              1 "C_PSIB=nn"
```

DISCREP4:

1. Applicable only if PROBRSLT='YES.'

F04ALPHA ----- NUMBER OF ALPHA GENES

type: numeric (float)

range: [2,5] units: 1
unique values: 4 coded missing: 51 / 2226

```
tabulation: Freq. Value
              94 2
              612 3
             1449 4
              20 5
```

F04REV ----- REVIEWED

type: numeric (float)

range: [1,1] units: 1
unique values: 1 coded missing: 2143 / 2226

5.0: Special Laboratory Studies - Overview

tabulation: Freq. Value
83 1

F04REV:

1. Value of 1 means alpha gene mapping performed locally and results reviewed by core lab.

_dta:

1. Created 07/17/00.