

**Dataset Integrity Check for the
EDIC 10-Year Retinopathy Study
[DCCT-EDIC Study on the Prolonged Effect of Intensive Therapy on the Risk of
Retinopathy Complications in Patients with Type 1 Diabetes Mellitus,
10 years after the DCCT]**

The Data Coordinating Center (DCC) of the DCCT-EDIC Research Group submitted an analysis dataset to the NIDDK Data Repository, pertaining to a study of the “Prolonged Effect of Intensive Therapy on the Risk of Retinopathy Complications in Patients with Type 1 Diabetes Mellitus: 10 Years After the Diabetes Control and Complications Trial”, as published in *Archives of Ophthalmology* [1]. As a partial check of the integrity of this dataset archived in the NIDDK data repository, a dataset integrity check (DSIC) was performed to verify that selected published results from the study could be reproduced using the archived dataset. Results of the DSIC are described below.

The intent of this DSIC is to provide confidence that the data distributed by the NIDDK repository is a true copy of the study data. Our intent is *not* to assess the integrity of the statistical analyses reported by study investigators. As with all statistical analyses of complex datasets, complete replication of a set of statistical results should not be expected on an initial exercise in secondary analysis. This occurs for a number of reasons including differences in the handling of missing data, restrictions on cases included in samples for a particular analysis, software coding used to define complex variables, etc. Experience suggests that most discrepancies can ordinarily be resolved by consultation with the study DCC, however this process is labor-intensive for both DCC and Repository staff. It is thus not our policy to resolve every discrepancy that is observed in an integrity check. Thus, we do not attempt to resolve minor or inconsequential discrepancies with published results or discrepancies that involve complex analyses *unless staff of the NIDDK Repository suspect that the observed discrepancy suggests that the dataset may have been corrupted in storage, transmission, or processing by repository staff*. We do, however, document those instances in which our secondary analyses produced results that were not fully consistent with those reported in the target publication.

DSIC Background. As stated in the publication, the DCCT demonstrated significant reductions in the risk of the development and progression of the early microvascular complications of diabetes over subjects administered intensive therapy as compared with conventional therapy. At the close of the DCCT, patients in the conventional therapy group were offered intensive therapy; 97% of the original DCCT cohort enrolled in the Epidemiology of Diabetes Interventions and Complications (EDIC) study, a longitudinal observational study. The analysis reported in the publication reports on continuing differences between the 2 original treatment groups in retinal complications, 10 years after the close of the DCCT.

DSIC Methods. The DCC submitted two SAS datasets in XPORT format. (XPORT format allows the data to be read in over a variety of SAS platforms). Per Repository operating procedures, the XPORT datasets were converted to SAS version 7-8-9 format. The converted SAS datasets were utilized for all DSIC analyses. The structure of the two SAS datasets are as follows:

1) dataset EDRET10: Longitudinal dataset containing many records per patient, for 1426 patients that had fundus photo data during DCCT closeout (EDIC year 0) *or* EDIC years 1-10. The unique record key is subject ID--EDIC year.

This dataset includes data on retinopathy outcomes attained through EDIC years 1- 10, such as proliferative diabetic retinopathy (PDR), severe nonproliferative diabetic retinopathy (SNPDR), presence of clinically significant macular edema (CSME), and photocoagulation therapy (focal or scatter).

Analysis indicators include: ANALYSIS (=1 for 1211 subjects with a year 10 retinopathy evaluation) and CSMEANAL(=1 for 1174 subjects with a year 10 CSME evaluation).

While performing the DSIC, we found that the indicators ANALYSIS and CSMEANAL were *only* programmed correctly for year 10 records. (The indicators are populated at other subject-years, but appear to select different subjects.) The dataset was fixed by isolating the data for these indicator variables at year 10 and re-merging them back into the entire longitudinal dataset via subject ID (see code in *Appendix 2*).

Also, the DCC notes that “1426 patients with fundus photo data at any time during DCCT close (EDIC year 0) and EDIC year 1-10 are included (in the dataset).” We believe a better wording for this statement is “1426 patients with fundus photo data at any time during DCCT close (EDIC year 0) *or* EDIC year 1-10” are included in the dataset”, as 3 of the 1426 patients were missing baseline data.

2) dataset EDRETTAB: Contains one record per patient, for 1211 patients with an EDIC year 10 retinopathy evaluation. This dataset primarily includes data on demographics and baseline clinical characteristics.

A portion of the analyses in the publication was selected for replication to assure the archived dataset is a true copy of the one analyzed for Publication. The methods of analysis emulated those described in the Publication text. To test for differences in characteristics between treatment groups, the Wilcoxon rank sum test was used for continuous measures, and the χ^2 test for categorical measures. The odds reduction associated with the intervention, for various retinopathy complications, was calculated using logistic regression. Odds reductions during EDIC are adjusted for the level of retinopathy at the end of the DCCT. Weibull proportional hazards regression was used to evaluate treatment group effects on the cumulative incidence of further retinopathy progression during EDIC, adjusting for other covariates as indicated by the publication. Hazard reduction for intensive versus conventional therapy was calculated using the formula “(1 – hazard ratio) x 100”. Hazard models used all available photographs in all subjects, and excluded participants who had scatter photocoagulation in either eye during DCCT.

SAS software (Cary, NC) was used for all DSIC analyses, as also reported in the publication.

DSIC Results: Sample Characteristics. Table 1 presents characteristics of the 1211 patients evaluated for retinopathy after 10 years of EDIC follow-up, by original treatment group. Each patient characteristic derived from archived data is compared to the corresponding published result. Overall sample size by treatment group, from archived data, exactly matches the published sample size. The percent of women, calculated from archived data, is lower than what is published (46.5% [archived] versus 49.2% [published] women in the conventional treatment

group; 49.5% [archived] versus 50.8% [published] women in the intensive treatment group). We suspect this reflects a typographical error in the publication; i.e., that the article reports the distribution of women across treatment groups instead of within treatment group. (Archived data shows that, of 581 females in the analysis cohort, 49.2% were in the conventional group and 50.8% were in the intensive group, which are exactly the percents reported in the publication.)

In the conventional group, the standard deviation of glycosylated hemoglobin level is smaller in archived data (0.2) compared to its corresponding published result (1.3). All other percents, means, standard deviations, and *P* values in the Table, as calculated from archived data, closely matched published results. Observed differences are in the decimal points and may be attributable to rounding error.

Table 1. Characteristics of the 1211 Patients Evaluated for Retinopathy After 10 Years of EDIC Follow-up
 [ARCH = from Archived Data; PUB = from Published data; DIFF = Difference between Archived and Published]

DCCT Treatment Group, % (unless otherwise indicated)

	<u>Conventional</u>			<u>Intensive</u>			<u>P value*</u>	
	<u>ARCH</u>	<u>PUB</u>	<u>DIFF</u>	<u>ARCH</u>	<u>PUB</u>	<u>DIFF</u>	<u>ARCH</u>	<u>PUB</u>
N	615	615	0	596	596	0		
At DCCT entry								
Women	46.5	49.2	2.7	49.5	50.8	1.3	0.30	0.30
Age, y, mean (SD)	27 (7.0)	27 (7.0)	0.0 (0.0)	27 (7.0)	27 (7.0)	0.0 (0.0)	0.13	0.13
Primary prevention cohort	51.2	51.2	0.0	49.2	49.2	0.0	0.47	0.47
Duration of diabetes, y, mean (SD)	5.7 (4.1)	5.7 (4.1)	0.0 (0.0)	6.0 (4.2)	6.0 (4.2)	0.0 (0.0)	0.27	0.27
Glycosylated hemoglobin level, %, mean (SD)	9 (1.6)	9 (1.6)	0.0 (0.0)	9.1 (1.6)	9.1 (1.6)	0.0 (0.0)	0.25	0.25
At DCCT closeout/EDIC baseline								
Age, y, mean (SD)	33 (7.0)	33 (7.0)	0.0 (0.0)	34 (7.0)	34 (7.0)	0.0 (0.0)	0.09	0.09
Duration of diabetes, y, mean (SD)	11.8 (4.9)	11.8 (4.9)	0.0 (0.0)	12.2 (4.9)	12.2 (4.9)	0.0 (0.0)	0.14	0.14
DCCT follow-up, y, mean (SD)	6.3 (1.6)	6.3 (1.6)	0.0 (0.0)	6.4 (1.7)	6.4 (1.7)	0.0 (0.0)	0.32	0.32
Glycosylated hemoglobin level, %, mean (SD)	9.1 (0.2)	9 (1.3)	-0.1 (1.2)	7.4 (0.9)	7.3 (1.0)	-0.1 (0.1)	<.001	<.001
Treatment								
Continuous subcutaneous insulin infusion (pump) or multiple daily injections	5.1	5.1	0.0	98.0	98.0	0.0	<.001	<.001
Self-monitoring of blood glucose level, ≥ 4 times/d	4.1	4.1	0.0	53.7	53.7	0.0	<.001	<.001
Arterial blood pressure, mm Hg, mean (SD)	88.2 (8.7)	88.2 (8.7)	0.0 (0.0)	88.7 (8.7)	88.7 (8.6)	0.0 (-0.1)	0.29	0.30
Hyperlipidemia	10.6	10.6	0.0	7.2	7.2	0.0	0.04	0.04
Level of retinopathy							<.001	<.001
None (10/10)	17.8	17.8	0.0	28.5	28.5	0.0		
Microaneurysms only (20/[<20])	31.7	31.7	0.0	39.8	39.8	0.0		
Mild nonproliferative retinopathy (35/[<35])	27.7	27.7	0.0	21.5	21.5	0.0		
Moderate or severe nonproliferative retinopathy (43/[<43])	22.8	22.8	0.0	10.2	10.2	0.0		
Photocoagulation during DCCT								
Scatter, for retinopathy	4.1	4.1	0.0	1.7	1.7	0.0	0.01	0.01
Focal, for macular edema	5.4	5.4	0.0	2.2	2.2	0.0	0.004	0.004
Treatment at EDIC year 10								
Continuous subcutaneous insulin infusion (pump) or multiple daily injections	92.2	92.2	0.0	96.6	96.6	0.0	0.001	0.001
Self-monitoring of blood glucose level, ≥ 4 times/d	61.5	61.5	0.0	53.7	53.6	-0.1	0.007	0.007

* P-values are from Wilcoxon rank-sum tests, as in the Publication.

DSIC Results: Retinopathy Complications. Table 2 presents the prevalence of various retinopathy complications at DCCT Closeout, EDIC Year 4, and EDIC Year 10, among the 1211 patients evaluated for retinopathy at EDIC Year 10. Odds reductions (for the intervention over conventional treatment) and *P* values are also presented. Odds reductions and *P* values at EDIC Year 4 and EDIC Year 10 are adjusted for the level of retinopathy at DCCT Closeout. Each prevalence, odds reduction, and *P* value derived from archived data is compared to the corresponding published result.

There is a small discrepancy in the analysis sample size at DCCT Closeout, for archived versus published data. In the conventional group, archived data shows a sample size of 614, while the publication reports that of 615. In spite of this discrepancy, all prevalences, odds reductions and *P* values calculated on archived data very closely match published results.

The largest discrepancy in estimated results is for the prevalence of Photocoagulation therapy at EDIC Year 4. For patients in the intervention group, the prevalence is 4.6% [archived] versus 4.2% [published]. For patients in the conventional group, the prevalence is 14.3% [archived] versus 13.7% [published]. The adjusted odds reduction and 95% confidence interval for the treatment versus conventional groups is 56 (25,74) in archived data, as compared to 54 (21,73) in published data.

All other prevalences, odds reductions and *P* values, estimated from archived data, closely match published results; observed differences are in the decimal points and may be attributable to rounding error.

Table 2. Prevalence of Various Retinopathy Complications at DCCT Closeout
 [ARCH = from Archived Data; PUB = from Published data; DIFF = Difference between Archived and Published]

DCCT Closeout	Intervention (%)			Conventional (%)			Odds Reduction (95% CI)			Pvalue	
	ARCH	PUB	DIFF	ARCH	PUB	DIFF	ARCH	PUB	DIFF	ARCH	PUB
	Sample Size	596	596	0	614	615	1				
>3-step progression from DCCT Baseline	10.7	10.7	0	33.2	33.2	0	76 (67, 82)	76 (67, 82)	0 (0, 0)	<0.001	<0.001
SNPDR or worse	2.5	2.5	0	7	7	0	66 (38, 81)	66 (38, 81)	0 (0, 0)	<0.001	<0.001
PDR or worse	2.5	2.5	0	6.8	6.8	0	65 (36, 81)	64 (35, 81)	-1 (-1, 0)	<0.001	<0.001
CSME	3.9	3.9	0	7.7	7.7	0	51 (19, 71)	51 (19, 71)	0 (0, 0)	0.005	0.005
Photocoagulation therapy (focal or scatter)	3.4	3.4	0	8	8	0	60 (32, 76)	60 (32, 76)	0 (0, 0)	<0.001	<0.001
EDIC Year 4	Intervention (%)			Conventional (%)			Odds Reduction (95% CI)			Pvalue	
	ARCH	PUB	DIFF	ARCH	PUB	DIFF	ARCH	PUB	DIFF	ARCH	PUB
Sample Size	541	541	0	553	553	0					
>3-step progression from DCCT Baseline	17.8	17.8	0	48.9	48.9	0	74 (64, 81)	74 (64, 80)	0 (0, -1)	<0.001	<0.001
SNPDR or worse	4.6	4.6	0	17.4	17.4	0	67 (44, 81)	68 (44, 81)	1 (0, 0)	<0.001	<0.001
PDR or worse	4.3	4.3	0	15.7	15.7	0	65 (39, 80)	65 (39, 80)	0 (0, 0)	<0.001	<0.001
CSME	3.8	3.8	0	13.3	13.3	0	63 (36, 78)	62 (35, 78)	-1 (-1, 0)	<0.001	<0.001
Photocoagulation therapy (focal or scatter)	4.6	4.2	-0.4	14.3	13.7	-0.6	56 (25, 74)	54 (21, 73)	-2 (-4, -1)	0.002	0.004
EDIC Year 10	Intervention (%)			Conventional (%)			Odds Reduction (95% CI)			Pvalue	
	ARCH	PUB	DIFF	ARCH	PUB	DIFF	ARCH	PUB	DIFF	ARCH	PUB
Sample Size	596	596	0	615	615	0					
>3-step progression from DCCT Baseline	35.8	35.8	0	60.6	60.6	0	57 (46, 67)	57 (45, 66)	0 (-1, -1)	<0.001	<0.001
SNPDR or worse	9.1	9.1	0	25	25	0	58 (37, 71)	58 (38, 71)	0 (1, 0)	<0.001	<0.001
PDR or worse	8.9	8.9	0	24.7	24.7	0	58 (37, 71)	58 (38, 71)	0 (1, 0)	<0.001	<0.001
CSME	9	9	0	19	19	0	39 (12, 59)	38 (9, 59)	-1 (-3, 0)	0.009	0.009
Photocoagulation therapy (focal or scatter)	8.4	8.4	0	23.6	23.6	0	57 (36, 71)	57 (38, 71)	0 (2, 0)	<0.001	<0.001

KEY:

>3-step progression from DCCT Baseline = more than a three-step progression from DCCT Baseline in the early treatment diabetic retinopathy study (ETDRS) scale of diabetic retinopathy severity for individual eyes

PDR = proliferative diabetic retinopathy

SNPDR = severe nonproliferative diabetic retinopathy

CSME = presence of clinically significant macular edema

DSIC Results: Further Progression of Retinopathy between DCCT Closeout and EDIC Year 10. Table 3 presents an analysis of the cumulative incidence of further 3-step progression of retinopathy and PDR between DCCT closeout and EDIC year 10, stratified by the level of retinopathy at DCCT closeout. As previously described, the analysis was performed using multivariate Weibull proportional hazards regression models using evaluations at all years in subjects, excluding participants who had scatter photocoagulation in either eye during DCCT.

There is a small discrepancy in the number at risk for further 3-step retinopathy progression in archived versus published data. Archived data shows 1350 subjects at risk overall, while the publication reports 1349. Even so, adjusted hazard reduction of further 3-step progression (for treatment versus conventional groups) is similar in archived versus published data. For example, the overall adjusted hazard reduction is estimated at 52% in archived data versus 53% in published data (P value $<.001$ for both datasets).

There is an additional small discrepancy in the number at risk for proliferative diabetic retinopathy (PDR) during EDIC in archived versus published data. Archived data shows 1312 at risk overall, while the publication reports 1314. Even so, the adjusted hazard reduction of PDR is similar in archived versus published data. For example, the overall adjusted hazard reduction is estimated at 56% in archived data versus 56% in published data (P value $<.001$ for both datasets).

Conclusion. We suspect that minor differences in sample sizes in archived versus published data reflect possible small updates to the analysis dataset, implemented by the DCC post-publication, and/or small typographical errors in the publication. Since results of this DSIC are overall quite similar to published numbers, we are confident the archived data was not corrupted in storage, transmission, or processing by Repository staff.

Table 3. Incidence of Further 3-Step Progression of Retinopathy and PDR Between DCCT Closeout and EDIC Year 10, Stratified by the Level of Retinopathy at DCCT Closeout

[ARCH = from Archived Data; PUB = from Published data; DIFF = Difference between Archived and Published]

	<u>No. at Risk</u>			<u>No. with Event</u>			<u>Adjusted Hazard Reduction, %</u>			<u>Pvalue</u>	
	<u>ARCH</u>	<u>PUB</u>	<u>DIFF</u>	<u>ARCH</u>	<u>PUB</u>	<u>DIFF</u>	<u>ARCH</u>	<u>PUB</u>	<u>DIFF</u>	<u>ARCH</u>	<u>PUB</u>
	Further 3-Step Progression										
All Levels	1350	1349	-1				52	53	1	<0.001	<0.001
INT*	682	681	-1	188	187	-1					
CON**	668	668	0	321	322	1					
Stratum 1: no retinopathy							47	47	0	<0.001	<0.001
INT*	194	194	0	71	71	0					
CON**	123	123	0	68	68	0					
Stratum 2: microaneurysm only							62	63	1	<0.001	<0.001
INT*	275	274	-1	54	53	-1					
CON**	219	219	0	87	87	0					
Stratum 3: mild non-PDR							58	58	0	<0.001	<0.001
INT*	148	148	0	31	31	0					
CON**	200	200	0	82	83	1					
Stratum 4: moderate or severe non-PDR							41	40	-1	0.02	0.02
INT*	65	65	0	32	32	0					
CON**	126	126	0	84	84	0					

PDR^a

All Levels	1312	1314	2				56	56	0	<0.001	<0.001
INT*	667	666	-1	45	45	0					
CON**	645	648	3	119	121	2					
Stratum 1: no retinopathy							72	72	0	0.004	0.001
INT*	194	194	0	1	1	0					
CON**	122	122	0	2	2	0					
Stratum 2: microaneurysm only							a	a	a	a	a
INT*	274	273	-1	9	9	0					
CON**	219	219	0	20	20	0					
Stratum 3: mild non-PDR							57	58	1	0.01	0.009
INT*	148	148	0	15	15	0					
CON**	199	199	0	39	40	1					
Stratum 4: moderate or severe non-PDR							39	39	0	0.07	0.06
INT*	50	50	0	20	20	0					
CON**	104	104	0	58	59	1					

^a For PDR, strata 1 and 2 were combined in stratified analysis and in adjustment for all-levels-combined analysis because of the low event rate in these 2 strata.

Reference.

[1] Diabetes Control and Complications Trial/Epidemiology of Diabetes Interventions and Complications Research Group. **DCCT-EDIC Study on the Prolonged Effect of Intensive Therapy on the Risk of Retinopathy Complications in Patients with Type 1 Diabetes Mellitus, 10 years after the DCCT.** *Archives of Ophthalmology*, Vol 126(12), Dec 2008, pp. 1707-1715.

Appendices.

[1] Full Text of Original Article in *Archives of Ophthalmology*, Vol 126(12), Dec 2008, pp. 1707-1715 (for approved requestors only)

[2] SAS version 9.2 Log for programming code submitted for the replication of results of *Archives of Ophthalmology*, Vol 126(12), Dec 2008, pp. 1707-1715

[3] SAS version 9.2 Log for programming code submitted for the replication of results of *Archives of Ophthalmology*, Vol 126(12), Dec 2008, pp. 1707-1715

Attachment 1

“The full text of the article referenced will be provided to approved data requestors along with the data archived.”

Diabetes Control and Complications Trial/Epidemiology of Diabetes Interventions and Complications Research Group. **DCCT-EDIC Study on the Prolonged Effect of Intensive Therapy on the Risk of Retinopathy Complications in Patients with Type 1 Diabetes Mellitus, 10 years after the DCCT.** *Archives of Ophthalmology*, Vol 126(12), Dec 2008, pp. 1707-1715.

Attachment 2

SAS version 9.2 Log
for programming code submitted for
the replication of results in
Archives of Ophthalmology, Vol 126(12), Dec 2008,
pp. 1707-1715

NOTE: Copyright (c) 2002-2008 by SAS Institute Inc., Cary, NC, USA.
NOTE: SAS (r) Proprietary Software 9.2 (TS2M2)
Licensed to RTI INTL MAIN, Site 70006746.
NOTE: This session is executing on the XP_PRO platform.

NOTE: SAS initialization used:
real time 6.51 seconds
cpu time 1.10 seconds

```
1 options ps=55 ls=75 nonumber formchar='|----|+\---+=|^-<>*' mprint
1 ! orientation=portrait;
2
3 * directory with extracted SAS datasets *;
4 libname edic10sa 'C:\Documents and Settings\stan\My
4 ! Documents\DATA\NIDDK\EDIC\10-Year-Retinopathy\SAS_extract';
```

NOTE: Libref EDIC10SA was successfully assigned as follows:
Engine: V9
Physical Name: C:\Documents and Settings\stan\My
Documents\DATA\NIDDK\EDIC\10-Year-Retinopathy\SAS_extract

```
5
6 * EDRET10 -- one record per visit (Longitudinal dataset) -- with analysis
indicators
7 and longitudinal outcomes *;
8 data edic10re; set EDIC10SA.EDRET10; run;
```

NOTE: There were 6764 observations read from the data set EDIC10SA.EDRET10.
NOTE: The data set WORK.EDIC10RE has 6764 observations and 57 variables.
NOTE: DATA statement used (Total process time):
real time 0.12 seconds
cpu time 0.03 seconds

```
9
10 * EDRETTAB -- one record per subject (Baseline dataset) -- has mostly
10 ! baseline/demographic measures,
11 but also has DTCLSETD, which is one of the primary outcomes (not programmed in
12 longitudinal dataset ) *;
13 data edic10retab; set EDIC10SA.EDRETTAB;
14
15 *****;
16 * to replicate table 1*;
17 title To Replicate Table 1;
```

NOTE: There were 1211 observations read from the data set EDIC10SA.EDRETTAB.
NOTE: The data set WORK.EDIC10RETAB has 1211 observations and 28 variables.
NOTE: DATA statement used (Total process time):
real time 0.01 seconds
cpu time 0.00 seconds

```
18 proc freq data=edic10retab; tables group; run;
```

2011

NOTE: There were 1211 observations read from the data set WORK.EDIC10RETAB.

NOTE: The PROCEDURE FREQ printed page 1.

NOTE: PROCEDURE FREQ used (Total process time):

real time	0.96 seconds
cpu time	0.03 seconds

```
19      proc freq data=edic10retab; tables (sex rethbase mdi99 gluc499 lipflg
20      mdi10 gluc410 dtclsetd anyscat anyfoca)*group/chisq exact; run;
```

NOTE: There were 1211 observations read from the data set WORK.EDIC10RETAB.

NOTE: The PROCEDURE FREQ printed pages 2-16.

NOTE: PROCEDURE FREQ used (Total process time):

real time	0.98 seconds
cpu time	0.26 seconds

```
21      * evidently the regular chisq test was reported in the publication....
22      as stated in methods (nothing special ) *;
```

```
23
24      proc means data=edic10retab mean std maxdec=1;
25      class group;
26      var age0 duryr0 hbael
27      age99 duryr99 dcctyear hba99 mbp99 ; run;
```

NOTE: There were 1211 observations read from the data set WORK.EDIC10RETAB.

NOTE: The PROCEDURE MEANS printed page 17.

NOTE: PROCEDURE MEANS used (Total process time):

real time	0.32 seconds
cpu time	0.03 seconds

```
28      proc npar1way wilcoxon data=edic10retab;
29      class group;
30      var age0 duryr0 hbael
31      age99 duryr99 dcctyear hba99 mbp99 ; run;
```

NOTE: There were 1211 observations read from the data set WORK.EDIC10RETAB.

NOTE: The PROCEDURE NPAR1WAY printed pages 18-25.

NOTE: PROCEDURE NPAR1WAY used (Total process time):

real time	0.23 seconds
cpu time	0.03 seconds

```
32
33
34      *****;
35      * to replicate table 2*;
36      title To Replicate Table 2;
37      data edic10re; set edic10re;
38      * create focal or scatter indicator, reported in Table 2 *;
39      IF FOCAL=1 OR SCAT=1 THEN FOCALSCAT=1; ELSE IF FOCAL=0 AND SCAT=0 THEN
FOCALSCAT=0;
40
```

2011

```

41      * create outcome in longitudinal dataset *;
42      DTCLSETD=.;
43      IF DCCT10=1 THEN DTCLSETD=1;
44      ELSE IF DCCT20=1 THEN DTCLSETD=2;
45      ELSE IF DCCT30=1 THEN DTCLSETD=3;
46      ELSE IF DCCT40=1 OR DCCT50=1 THEN DTCLSETD=4;
47
48      label DTCLSETD='DCCT closeout ETDRS level comb DCCT10-DCCT50';
49      * this was programmed in baseline dataset but not in longitudinal *;
50
51      if group='EXPERIMENTAL' then tgroup=1;
52      else if group='STANDARD' then tgroup=0;
53      run;

```

NOTE: There were 6764 observations read from the data set WORK.EDIC10RE.
NOTE: The data set WORK.EDIC10RE has 6764 observations and 60 variables.
NOTE: DATA statement used (Total process time):

real time	0.01 seconds
cpu time	0.01 seconds

```

54
55      proc sort data=edic10re; by mask_pat edicyr;
56
57      *****;
58      * the analysis indicator is a little weird... it is only programmed correctly
59      for those with edicyr=10... at other years it includes too many people *;
60      * fix the indicators using below code *;

```

NOTE: There were 6764 observations read from the data set WORK.EDIC10RE.
NOTE: The data set WORK.EDIC10RE has 6764 observations and 60 variables.
NOTE: PROCEDURE SORT used (Total process time):

real time	0.03 seconds
cpu time	0.03 seconds

```

61      data analysisre; set edic10re; if analysis=1 and edicyr=10;

```

NOTE: There were 6764 observations read from the data set WORK.EDIC10RE.
NOTE: The data set WORK.ANALYSISRE has 1211 observations and 60 variables.
NOTE: DATA statement used (Total process time):

real time	0.01 seconds
cpu time	0.01 seconds

```

62      data csmere; set edic10re; if csmeanal=1 and edicyr=10; run;

```

NOTE: There were 6764 observations read from the data set WORK.EDIC10RE.
NOTE: The data set WORK.CSMERE has 1174 observations and 60 variables.
NOTE: DATA statement used (Total process time):

real time	0.01 seconds
cpu time	0.01 seconds

2011

```

63
64      * main longitudinal analysis dataset *;
65      data edic10re_analy; merge edic10re analysisre(keep=mask_pat in=in2);
66      if in2; by mask_pat;
67
68      * csme longitudinal analysis dataset *;

```

NOTE: There were 6764 observations read from the data set WORK.EDIC10RE.
NOTE: There were 1211 observations read from the data set WORK.ANALYSISRE.
NOTE: The data set WORK.EDIC10RE_ANALY has 6084 observations and 60 variables.
NOTE: DATA statement used (Total process time):

real time	0.03 seconds
cpu time	0.03 seconds

```

69      data edic10re_csme; merge edic10re csmere(keep=mask_pat in=in2);
70      if in2; by mask_pat; run;

```

NOTE: There were 6764 observations read from the data set WORK.EDIC10RE.
NOTE: There were 1174 observations read from the data set WORK.CSMERE.
NOTE: The data set WORK.EDIC10RE_CSME has 5910 observations and 60 variables.
NOTE: DATA statement used (Total process time):

real time	0.01 seconds
cpu time	0.01 seconds

```

71      *****;
72
73      * #s for table 2 *;
74      proc sort data=edic10re_analy; by edicyr;

```

NOTE: There were 6084 observations read from the data set WORK.EDIC10RE_ANALY.
NOTE: The data set WORK.EDIC10RE_ANALY has 6084 observations and 60 variables.
NOTE: PROCEDURE SORT used (Total process time):

real time	0.03 seconds
cpu time	0.01 seconds

```

75      proc freq data=edic10re_analy; by edicyr; tables (step3 snpdr pdr
76      ! focalscat)*group/chisq exact; where edicyr in (0,4,10); run;

```

NOTE: There were 3524 observations read from the data set WORK.EDIC10RE_ANALY.
WHERE edicyr in (0, 4, 10);
NOTE: The PROCEDURE FREQ printed pages 26-49.
NOTE: PROCEDURE FREQ used (Total process time):

real time	1.01 seconds
cpu time	0.03 seconds

```

76
77      %macro logreganaly(out,adjust,edicyear,classvar);
78      proc logistic data=edic10re_analy descending; where edicyr=&edicyear;

```

2011

```
79          class &classvar;
80          model &out=tgroup &adjust/risklimits; run;
81          %mend;
82          %logreganaly(step3,,0);
MPRINT(LOGREGANALY):  proc logistic data=edic10re_analy descending;
MPRINT(LOGREGANALY):  where edicyr=0;
MPRINT(LOGREGANALY):  class ;
MPRINT(LOGREGANALY):  model step3=tgroup /risklimits;
MPRINT(LOGREGANALY):  run;
```

NOTE: PROC LOGISTIC is modeling the probability that STEP3=1.
NOTE: Convergence criterion (GCONV=1E-8) satisfied.
NOTE: There were 1210 observations read from the data set WORK.EDIC10RE_ANALY.
WHERE edicyr=0;
NOTE: The PROCEDURE LOGISTIC printed pages 50-51.
NOTE: PROCEDURE LOGISTIC used (Total process time):
real time 0.06 seconds
cpu time 0.01 seconds

```
83          %logreganaly(snpdr,,0);
MPRINT(LOGREGANALY):  proc logistic data=edic10re_analy descending;
MPRINT(LOGREGANALY):  where edicyr=0;
MPRINT(LOGREGANALY):  class ;
MPRINT(LOGREGANALY):  model snpdr=tgroup /risklimits;
MPRINT(LOGREGANALY):  run;
```

NOTE: PROC LOGISTIC is modeling the probability that SNPDR=1.
NOTE: Convergence criterion (GCONV=1E-8) satisfied.
NOTE: There were 1210 observations read from the data set WORK.EDIC10RE_ANALY.
WHERE edicyr=0;
NOTE: The PROCEDURE LOGISTIC printed pages 52-53.
NOTE: PROCEDURE LOGISTIC used (Total process time):
real time 0.06 seconds
cpu time 0.01 seconds

```
84          %logreganaly(pdr,,0);
MPRINT(LOGREGANALY):  proc logistic data=edic10re_analy descending;
MPRINT(LOGREGANALY):  where edicyr=0;
MPRINT(LOGREGANALY):  class ;
MPRINT(LOGREGANALY):  model pdr=tgroup /risklimits;
MPRINT(LOGREGANALY):  run;
```

NOTE: PROC LOGISTIC is modeling the probability that PDR=1.
NOTE: Convergence criterion (GCONV=1E-8) satisfied.
NOTE: There were 1210 observations read from the data set WORK.EDIC10RE_ANALY.
WHERE edicyr=0;
NOTE: The PROCEDURE LOGISTIC printed pages 54-55.
NOTE: PROCEDURE LOGISTIC used (Total process time):
real time 0.10 seconds
cpu time 0.04 seconds

2011

```
85          %logreganaly(focalscat,,0);
MPRINT(LOGREGANALY):  proc logistic data=edic10re_analy descending;
MPRINT(LOGREGANALY):  where edicyr=0;
MPRINT(LOGREGANALY):  class ;
MPRINT(LOGREGANALY):  model focalscat=tgroup /risklimits;
MPRINT(LOGREGANALY):  run;
```

```
NOTE: PROC LOGISTIC is modeling the probability that FOCALSCAT=1.
NOTE: Convergence criterion (GCONV=1E-8) satisfied.
NOTE: There were 1210 observations read from the data set WORK.EDIC10RE_ANALY.
      WHERE edicyr=0;
NOTE: The PROCEDURE LOGISTIC printed pages 56-57.
NOTE: PROCEDURE LOGISTIC used (Total process time):
      real time          0.15 seconds
      cpu time           0.01 seconds
```

```
86          %logreganaly(step3,dtclsetd ,4,dtclsetd);
MPRINT(LOGREGANALY):  proc logistic data=edic10re_analy descending;
MPRINT(LOGREGANALY):  where edicyr=4;
MPRINT(LOGREGANALY):  class dtclsetd;
MPRINT(LOGREGANALY):  model step3=tgroup dtclsetd/risklimits;
MPRINT(LOGREGANALY):  run;
```

```
NOTE: PROC LOGISTIC is modeling the probability that STEP3=1.
NOTE: Convergence criterion (GCONV=1E-8) satisfied.
NOTE: There were 1103 observations read from the data set WORK.EDIC10RE_ANALY.
      WHERE edicyr=4;
NOTE: The PROCEDURE LOGISTIC printed pages 58-60.
NOTE: PROCEDURE LOGISTIC used (Total process time):
      real time          0.09 seconds
      cpu time           0.04 seconds
```

```
87          %logreganaly(snpdr,dtclsetd ,4,dtclsetd);
MPRINT(LOGREGANALY):  proc logistic data=edic10re_analy descending;
MPRINT(LOGREGANALY):  where edicyr=4;
MPRINT(LOGREGANALY):  class dtclsetd;
MPRINT(LOGREGANALY):  model snpdr=tgroup dtclsetd/risklimits;
MPRINT(LOGREGANALY):  run;
```

```
NOTE: PROC LOGISTIC is modeling the probability that SNPDR=1.
NOTE: Convergence criterion (GCONV=1E-8) satisfied.
NOTE: There were 1103 observations read from the data set WORK.EDIC10RE_ANALY.
      WHERE edicyr=4;
NOTE: The PROCEDURE LOGISTIC printed pages 61-63.
NOTE: PROCEDURE LOGISTIC used (Total process time):
      real time          0.09 seconds
      cpu time           0.01 seconds
```

```
88          %logreganaly(pdr,dtclsetd ,4,dtclsetd);
```

2011

```
MPRINT(LOGREGANALY):  proc logistic data=edic10re_analy descending;
MPRINT(LOGREGANALY):  where edicyr=4;
MPRINT(LOGREGANALY):  class dtclsetd;
MPRINT(LOGREGANALY):  model pdr=tgroup dtclsetd/risklimits;
MPRINT(LOGREGANALY):  run;
```

```
NOTE: PROC LOGISTIC is modeling the probability that PDR=1.
NOTE: Convergence criterion (GCONV=1E-8) satisfied.
NOTE: There were 1103 observations read from the data set WORK.EDIC10RE_ANALY.
      WHERE edicyr=4;
NOTE: The PROCEDURE LOGISTIC printed pages 64-66.
NOTE: PROCEDURE LOGISTIC used (Total process time):
      real time          0.17 seconds
      cpu time           0.03 seconds
```

```
89          %logreganaly(focalscat,dtclsetd,4,dtclsetd);
MPRINT(LOGREGANALY):  proc logistic data=edic10re_analy descending;
MPRINT(LOGREGANALY):  where edicyr=4;
MPRINT(LOGREGANALY):  class dtclsetd;
MPRINT(LOGREGANALY):  model focalscat=tgroup dtclsetd/risklimits;
MPRINT(LOGREGANALY):  run;
```

```
NOTE: PROC LOGISTIC is modeling the probability that FOCALSCAT=1.
NOTE: Convergence criterion (GCONV=1E-8) satisfied.
NOTE: There were 1103 observations read from the data set WORK.EDIC10RE_ANALY.
      WHERE edicyr=4;
NOTE: The PROCEDURE LOGISTIC printed pages 67-69.
NOTE: PROCEDURE LOGISTIC used (Total process time):
      real time          0.07 seconds
      cpu time           0.04 seconds
```

```
90          %logreganaly(step3,dtclsetd ,10,dtclsetd);
MPRINT(LOGREGANALY):  proc logistic data=edic10re_analy descending;
MPRINT(LOGREGANALY):  where edicyr=10;
MPRINT(LOGREGANALY):  class dtclsetd;
MPRINT(LOGREGANALY):  model step3=tgroup dtclsetd/risklimits;
MPRINT(LOGREGANALY):  run;
```

```
NOTE: PROC LOGISTIC is modeling the probability that STEP3=1.
NOTE: Convergence criterion (GCONV=1E-8) satisfied.
NOTE: There were 1211 observations read from the data set WORK.EDIC10RE_ANALY.
      WHERE edicyr=10;
NOTE: The PROCEDURE LOGISTIC printed pages 70-72.
NOTE: PROCEDURE LOGISTIC used (Total process time):
      real time          0.07 seconds
      cpu time           0.03 seconds
```

```
91          %logreganaly(snpdr,dtclsetd ,10,dtclsetd);
MPRINT(LOGREGANALY):  proc logistic data=edic10re_analy descending;
MPRINT(LOGREGANALY):  where edicyr=10;
```

2011

```
MPRINT(LOGREGANALY): class dtclsetd;
MPRINT(LOGREGANALY): model snpdr=tgroup dtclsetd/risklimits;
MPRINT(LOGREGANALY): run;
```

```
NOTE: PROC LOGISTIC is modeling the probability that SNPDR=1.
NOTE: Convergence criterion (GCONV=1E-8) satisfied.
NOTE: There were 1211 observations read from the data set WORK.EDIC10RE_ANALY.
      WHERE edicyr=10;
NOTE: The PROCEDURE LOGISTIC printed pages 73-75.
NOTE: PROCEDURE LOGISTIC used (Total process time):
      real time          0.06 seconds
      cpu time           0.04 seconds
```

```
92      %logreganaly(pdr,dtclsetd ,10,dtclsetd);
MPRINT(LOGREGANALY): proc logistic data=edic10re_analy descending;
MPRINT(LOGREGANALY): where edicyr=10;
MPRINT(LOGREGANALY): class dtclsetd;
MPRINT(LOGREGANALY): model pdr=tgroup dtclsetd/risklimits;
MPRINT(LOGREGANALY): run;
```

```
NOTE: PROC LOGISTIC is modeling the probability that PDR=1.
NOTE: Convergence criterion (GCONV=1E-8) satisfied.
NOTE: There were 1211 observations read from the data set WORK.EDIC10RE_ANALY.
      WHERE edicyr=10;
NOTE: The PROCEDURE LOGISTIC printed pages 76-78.
NOTE: PROCEDURE LOGISTIC used (Total process time):
      real time          0.09 seconds
      cpu time           0.03 seconds
```

```
93      %logreganaly(focalscat,dtclsetd,10,dtclsetd);
MPRINT(LOGREGANALY): proc logistic data=edic10re_analy descending;
MPRINT(LOGREGANALY): where edicyr=10;
MPRINT(LOGREGANALY): class dtclsetd;
MPRINT(LOGREGANALY): model focalscat=tgroup dtclsetd/risklimits;
MPRINT(LOGREGANALY): run;
```

```
NOTE: PROC LOGISTIC is modeling the probability that FOCALSCAT=1.
NOTE: Convergence criterion (GCONV=1E-8) satisfied.
NOTE: There were 1211 observations read from the data set WORK.EDIC10RE_ANALY.
      WHERE edicyr=10;
NOTE: The PROCEDURE LOGISTIC printed pages 79-81.
NOTE: PROCEDURE LOGISTIC used (Total process time):
      real time          0.07 seconds
      cpu time           0.04 seconds
```

```
94
95      proc sort data=edic10re_csme; by edicyr;
```

```
NOTE: There were 5910 observations read from the data set WORK.EDIC10RE_CSME.
NOTE: The data set WORK.EDIC10RE_CSME has 5910 observations and 60 variables.
```

2011

NOTE: PROCEDURE SORT used (Total process time):
real time 0.01 seconds
cpu time 0.01 seconds

```
96      proc freq data=edic10re_csme; by edicyr; tables csme*group/chisq exact; where  
edicyr  
96      ! in (0,4,10); run;
```

NOTE: There were 3416 observations read from the data set WORK.EDIC10RE_CSME.
WHERE edicyr in (0, 4, 10);

NOTE: The PROCEDURE FREQ printed pages 82-87.

NOTE: PROCEDURE FREQ used (Total process time):
real time 0.25 seconds
cpu time 0.01 seconds

```
97  
98      proc logistic data=edic10re_csme descending; where edicyr=0;  
99      model csme=tgroup/risklimits; run;
```

NOTE: PROC LOGISTIC is modeling the probability that CSME=1.

NOTE: Convergence criterion (GCONV=1E-8) satisfied.

NOTE: There were 1173 observations read from the data set WORK.EDIC10RE_CSME.
WHERE edicyr=0;

NOTE: The PROCEDURE LOGISTIC printed pages 88-89.

NOTE: PROCEDURE LOGISTIC used (Total process time):
real time 0.04 seconds
cpu time 0.03 seconds

```
100     proc logistic data=edic10re_csme descending; where edicyr=4;  
101     class dtclsetd;  
102     model csme=tgroup dtclsetd /risklimits; run;
```

NOTE: PROC LOGISTIC is modeling the probability that CSME=1.

NOTE: Convergence criterion (GCONV=1E-8) satisfied.

NOTE: There were 1069 observations read from the data set WORK.EDIC10RE_CSME.
WHERE edicyr=4;

NOTE: The PROCEDURE LOGISTIC printed pages 90-92.

NOTE: PROCEDURE LOGISTIC used (Total process time):
real time 0.04 seconds
cpu time 0.03 seconds

```
103     proc logistic data=edic10re_csme descending; where edicyr=10;  
104     class dtclsetd;  
105     model csme=tgroup dtclsetd /risklimits; run;
```

NOTE: PROC LOGISTIC is modeling the probability that CSME=1.

NOTE: Convergence criterion (GCONV=1E-8) satisfied.

NOTE: There were 1174 observations read from the data set WORK.EDIC10RE_CSME.
WHERE edicyr=10;

NOTE: The PROCEDURE LOGISTIC printed pages 93-95.

2011

NOTE: PROCEDURE LOGISTIC used (Total process time):

real time	0.06 seconds
cpu time	0.04 seconds

```

106
107 *****;
108 * to replicate table 3*;
109 title To Replicate Table 3;
110
111 title2 Part 1: Further 3-step Progression;
112
113 * get indicators for participants with at least followup retinopathy assessment
114 ! during EDIC
115 (EDIC years 1+) *;
116 * variable edic3stf = Any further 3 STEP change through EDIC (0=n 1=y) *;
117 proc freq data=edic10re noprint; where edic3stf in (0,1); tables
118 ! mask_pat/out=stf_assess; run;

```

NOTE: There were 5177 observations read from the data set WORK.EDIC10RE.

WHERE edic3stf in (0, 1);

NOTE: The data set WORK.STF_ASSESS has 1350 observations and 3 variables.

NOTE: PROCEDURE FREQ used (Total process time):

real time	0.04 seconds
cpu time	0.03 seconds

```

117 proc freq data=edic10re noprint; where edic3stf=1; tables
118 ! mask_pat/out=stf_edic_further; run;

```

NOTE: There were 1199 observations read from the data set WORK.EDIC10RE.

WHERE edic3stf=1;

NOTE: The data set WORK.STF_EDIC_FURTHER has 509 observations and 3 variables.

NOTE: PROCEDURE FREQ used (Total process time):

real time	0.28 seconds
cpu time	0.00 seconds

```

118
119 proc sort data=edic10re; by mask_pat;

```

NOTE: Input data set is already sorted, no sorting done.

NOTE: PROCEDURE SORT used (Total process time):

real time	0.00 seconds
cpu time	0.00 seconds

```

120 data edic10re; merge edic10re stf_assess(in=in3 keep=mask_pat)
121 ! stf_edic_further(in=in4 keep=mask_pat);
122 by mask_pat;
123 * at least one followup EDIC retinopathy assessment (denominator, indicator
124 ! variable) *;
125 if in3 then stf_assess=1; else stf_assess=0;

```

2011

```

124
125     * subjects with further 3 STEP change (numerator) *;
126     if in4 then anystffurther=1; else anystffurther=0; run;

```

```

NOTE: There were 6764 observations read from the data set WORK.EDIC10RE.
NOTE: There were 1350 observations read from the data set WORK.STF_ASSESS.
NOTE: There were 509 observations read from the data set WORK.STF_EDIC_FURTHER.
NOTE: The data set WORK.EDIC10RE has 6764 observations and 62 variables.
NOTE: DATA statement used (Total process time):
      real time           0.23 seconds
      cpu time            0.03 seconds

```

```

127
128     *****;
129     ***** below: we get approximate #s for numerator and denominator in table
130     further 3-step progression *****;
131     * #s at risk ... anyone with at least one followup STF assessment *;
132     proc freq data=edic10re; tables dtclsetd*group;
133     where DCCTSCAT=0 /* eliminate those with DCCT scatter */ AND STF_ASSESS=1
134     AND EDICYR=0; run;

```

```

NOTE: There were 1350 observations read from the data set WORK.EDIC10RE.
      WHERE (DCCTSCAT=0) and (STF_ASSESS=1) and (EDICYR=0);
NOTE: The PROCEDURE FREQ printed page 96.
NOTE: PROCEDURE FREQ used (Total process time):
      real time           0.07 seconds
      cpu time            0.00 seconds

```

```

135
136     * #s with event *;
137     proc sort data=edic10re; by dtclsetd;

```

```

NOTE: There were 6764 observations read from the data set WORK.EDIC10RE.
NOTE: The data set WORK.EDIC10RE has 6764 observations and 62 variables.
NOTE: PROCEDURE SORT used (Total process time):
      real time           0.04 seconds
      cpu time            0.03 seconds

```

```

138     proc freq data=edic10re; by dtclsetd; tables anystffurther*group;
139     where DCCTSCAT=0 /* eliminate those with DCCT scatter */ AND STF_ASSESS=1
140     AND EDICYR=0; run;

```

```

NOTE: There were 1350 observations read from the data set WORK.EDIC10RE.
      WHERE (DCCTSCAT=0) and (STF_ASSESS=1) and (EDICYR=0);
NOTE: The PROCEDURE FREQ printed pages 97-100.
NOTE: PROCEDURE FREQ used (Total process time):
      real time           0.04 seconds
      cpu time            0.03 seconds

```

2011

```

141
142 *****;
143 * create basic survival dataset for Further 3-step Progression *;
144 proc sort data=edic10re; by mask_pat edicyr;

```

NOTE: There were 6764 observations read from the data set WORK.EDIC10RE.

NOTE: The data set WORK.EDIC10RE has 6764 observations and 62 variables.

NOTE: PROCEDURE SORT used (Total process time):

```

real time          0.01 seconds
cpu time           0.01 seconds

```

```

145 data base followup; set edic10re; by mask_pat edicyr;
146 if edicyr=0 then output base;
147 else if edicyr>0 AND edic3stf IN (0,1) then output followup; run;

```

NOTE: There were 6764 observations read from the data set WORK.EDIC10RE.

NOTE: The data set WORK.BASE has 1423 observations and 62 variables.

NOTE: The data set WORK.FOLLOWUP has 5177 observations and 62 variables.

NOTE: DATA statement used (Total process time):

```

real time          0.03 seconds
cpu time           0.01 seconds

```

```

148
149 data event noevent; set followup; if anystffurther=1 then output event;
150 else if anystffurther=0 then output noevent;
151 * EDIC3SFD (first event date) pops up when the event
152 actually happened (edic3stf=1), and then doesnt change *;

```

NOTE: There were 5177 observations read from the data set WORK.FOLLOWUP.

NOTE: The data set WORK.EVENT has 1980 observations and 62 variables.

NOTE: The data set WORK.NOEVENT has 3197 observations and 62 variables.

NOTE: DATA statement used (Total process time):

```

real time          0.03 seconds
cpu time           0.03 seconds

```

```

153 data event; set event;
154 IF edic3stf=1;

```

NOTE: There were 1980 observations read from the data set WORK.EVENT.

NOTE: The data set WORK.EVENT has 1199 observations and 62 variables.

NOTE: DATA statement used (Total process time):

```

real time          0.01 seconds
cpu time           0.01 seconds

```

```

155 data event; set event;
156 ** if edic3sfd=fsasdate; * cant do it this way, wont pick up all events
(fsasdate
156 ! doesnt always match) *;
157 by mask_pat edicyr;
158 if first.mask_pat; run;

```

2011

NOTE: There were 1199 observations read from the data set WORK.EVENT.

NOTE: The data set WORK.EVENT has 509 observations and 62 variables.

NOTE: DATA statement used (Total process time):

```
real time          0.01 seconds
cpu time           0.01 seconds
```

```
158      !                               * first visit with incident for those with event *;
159      /* proc compare data=event; var edic3sfd; with fsasdate; run;
160      ** should always be the same? (it isn't always) */
161      data noevent; set noevent;
162      by mask_pat edicyr;
163      if last.mask_pat; run;
```

NOTE: There were 3197 observations read from the data set WORK.NOEVENT.

NOTE: The data set WORK.NOEVENT has 841 observations and 62 variables.

NOTE: DATA statement used (Total process time):

```
real time          0.01 seconds
cpu time           0.00 seconds
```

```
163      !                               * last visit for those who were event free, and had f/u
163      ! assessment taken *;
164      data survival; set event(in=in1) noevent(in=in2);
165      by mask_pat;
166      if in1 then do; event=1; lastdate=edic3sfd; end;
167      else if in2 then do; event=0; lastdate=fsasdate; end;
168      rename edicyr=lastedicyr; run;
```

NOTE: There were 509 observations read from the data set WORK.EVENT.

NOTE: There were 841 observations read from the data set WORK.NOEVENT.

NOTE: The data set WORK.SURVIVAL has 1350 observations and 64 variables.

NOTE: DATA statement used (Total process time):

```
real time          0.01 seconds
cpu time           0.01 seconds
```

```
169      * check: frequencies are exactly the same *;
170      /* proc freq; tables event*edic3stf/missing; run; */
171      data survival; merge survival(in=in1) base(keep=mask_pat fsasdate
171      ! rename=(fsasdate=edicbsdt))
172      edic10retab(keep=mask_pat hbael retbase dtclsetd);
173      by mask_pat;
174      if in1;
175      survdays=lastdate-edicbsdt; * all dates are represented as days since DCCT
175      ! randomization *;
176      if (lastdate=. or edicbsdt=.) then do; misslastdate=1;
survdays=lastedicyr*365.25;
176      ! end;
177      survyrs=round((survdays/365.25),0.01);
178      if retbase='PRIM' then retstratum=1; else if retbase='SCND' then retstratum=0;
run;
```

NOTE: Missing values were generated as a result of performing an operation on missing values.

2011

Each place is given by: (Number of times) at (Line):(Column).
1 at 175:20

NOTE: There were 1350 observations read from the data set WORK.SURVIVAL.
NOTE: There were 1423 observations read from the data set WORK.BASE.
NOTE: There were 1211 observations read from the data set WORK.EDIC10RETAB.
NOTE: The data set WORK.SURVIVAL has 1350 observations and 69 variables.
NOTE: DATA statement used (Total process time):
real time 0.03 seconds
cpu time 0.03 seconds

```
179
180      proc freq; tables event*group; run;
```

NOTE: There were 1350 observations read from the data set WORK.SURVIVAL.
NOTE: The PROCEDURE FREQ printed page 101.
NOTE: PROCEDURE FREQ used (Total process time):
real time 0.07 seconds
cpu time 0.03 seconds

```
181      proc print; where missslstdate=1; var survyrs lastedicyr lastdate event; run;
```

NOTE: There were 1 observations read from the data set WORK.SURVIVAL.
WHERE missslstdate=1;
NOTE: The PROCEDURE PRINT printed page 102.
NOTE: PROCEDURE PRINT used (Total process time):
real time 0.00 seconds
cpu time 0.00 seconds

```
182      *n=1, did not reach outcome, lastdate missing *;
183      proc sort; by dtclsetd;
```

NOTE: There were 1350 observations read from the data set WORK.SURVIVAL.
NOTE: The data set WORK.SURVIVAL has 1350 observations and 69 variables.
NOTE: PROCEDURE SORT used (Total process time):
real time 0.01 seconds
cpu time 0.01 seconds

```
184      proc freq; tables event*group; by dtclsetd; run;
```

NOTE: There were 1350 observations read from the data set WORK.SURVIVAL.
NOTE: The PROCEDURE FREQ printed pages 103-106.
NOTE: PROCEDURE FREQ used (Total process time):
real time 0.04 seconds
cpu time 0.01 seconds

```
185      proc freq; tables DCCTSCAT; run;
```

NOTE: There were 1350 observations read from the data set WORK.SURVIVAL.

2011

NOTE: The PROCEDURE FREQ printed page 107.
 NOTE: PROCEDURE FREQ used (Total process time):
 real time 0.00 seconds
 cpu time 0.00 seconds

```

185      !                               *n=0. evidently programming this way
eliminates
186      those with DCCTSCAT=1 (those with DCCT scatter),
187      maybe because all missing <edic3stf> were eliminated *;
188
189      ***** to get survival/hazard/hazard reduction
*****;
190      proc lifereg data=survival;
191      model survyrs*event(0)=tgroup/distribution=weibull; run;

```

NOTE: Algorithm converged.
 NOTE: The PROCEDURE LIFEREG printed page 108.
 NOTE: PROCEDURE LIFEREG used (Total process time):
 real time 0.01 seconds
 cpu time 0.01 seconds

```

192      proc sort; by dtclsetd;

```

NOTE: Input data set is already sorted, no sorting done.
 NOTE: PROCEDURE SORT used (Total process time):
 real time 0.00 seconds
 cpu time 0.00 seconds

```

193      proc lifereg data=survival; by dtclsetd;
194      model survyrs*event(0)=tgroup/distribution=weibull; run;

```

NOTE: Algorithm converged.
 NOTE: The above message was for the following BY group:
 DCCT closeout ETDRS level comb DCCT10-DCCT50=1
 NOTE: Algorithm converged.
 NOTE: The above message was for the following BY group:
 DCCT closeout ETDRS level comb DCCT10-DCCT50=2
 NOTE: Algorithm converged.
 NOTE: The above message was for the following BY group:
 DCCT closeout ETDRS level comb DCCT10-DCCT50=3
 NOTE: Algorithm converged.
 NOTE: The above message was for the following BY group:
 DCCT closeout ETDRS level comb DCCT10-DCCT50=4
 NOTE: The PROCEDURE LIFEREG printed pages 109-112.
 NOTE: PROCEDURE LIFEREG used (Total process time):
 real time 0.18 seconds
 cpu time 0.01 seconds

```

195
196
197      ***** to get adjusted survival/hazard/hazard reduction

```

2011

```

197      ! *****;
198      proc lifereg data=survival; class dtclsetd;
199          model survyrs*event(0)=tgroup retstratum hbael duryr0
dtclsetd/distribution=weibull
199      ! ; run;

```

```

NOTE: Algorithm converged.
NOTE: The PROCEDURE LIFEREG printed pages 113-114.
NOTE: PROCEDURE LIFEREG used (Total process time):
      real time          0.03 seconds
      cpu time           0.03 seconds

```

```

200      proc sort data=survival; by dtclsetd;

```

```

NOTE: Input data set is already sorted, no sorting done.
NOTE: PROCEDURE SORT used (Total process time):
      real time          0.00 seconds
      cpu time           0.00 seconds

```

```

201      proc lifereg data=survival; by dtclsetd;
202          model survyrs*event(0)=tgroup retstratum hbael duryr0/distribution=weibull;
run;

```

```

NOTE: Algorithm converged.
NOTE: The above message was for the following BY group:
      DCCT closeout ETDRS level comb DCCT10-DCCT50=1
NOTE: Algorithm converged.
NOTE: The above message was for the following BY group:
      DCCT closeout ETDRS level comb DCCT10-DCCT50=2
NOTE: Algorithm converged.
NOTE: The above message was for the following BY group:
      DCCT closeout ETDRS level comb DCCT10-DCCT50=3
NOTE: Algorithm converged.
NOTE: The above message was for the following BY group:
      DCCT closeout ETDRS level comb DCCT10-DCCT50=4
NOTE: The PROCEDURE LIFEREG printed pages 115-122.
NOTE: PROCEDURE LIFEREG used (Total process time):
      real time          0.21 seconds
      cpu time           0.03 seconds

```

```

203
204
205
206      title To Replicate Table 3;
207
208      title2 Part 2: PDR;
209
210      *****;
211      * get indicators for participants with at least followup PDR assessment during
EDIC
212          (EDIC years 1+) *;
213      /* proc print data=edic10re; by mask_pat; var edicyr anypdr anypdrd fsasdate
dcctpdr

```

213 ! ; run; */

2011

```
214      * dcctpdr is a subject indicator, it doesnt change through time *;
215      * also, anypdr is populated at baseline, unlike edic3stf *;
216
217      data edic10_nodcpdr; set edic10re; if dcctpdr^=1;
218      if anypdr in (0,1); run;
```

NOTE: There were 6764 observations read from the data set WORK.EDIC10RE.

NOTE: The data set WORK.EDIC10_NODCPDR has 6373 observations and 62 variables.

NOTE: DATA statement used (Total process time):

real time	0.03 seconds
cpu time	0.01 seconds

```
219      proc sort; by mask_pat edicyr;
```

NOTE: There were 6373 observations read from the data set WORK.EDIC10_NODCPDR.

NOTE: The data set WORK.EDIC10_NODCPDR has 6373 observations and 62 variables.

NOTE: PROCEDURE SORT used (Total process time):

real time	0.07 seconds
cpu time	0.03 seconds

```
220      data base; set edic10_nodcpdr; by mask_pat edicyr;
221      if first.mask_pat; run;
```

NOTE: There were 6373 observations read from the data set WORK.EDIC10_NODCPDR.

NOTE: The data set WORK.BASE has 1348 observations and 62 variables.

NOTE: DATA statement used (Total process time):

real time	0.03 seconds
cpu time	0.03 seconds

```
222      data base; set base;
223      if edicyr=0; run;
```

NOTE: There were 1348 observations read from the data set WORK.BASE.

NOTE: The data set WORK.BASE has 1345 observations and 62 variables.

NOTE: DATA statement used (Total process time):

real time	0.01 seconds
cpu time	0.00 seconds

```
224      data edic10_nodcpdr; set edic10_nodcpdr; by mask_pat edicyr;
225      if first.mask_pat and last.mask_pat then flag=1; else flag=0; run;
```

NOTE: There were 6373 observations read from the data set WORK.EDIC10_NODCPDR.

NOTE: The data set WORK.EDIC10_NODCPDR has 6373 observations and 63 variables.

NOTE: DATA statement used (Total process time):

real time	0.04 seconds
cpu time	0.03 seconds

```
226      data edic10_nodcpdr; set edic10_nodcpdr; if flag=0; run;
```

2011

NOTE: There were 6373 observations read from the data set WORK.EDIC10_NODCPDR.

NOTE: The data set WORK.EDIC10_NODCPDR has 6339 observations and 63 variables.

NOTE: DATA statement used (Total process time):

```
real time          0.03 seconds
cpu time           0.03 seconds
```

```
227      data edic10_nodcpdr; merge edic10_nodcpdr(in=in1) base(in=in2 keep=mask_pat);
228          by mask_pat;
229          if in1 and in2; run;
```

NOTE: There were 6339 observations read from the data set WORK.EDIC10_NODCPDR.

NOTE: There were 1345 observations read from the data set WORK.BASE.

NOTE: The data set WORK.EDIC10_NODCPDR has 6331 observations and 63 variables.

NOTE: DATA statement used (Total process time):

```
real time          0.03 seconds
cpu time           0.03 seconds
```

```
230
231      proc freq data=edic10_nodcpdr noprint; where anypdr=1; tables
mask_pat/out=pdr_edic;
231      ! run;
```

NOTE: There were 365 observations read from the data set WORK.EDIC10_NODCPDR.
WHERE anypdr=1;

NOTE: The data set WORK.PDR_EDIC has 164 observations and 3 variables.

NOTE: PROCEDURE FREQ used (Total process time):

```
real time          0.01 seconds
cpu time           0.01 seconds
```

```
232
233      data edic10_nodcpdr; merge edic10_nodcpdr pdr_edic(in=in4 keep=mask_pat);
234          by mask_pat;
235
236          * subjects with PDR during EDIC followup (numerator) *;
237          if in4 then pdr_edic=1; else pdr_edic=0; run;
```

NOTE: There were 6331 observations read from the data set WORK.EDIC10_NODCPDR.

NOTE: There were 164 observations read from the data set WORK.PDR_EDIC.

NOTE: The data set WORK.EDIC10_NODCPDR has 6331 observations and 64 variables.

NOTE: DATA statement used (Total process time):

```
real time          0.03 seconds
cpu time           0.03 seconds
```

```
238
239      *****;
240          ***** below: we get approximate #s for numerator and denominator in table
3,
241          PDR during EDIC *****;
242          * #s at risk ... anyone with at least one followup PDR assessment *;
243      proc freq data=edic10_nodcpdr; tables dtclsetd*group/missing;
```

2011

```
244       where EDICYR=0; run;
```

NOTE: There were 1312 observations read from the data set WORK.EDIC10_NODCPDR.
WHERE EDICYR=0;

NOTE: The PROCEDURE FREQ printed page 123.

NOTE: PROCEDURE FREQ used (Total process time):

```
real time      0.01 seconds
cpu time       0.00 seconds
```

245

```
246       * #s with event *;
247       proc sort data=edic10_nodcpdr; by dtclsetd;
```

NOTE: There were 6331 observations read from the data set WORK.EDIC10_NODCPDR.

NOTE: The data set WORK.EDIC10_NODCPDR has 6331 observations and 64 variables.

NOTE: PROCEDURE SORT used (Total process time):

```
real time      0.03 seconds
cpu time       0.01 seconds
```

```
248       proc freq data=edic10_nodcpdr; tables pdr_edic*group;
249       where EDICYR=0; run;
```

NOTE: There were 1312 observations read from the data set WORK.EDIC10_NODCPDR.
WHERE EDICYR=0;

NOTE: The PROCEDURE FREQ printed page 124.

NOTE: PROCEDURE FREQ used (Total process time):

```
real time      0.04 seconds
cpu time       0.01 seconds
```

```
250       proc freq data=edic10_nodcpdr; by dtclsetd; tables pdr_edic*group; run;
```

NOTE: There were 6331 observations read from the data set WORK.EDIC10_NODCPDR.

NOTE: The PROCEDURE FREQ printed pages 125-129.

NOTE: PROCEDURE FREQ used (Total process time):

```
real time      0.03 seconds
cpu time       0.01 seconds
```

251

```
252       *****;
253       * create basic survival dataset for PDR *;
254       proc sort data=edic10_nodcpdr; by mask_pat edicyr;
```

NOTE: There were 6331 observations read from the data set WORK.EDIC10_NODCPDR.

NOTE: The data set WORK.EDIC10_NODCPDR has 6331 observations and 64 variables.

NOTE: PROCEDURE SORT used (Total process time):

```
real time      0.04 seconds
cpu time       0.01 seconds
```

2011

```

255     data event noevent; set edic10_nodcpdr; if pdr_edic=1 then output event;
256         else if pdr_edic=0 then output noevent;

```

NOTE: There were 6331 observations read from the data set WORK.EDIC10_NODCPDR.

NOTE: The data set WORK.EVENT has 798 observations and 64 variables.

NOTE: The data set WORK.NOEVENT has 5533 observations and 64 variables.

NOTE: DATA statement used (Total process time):

```

real time          0.04 seconds
cpu time           0.01 seconds

```

```

257     data event; set event;
258         IF anypdr=1;

```

NOTE: There were 798 observations read from the data set WORK.EVENT.

NOTE: The data set WORK.EVENT has 365 observations and 64 variables.

NOTE: DATA statement used (Total process time):

```

real time          0.00 seconds
cpu time           0.00 seconds

```

```

259     data event; set event;
260         by mask_pat edicyr;
261         if first.mask_pat; run;

```

NOTE: There were 365 observations read from the data set WORK.EVENT.

NOTE: The data set WORK.EVENT has 164 observations and 64 variables.

NOTE: DATA statement used (Total process time):

```

real time          0.00 seconds
cpu time           0.00 seconds

```

```

261     !                               * first visit with incident for those with event *;
262     /* proc compare data=event; var anypdrd; with fsasdate; run;
263     ** not always the same */
264     data noevent; set noevent;
265         by mask_pat edicyr;
266         if last.mask_pat; run;

```

NOTE: There were 5533 observations read from the data set WORK.NOEVENT.

NOTE: The data set WORK.NOEVENT has 1148 observations and 64 variables.

NOTE: DATA statement used (Total process time):

```

real time          0.01 seconds
cpu time           0.00 seconds

```

```

266     !                               * last visit for those who were event free, and had f/u
266     ! assessment taken *;
267     data survival_pdr; set event(in=in1) noevent(in=in2);
268         by mask_pat;
269         if in1 then do; event=1; lastdate=anypdrd; end;
270         else if in2 then do; event=0; lastdate=fsasdate; end;
271         rename edicyr=lastedicyr; run;

```

2011

NOTE: There were 164 observations read from the data set WORK.EVENT.
 NOTE: There were 1148 observations read from the data set WORK.NOEVENT.
 NOTE: The data set WORK.SURVIVAL_PDR has 1312 observations and 66 variables.
 NOTE: DATA statement used (Total process time):
 real time 0.01 seconds
 cpu time 0.01 seconds

```

272      * check: frequencies are exactly the same *;
273      /* proc freq; tables event*anypdr/missing; run; */
274      data survival_pdr; merge survival_pdr(in=in1) base(keep=mask_pat fsasdate
274      ! rename=(fsasdate=edicbsdt))
275      edic10retab(keep=mask_pat hbael retbase dtclsetd);
276      by mask_pat;
277      if in1;
278      survdays=lastdate-edicbsdt;
279      if (lastdate=. or edicbsdt=.) then do; misslastdate=1;
survdays=lastedicyr*365.25;
279      ! end;
280      survyrs=round((survdays/365.25),0.01);
281      if retbase='PRIM' then retstratum=1; else if retbase='SCND' then retstratum=0;
run;

```

NOTE: Missing values were generated as a result of performing an operation on missing values.

Each place is given by: (Number of times) at (Line):(Column).

1 at 278:20

NOTE: There were 1312 observations read from the data set WORK.SURVIVAL_PDR.
 NOTE: There were 1345 observations read from the data set WORK.BASE.
 NOTE: There were 1211 observations read from the data set WORK.EDIC10RETAB.
 NOTE: The data set WORK.SURVIVAL_PDR has 1312 observations and 71 variables.
 NOTE: DATA statement used (Total process time):
 real time 0.01 seconds
 cpu time 0.01 seconds

```

282
283      proc freq; tables event*group; run;

```

NOTE: There were 1312 observations read from the data set WORK.SURVIVAL_PDR.
 NOTE: The PROCEDURE FREQ printed page 130.
 NOTE: PROCEDURE FREQ used (Total process time):
 real time 0.04 seconds
 cpu time 0.00 seconds

```

284      proc print; where misslastdate=1; var survyrs lastedicyr lastdate event; run;

```

NOTE: There were 1 observations read from the data set WORK.SURVIVAL_PDR.
 WHERE misslastdate=1;
 NOTE: The PROCEDURE PRINT printed page 131.
 NOTE: PROCEDURE PRINT used (Total process time):
 real time 0.00 seconds
 cpu time 0.00 seconds

2011

```

285             *n=1, did not reach outcome, lastdate missing *;
286             proc sort; by dtclsetd;

```

NOTE: There were 1312 observations read from the data set WORK.SURVIVAL_PDR.
 NOTE: The data set WORK.SURVIVAL_PDR has 1312 observations and 71 variables.
 NOTE: PROCEDURE SORT used (Total process time):

real time	0.03 seconds
cpu time	0.00 seconds

```

287             proc freq; tables event*group; by dtclsetd; run;

```

NOTE: There were 1312 observations read from the data set WORK.SURVIVAL_PDR.
 NOTE: The PROCEDURE FREQ printed pages 132-136.
 NOTE: PROCEDURE FREQ used (Total process time):

real time	0.01 seconds
cpu time	0.00 seconds

```

288             proc freq; tables DCCTSCAT; run;

```

NOTE: There were 1312 observations read from the data set WORK.SURVIVAL_PDR.
 NOTE: The PROCEDURE FREQ printed page 137.
 NOTE: PROCEDURE FREQ used (Total process time):

real time	0.01 seconds
cpu time	0.01 seconds

```

288             !                               *n=0. evidently programming this way
eliminates

```

```

289             those with DCCTSCAT=1 (those with DCCT scatter),
290             maybe because all missing <edic3stf> were eliminated *;

```

```

291
292             ***** to get survival/hazard/hazard reduction
*****;

```

```

293             proc lifereg data=survival_pdr;
294             model survyrs*event(0)=tgroup/distribution=weibull; run;

```

NOTE: Algorithm converged.
 NOTE: The PROCEDURE LIFEREG printed page 138.
 NOTE: PROCEDURE LIFEREG used (Total process time):

real time	0.03 seconds
cpu time	0.01 seconds

```

295             data survival_pdr; set survival_pdr;
296             dtclsetd_cut3=dtclsetd;
297             if dtclsetd in (1,2) then dtclsetd_cut3=1;

```

NOTE: There were 1312 observations read from the data set WORK.SURVIVAL_PDR.
 NOTE: The data set WORK.SURVIVAL_PDR has 1312 observations and 72 variables.
 NOTE: DATA statement used (Total process time):

real time	0.20 seconds
cpu time	0.01 seconds

2011

```
298      proc freq; tables dtclsetd*dtclsetd_cut3; run;
```

NOTE: There were 1312 observations read from the data set WORK.SURVIVAL_PDR.

NOTE: The PROCEDURE FREQ printed page 139.

NOTE: PROCEDURE FREQ used (Total process time):

real time 0.04 seconds

cpu time 0.01 seconds

```
299      proc sort; by dtclsetd_cut3;
```

NOTE: There were 1312 observations read from the data set WORK.SURVIVAL_PDR.

NOTE: The data set WORK.SURVIVAL_PDR has 1312 observations and 72 variables.

NOTE: PROCEDURE SORT used (Total process time):

real time 0.01 seconds

cpu time 0.01 seconds

```
300      proc lifereg data=survival_pdr; by dtclsetd_cut3;
```

```
301      model survyrs*event(0)=tgroup/distribution=weibull; run;
```

WARNING: The negative of the Hessian is not positive definite. The convergence is questionable.

WARNING: The procedure is continuing in spite of the above warning. Results shown are based on

the last maximum likelihood iteration. Validity of the model fit is questionable.

NOTE: The above message was for the following BY group:

dtclsetd_cut3=.

NOTE: Algorithm converged.

NOTE: The above message was for the following BY group:

dtclsetd_cut3=1

NOTE: Algorithm converged.

NOTE: The above message was for the following BY group:

dtclsetd_cut3=3

NOTE: Algorithm converged.

NOTE: The above message was for the following BY group:

dtclsetd_cut3=4

NOTE: The PROCEDURE LIFEREG printed pages 140-143.

NOTE: PROCEDURE LIFEREG used (Total process time):

real time 0.34 seconds

cpu time 0.01 seconds

302

303

```
304      ***** to get adjusted survival/hazard/hazard reduction
```

```
304      ! *****;
```

```
305      proc lifereg data=survival_pdr; class dtclsetd_cut3;
```

```
306      model survyrs*event(0)=tgroup dtclsetd_cut3 retstratum hbael
```

```
306      ! duryr0/distribution=weibull; run;
```

NOTE: Algorithm converged.

NOTE: The PROCEDURE LIFEREG printed pages 144-145.

2011

NOTE: PROCEDURE LIFEREG used (Total process time):
real time 0.03 seconds
cpu time 0.03 seconds

307 proc sort; by dtclsetd_cut3;

NOTE: Input data set is already sorted, no sorting done.
NOTE: PROCEDURE SORT used (Total process time):
real time 0.00 seconds
cpu time 0.00 seconds

308 proc lifereg data=survival_pdr; by dtclsetd_cut3;
309 model survyrs*event(0)=tgroup retstratum hbael duryr0/distribution=weibull;
run;

WARNING: The negative of the Hessian is not positive definite. The convergence is questionable.
WARNING: The procedure is continuing in spite of the above warning. Results shown are based on the last maximum likelihood iteration. Validity of the model fit is questionable.

NOTE: The above message was for the following BY group:
dtclsetd_cut3=.

NOTE: Algorithm converged.

NOTE: The above message was for the following BY group:
dtclsetd_cut3=1

NOTE: Algorithm converged.

NOTE: The above message was for the following BY group:
dtclsetd_cut3=3

NOTE: Algorithm converged.

NOTE: The above message was for the following BY group:
dtclsetd_cut3=4

NOTE: The PROCEDURE LIFEREG printed pages 146-152.

NOTE: PROCEDURE LIFEREG used (Total process time):
real time 0.26 seconds
cpu time 0.04 seconds

310

311

312

313

314

NOTE: SAS Institute Inc., SAS Campus Drive, Cary, NC USA 27513-2414

NOTE: The SAS System used:
real time 39.02 seconds
cpu time 3.71 seconds

Attachment 3

SAS version 9.2 Log
for programming code submitted for
the replication of results in
Archives of Ophthalmology, Vol 126(12), Dec 2008,
pp. 1707-1715

The FREQ Procedure

GROUP	Frequency	Percent	Cumulative Frequency	Cumulative Percent
EXPERIMENTAL	596	49.22	596	49.22
STANDARD	615	50.78	1211	100.00

The FREQ Procedure

Table of SEX by GROUP

SEX(SEX Sex (F M))
 GROUP(GROUP Treatment Group (EXPERIMENTAL
 STANDARD))

Frequency Percent Row Pct Col Pct	EXPERIME	STANDARD	Total
	NTAL		
F	295 24.36 50.77 49.50	286 23.62 49.23 46.50	581 47.98
M	301 24.86 47.78 50.50	329 27.17 52.22 53.50	630 52.02
Total	596 49.22	615 50.78	1211 100.00

Statistics for Table of SEX by GROUP

Statistic	DF	Value	Prob
Chi-Square	1	1.0860	0.2974
Likelihood Ratio Chi-Square	1	1.0862	0.2973
Continuity Adj. Chi-Square	1	0.9694	0.3248
Mantel-Haenszel Chi-Square	1	1.0851	0.2976
Phi Coefficient		0.0299	
Contingency Coefficient		0.0299	
Cramer's V		0.0299	

Fisher's Exact Test

Cell (1,1) Frequency (F)	295
Left-sided Pr <= F	0.8643
Right-sided Pr >= F	0.1624
Table Probability (P)	0.0267
Two-sided Pr <= P	0.3011

Sample Size = 1211

The FREQ Procedure

Table of RETBASE by GROUP

RETBASE(RETBASE RETINOPATHY AT BASELINE (PRIM SCND))
 GROUP(GROUP Treatment Group (EXPERIMENTAL
 STANDARD))

Frequency			
Percent			
Row Pct			
Col Pct	EXPERIME	STANDARD	Total
	NTAL		
PRIM	293	315	608
	24.19	26.01	50.21
	48.19	51.81	
	49.16	51.22	
SCND	303	300	603
	25.02	24.77	49.79
	50.25	49.75	
	50.84	48.78	
Total	596	615	1211
	49.22	50.78	100.00

Statistics for Table of RETBASE by GROUP

Statistic	DF	Value	Prob
Chi-Square	1	0.5130	0.4738
Likelihood Ratio Chi-Square	1	0.5130	0.4738
Continuity Adj. Chi-Square	1	0.4340	0.5100
Mantel-Haenszel Chi-Square	1	0.5126	0.4740
Phi Coefficient		-0.0206	
Contingency Coefficient		0.0206	
Cramer's V		-0.0206	

Fisher's Exact Test

Cell (1,1) Frequency (F)	293
Left-sided Pr <= F	0.2550
Right-sided Pr >= F	0.7804
Table Probability (P)	0.0355
Two-sided Pr <= P	0.4906

Sample Size = 1211

The FREQ Procedure

Table of MDI99 by GROUP

MDI99(MDI99 Pump or MDI @ DCCT closeout (0=n 1=y))
 GROUP(GROUP Treatment Group (EXPERIMENTAL

STANDARD))

Frequency			
Percent			
Row Pct			
Col Pct	EXPERIME	STANDARD	Total
	NTAL		
0	12	583	595
	0.99	48.18	49.17
	2.02	97.98	
	2.01	94.95	
1	584	31	615
	48.26	2.56	50.83
	94.96	5.04	
	97.99	5.05	
Total	596	614	1210
	49.26	50.74	100.00

Frequency Missing = 1

The FREQ Procedure

Statistics for Table of MDI99 by GROUP

Statistic	DF	Value	Prob
Chi-Square	1	1045.1820	<.0001
Likelihood Ratio Chi-Square	1	1314.0605	<.0001
Continuity Adj. Chi-Square	1	1041.4668	<.0001
Mantel-Haenszel Chi-Square	1	1044.3182	<.0001
Phi Coefficient		-0.9294	
Contingency Coefficient		0.6808	
Cramer's V		-0.9294	

Fisher's Exact Test

Cell (1,1) Frequency (F)	12
Left-sided Pr <= F	1.673E-286
Right-sided Pr >= F	1.0000
Table Probability (P)	1.671E-286
Two-sided Pr <= P	1.806E-286

Effective Sample Size = 1210

Frequency Missing = 1

The FREQ Procedure

Table of GLUC499 by GROUP

GLUC499(GLUC499 BGSM >=4 times a day @ DCCT Close (0=n 1=y))
 GROUP(GROUP Treatment Group (EXPERIMENTAL

STANDARD))

Frequency			
Percent			
Row Pct			
Col Pct	EXPERIME	STANDARD	Total
	NTAL		
0	276	589	865
	22.81	48.68	71.49
	31.91	68.09	
	46.31	95.93	
1	320	25	345
	26.45	2.07	28.51
	92.75	7.25	
	53.69	4.07	
Total	596	614	1210
	49.26	50.74	100.00

Frequency Missing = 1

The FREQ Procedure

Statistics for Table of GLUC499 by GROUP

Statistic	DF	Value	Prob
Chi-Square	1	365.3184	<.0001
Likelihood Ratio Chi-Square	1	414.4973	<.0001
Continuity Adj. Chi-Square	1	362.8881	<.0001
Mantel-Haenszel Chi-Square	1	365.0165	<.0001
Phi Coefficient		-0.5495	
Contingency Coefficient		0.4816	
Cramer's V		-0.5495	

Fisher's Exact Test

Cell (1,1) Frequency (F)	276
Left-sided Pr <= F	1.070E-91
Right-sided Pr >= F	1.0000
Table Probability (P)	1.031E-91
Two-sided Pr <= P	1.785E-91

Effective Sample Size = 1210
 Frequency Missing = 1

Table of LIPFLG by GROUP

LIPFLG(LIPFLG HYPERLIPIDEMIA EVER (0=n 1=y))
 GROUP(GROUP Treatment Group (EXPERIMENTAL

STANDARD))

Frequency Percent Row Pct Col Pct	EXPERIME	STANDARD	Total
	NTAL		
0	553 45.66 50.14 92.79	550 45.42 49.86 89.43	1103 91.08
1	43 3.55 39.81 7.21	65 5.37 60.19 10.57	108 8.92
Total	596 49.22	615 50.78	1211 100.00

The FREQ Procedure

Statistics for Table of LIPFLG by GROUP

Statistic	DF	Value	Prob
Chi-Square	1	4.1926	0.0406
Likelihood Ratio Chi-Square	1	4.2230	0.0399
Continuity Adj. Chi-Square	1	3.7898	0.0516
Mantel-Haenszel Chi-Square	1	4.1891	0.0407
Phi Coefficient		0.0588	
Contingency Coefficient		0.0587	
Cramer's V		0.0588	

Fisher's Exact Test

Cell (1,1) Frequency (F)	553
Left-sided Pr <= F	0.9844
Right-sided Pr >= F	0.0255
Table Probability (P)	0.0099
Two-sided Pr <= P	0.0438

Sample Size = 1211

The FREQ Procedure

Table of MDI10 by GROUP

MDI10(MDI10 Pump or MDI @ EDIC Yr 10 (0=n 1=y))
 GROUP(GROUP Treatment Group (EXPERIMENTAL

STANDARD))

Frequency	EXPERIMENTAL	STANDARD	Total
0	20	46	66
Percent	1.71	3.92	5.63
Row Pct	30.30	69.70	
Col Pct	3.44	7.78	
1	561	545	1106
Percent	47.87	46.50	94.37
Row Pct	50.72	49.28	
Col Pct	96.56	92.22	
Total	581	591	1172
Percent	49.57	50.43	100.00

Frequency Missing = 39

The FREQ Procedure

Statistics for Table of MDI10 by GROUP

Statistic	DF	Value	Prob
Chi-Square	1	10.3893	0.0013
Likelihood Ratio Chi-Square	1	10.6714	0.0011
Continuity Adj. Chi-Square	1	9.5885	0.0020
Mantel-Haenszel Chi-Square	1	10.3805	0.0013
Phi Coefficient		-0.0942	
Contingency Coefficient		0.0937	
Cramer's V		-0.0942	

Fisher's Exact Test

Cell (1,1) Frequency (F)	20
Left-sided Pr <= F	8.711E-04
Right-sided Pr >= F	0.9997
Table Probability (P)	5.273E-04
Two-sided Pr <= P	0.0014

Effective Sample Size = 1172

Frequency Missing = 39

The FREQ Procedure

Table of GLUC410 by GROUP

GLUC410(GLUC410 BGSM >=4 times a day @ EDIC YR 10 (0=n 1=y
 .U=uncertain))
 GROUP(GROUP Treatment Group (EXPERIMENTAL
 STANDARD))

Frequency			
Percent			
Row Pct			
Col Pct	EXPERIME NTAL	STANDARD	Total
0	267 22.96 54.16 46.35	226 19.43 45.84 38.50	493 42.39
1	309 26.57 46.12 53.65	361 31.04 53.88 61.50	670 57.61
Total	576 49.53	587 50.47	1163 100.00

Frequency Missing = 48

The FREQ Procedure

Statistics for Table of GLUC410 by GROUP

Statistic	DF	Value	Prob
Chi-Square	1	7.3422	0.0067
Likelihood Ratio Chi-Square	1	7.3495	0.0067
Continuity Adj. Chi-Square	1	7.0241	0.0080
Mantel-Haenszel Chi-Square	1	7.3359	0.0068
Phi Coefficient		0.0795	
Contingency Coefficient		0.0792	
Cramer's V		0.0795	

Fisher's Exact Test

Cell (1,1) Frequency (F)	267
Left-sided Pr <= F	0.9972
Right-sided Pr >= F	0.0040
Table Probability (P)	0.0012
Two-sided Pr <= P	0.0076

Effective Sample Size = 1163

Frequency Missing = 48

The FREQ Procedure

Table of DTCLSETD by GROUP

DTCLSETD(DTCLSETD DCCT closeout ETDRS level comb DCCT10-
 DCCT50)
 GROUP(GROUP Treatment Group (EXPERIMENTAL
 STANDARD))

Frequency			
Percent			
Row Pct			
Col Pct	EXPERIME NTAL	STANDARD	Total
1	170	109	279
	14.06	9.02	23.08
	60.93	39.07	
	28.52	17.78	
2	237	194	431
	19.60	16.05	35.65
	54.99	45.01	
	39.77	31.65	
3	128	170	298
	10.59	14.06	24.65
	42.95	57.05	
	21.48	27.73	
4	61	140	201
	5.05	11.58	16.63
	30.35	69.65	
	10.23	22.84	
Total	596	613	1209
	49.30	50.70	100.00

Frequency Missing = 2

The FREQ Procedure

Statistics for Table of DTCLSETD by GROUP

Statistic	DF	Value	Prob
Chi-Square	3	54.3679	<.0001
Likelihood Ratio Chi-Square	3	55.3457	<.0001
Mantel-Haenszel Chi-Square	1	52.6774	<.0001
Phi Coefficient		0.2121	
Contingency Coefficient		0.2074	
Cramer's V		0.2121	

Fisher's Exact Test

Table Probability (P)	2.249E-16
Pr <= P	6.286E-12

Effective Sample Size = 1209
 Frequency Missing = 2

Table of ANYSCAT by GROUP

ANYSCAT(ANYSCAT Any SCATTER DCCT/EDIC to date (0=n 1=y))
 GROUP(GROUP Treatment Group (EXPERIMENTAL

STANDARD))

Frequency			
Percent			
Row Pct			
Col Pct	EXPERIME	STANDARD	Total
	NTAL		
0	586	590	1176
	48.39	48.72	97.11
	49.83	50.17	
	98.32	95.93	
1	10	25	35
	0.83	2.06	2.89
	28.57	71.43	
	1.68	4.07	
Total	596	615	1211
	49.22	50.78	100.00

The FREQ Procedure

Statistics for Table of ANYSCAT by GROUP

Statistic	DF	Value	Prob
Chi-Square	1	6.1456	0.0132
Likelihood Ratio Chi-Square	1	6.3569	0.0117
Continuity Adj. Chi-Square	1	5.3245	0.0210
Mantel-Haenszel Chi-Square	1	6.1405	0.0132
Phi Coefficient		0.0712	
Contingency Coefficient		0.0711	
Cramer's V		0.0712	

Fisher's Exact Test

Cell (1,1) Frequency (F)	586
Left-sided Pr <= F	0.9965
Right-sided Pr >= F	0.0098
Table Probability (P)	0.0062
Two-sided Pr <= P	0.0156

Sample Size = 1211

Table of ANYFOCA by GROUP

ANYFOCA(ANYFOCA Any FOCAL DCCT/EDIC to date (0=n 1=y))
 GROUP(GROUP Treatment Group (EXPERIMENTAL

STANDARD))

Frequency			Total
Percent	EXPERIME	STANDARD	
Row Pct			
Col Pct	NTAL		
0	583	582	1165
	48.14	48.06	96.20
	50.04	49.96	
	97.82	94.63	
1	13	33	46
	1.07	2.73	3.80
	28.26	71.74	
	2.18	5.37	
Total	596	615	1211
	49.22	50.78	100.00

The FREQ Procedure

Statistics for Table of ANYFOCA by GROUP

Statistic	DF	Value	Prob
Chi-Square	1	8.4005	0.0038
Likelihood Ratio Chi-Square	1	8.6955	0.0032
Continuity Adj. Chi-Square	1	7.5516	0.0060
Mantel-Haenszel Chi-Square	1	8.3935	0.0038
Phi Coefficient		0.0833	
Contingency Coefficient		0.0830	
Cramer's V		0.0833	

Fisher's Exact Test

Cell (1,1) Frequency (F)	583
Left-sided Pr <= F	0.9990
Right-sided Pr >= F	0.0027
Table Probability (P)	0.0017
Two-sided Pr <= P	0.0040

Sample Size = 1211

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The MEANS Procedure

GROUP Treatment Group (EXPERIMENTAL STANDARD)	N Obs	Variable	Label		Std Dev

EXPERIMENTAL	596	AGE0	AGE0	AGE at DCCT baseline (years)	
27.2		DURYR0	DURYR0	IDDM duration (years): DCCT baseline	
6.0		HBAEL	HBAEL	HBA1c at DCCT eligibility (%)	
9.1		AGE99	AGE99	AGE at DCCT closeout (years)	
33.6		DURYR99	DURYR99	IDDM duration (years): DCCT Closeout	
12.2		DCCTYEAR	DCCTYEAR	Time on randomized treatment (Yr)	
6.4		HBA99	HBA99	HBA1c at DCCT closeout (%)	
7.4		MBP99	MBP99	Mean BP (CloseOut, F021)	
88.7					
STANDARD	615	AGE0	AGE0	AGE at DCCT baseline (years)	
26.6		DURYR0	DURYR0	IDDM duration (years): DCCT baseline	
5.7		HBAEL	HBAEL	HBA1c at DCCT eligibility (%)	
9.0		AGE99	AGE99	AGE at DCCT closeout (years)	
32.9		DURYR99	DURYR99	IDDM duration (years): DCCT Closeout	
11.8		DCCTYEAR	DCCTYEAR	Time on randomized treatment (Yr)	
6.3		HBA99	HBA99	HBA1c at DCCT closeout (%)	
9.1		MBP99	MBP99	Mean BP (CloseOut, F021)	
88.2					

GROUP Treatment Group (EXPERIMENTAL STANDARD)	N Obs	Variable	Label		Std Dev

EXPERIMENTAL	596	AGE0	AGE0	AGE at DCCT baseline (years)	
7.0					

4.2		DURYR0	DURYR0	IDDM duration (years): DCCT baseline
		HBAEL	HBAEL	HBA1c at DCCT eligibility (%)
1.6		AGE99	AGE99	AGE at DCCT closeout (years)
6.8		DURYR99	DURYR99	IDDM duration (years): DCCT Closeout
4.9		DCCTYEAR	DCCTYEAR	Time on randomized treatment (Yr)
1.7		HBA99	HBA99	HBA1c at DCCT closeout (%)
1.0		MBP99	MBP99	Mean BP (CloseOut, F021)
8.7				

STANDARD	615	AGE0	AGE0	AGE at DCCT baseline (years)
7.0		DURYR0	DURYR0	IDDM duration (years): DCCT baseline
4.1		HBAEL	HBAEL	HBA1c at DCCT eligibility (%)
1.6		AGE99	AGE99	AGE at DCCT closeout (years)
6.9		DURYR99	DURYR99	IDDM duration (years): DCCT Closeout
4.9		DCCTYEAR	DCCTYEAR	Time on randomized treatment (Yr)
1.6		HBA99	HBA99	HBA1c at DCCT closeout (%)
1.5		MBP99	MBP99	Mean BP (CloseOut, F021)
8.7				

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable AGE0
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
EXPERIMENTAL	596	370325.50	361176.0	6078.99535	621.351510
STANDARD	615	363540.50	372690.0	6078.99535	591.122764

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 370325.5000

Normal Approximation

Z 1.5050

One-Sided Pr > Z 0.0662

Two-Sided Pr > |Z| 0.1323

t Approximation

One-Sided Pr > Z 0.0663

Two-Sided Pr > |Z| 0.1326

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 2.2653

DF 1

Pr > Chi-Square 0.1323

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable DURYRO
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
EXPERIMENTAL	596	367876.0	361176.0	6052.40469	617.241611
STANDARD	615	365990.0	372690.0	6052.40469	595.105691

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 367876.0000

Normal Approximation

Z 1.1069

One-Sided Pr > Z 0.1342

Two-Sided Pr > |Z| 0.2683

t Approximation

One-Sided Pr > Z 0.1343

Two-Sided Pr > |Z| 0.2686

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 1.2254

DF 1

Pr > Chi-Square 0.2683

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable HBAEL
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
EXPERIMENTAL	596	368146.0	361176.0	6084.21271	617.694631
STANDARD	615	365720.0	372690.0	6084.21271	594.666667

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 368146.0000

Normal Approximation

Z 1.1455

One-Sided Pr > Z 0.1260

Two-Sided Pr > |Z| 0.2520

t Approximation

One-Sided Pr > Z 0.1261

Two-Sided Pr > |Z| 0.2522

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 1.3124

DF 1

Pr > Chi-Square 0.2520

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable AGE99
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
EXPERIMENTAL	596	371382.50	361176.0	6078.92457	623.125000
STANDARD	615	362483.50	372690.0	6078.92457	589.404065

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 371382.5000

Normal Approximation

Z 1.6789

One-Sided Pr > Z 0.0466

Two-Sided Pr > |Z| 0.0932

t Approximation

One-Sided Pr > Z 0.0467

Two-Sided Pr > |Z| 0.0934

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 2.8190

DF 1

Pr > Chi-Square 0.0932

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable DURYR99
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
EXPERIMENTAL	596	370063.50	361176.0	6069.97973	620.911913
STANDARD	615	363802.50	372690.0	6069.97973	591.548780

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 370063.5000

Normal Approximation

Z 1.4641

One-Sided Pr > Z 0.0716

Two-Sided Pr > |Z| 0.1432

t Approximation

One-Sided Pr > Z 0.0717

Two-Sided Pr > |Z| 0.1434

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 2.1438

DF 1

Pr > Chi-Square 0.1431

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable DCCTYEAR
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
EXPERIMENTAL	596	367092.50	361176.0	5957.73465	615.927013
STANDARD	615	366773.50	372690.0	5957.73465	596.379675

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 367092.5000

Normal Approximation

Z 0.9930

One-Sided Pr > Z 0.1604

Two-Sided Pr > |Z| 0.3207

t Approximation

One-Sided Pr > Z 0.1605

Two-Sided Pr > |Z| 0.3209

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 0.9862

DF 1

Pr > Chi-Square 0.3207

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable HBA99
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
EXPERIMENTAL	595	237885.50	359975.0	6067.94844	399.807563
STANDARD	614	493559.50	371470.0	6067.94844	803.842834

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 237885.5000

Normal Approximation

Z -20.1203

One-Sided Pr < Z <.0001

Two-Sided Pr > |Z| <.0001

t Approximation

One-Sided Pr < Z <.0001

Two-Sided Pr > |Z| <.0001

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 404.8302

DF 1

Pr > Chi-Square <.0001

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable MBP99
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
EXPERIMENTAL	594	364282.0	357885.0	6030.22509	613.269360
STANDARD	610	361128.0	367525.0	6030.22509	592.013115

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 364282.0000

Normal Approximation

Z 1.0607

One-Sided Pr > Z 0.1444

Two-Sided Pr > |Z| 0.2888

t Approximation

One-Sided Pr > Z 0.1445

Two-Sided Pr > |Z| 0.2890

Z includes a continuity correction of 0.5.

Kruskal-Wallis Test

Chi-Square 1.1253

DF 1

Pr > Chi-Square 0.2888

----- EDICYR EDIC year=0 -----

The FREQ Procedure

Table of STEP3 by GROUP

STEP3(STEP3 3 Step change from DCCT baseline (0=n 1=y))
 GROUP(GROUP Treatment Group (EXPERIMENTAL

STANDARD))

Frequency			
Percent			
Row Pct			
Col Pct	EXPERIME	STANDARD	Total
	NTAL		
0	532	410	942
	43.97	33.88	77.85
	56.48	43.52	
	89.26	66.78	
1	64	204	268
	5.29	16.86	22.15
	23.88	76.12	
	10.74	33.22	
Total	596	614	1210
	49.26	50.74	100.00

----- EDICYR EDIC year=0 -----

The FREQ Procedure

Statistics for Table of STEP3 by GROUP

Statistic	DF	Value	Prob
Chi-Square	1	88.6866	<.0001
Likelihood Ratio Chi-Square	1	92.4650	<.0001
Continuity Adj. Chi-Square	1	87.3873	<.0001
Mantel-Haenszel Chi-Square	1	88.6133	<.0001
Phi Coefficient		0.2707	
Contingency Coefficient		0.2613	
Cramer's V		0.2707	

Fisher's Exact Test

Cell (1,1) Frequency (F)	532
Left-sided Pr <= F	1.0000
Right-sided Pr >= F	7.147E-22
Table Probability (P)	2.212E-21
Two-sided Pr <= P	9.724E-22

Sample Size = 1210

----- EDICYR EDIC year=0 -----

The FREQ Procedure

Table of SNPDR by GROUP

SNPDR(SNPDR Severe Non-Proliferative Diabetic Retinopathy
 (0=n 1=y))
 GROUP(GROUP Treatment Group (EXPERIMENTAL
 STANDARD))

Frequency	Percent	Row Pct	Col Pct	EXPERIMENTAL	STANDARD	Total
0				581	571	1152
				48.02	47.19	95.21
				50.43	49.57	
				97.48	93.00	
1				15	43	58
				1.24	3.55	4.79
				25.86	74.14	
				2.52	7.00	
Total			596	614	1210	
			49.26	50.74	100.00	

----- EDICYR EDIC year=0 -----

The FREQ Procedure

Statistics for Table of SNPDR by GROUP

Statistic	DF	Value	Prob
Chi-Square	1	13.3392	0.0003
Likelihood Ratio Chi-Square	1	13.9174	0.0002
Continuity Adj. Chi-Square	1	12.3742	0.0004
Mantel-Haenszel Chi-Square	1	13.3282	0.0003
Phi Coefficient		0.1050	
Contingency Coefficient		0.1044	
Cramer's V		0.1050	

Fisher's Exact Test

Cell (1,1) Frequency (F)	581
Left-sided Pr <= F	0.9999
Right-sided Pr >= F	1.706E-04
Table Probability (P)	1.158E-04
Two-sided Pr <= P	2.398E-04

Sample Size = 1210

----- EDICYR EDIC year=0 -----

The FREQ Procedure

Table of PDR by GROUP

PDR(PDR Proliferative Diabetic Retinopathy (0=n 1=y))
 GROUP(GROUP Treatment Group (EXPERIMENTAL

STANDARD))

Frequency	Percent	Row Pct	Col Pct	EXPERIMENTAL	STANDARD	Total
0	581	48.02	50.39	572	47.27	1153
	97.48		93.16			95.29
1	15	1.24	26.32	42	3.47	57
	2.52		6.84			4.71
Total	596	49.26		614	50.74	1210
						100.00

----- EDICYR EDIC year=0 -----

The FREQ Procedure

Statistics for Table of PDR by GROUP

Statistic	DF	Value	Prob
Chi-Square	1	12.5947	0.0004
Likelihood Ratio Chi-Square	1	13.1192	0.0003
Continuity Adj. Chi-Square	1	11.6500	0.0006
Mantel-Haenszel Chi-Square	1	12.5843	0.0004
Phi Coefficient		0.1020	
Contingency Coefficient		0.1015	
Cramer's V		0.1020	

Fisher's Exact Test

Cell (1,1) Frequency (F)	581
Left-sided Pr <= F	0.9999
Right-sided Pr >= F	2.578E-04
Table Probability (P)	1.731E-04
Two-sided Pr <= P	3.658E-04

Sample Size = 1210

----- EDICYR EDIC year=0 -----

The FREQ Procedure

Table of FOCALSCAT by GROUP

FOCALSCAT
 GROUP(GROUP Treatment Group (EXPERIMENTAL
 STANDARD))

Frequency	Percent	Row Pct	Col Pct	EXPERIMENTAL	STANDARD	Total
0	576	47.60	50.48	565	46.69	1141
	96.64		92.02			94.30
1	20	1.65	28.99	49	4.05	69
	3.36		7.98			5.70
Total	596	49.26		614	50.74	1210
						100.00

----- EDICYR EDIC year=0 -----

The FREQ Procedure

Statistics for Table of FOCALSCAT by GROUP

Statistic	DF	Value	Prob
Chi-Square	1	12.0293	0.0005
Likelihood Ratio Chi-Square	1	12.4136	0.0004
Continuity Adj. Chi-Square	1	11.1847	0.0008
Mantel-Haenszel Chi-Square	1	12.0194	0.0005
Phi Coefficient		0.0997	
Contingency Coefficient		0.0992	
Cramer's V		0.0997	

Fisher's Exact Test

Cell (1,1) Frequency (F)	576
Left-sided Pr <= F	0.9999
Right-sided Pr >= F	3.505E-04
Table Probability (P)	2.187E-04
Two-sided Pr <= P	4.862E-04

Sample Size = 1210

----- EDICYR EDIC year=4 -----

The FREQ Procedure

Table of STEP3 by GROUP

STEP3(STEP3 3 Step change from DCCT baseline (0=n 1=y))
 GROUP(GROUP Treatment Group (EXPERIMENTAL

STANDARD))

Frequency			
Percent			
Row Pct			
Col Pct	EXPERIME	STANDARD	Total
	NTAL		
0	442	282	724
	40.55	25.87	66.42
	61.05	38.95	
	82.16	51.09	
1	96	270	366
	8.81	24.77	33.58
	26.23	73.77	
	17.84	48.91	
Total	538	552	1090
	49.36	50.64	100.00

Frequency Missing = 13

----- EDICYR EDIC year=4 -----

The FREQ Procedure

Statistics for Table of STEP3 by GROUP

Statistic	DF	Value	Prob
Chi-Square	1	117.9201	<.0001
Likelihood Ratio Chi-Square	1	121.6317	<.0001
Continuity Adj. Chi-Square	1	116.5311	<.0001
Mantel-Haenszel Chi-Square	1	117.8119	<.0001
Phi Coefficient		0.3289	
Contingency Coefficient		0.3124	
Cramer's V		0.3289	

Fisher's Exact Test

Cell (1,1) Frequency (F)	442
Left-sided Pr <= F	1.0000
Right-sided Pr >= F	2.974E-28
Table Probability (P)	1.003E-27
Two-sided Pr <= P	4.353E-28

Effective Sample Size = 1090

Frequency Missing = 13

----- EDICYR EDIC year=4 -----

The FREQ Procedure

Table of SNPDR by GROUP

SNPDR(SNPDR Severe Non-Proliferative Diabetic Retinopathy
 (0=n 1=y))

GROUP(GROUP Treatment Group (EXPERIMENTAL
 STANDARD))

Frequency			
Percent			
Row Pct			
Col Pct	EXPERIME	STANDARD	Total
	NTAL		
0	516	457	973
	47.17	41.77	88.94
	53.03	46.97	
	95.38	82.64	
1	25	96	121
	2.29	8.78	11.06
	20.66	79.34	
	4.62	17.36	
Total	541	553	1094
	49.45	50.55	100.00

Frequency Missing = 9

----- EDICYR EDIC year=4 -----

The FREQ Procedure

Statistics for Table of SNPDR by GROUP

Statistic	DF	Value	Prob
Chi-Square	1	45.1126	<.0001
Likelihood Ratio Chi-Square	1	47.9071	<.0001
Continuity Adj. Chi-Square	1	43.8269	<.0001
Mantel-Haenszel Chi-Square	1	45.0713	<.0001
Phi Coefficient		0.2031	
Contingency Coefficient		0.1990	
Cramer's V		0.2031	

Fisher's Exact Test

Cell (1,1) Frequency (F)	516
Left-sided Pr <= F	1.0000
Right-sided Pr >= F	4.834E-12
Table Probability (P)	3.750E-12
Two-sided Pr <= P	8.501E-12

Effective Sample Size = 1094

Frequency Missing = 9

----- EDICYR EDIC year=4 -----

The FREQ Procedure

Table of PDR by GROUP

PDR(PDR Proliferative Diabetic Retinopathy (0=n 1=y))
 GROUP(GROUP Treatment Group (EXPERIMENTAL

STANDARD))

Frequency	Percent	Row Pct	Col Pct	EXPERIMENTAL	STANDARD	Total
0	518	47.35	52.64	466	42.60	984
		95.75			84.27	
1	23	2.10	20.91	87	7.95	110
		4.25			15.73	
Total	541	49.45		553	50.55	1094
						100.00

Frequency Missing = 9

----- EDICYR EDIC year=4 -----

The FREQ Procedure

Statistics for Table of PDR by GROUP

Statistic	DF	Value	Prob
Chi-Square	1	39.8575	<.0001
Likelihood Ratio Chi-Square	1	42.3051	<.0001
Continuity Adj. Chi-Square	1	38.5981	<.0001
Mantel-Haenszel Chi-Square	1	39.8211	<.0001
Phi Coefficient		0.1909	
Contingency Coefficient		0.1875	
Cramer's V		0.1909	

Fisher's Exact Test

Cell (1,1) Frequency (F)	518
Left-sided Pr <= F	1.0000
Right-sided Pr >= F	8.325E-11
Table Probability (P)	6.404E-11
Two-sided Pr <= P	1.572E-10

Effective Sample Size = 1094

Frequency Missing = 9

----- EDICYR EDIC year=4 -----

The FREQ Procedure

Table of FOCALSCAT by GROUP

FOCALSCAT
 GROUP(GROUP Treatment Group (EXPERIMENTAL
 STANDARD))

Frequency	Percent	Row Pct	Col Pct	EXPERIMENTAL	STANDARD	Total
0	517	477	994	46.87	43.25	90.12
	52.01	47.99		95.39	85.03	
1	25	84	109	2.27	7.62	9.88
	22.94	77.06		4.61	14.97	
Total	542	561	1103	49.14	50.86	100.00

----- EDICYR EDIC year=4 -----

The FREQ Procedure

Statistics for Table of FOCALSCAT by GROUP

Statistic	DF	Value	Prob
Chi-Square	1	33.2280	<.0001
Likelihood Ratio Chi-Square	1	34.9960	<.0001
Continuity Adj. Chi-Square	1	32.0748	<.0001
Mantel-Haenszel Chi-Square	1	33.1979	<.0001
Phi Coefficient		0.1736	
Contingency Coefficient		0.1710	
Cramer's V		0.1736	

Fisher's Exact Test

Cell (1,1) Frequency (F)	517
Left-sided Pr <= F	1.0000
Right-sided Pr >= F	3.271E-09
Table Probability (P)	2.402E-09
Two-sided Pr <= P	4.554E-09

Sample Size = 1103

----- EDICYR EDIC year=10 -----

The FREQ Procedure

Table of STEP3 by GROUP

STEP3(STEP3 3 Step change from DCCT baseline (0=n 1=y))
 GROUP(GROUP Treatment Group (EXPERIMENTAL

STANDARD))

Frequency			
Percent			
Row Pct			
Col Pct	EXPERIME	STANDARD	Total
	NTAL		
0	380	242	622
	31.51	20.07	51.58
	61.09	38.91	
	64.19	39.41	
1	212	372	584
	17.58	30.85	48.42
	36.30	63.70	
	35.81	60.59	
Total	592	614	1206
	49.09	50.91	100.00

Frequency Missing = 5

----- EDICYR EDIC year=10 -----

The FREQ Procedure

Statistics for Table of STEP3 by GROUP

Statistic	DF	Value	Prob
Chi-Square	1	74.0763	<.0001
Likelihood Ratio Chi-Square	1	74.8734	<.0001
Continuity Adj. Chi-Square	1	73.0876	<.0001
Mantel-Haenszel Chi-Square	1	74.0149	<.0001
Phi Coefficient		0.2478	
Contingency Coefficient		0.2406	
Cramer's V		0.2478	

Fisher's Exact Test

Cell (1,1) Frequency (F)	380
Left-sided Pr <= F	1.0000
Right-sided Pr >= F	4.208E-18
Table Probability (P)	4.228E-18
Two-sided Pr <= P	6.397E-18

Effective Sample Size = 1206

Frequency Missing = 5

----- EDICYR EDIC year=10 -----

The FREQ Procedure

Table of SNPDR by GROUP

SNPDR(SNPDR Severe Non-Proliferative Diabetic Retinopathy
 (0=n 1=y))

GROUP(GROUP Treatment Group (EXPERIMENTAL
 STANDARD))

Frequency			
Percent			
Row Pct			
Col Pct	EXPERIME	STANDARD	Total
	NTAL		
0	542	461	1003
	44.76	38.07	82.82
	54.04	45.96	
	90.94	74.96	
1	54	154	208
	4.46	12.72	17.18
	25.96	74.04	
	9.06	25.04	
Total	596	615	1211
	49.22	50.78	100.00

----- EDICYR EDIC year=10 -----

The FREQ Procedure

Statistics for Table of SNPDR by GROUP

Statistic	DF	Value	Prob
Chi-Square	1	54.3336	<.0001
Likelihood Ratio Chi-Square	1	56.3755	<.0001
Continuity Adj. Chi-Square	1	53.2160	<.0001
Mantel-Haenszel Chi-Square	1	54.2887	<.0001
Phi Coefficient		0.2118	
Contingency Coefficient		0.2072	
Cramer's V		0.2118	

Fisher's Exact Test

Cell (1,1) Frequency (F)	542
Left-sided Pr <= F	1.0000
Right-sided Pr >= F	5.622E-14
Table Probability (P)	3.979E-14
Two-sided Pr <= P	1.080E-13

Sample Size = 1211

----- EDICYR EDIC year=10 -----

The FREQ Procedure

Table of PDR by GROUP

PDR(PDR Proliferative Diabetic Retinopathy (0=n 1=y))
 STANDARD)) GROUP(GROUP Treatment Group (EXPERIMENTAL

Frequency	Percent	Row Pct	Col Pct	EXPERIMENTAL	STANDARD	Total
0	543	44.84	53.98	463	38.23	1006
		91.11			46.02	83.07
1	53	4.38	25.85	152	12.55	205
		8.89			24.72	16.93
Total	596	49.22		615	50.78	1211
						100.00

----- EDICYR EDIC year=10 -----

The FREQ Procedure

Statistics for Table of PDR by GROUP

Statistic	DF	Value	Prob
Chi-Square	1	53.8867	<.0001
Likelihood Ratio Chi-Square	1	55.9373	<.0001
Continuity Adj. Chi-Square	1	52.7674	<.0001
Mantel-Haenszel Chi-Square	1	53.8423	<.0001
Phi Coefficient		0.2109	
Contingency Coefficient		0.2064	
Cramer's V		0.2109	

Fisher's Exact Test

Cell (1,1) Frequency (F)	543
Left-sided Pr <= F	1.0000
Right-sided Pr >= F	7.039E-14
Table Probability (P)	4.985E-14
Two-sided Pr <= P	1.390E-13

Sample Size = 1211

----- EDICYR EDIC year=10 -----

The FREQ Procedure

Table of FOCALSCAT by GROUP

FOCALSCAT
 GROUP(GROUP Treatment Group (EXPERIMENTAL
 STANDARD))

Frequency			
Percent			
Row Pct			
Col Pct	EXPERIME	STANDARD	Total
	NTAL		
0	546	470	1016
	45.09	38.81	83.90
	53.74	46.26	
	91.61	76.42	
1	50	145	195
	4.13	11.97	16.10
	25.64	74.36	
	8.39	23.58	
Total	596	615	1211
	49.22	50.78	100.00

----- EDICYR EDIC year=10 -----

The FREQ Procedure

Statistics for Table of FOCALSCAT by GROUP

Statistic	DF	Value	Prob
Chi-Square	1	51.6817	<.0001
Likelihood Ratio Chi-Square	1	53.7049	<.0001
Continuity Adj. Chi-Square	1	50.5636	<.0001
Mantel-Haenszel Chi-Square	1	51.6390	<.0001
Phi Coefficient		0.2066	
Contingency Coefficient		0.2023	
Cramer's V		0.2066	

Fisher's Exact Test

Cell (1,1) Frequency (F)	546
Left-sided Pr <= F	1.0000
Right-sided Pr >= F	2.195E-13
Table Probability (P)	1.557E-13
Two-sided Pr <= P	2.956E-13

Sample Size = 1211

The LOGISTIC Procedure

Model Information

Data Set	WORK.EDIC10RE_ANALY
Response Variable	STEP3
Number of Response Levels	2
Model	binary logit
Optimization Technique	Fisher's scoring

Model Information

STEP3 3 Step change from DCCT baseline (0=n 1=y)

Number of Observations Read	1210
Number of Observations Used	1210

Response Profile

Ordered Value	STEP3	Total Frequency
1	1	268
2	0	942

Probability modeled is STEP3=1.

Model Convergence Status

Convergence criterion (GCONV=1E-8) satisfied.

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	1281.658	1191.193
SC	1286.756	1201.390
-2 Log L	1279.658	1187.193

The LOGISTIC Procedure

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	92.4650	1	<.0001
Score	88.6866	1	<.0001
Wald	81.1198	1	<.0001

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	-0.6980	0.0857	66.3747	<.0001
tgroup	1	-1.4196	0.1576	81.1198	<.0001

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits	
tgroup	0.242	0.178	0.329

Association of Predicted Probabilities and Observed Responses

Percent Concordant	43.0	Somers' D	0.326
Percent Discordant	10.4	Gamma	0.611
Percent Tied	46.6	Tau-a	0.113
Pairs	252456	c	0.663

Wald Confidence Interval for Odds Ratios

Effect	Unit	Estimate	95% Confidence Limits	
tgroup	1.0000	0.242	0.178	0.329

The LOGISTIC Procedure

Model Information

Data Set	WORK.EDIC10RE_ANALY
Response Variable	SNPDR
Number of Response Levels	2
Model	binary logit
Optimization Technique	Fisher's scoring

Model Information

SNPDR Severe Non-Proliferative Diabetic Retinopathy (0=n 1=y)

Number of Observations Read	1210
Number of Observations Used	1210

Response Profile

Ordered Value	SNPDR	Total Frequency
1	1	58
2	0	1152

Probability modeled is SNPDR=1.

Model Convergence Status

Convergence criterion (GCONV=1E-8) satisfied.

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	467.575	455.657
SC	472.673	465.854
-2 Log L	465.575	451.657

The LOGISTIC Procedure

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	13.9174	1	0.0002
Score	13.3392	1	0.0003
Wald	12.2694	1	0.0005

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	-2.5862	0.1581	267.4588	<.0001
tgroup	1	-1.0704	0.3056	12.2694	0.0005

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits	
tgroup	0.343	0.188	0.624

Association of Predicted Probabilities and Observed Responses

Percent Concordant	37.4	Somers' D	0.246
Percent Discordant	12.8	Gamma	0.489
Percent Tied	49.8	Tau-a	0.022
Pairs	66816	c	0.623

Wald Confidence Interval for Odds Ratios

Effect	Unit	Estimate	95% Confidence Limits	
tgroup	1.0000	0.343	0.188	0.624

The LOGISTIC Procedure

Model Information

Data Set	WORK.EDIC10RE_ANALY
Response Variable	PDR
Number of Response Levels	2
Model	binary logit
Optimization Technique	Fisher's scoring

Model Information

PDR Proliferative Diabetic Retinopathy (0=n 1=y)

Number of Observations Read	1210
Number of Observations Used	1210

Response Profile

Ordered Value	PDR	Total Frequency
1	1	57
2	0	1153

Probability modeled is PDR=1.

Model Convergence Status

Convergence criterion (GCONV=1E-8) satisfied.

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	461.579	450.460
SC	466.677	460.656
-2 Log L	459.579	446.460

The LOGISTIC Procedure

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	13.1192	1	0.0003
Score	12.5947	1	0.0004
Wald	11.6283	1	0.0006

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	-2.6115	0.1599	266.8376	<.0001
tgroup	1	-1.0452	0.3065	11.6283	0.0006

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits	
tgroup	0.352	0.193	0.641

Association of Predicted Probabilities and Observed Responses

Percent Concordant	37.1	Somers' D	0.241
Percent Discordant	13.1	Gamma	0.480
Percent Tied	49.8	Tau-a	0.022
Pairs	65721	c	0.620

Wald Confidence Interval for Odds Ratios

Effect	Unit	Estimate	95% Confidence Limits	
tgroup	1.0000	0.352	0.193	0.641

The LOGISTIC Procedure

Model Information

Data Set	WORK.EDIC10RE_ANALY
Response Variable	FOCALSCAT
Number of Response Levels	2
Model	binary logit
Optimization Technique	Fisher's scoring

Number of Observations Read	1210
Number of Observations Used	1210

Response Profile

Ordered Value	FOCALSCAT	Total Frequency
1	1	69
2	0	1141

Probability modeled is FOCALSCAT=1.

Model Convergence Status

Convergence criterion (GCONV=1E-8) satisfied.

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	531.257	520.844
SC	536.356	531.041
-2 Log L	529.257	516.844

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	12.4136	1	0.0004
Score	12.0293	1	0.0005
Wald	11.3359	1	0.0008

The LOGISTIC Procedure

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	-2.4450	0.1489	269.5478	<.0001
tgroup	1	-0.9154	0.2719	11.3359	0.0008

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits	
tgroup	0.400	0.235	0.682

Association of Predicted Probabilities and Observed Responses

Percent Concordant	35.8	Somers' D	0.215
Percent Discordant	14.4	Gamma	0.428
Percent Tied	49.8	Tau-a	0.023
Pairs	78729	c	0.607

Wald Confidence Interval for Odds Ratios

Effect	Unit	Estimate	95% Confidence Limits	
tgroup	1.0000	0.400	0.235	0.682

The LOGISTIC Procedure

Model Information

Data Set	WORK.EDIC10RE_ANALY
Response Variable	STEP3
Number of Response Levels	2
Model	binary logit
Optimization Technique	Fisher's scoring

Model Information

STEP3 3 Step change from DCCT baseline (0=n 1=y)

Number of Observations Read	1103
Number of Observations Used	1088

Response Profile

Ordered Value	STEP3	Total Frequency
1	1	364
2	0	724

Probability modeled is STEP3=1.

NOTE: 15 observations were deleted due to missing values for the response or explanatory variables.

Class Level Information

Class	Value	Design Variables		
DTCLSETD	1	1	0	0
	2	0	1	0
	3	0	0	1
	4	-1	-1	-1

Model Convergence Status

Convergence criterion (GCONV=1E-8) satisfied.

The LOGISTIC Procedure

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	1388.896	1093.024
SC	1393.888	1117.985
-2 Log L	1386.896	1083.024

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	303.8717	4	<.0001
Score	280.3627	4	<.0001
Wald	213.6273	4	<.0001

Type 3 Analysis of Effects

Effect	DF	Wald Chi-Square	Pr > ChiSq
tgroup	1	74.5450	<.0001
DTCLSETD	3	147.9164	<.0001

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	-0.1281	0.1019	1.5811	0.2086
tgroup	1	-1.3338	0.1545	74.5450	<.0001
DTCLSETD 1	1	-1.5423	0.1782	74.9162	<.0001
DTCLSETD 2	1	-0.3689	0.1214	9.2313	0.0024
DTCLSETD 3	1	0.3163	0.1237	6.5368	0.0106

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits	
tgroup	0.263	0.195	0.357
DTCLSETD 1 vs 4	0.043	0.025	0.075
DTCLSETD 2 vs 4	0.140	0.093	0.212
DTCLSETD 3 vs 4	0.278	0.183	0.424

The LOGISTIC Procedure

Association of Predicted Probabilities and Observed Responses

Percent Concordant	75.0	Somers' D	0.598
Percent Discordant	15.2	Gamma	0.664
Percent Tied	9.9	Tau-a	0.267
Pairs	263536	c	0.799

Wald Confidence Interval for Odds Ratios

Effect	Unit	Estimate	95% Confidence Limits	
tgroup	1.0000	0.263	0.195	0.357
DTCLSETD 1 vs 4	1.0000	0.043	0.025	0.075
DTCLSETD 2 vs 4	1.0000	0.140	0.093	0.212
DTCLSETD 3 vs 4	1.0000	0.278	0.183	0.424

The LOGISTIC Procedure

Model Information

Data Set	WORK.EDIC10RE_ANALY
Response Variable	SNPDR
Number of Response Levels	2
Model	binary logit
Optimization Technique	Fisher's scoring

Model Information

SNPDR Severe Non-Proliferative Diabetic Retinopathy (0=n 1=y)

Number of Observations Read	1103
Number of Observations Used	1092

Response Profile

Ordered Value	SNPDR	Total Frequency
1	1	120
2	0	972

Probability modeled is SNPDR=1.

NOTE: 11 observations were deleted due to missing values for the response or explanatory variables.

Class Level Information

Class	Value	Design Variables		
DTCLSETD	1	1	0	0
	2	0	1	0
	3	0	0	1
	4	-1	-1	-1

Model Convergence Status

Convergence criterion (GCONV=1E-8) satisfied.

The LOGISTIC Procedure

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	758.288	443.778
SC	763.283	468.757
-2 Log L	756.288	433.778

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	322.5093	4	<.0001
Score	392.2473	4	<.0001
Wald	161.8183	4	<.0001

Type 3 Analysis of Effects

Effect	DF	Wald Chi-Square	Pr > ChiSq
tgroup	1	16.4210	<.0001
DTCLSETD	3	149.7795	<.0001

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	-2.7881	0.3083	81.8038	<.0001
tgroup	1	-1.1146	0.2751	16.4210	<.0001
DTCLSETD 1	1	-2.2206	0.7690	8.3372	0.0039
DTCLSETD 2	1	-1.5664	0.5070	9.5433	0.0020
DTCLSETD 3	1	0.6067	0.3413	3.1602	0.0755

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits	
tgroup	0.328	0.191	0.562
DTCLSETD 1 vs 4	0.005	<0.001	0.033
DTCLSETD 2 vs 4	0.009	0.003	0.028
DTCLSETD 3 vs 4	0.076	0.044	0.132

The LOGISTIC Procedure

Association of Predicted Probabilities and Observed Responses

Percent Concordant	88.5	Somers' D	0.841
Percent Discordant	4.5	Gamma	0.904
Percent Tied	7.0	Tau-a	0.165
Pairs	116640	c	0.920

Wald Confidence Interval for Odds Ratios

Effect	Unit	Estimate	95% Confidence Limits	
tgroup	1.0000	0.328	0.191	0.562
DTCLSETD 1 vs 4	1.0000	0.005	<0.001	0.033
DTCLSETD 2 vs 4	1.0000	0.009	0.003	0.028
DTCLSETD 3 vs 4	1.0000	0.076	0.044	0.132

The LOGISTIC Procedure

Model Information

Data Set	WORK.EDIC10RE_ANALY
Response Variable	PDR
Number of Response Levels	2
Model	binary logit
Optimization Technique	Fisher's scoring

Model Information

PDR Proliferative Diabetic Retinopathy (0=n 1=y)

Number of Observations Read	1103
Number of Observations Used	1092

Response Profile

Ordered Value	PDR	Total Frequency
1	1	109
2	0	983

Probability modeled is PDR=1.

NOTE: 11 observations were deleted due to missing values for the response or explanatory variables.

Class Level Information

Class	Value	Design Variables		
DTCLSETD	1	1	0	0
	2	0	1	0
	3	0	0	1
	4	-1	-1	-1

Model Convergence Status

Convergence criterion (GCONV=1E-8) satisfied.

The LOGISTIC Procedure

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	711.102	425.242
SC	716.098	450.221
-2 Log L	709.102	415.242

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	293.8600	4	<.0001
Score	367.5658	4	<.0001
Wald	152.4423	4	<.0001

Type 3 Analysis of Effects

Effect	DF	Wald Chi-Square	Pr > ChiSq
tgroup	1	13.5905	0.0002
DTCLSETD	3	140.7458	<.0001

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	-2.9097	0.3105	87.8154	<.0001
tgroup	1	-1.0412	0.2824	13.5905	0.0002
DTCLSETD 1	1	-2.1249	0.7696	7.6242	0.0058
DTCLSETD 2	1	-1.4668	0.5078	8.3448	0.0039
DTCLSETD 3	1	0.4697	0.3513	1.7881	0.1812

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits
tgroup	0.353	0.203 0.614
DTCLSETD 1 vs 4	0.005	<0.001 0.038
DTCLSETD 2 vs 4	0.010	0.003 0.033
DTCLSETD 3 vs 4	0.070	0.039 0.127

The LOGISTIC Procedure

Association of Predicted Probabilities and Observed Responses

Percent Concordant	88.2	Somers' D	0.835
Percent Discordant	4.6	Gamma	0.901
Percent Tied	7.2	Tau-a	0.150
Pairs	107147	c	0.918

Wald Confidence Interval for Odds Ratios

Effect	Unit	Estimate	95% Confidence Limits	
tgroup	1.0000	0.353	0.203	0.614
DTCLSETD 1 vs 4	1.0000	0.005	<0.001	0.038
DTCLSETD 2 vs 4	1.0000	0.010	0.003	0.033
DTCLSETD 3 vs 4	1.0000	0.070	0.039	0.127

The LOGISTIC Procedure

Model Information

Data Set	WORK.EDIC10RE_ANALY
Response Variable	FOCALSCAT
Number of Response Levels	2
Model	binary logit
Optimization Technique	Fisher's scoring

Number of Observations Read	1103
Number of Observations Used	1101

Response Profile

Ordered Value	FOCALSCAT	Total Frequency
1	1	108
2	0	993

Probability modeled is FOCALSCAT=1.

NOTE: 2 observations were deleted due to missing values for the response or explanatory variables.

Class Level Information

Class	Value	Design Variables		
DTCLSETD	1	1	0	0
	2	0	1	0
	3	0	0	1
	4	-1	-1	-1

Model Convergence Status

Convergence criterion (GCONV=1E-8) satisfied.

The LOGISTIC Procedure

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	708.560	452.560
SC	713.564	477.580
-2 Log L	706.560	442.560

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	263.9999	4	<.0001
Score	333.2772	4	<.0001
Wald	152.9939	4	<.0001

Type 3 Analysis of Effects

Effect	DF	Wald Chi-Square	Pr > ChiSq
tgroup	1	9.2088	0.0024
DTCLSETD	3	141.6798	<.0001

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	-2.8813	0.2982	93.3743	<.0001
tgroup	1	-0.8249	0.2718	9.2088	0.0024
DTCLSETD 1	1	-2.2429	0.7641	8.6171	0.0033
DTCLSETD 2	1	-1.0590	0.4274	6.1402	0.0132
DTCLSETD 3	1	0.3831	0.3388	1.2788	0.2581

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits
tgroup	0.438	0.257 0.747
DTCLSETD 1 vs 4	0.006	<0.001 0.042
DTCLSETD 2 vs 4	0.019	0.007 0.047
DTCLSETD 3 vs 4	0.079	0.044 0.142

The LOGISTIC Procedure

Association of Predicted Probabilities and Observed Responses

Percent Concordant	86.4	Somers' D	0.806
Percent Discordant	5.8	Gamma	0.875
Percent Tied	7.8	Tau-a	0.143
Pairs	107244	c	0.903

Wald Confidence Interval for Odds Ratios

Effect	Unit	Estimate	95% Confidence Limits	
tgroup	1.0000	0.438	0.257	0.747
DTCLSETD 1 vs 4	1.0000	0.006	<0.001	0.042
DTCLSETD 2 vs 4	1.0000	0.019	0.007	0.047
DTCLSETD 3 vs 4	1.0000	0.079	0.044	0.142

The LOGISTIC Procedure

Model Information

Data Set	WORK.EDIC10RE_ANALY
Response Variable	STEP3
Number of Response Levels	2
Model	binary logit
Optimization Technique	Fisher's scoring

Model Information

STEP3 3 Step change from DCCT baseline (0=n 1=y)

Number of Observations Read	1211
Number of Observations Used	1204

Response Profile

Ordered Value	STEP3	Total Frequency
1	1	582
2	0	622

Probability modeled is STEP3=1.

NOTE: 7 observations were deleted due to missing values for the response or explanatory variables.

Class Level Information

Class	Value	Design Variables		
DTCLSETD	1	1	0	0
	2	0	1	0
	3	0	0	1
	4	-1	-1	-1

Model Convergence Status

Convergence criterion (GCONV=1E-8) satisfied.

The LOGISTIC Procedure

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	1669.769	1530.041
SC	1674.863	1555.508
-2 Log L	1667.769	1520.041

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	147.7278	4	<.0001
Score	140.7624	4	<.0001
Wald	126.1269	4	<.0001

Type 3 Analysis of Effects

Effect	DF	Wald Chi-Square	Pr > ChiSq
tgroup	1	47.3130	<.0001
DTCLSETD	3	66.3630	<.0001

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	0.4624	0.0881	27.5572	<.0001
tgroup	1	-0.8502	0.1236	47.3130	<.0001
DTCLSETD 1	1	-0.6897	0.1138	36.7444	<.0001
DTCLSETD 2	1	-0.2882	0.0967	8.8763	0.0029
DTCLSETD 3	1	-0.0344	0.1069	0.1034	0.7478

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits	
tgroup	0.427	0.335	0.544
DTCLSETD 1 vs 4	0.182	0.120	0.278
DTCLSETD 2 vs 4	0.272	0.185	0.401
DTCLSETD 3 vs 4	0.351	0.234	0.527

The LOGISTIC Procedure

Association of Predicted Probabilities and Observed Responses

Percent Concordant	62.8	Somers' D	0.378
Percent Discordant	25.0	Gamma	0.431
Percent Tied	12.3	Tau-a	0.189
Pairs	362004	c	0.689

Wald Confidence Interval for Odds Ratios

Effect	Unit	Estimate	95% Confidence Limits	
tgroup	1.0000	0.427	0.335	0.544
DTCLSETD 1 vs 4	1.0000	0.182	0.120	0.278
DTCLSETD 2 vs 4	1.0000	0.272	0.185	0.401
DTCLSETD 3 vs 4	1.0000	0.351	0.234	0.527

The LOGISTIC Procedure

Model Information

Data Set	WORK.EDIC10RE_ANALY
Response Variable	SNPDR
Number of Response Levels	2
Model	binary logit
Optimization Technique	Fisher's scoring

Model Information

SNPDR Severe Non-Proliferative Diabetic Retinopathy (0=n 1=y)

Number of Observations Read	1211
Number of Observations Used	1209

Response Profile

Ordered Value	SNPDR	Total Frequency
1	1	207
2	0	1002

Probability modeled is SNPDR=1.

NOTE: 2 observations were deleted due to missing values for the response or explanatory variables.

Class Level Information

Class	Value	Design Variables		
DTCLSETD	1	1	0	0
	2	0	1	0
	3	0	0	1
	4	-1	-1	-1

Model Convergence Status

Convergence criterion (GCONV=1E-8) satisfied.

The LOGISTIC Procedure

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	1108.982	774.298
SC	1114.080	799.785
-2 Log L	1106.982	764.298

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	342.6844	4	<.0001
Score	379.4523	4	<.0001
Wald	227.4658	4	<.0001

Type 3 Analysis of Effects

Effect	DF	Wald Chi-Square	Pr > ChiSq
tgroup	1	18.7465	<.0001
DTCLSETD	3	206.3390	<.0001

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	-1.7145	0.1765	94.3692	<.0001
tgroup	1	-0.8552	0.1975	18.7465	<.0001
DTCLSETD 1	1	-2.3742	0.4419	28.8626	<.0001
DTCLSETD 2	1	-0.5609	0.2137	6.8857	0.0087
DTCLSETD 3	1	0.4702	0.1959	5.7585	0.0164

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits	
tgroup	0.425	0.289	0.626
DTCLSETD 1 vs 4	0.008	0.002	0.026
DTCLSETD 2 vs 4	0.049	0.030	0.079
DTCLSETD 3 vs 4	0.136	0.089	0.207

The LOGISTIC Procedure

Association of Predicted Probabilities and Observed Responses

Percent Concordant	81.8	Somers' D	0.721
Percent Discordant	9.7	Gamma	0.788
Percent Tied	8.5	Tau-a	0.205
Pairs	207414	c	0.860

Wald Confidence Interval for Odds Ratios

Effect	Unit	Estimate	95% Confidence Limits	
tgroup	1.0000	0.425	0.289	0.626
DTCLSETD 1 vs 4	1.0000	0.008	0.002	0.026
DTCLSETD 2 vs 4	1.0000	0.049	0.030	0.079
DTCLSETD 3 vs 4	1.0000	0.136	0.089	0.207

The LOGISTIC Procedure

Model Information

Data Set	WORK.EDIC10RE_ANALY
Response Variable	PDR
Number of Response Levels	2
Model	binary logit
Optimization Technique	Fisher's scoring

Model Information

PDR Proliferative Diabetic Retinopathy (0=n 1=y)

Number of Observations Read	1211
Number of Observations Used	1209

Response Profile

Ordered Value	PDR	Total Frequency
1	1	204
2	0	1005

Probability modeled is PDR=1.

NOTE: 2 observations were deleted due to missing values for the response or explanatory variables.

Class Level Information

Class	Value	Design Variables		
DTCLSETD	1	1	0	0
	2	0	1	0
	3	0	0	1
	4	-1	-1	-1

Model Convergence Status

Convergence criterion (GCONV=1E-8) satisfied.

The LOGISTIC Procedure

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	1099.467	768.993
SC	1104.565	794.480
-2 Log L	1097.467	758.993

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	338.4745	4	<.0001
Score	377.3269	4	<.0001
Wald	226.5171	4	<.0001

Type 3 Analysis of Effects

Effect	DF	Wald Chi-Square	Pr > ChiSq
tgroup	1	18.6614	<.0001
DTCLSETD	3	205.4556	<.0001

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	-1.7307	0.1766	96.0609	<.0001
tgroup	1	-0.8582	0.1987	18.6614	<.0001
DTCLSETD 1	1	-2.3557	0.4418	28.4360	<.0001
DTCLSETD 2	1	-0.5435	0.2138	6.4636	0.0110
DTCLSETD 3	1	0.4390	0.1970	4.9672	0.0258

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits	
tgroup	0.424	0.287	0.626
DTCLSETD 1 vs 4	0.008	0.003	0.026
DTCLSETD 2 vs 4	0.050	0.031	0.080
DTCLSETD 3 vs 4	0.132	0.087	0.202

The LOGISTIC Procedure

Association of Predicted Probabilities and Observed Responses

Percent Concordant	81.7	Somers' D	0.719
Percent Discordant	9.8	Gamma	0.786
Percent Tied	8.5	Tau-a	0.202
Pairs	205020	c	0.860

Wald Confidence Interval for Odds Ratios

Effect	Unit	Estimate	95% Confidence Limits	
tgroup	1.0000	0.424	0.287	0.626
DTCLSETD 1 vs 4	1.0000	0.008	0.003	0.026
DTCLSETD 2 vs 4	1.0000	0.050	0.031	0.080
DTCLSETD 3 vs 4	1.0000	0.132	0.087	0.202

The LOGISTIC Procedure

Model Information

Data Set	WORK.EDIC10RE_ANALY
Response Variable	FOCALSCAT
Number of Response Levels	2
Model	binary logit
Optimization Technique	Fisher's scoring

Number of Observations Read	1211
Number of Observations Used	1209

Response Profile

Ordered Value	FOCALSCAT	Total Frequency
1	1	194
2	0	1015

Probability modeled is FOCALSCAT=1.

NOTE: 2 observations were deleted due to missing values for the response or explanatory variables.

Class Level Information

Class	Value	Design Variables		
DTCLSETD	1	1	0	0
	2	0	1	0
	3	0	0	1
	4	-1	-1	-1

Model Convergence Status

Convergence criterion (GCONV=1E-8) satisfied.

The LOGISTIC Procedure

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	1066.977	755.203
SC	1072.075	780.691
-2 Log L	1064.977	745.203

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	319.7741	4	<.0001
Score	357.8739	4	<.0001
Wald	215.7823	4	<.0001

Type 3 Analysis of Effects

Effect	DF	Wald Chi-Square	Pr > ChiSq
tgroup	1	17.6128	<.0001
DTCLSETD	3	194.3539	<.0001

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	-1.8044	0.1775	103.3263	<.0001
tgroup	1	-0.8445	0.2012	17.6128	<.0001
DTCLSETD 1	1	-2.2877	0.4421	26.7756	<.0001
DTCLSETD 2	1	-0.5968	0.2193	7.4051	0.0065
DTCLSETD 3	1	0.4839	0.1981	5.9695	0.0146

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits	
tgroup	0.430	0.290	0.638
DTCLSETD 1 vs 4	0.009	0.003	0.030
DTCLSETD 2 vs 4	0.050	0.030	0.082
DTCLSETD 3 vs 4	0.147	0.097	0.224

The LOGISTIC Procedure

Association of Predicted Probabilities and Observed Responses

Percent Concordant	81.5	Somers' D	0.717
Percent Discordant	9.8	Gamma	0.785
Percent Tied	8.6	Tau-a	0.193
Pairs	196910	c	0.859

Wald Confidence Interval for Odds Ratios

Effect	Unit	Estimate	95% Confidence Limits	
tgroup	1.0000	0.430	0.290	0.638
DTCLSETD 1 vs 4	1.0000	0.009	0.003	0.030
DTCLSETD 2 vs 4	1.0000	0.050	0.030	0.082
DTCLSETD 3 vs 4	1.0000	0.147	0.097	0.224

----- EDICYR EDIC year=0 -----

The FREQ Procedure

Table of CSME by GROUP

CSME(CSME Clinically Significant Macular Edema (0=n 1=y))
 GROUP(GROUP Treatment Group (EXPERIMENTAL

STANDARD))

Frequency	Percent	Row Pct	Col Pct	EXPERIMENTAL	STANDARD	Total
0	566	48.25	51.22	539	45.95	1105
	96.10		92.29			94.20
1	23	1.96	33.82	45	3.84	68
	3.90		7.71			5.80
Total	589	50.21		584	49.79	1173
						100.00

----- EDICYR EDIC year=0 -----

The FREQ Procedure

Statistics for Table of CSME by GROUP

Statistic	DF	Value	Prob
Chi-Square	1	7.7562	0.0054
Likelihood Ratio Chi-Square	1	7.8858	0.0050
Continuity Adj. Chi-Square	1	7.0759	0.0078
Mantel-Haenszel Chi-Square	1	7.7496	0.0054
Phi Coefficient		0.0813	
Contingency Coefficient		0.0810	
Cramer's V		0.0813	

Fisher's Exact Test

Cell (1,1) Frequency (F)	566
Left-sided Pr <= F	0.9983
Right-sided Pr >= F	0.0037
Table Probability (P)	0.0020
Two-sided Pr <= P	0.0058

Sample Size = 1173

----- EDICYR EDIC year=4 -----

The FREQ Procedure

Table of CSME by GROUP

CSME(CSME Clinically Significant Macular Edema (0=n 1=y))
 GROUP(GROUP Treatment Group (EXPERIMENTAL

STANDARD))

Frequency			
Percent			
Row Pct			
Col Pct	EXPERIME	STANDARD	Total
	NTAL		
0	514	463	977
	48.13	43.35	91.48
	52.61	47.39	
	96.25	86.70	
1	20	71	91
	1.87	6.65	8.52
	21.98	78.02	
	3.75	13.30	
Total	534	534	1068
	50.00	50.00	100.00

Frequency Missing = 1

----- EDICYR EDIC year=4 -----

The FREQ Procedure

Statistics for Table of CSME by GROUP

Statistic	DF	Value	Prob
Chi-Square	1	31.2446	<.0001
Likelihood Ratio Chi-Square	1	32.9696	<.0001
Continuity Adj. Chi-Square	1	30.0314	<.0001
Mantel-Haenszel Chi-Square	1	31.2154	<.0001
Phi Coefficient		0.1710	
Contingency Coefficient		0.1686	
Cramer's V		0.1710	

Fisher's Exact Test

Cell (1,1) Frequency (F)	514
Left-sided Pr <= F	1.0000
Right-sided Pr >= F	9.656E-09
Table Probability (P)	7.295E-09
Two-sided Pr <= P	1.931E-08

Effective Sample Size = 1068

Frequency Missing = 1

----- EDICYR EDIC year=10 -----

The FREQ Procedure

Table of CSME by GROUP

CSME(CSME Clinically Significant Macular Edema (0=n 1=y))
 GROUP(GROUP Treatment Group (EXPERIMENTAL

STANDARD))

Frequency	Percent	Row Pct	Col Pct	EXPERIMENTAL	STANDARD	Total
0	536	474	1010	45.66	40.37	86.03
	53.07	46.93		91.00	81.03	
1	53	111	164	4.51	9.45	13.97
	32.32	67.68		9.00	18.97	
Total	589	585	1174	50.17	49.83	100.00

----- EDICYR EDIC year=10 -----

The FREQ Procedure

Statistics for Table of CSME by GROUP

Statistic	DF	Value	Prob
Chi-Square	1	24.3048	<.0001
Likelihood Ratio Chi-Square	1	24.7574	<.0001
Continuity Adj. Chi-Square	1	23.4818	<.0001
Mantel-Haenszel Chi-Square	1	24.2841	<.0001
Phi Coefficient		0.1439	
Contingency Coefficient		0.1424	
Cramer's V		0.1439	

Fisher's Exact Test

Cell (1,1) Frequency (F)	536
Left-sided Pr <= F	1.0000
Right-sided Pr >= F	5.113E-07
Table Probability (P)	3.021E-07
Two-sided Pr <= P	8.511E-07

Sample Size = 1174

The LOGISTIC Procedure

Model Information

Data Set	WORK.EDIC10RE_CSME
Response Variable	CSME
Number of Response Levels	2
Model	binary logit
Optimization Technique	Fisher's scoring

Model Information

CSME Clinically Significant Macular Edema (0=n 1=y)

Number of Observations Read	1173
Number of Observations Used	1173

Response Profile

Ordered Value	CSME	Total Frequency
1	1	68
2	0	1105

Probability modeled is CSME=1.

Model Convergence Status

Convergence criterion (GCONV=1E-8) satisfied.

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	521.282	515.396
SC	526.349	525.531
-2 Log L	519.282	511.396

The LOGISTIC Procedure

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	7.8858	1	0.0050
Score	7.7562	1	0.0054
Wald	7.4790	1	0.0062

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	-2.4831	0.1552	256.0710	<.0001
tgroup	1	-0.7200	0.2633	7.4790	0.0062

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits	
tgroup	0.487	0.291	0.815

Association of Predicted Probabilities and Observed Responses

Percent Concordant	33.9	Somers' D	0.174
Percent Discordant	16.5	Gamma	0.345
Percent Tied	49.6	Tau-a	0.019
Pairs	75140	c	0.587

Wald Confidence Interval for Odds Ratios

Effect	Unit	Estimate	95% Confidence Limits	
tgroup	1.0000	0.487	0.291	0.815

The LOGISTIC Procedure

Model Information

Data Set	WORK.EDIC10RE_CSME
Response Variable	CSME
Number of Response Levels	2
Model	binary logit
Optimization Technique	Fisher's scoring

Model Information

CSME Clinically Significant Macular Edema (0=n 1=y)

Number of Observations Read	1069
Number of Observations Used	1065

Response Profile

Ordered Value	CSME	Total Frequency
1	1	90
2	0	975

Probability modeled is CSME=1.

NOTE: 4 observations were deleted due to missing values for the response or explanatory variables.

Class Level Information

Class	Value	Design Variables		
DTCLSETD	1	1	0	0
	2	0	1	0
	3	0	0	1
	4	-1	-1	-1

Model Convergence Status

Convergence criterion (GCONV=1E-8) satisfied.

The LOGISTIC Procedure

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	618.936	484.345
SC	623.907	509.199
-2 Log L	616.936	474.345

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	142.5911	4	<.0001
Score	170.9425	4	<.0001
Wald	104.7126	4	<.0001

Type 3 Analysis of Effects

Effect	DF	Wald Chi-Square	Pr > ChiSq
tgroup	1	12.7491	0.0004
DTCLSETD	3	86.3934	<.0001

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	-2.4749	0.2214	124.9890	<.0001
tgroup	1	-0.9894	0.2771	12.7491	0.0004
DTCLSETD 1	1	-1.8845	0.5432	12.0359	0.0005
DTCLSETD 2	1	-0.5943	0.2991	3.9491	0.0469
DTCLSETD 3	1	0.4472	0.2579	3.0062	0.0829

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits	
tgroup	0.372	0.216	0.640
DTCLSETD 1 vs 4	0.020	0.005	0.084
DTCLSETD 2 vs 4	0.072	0.036	0.144
DTCLSETD 3 vs 4	0.205	0.119	0.353

The LOGISTIC Procedure

Association of Predicted Probabilities and Observed Responses

Percent Concordant	79.5	Somers' D	0.684
Percent Discordant	11.1	Gamma	0.755
Percent Tied	9.5	Tau-a	0.106
Pairs	87750	c	0.842

Wald Confidence Interval for Odds Ratios

Effect	Unit	Estimate	95% Confidence Limits	
tgroup	1.0000	0.372	0.216	0.640
DTCLSETD 1 vs 4	1.0000	0.020	0.005	0.084
DTCLSETD 2 vs 4	1.0000	0.072	0.036	0.144
DTCLSETD 3 vs 4	1.0000	0.205	0.119	0.353

The LOGISTIC Procedure

Model Information

Data Set	WORK.EDIC10RE_CSME
Response Variable	CSME
Number of Response Levels	2
Model	binary logit
Optimization Technique	Fisher's scoring

Model Information

CSME Clinically Significant Macular Edema (0=n 1=y)

Number of Observations Read	1174
Number of Observations Used	1171

Response Profile

Ordered Value	CSME	Total Frequency
1	1	161
2	0	1010

Probability modeled is CSME=1.

NOTE: 3 observations were deleted due to missing values for the response or explanatory variables.

Class Level Information

Class	Value	Design Variables		
DTCLSETD	1	1	0	0
	2	0	1	0
	3	0	0	1
	4	-1	-1	-1

Model Convergence Status

Convergence criterion (GCONV=1E-8) satisfied.

The LOGISTIC Procedure

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	939.689	797.505
SC	944.755	822.833
-2 Log L	937.689	787.505

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	150.1844	4	<.0001
Score	168.3959	4	<.0001
Wald	124.8389	4	<.0001

Type 3 Analysis of Effects

Effect	DF	Wald Chi-Square	Pr > ChiSq
tgroup	1	6.8125	0.0091
DTCLSETD	3	108.7178	<.0001

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	-1.7992	0.1420	160.5418	<.0001
tgroup	1	-0.5016	0.1922	6.8125	0.0091
DTCLSETD 1	1	-1.5807	0.2966	28.4021	<.0001
DTCLSETD 2	1	-0.4342	0.1757	6.1078	0.0135
DTCLSETD 3	1	0.3759	0.1641	5.2494	0.0220

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits	
tgroup	0.606	0.415	0.883
DTCLSETD 1 vs 4	0.040	0.018	0.090
DTCLSETD 2 vs 4	0.126	0.079	0.201
DTCLSETD 3 vs 4	0.283	0.183	0.437

The LOGISTIC Procedure

Association of Predicted Probabilities and Observed Responses

Percent Concordant	72.6	Somers' D	0.558
Percent Discordant	16.8	Gamma	0.625
Percent Tied	10.7	Tau-a	0.132
Pairs	162610	c	0.779

Wald Confidence Interval for Odds Ratios

Effect	Unit	Estimate	95% Confidence Limits	
tgroup	1.0000	0.606	0.415	0.883
DTCLSETD 1 vs 4	1.0000	0.040	0.018	0.090
DTCLSETD 2 vs 4	1.0000	0.126	0.079	0.201
DTCLSETD 3 vs 4	1.0000	0.283	0.183	0.437

Part 1: Further 3-step Progression

The FREQ Procedure

Table of DTCLSETD by GROUP

DTCLSETD(DCCT closeout ETDRS level comb DCCT10-DCCT50)
 GROUP(GROUP Treatment Group (EXPERIMENTAL

STANDARD))

Frequency			
Percent			
Row Pct			
Col Pct	EXPERIME	STANDARD	Total
	NTAL		
1	194	123	317
	14.37	9.11	23.48
	61.20	38.80	
	28.45	18.41	
2	275	219	494
	20.37	16.22	36.59
	55.67	44.33	
	40.32	32.78	
3	148	200	348
	10.96	14.81	25.78
	42.53	57.47	
	21.70	29.94	
4	65	126	191
	4.81	9.33	14.15
	34.03	65.97	
	9.53	18.86	
Total	682	668	1350
	50.52	49.48	100.00

Part 1: Further 3-step Progression

----- DCCT closeout ETDRS level comb DCCT10-DCCT50=1 -----

The FREQ Procedure

Table of anystffurther by GROUP

anystffurther
 GROUP(GROUP Treatment Group (EXPERIMENTAL
 STANDARD))

Frequency			
Percent			
Row Pct			
Col Pct	EXPERIME	STANDARD	Total
	NTAL		
0	123	55	178
	38.80	17.35	56.15
	69.10	30.90	
	63.40	44.72	
1	71	68	139
	22.40	21.45	43.85
	51.08	48.92	
	36.60	55.28	
Total	194	123	317
	61.20	38.80	100.00

Part 1: Further 3-step Progression

----- DCCT closeout ETDRS level comb DCCT10-DCCT50=2 -----

The FREQ Procedure

Table of anystffurther by GROUP

anystffurther
 GROUP(GROUP Treatment Group (EXPERIMENTAL
 STANDARD))

Frequency			
Percent			
Row Pct			
Col Pct	EXPERIME	STANDARD	Total
	NTAL		
0	221	132	353
	44.74	26.72	71.46
	62.61	37.39	
	80.36	60.27	
1	54	87	141
	10.93	17.61	28.54
	38.30	61.70	
	19.64	39.73	
Total	275	219	494
	55.67	44.33	100.00

Part 1: Further 3-step Progression

----- DCCT closeout ETDRS level comb DCCT10-DCCT50=3 -----

The FREQ Procedure

Table of anystffurther by GROUP

anystffurther
 GROUP(GROUP Treatment Group (EXPERIMENTAL
 STANDARD))

Frequency			
Percent			
Row Pct			
Col Pct	EXPERIME	STANDARD	Total
	NTAL		
0	117	118	235
	33.62	33.91	67.53
	49.79	50.21	
	79.05	59.00	
1	31	82	113
	8.91	23.56	32.47
	27.43	72.57	
	20.95	41.00	
Total	148	200	348
	42.53	57.47	100.00

2011

Part 1: Further 3-step Progression

----- DCCT closeout ETDRS level comb DCCT10-DCCT50=4 -----

The FREQ Procedure

Table of anystffurther by GROUP

anystffurther

GROUP(GROUP Treatment Group (EXPERIMENTAL

STANDARD))

Frequency			
Percent			
Row Pct			
Col Pct	EXPERIME	STANDARD	Total
	NTAL		
0	33	42	75
	17.28	21.99	39.27
	44.00	56.00	
	50.77	33.33	
1	32	84	116
	16.75	43.98	60.73
	27.59	72.41	
	49.23	66.67	
Total	65	126	191
	34.03	65.97	100.00

Part 1: Further 3-step Progression

The FREQ Procedure

Table of event by GROUP

event
 GROUP(GROUP Treatment Group (EXPERIMENTAL
 STANDARD))

Frequency	EXPERIMENTAL	STANDARD	Total
0	494	347	841
Percent	36.59	25.70	62.30
Row Pct	58.74	41.26	
Col Pct	72.43	51.95	
1	188	321	509
Percent	13.93	23.78	37.70
Row Pct	36.94	63.06	
Col Pct	27.57	48.05	
Total	682	668	1350
Percent	50.52	49.48	100.00

Part 1: Further 3-step Progression

Obs	survyrs	lastedicyr	lastdate	event
872	10	10	.	0

Part 1: Further 3-step Progression

----- DCCT closeout ETDRS level comb DCCT10-DCCT50=1 -----

The FREQ Procedure

Table of event by GROUP

event
 GROUP(GROUP Treatment Group (EXPERIMENTAL
 STANDARD))

Frequency	Percent	Row Pct	Col Pct	EXPERIMENTAL	STANDARD	Total
0	123	55	178	38.80	17.35	56.15
	69.10	30.90		63.40	44.72	
1	71	68	139	22.40	21.45	43.85
	51.08	48.92		36.60	55.28	
Total	194	123	317	61.20	38.80	100.00

Part 1: Further 3-step Progression

----- DCCT closeout ETDRS level comb DCCT10-DCCT50=2 -----

The FREQ Procedure

Table of event by GROUP

event
 GROUP(GROUP Treatment Group (EXPERIMENTAL
 STANDARD))

Frequency |	EXPERIME |	STANDARD |	Total
Percent |	NTAL |	|	
Row Pct |	|	|	
Col Pct |	|	|	
0 |	221 |	132 |	353
44.74 |	26.72 |	71.46 |	
62.61 |	37.39 |		
80.36 |	60.27 |		
1 |	54 |	87 |	141
10.93 |	17.61 |	28.54 |	
38.30 |	61.70 |		
19.64 |	39.73 |		
Total |	275 |	219 |	494
55.67 |	44.33 |	100.00 |	

2011

Part 1: Further 3-step Progression

----- DCCT closeout ETDRS level comb DCCT10-DCCT50=3 -----

The FREQ Procedure

Table of event by GROUP

event
 GROUP(GROUP Treatment Group (EXPERIMENTAL
 STANDARD))

Frequency	Percent	Row Pct	Col Pct	EXPERIMENTAL	STANDARD	Total
0	117	118	235	33.62	33.91	67.53
	49.79	50.21		79.05	59.00	
1	31	82	113	8.91	23.56	32.47
	27.43	72.57		20.95	41.00	
Total	148	200	348	42.53	57.47	100.00

Part 1: Further 3-step Progression

----- DCCT closeout ETDRS level comb DCCT10-DCCT50=4 -----

The FREQ Procedure

Table of event by GROUP

event
 GROUP(GROUP Treatment Group (EXPERIMENTAL
 STANDARD))

Frequency	GROUP(GROUP		Treatment Group (EXPERIMENTAL
Percent	STANDARD		STANDARD))
Row Pct	EXPERIME	STANDARD	Total
Col Pct	NTAL		
0	33	42	75
	17.28	21.99	39.27
	44.00	56.00	
	50.77	33.33	
1	32	84	116
	16.75	43.98	60.73
	27.59	72.41	
	49.23	66.67	
Total	65	126	191
	34.03	65.97	100.00

Part 1: Further 3-step Progression

The FREQ Procedure

DCCTSCAT Any SCATTER through DCCT (0=n 1=y)

DCCTSCAT	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	1350	100.00	1350	100.00

Part 1: Further 3-step Progression

The LIFEREG Procedure

Model Information

Data Set	WORK.SURVIVAL
Dependent Variable	Log(surv yrs)
Censoring Variable	event
Censoring Value(s)	0
Number of Observations	1350
Noncensored Values	509
Right Censored Values	841
Left Censored Values	0
Interval Censored Values	0
Name of Distribution	Weibull
Log Likelihood	-1065.856528

Number of Observations Read	1350
Number of Observations Used	1350

Fit Statistics

-2 Log Likelihood	2131.713
AIC (smaller is better)	2137.713
AICC (smaller is better)	2137.731
BIC (smaller is better)	2153.337

Algorithm converged.

Type III Analysis of Effects

Effect	DF	Wald	
		Chi-Square	Pr > ChiSq
tgroup	1	63.6094	<.0001

Analysis of Maximum Likelihood Parameter Estimates

Parameter	DF	Estimate	Standard Error	95% Confidence Limits		Chi-Square	Pr > ChiSq
Intercept	1	2.5311	0.0303	2.4717	2.5905	6973.54	<.0001
tgroup	1	0.3873	0.0486	0.2921	0.4824	63.61	<.0001
Scale	1	0.5069	0.0206	0.4680	0.5490		
Weibull Shape	1	1.9727	0.0803	1.8213	2.1366		

Part 1: Further 3-step Progression

----- DCCT closeout ETDRS level comb DCCT10-DCCT50=1 -----

The LIFEREG Procedure

Model Information

Data Set	WORK.SURVIVAL
Dependent Variable	Log(surv yrs)
Censoring Variable	event
Censoring Value(s)	0
Number of Observations	317
Noncensored Values	139
Right Censored Values	178
Left Censored Values	0
Interval Censored Values	0
Name of Distribution	Weibull
Log Likelihood	-226.8158407

Number of Observations Read	317
Number of Observations Used	317

Fit Statistics

-2 Log Likelihood	453.632
AIC (smaller is better)	459.632
AICC (smaller is better)	459.708
BIC (smaller is better)	470.908

Algorithm converged.

Type III Analysis of Effects

Effect	DF	Wald	
		Chi-Square	Pr > ChiSq
tgroup	1	13.5389	0.0002

Analysis of Maximum Likelihood Parameter Estimates

Parameter	DF	Estimate	Standard Error	95% Confidence Limits		Chi-Square	Pr > ChiSq
Intercept	1	2.4154	0.0461	2.3251	2.5057	2749.07	<.0001
tgroup	1	0.2380	0.0647	0.1112	0.3648	13.54	0.0002
Scale	1	0.3705	0.0288	0.3181	0.4314		
Weibull Shape	1	2.6994	0.2098	2.3179	3.1436		

Part 1: Further 3-step Progression

----- DCCT closeout ETDRS level comb DCCT10-DCCT50=2 -----

The LIFEREG Procedure

Model Information

Data Set	WORK.SURVIVAL
Dependent Variable	Log(surv yrs)
Censoring Variable	event
Censoring Value(s)	0
Number of Observations	494
Noncensored Values	141
Right Censored Values	353
Left Censored Values	0
Interval Censored Values	0
Name of Distribution	Weibull
Log Likelihood	-320.7033933

Number of Observations Read	494
Number of Observations Used	494

Fit Statistics

-2 Log Likelihood	641.407
AIC (smaller is better)	647.407
AICC (smaller is better)	647.456
BIC (smaller is better)	660.014

Algorithm converged.

Type III Analysis of Effects

Effect	DF	Wald	
		Chi-Square	Pr > ChiSq
tgroup	1	22.1634	<.0001

Analysis of Maximum Likelihood Parameter Estimates

Parameter	DF	Estimate	Standard Error	95% Confidence Limits		Chi-Square	Pr > ChiSq
Intercept	1	2.6390	0.0561	2.5290	2.7490	2211.14	<.0001
tgroup	1	0.4001	0.0850	0.2335	0.5666	22.16	<.0001
Scale	1	0.4602	0.0362	0.3945	0.5369		
Weibull Shape	1	2.1730	0.1709	1.8626	2.5351		

Part 1: Further 3-step Progression

----- DCCT closeout ETDRS level comb DCCT10-DCCT50=3 -----

The LIFEREG Procedure

Model Information

Data Set	WORK.SURVIVAL
Dependent Variable	Log(surv yrs)
Censoring Variable	event
Censoring Value(s)	0
Number of Observations	348
Noncensored Values	113
Right Censored Values	235
Left Censored Values	0
Interval Censored Values	0
Name of Distribution	Weibull
Log Likelihood	-250.5125401

Number of Observations Read	348
Number of Observations Used	348

Fit Statistics

-2 Log Likelihood	501.025
AIC (smaller is better)	507.025
AICC (smaller is better)	507.095
BIC (smaller is better)	518.582

Algorithm converged.

Type III Analysis of Effects

Effect	DF	Wald	
		Chi-Square	Pr > ChiSq
tgroup	1	14.9684	0.0001

Analysis of Maximum Likelihood Parameter Estimates

Parameter	DF	Estimate	Standard Error	95% Confidence Limits		Chi-Square	Pr > ChiSq
Intercept	1	2.6234	0.0625	2.5009	2.7459	1761.84	<.0001
tgroup	1	0.4213	0.1089	0.2079	0.6347	14.97	0.0001
Scale	1	0.4933	0.0428	0.4162	0.5846		
Weibull Shape	1	2.0273	0.1757	1.7105	2.4028		

Part 1: Further 3-step Progression

----- DCCT closeout ETDRS level comb DCCT10-DCCT50=4 -----

The LIFEREG Procedure

Model Information

Data Set	WORK.SURVIVAL
Dependent Variable	Log(surv yrs)
Censoring Variable	event
Censoring Value(s)	0
Number of Observations	191
Noncensored Values	116
Right Censored Values	75
Left Censored Values	0
Interval Censored Values	0
Name of Distribution	Weibull
Log Likelihood	-215.8618775

Number of Observations Read	191
Number of Observations Used	191

Fit Statistics

-2 Log Likelihood	431.724
AIC (smaller is better)	437.724
AICC (smaller is better)	437.852
BIC (smaller is better)	447.481

Algorithm converged.

Type III Analysis of Effects

Effect	DF	Wald	
		Chi-Square	Pr > ChiSq
tgroup	1	5.9569	0.0147

Analysis of Maximum Likelihood Parameter Estimates

Parameter	DF	Estimate	Standard Error	95% Confidence Limits		Chi-Square	Pr > ChiSq
Intercept	1	2.2309	0.0745	2.0849	2.3769	896.78	<.0001
tgroup	1	0.3484	0.1428	0.0686	0.6282	5.96	0.0147
Scale	1	0.6792	0.0548	0.5800	0.7955		
Weibull Shape	1	1.4723	0.1187	1.2571	1.7243		

Part 1: Further 3-step Progression

The LIFEREG Procedure

Model Information

Data Set	WORK.SURVIVAL
Dependent Variable	Log(surv yrs)
Censoring Variable	event
Censoring Value(s)	0
Number of Observations	1350
Noncensored Values	509
Right Censored Values	841
Left Censored Values	0
Interval Censored Values	0
Name of Distribution	Weibull
Log Likelihood	-1006.6899

Number of Observations Read	1350
Number of Observations Used	1350

Class Level Information

Name	Levels	Values
DTCLSETD	4	1 2 3 4

Fit Statistics

-2 Log Likelihood	2013.380
AIC (smaller is better)	2031.380
AICC (smaller is better)	2031.514
BIC (smaller is better)	2078.251

Algorithm converged.

Type III Analysis of Effects

Effect	DF	Wald	
		Chi-Square	Pr > ChiSq
tgroup	1	54.7559	<.0001
retstratum	1	0.1217	0.7272
HBAEL	1	34.2179	<.0001
DURYR0	1	3.6932	0.0546
DTCLSETD	3	66.1963	<.0001

Part 1: Further 3-step Progression

The LIFEREG Procedure

Analysis of Maximum Likelihood Parameter Estimates

Parameter	DF	Estimate	Standard Error	95% Confidence Limits		Chi- Square	Pr > ChiSq
Intercept	1	2.8307	0.1751	2.4875	3.1739	261.37	<.0001
tgroup	1	0.3636	0.0491	0.2673	0.4599	54.76	<.0001
retstratum	1	0.0235	0.0672	-0.1083	0.1553	0.12	0.7272
HBAEL	1	-0.0799	0.0137	-0.1067	-0.0532	34.22	<.0001
DURYR0	1	0.0164	0.0085	-0.0003	0.0331	3.69	0.0546
DTCLSETD	1 1	0.2126	0.0849	0.0462	0.3790	6.27	0.0123
DTCLSETD	2 1	0.4925	0.0738	0.3479	0.6372	44.56	<.0001
DTCLSETD	3 1	0.4314	0.0694	0.2953	0.5674	38.62	<.0001
DTCLSETD	4 0	0.0000	.	.	.	.	.
Scale	1	0.4942	0.0198	0.4569	0.5345		
Weibull Shape	1	2.0236	0.0810	1.8709	2.1888		

Part 1: Further 3-step Progression

----- DCCT closeout ETDRS level comb DCCT10-DCCT50=1 -----

The LIFEREG Procedure

Model Information

Data Set	WORK.SURVIVAL
Dependent Variable	Log(surv yrs)
Censoring Variable	event
Censoring Value(s)	0
Number of Observations	317
Noncensored Values	139
Right Censored Values	178
Left Censored Values	0
Interval Censored Values	0
Name of Distribution	Weibull
Log Likelihood	-223.5696632

Number of Observations Read	317
Number of Observations Used	317

Fit Statistics

-2 Log Likelihood	447.139
AIC (smaller is better)	459.139
AICC (smaller is better)	459.410
BIC (smaller is better)	481.693

Algorithm converged.

Type III Analysis of Effects

Effect	DF	Wald	
		Chi-Square	Pr > ChiSq
tgroup	1	12.7267	0.0004
retstratum	1	0.2301	0.6315
HBAEL	1	6.0013	0.0143
DURYR0	1	0.3661	0.5451

Analysis of Maximum Likelihood Parameter Estimates

Parameter	DF	Estimate	Standard Error	95% Confidence Limits		Chi-Square	Pr > ChiSq
Intercept	1	2.8062	0.2404	2.3350	3.2774	136.23	<.0001
tgroup	1	0.2339	0.0656	0.1054	0.3624	12.73	0.0004

Part 1: Further 3-step Progression

----- DCCT closeout ETDRS level comb DCCT10-DCCT50=1 -----

The LIFEREG Procedure

Analysis of Maximum Likelihood Parameter Estimates

Parameter	DF	Estimate	Standard Error	95% Confidence Limits		Chi- Square	Pr > ChiSq
retstratum	1	0.0530	0.1104	-0.1634	0.2693	0.23	0.6315
HBAEL	1	-0.0557	0.0227	-0.1003	-0.0111	6.00	0.0143
DURYR0	1	0.0121	0.0200	-0.0272	0.0514	0.37	0.5451
Scale	1	0.3692	0.0286	0.3171	0.4297		
Weibull Shape	1	2.7089	0.2100	2.3271	3.1534		

Part 1: Further 3-step Progression

----- DCCT closeout ETDRS level comb DCCT10-DCCT50=2 -----

The LIFEREG Procedure

Model Information

Data Set	WORK.SURVIVAL
Dependent Variable	Log(surv yrs)
Censoring Variable	event
Censoring Value(s)	0
Number of Observations	494
Noncensored Values	141
Right Censored Values	353
Left Censored Values	0
Interval Censored Values	0
Name of Distribution	Weibull
Log Likelihood	-310.603071

Number of Observations Read	494
Number of Observations Used	494

Fit Statistics

-2 Log Likelihood	621.206
AIC (smaller is better)	633.206
AICC (smaller is better)	633.379
BIC (smaller is better)	658.421

Algorithm converged.

Type III Analysis of Effects

Effect	DF	Wald	
		Chi-Square	Pr > ChiSq
tgroup	1	25.4338	<.0001
retstratum	1	0.2458	0.6200
HBAEL	1	15.1387	<.0001
DURYR0	1	2.3745	0.1233

Analysis of Maximum Likelihood Parameter Estimates

Parameter	DF	Estimate	Standard Error	95% Confidence Limits		Chi-Square	Pr > ChiSq
Intercept	1	3.3102	0.2646	2.7916	3.8287	156.54	<.0001
tgroup	1	0.4391	0.0871	0.2684	0.6097	25.43	<.0001

Part 1: Further 3-step Progression

----- DCCT closeout ETDRS level comb DCCT10-DCCT50=2 -----

The LIFEREG Procedure

Analysis of Maximum Likelihood Parameter Estimates

Parameter	DF	Estimate	Standard Error	95% Confidence Limits		Chi- Square	Pr > ChiSq
retstratum	1	0.0554	0.1118	-0.1637	0.2746	0.25	0.6200
HBAEL	1	-0.0926	0.0238	-0.1392	-0.0460	15.14	<.0001
DURYR0	1	0.0260	0.0168	-0.0071	0.0590	2.37	0.1233
Scale	1	0.4577	0.0358	0.3926	0.5336		
Weibull Shape	1	2.1848	0.1711	1.8740	2.5472		

Part 1: Further 3-step Progression

----- DCCT closeout ETDRS level comb DCCT10-DCCT50=3 -----

The LIFEREG Procedure

Model Information

Data Set	WORK.SURVIVAL
Dependent Variable	Log(surv yrs)
Censoring Variable	event
Censoring Value(s)	0
Number of Observations	348
Noncensored Values	113
Right Censored Values	235
Left Censored Values	0
Interval Censored Values	0
Name of Distribution	Weibull
Log Likelihood	-234.78881
Number of Observations Read	348
Number of Observations Used	348

Fit Statistics

-2 Log Likelihood	469.578
AIC (smaller is better)	481.578
AICC (smaller is better)	481.824
BIC (smaller is better)	504.691

Algorithm converged.

Type III Analysis of Effects

Effect	DF	Wald	
		Chi-Square	Pr > ChiSq
tgroup	1	13.3690	0.0003
retstratum	1	0.0512	0.8209
HBAEL	1	19.6266	<.0001
DURYR0	1	3.3786	0.0660

Analysis of Maximum Likelihood Parameter Estimates

Parameter	DF	Estimate	Standard Error	95% Confidence Limits		Chi-Square	Pr > ChiSq
Intercept	1	3.5234	0.3110	2.9138	4.1329	128.36	<.0001
tgroup	1	0.4152	0.1136	0.1926	0.6378	13.37	0.0003

Part 1: Further 3-step Progression

----- DCCT closeout ETDRS level comb DCCT10-DCCT50=3 -----

The LIFEREG Procedure

Analysis of Maximum Likelihood Parameter Estimates

Parameter	DF	Estimate	Standard Error	95% Confidence Limits		Chi- Square	Pr > ChiSq
retstratum	1	0.0275	0.1213	-0.2104	0.2653	0.05	0.8209
HBAEL	1	-0.1187	0.0268	-0.1713	-0.0662	19.63	<.0001
DURYR0	1	0.0294	0.0160	-0.0019	0.0607	3.38	0.0660
Scale	1	0.4752	0.0404	0.4022	0.5613		
Weibull Shape	1	2.1046	0.1790	1.7814	2.4863		

Part 1: Further 3-step Progression

----- DCCT closeout ETDRS level comb DCCT10-DCCT50=4 -----

The LIFEREG Procedure

Model Information

Data Set	WORK.SURVIVAL
Dependent Variable	Log(surv yrs)
Censoring Variable	event
Censoring Value(s)	0
Number of Observations	191
Noncensored Values	116
Right Censored Values	75
Left Censored Values	0
Interval Censored Values	0
Name of Distribution	Weibull
Log Likelihood	-214.624944
Number of Observations Read	191
Number of Observations Used	191

Fit Statistics

-2 Log Likelihood	429.250
AIC (smaller is better)	441.250
AICC (smaller is better)	441.706
BIC (smaller is better)	460.764

Algorithm converged.

Type III Analysis of Effects

Effect	DF	Wald	
		Chi-Square	Pr > ChiSq
tgroup	1	5.8280	0.0158
retstratum	1	0.1670	0.6828
HBAEL	1	1.8727	0.1712
DURYR0	1	0.0937	0.7596

Analysis of Maximum Likelihood Parameter Estimates

Parameter	DF	Estimate	Standard Error	95% Confidence Limits		Chi-Square	Pr > ChiSq
Intercept	1	2.6673	0.4718	1.7427	3.5920	31.97	<.0001
tgroup	1	0.3499	0.1449	0.0658	0.6339	5.83	0.0158

Part 1: Further 3-step Progression

----- DCCT closeout ETDRS level comb DCCT10-DCCT50=4 -----

The LIFEREG Procedure

Analysis of Maximum Likelihood Parameter Estimates

Parameter	DF	Estimate	Standard Error	95% Confidence Limits		Chi- Square	Pr > ChiSq
retstratum	1	0.0936	0.2290	-0.3553	0.5424	0.17	0.6828
HBAEL	1	-0.0524	0.0383	-0.1274	0.0226	1.87	0.1712
DURYR0	1	0.0062	0.0202	-0.0335	0.0458	0.09	0.7596
Scale	1	0.6739	0.0542	0.5755	0.7890		
Weibull Shape	1	1.4839	0.1194	1.2674	1.7375		

Part 2: PDR

The FREQ Procedure

Table of DTCLSETD by GROUP

DTCLSETD(DCCT closeout ETDRS level comb DCCT10-DCCT50)
 GROUP(GROUP Treatment Group (EXPERIMENTAL

STANDARD))

Frequency	Percent	Row Pct	Col Pct	EXPERIMENTAL	STANDARD	Total
.	1	1	2	0.08	0.08	0.15
	50.00	50.00		0.15	0.16	
1	194	122	316	14.79	9.30	24.09
	61.39	38.61		29.09	18.91	
2	274	219	493	20.88	16.69	37.58
	55.58	44.42		41.08	33.95	
3	148	199	347	11.28	15.17	26.45
	42.65	57.35		22.19	30.85	
4	50	104	154	3.81	7.93	11.74
	32.47	67.53		7.50	16.12	
Total	667	645	1312	50.84	49.16	100.00

Part 2: PDR

The FREQ Procedure

Table of pdr_edic by GROUP

pdr_edic
 GROUP(GROUP Treatment Group (EXPERIMENTAL
 STANDARD))

Frequency	Percent	Row Pct	Col Pct	EXPERIMENTAL	STANDARD	Total
0	622	526	1148	47.41	40.09	87.50
	54.18	45.82		93.25	81.55	
1	45	119	164	3.43	9.07	12.50
	27.44	72.56		6.75	18.45	
Total	667	645	1312	50.84	49.16	100.00

Part 2: PDR

----- DCCT closeout ETDRS level comb DCCT10-DCCT50=. -----

The FREQ Procedure

Table of pdr_edic by GROUP

pdr_edic
GROUP(GROUP Treatment Group (EXPERIMENTAL
STANDARD))

Frequency	Percent	Row Pct	Col Pct	EXPERIMENTAL	STANDARD	Total
0	66.67	66.67	100.00	4	2	6
				33.33	33.33	100.00
Total	66.67			4	2	6
				33.33	33.33	100.00

Part 2: PDR

----- DCCT closeout ETDRS level comb DCCT10-DCCT50=1 -----

The FREQ Procedure

Table of pdr_edic by GROUP

pdr_edic
 GROUP(GROUP Treatment Group (EXPERIMENTAL
 STANDARD))

Frequency	GROUP(GROUP Treatment Group (EXPERIMENTAL		Total
Percent	EXPERIME	STANDARD	
Row Pct	NTAL		
Col Pct			
0	924	564	1488
	61.56	37.57	99.13
	62.10	37.90	
	99.46	98.60	
1	5	8	13
	0.33	0.53	0.87
	38.46	61.54	
	0.54	1.40	
Total	929	572	1501
	61.89	38.11	100.00

Part 2: PDR

----- DCCT closeout ETDRS level comb DCCT10-DCCT50=2 -----

The FREQ Procedure

Table of pdr_edic by GROUP

pdr_edic
 GROUP(GROUP Treatment Group (EXPERIMENTAL
 STANDARD))

Frequency			
Percent			
Row Pct			
Col Pct	EXPERIME	STANDARD	Total
	NTAL		
0	1279	949	2228
	54.03	40.09	94.13
	57.41	42.59	
	96.89	90.64	
1	41	98	139
	1.73	4.14	5.87
	29.50	70.50	
	3.11	9.36	
Total	1320	1047	2367
	55.77	44.23	100.00

Part 2: PDR

----- DCCT closeout ETDRS level comb DCCT10-DCCT50=3 -----

The FREQ Procedure

Table of pdr_edic by GROUP

pdr_edic
 GROUP(GROUP Treatment Group (EXPERIMENTAL
 STANDARD))

Frequency			
Percent			
Row Pct			
Col Pct	EXPERIME	STANDARD	Total
	NTAL		
0	658	782	1440
	38.62	45.89	84.51
	45.69	54.31	
	90.14	80.29	
1	72	192	264
	4.23	11.27	15.49
	27.27	72.73	
	9.86	19.71	
Total	730	974	1704
	42.84	57.16	100.00

Part 2: PDR

----- DCCT closeout ETDRS level comb DCCT10-DCCT50=4 -----

The FREQ Procedure

Table of pdr_edic by GROUP

pdr_edic
 GROUP(GROUP Treatment Group (EXPERIMENTAL
 STANDARD))

Frequency			
Percent			
Row Pct			
Col Pct	EXPERIME	STANDARD	Total
	NTAL		
0	147	224	371
	19.52	29.75	49.27
	39.62	60.38	
	60.49	43.92	
1	96	286	382
	12.75	37.98	50.73
	25.13	74.87	
	39.51	56.08	
Total	243	510	753
	32.27	67.73	100.00

Part 2: PDR

The FREQ Procedure

Table of event by GROUP

event
 GROUP(GROUP Treatment Group (EXPERIMENTAL
 STANDARD))

Frequency	EXPERIMENTAL	STANDARD	Total
0	622	526	1148
Percent	47.41	40.09	87.50
Row Pct	54.18	45.82	
Col Pct	93.25	81.55	
1	45	119	164
Percent	3.43	9.07	12.50
Row Pct	27.44	72.56	
Col Pct	6.75	18.45	
Total	667	645	1312
Percent	50.84	49.16	100.00

Part 2: PDR

Obs	survyrs	lastedicyr	lastdate	event
839	10	10	.	0

Part 2: PDR

----- DCCT closeout ETDRS level comb DCCT10-DCCT50=. -----

The FREQ Procedure

Table of event by GROUP

event
GROUP(GROUP Treatment Group (EXPERIMENTAL
STANDARD))

Frequency	Percent	Row Pct	Col Pct	EXPERIMENTAL	STANDARD	Total
0	1	1	2	50.00	50.00	100.00
	50.00	50.00		50.00	50.00	
	100.00	100.00				
Total	1	1	2	50.00	50.00	100.00

Part 2: PDR

----- DCCT closeout ETDRS level comb DCCT10-DCCT50=1 -----

The FREQ Procedure

Table of event by GROUP

event
 GROUP(GROUP Treatment Group (EXPERIMENTAL
 STANDARD))

Frequency	GROUP(GROUP		Treatment Group (EXPERIMENTAL
Percent	STANDARD		
Row Pct	NTAL		Total
Col Pct	EXPERIME	STANDARD	
	NTAL		
0	193	120	313
	61.08	37.97	99.05
	61.66	38.34	
	99.48	98.36	
1	1	2	3
	0.32	0.63	0.95
	33.33	66.67	
	0.52	1.64	
Total	194	122	316
	61.39	38.61	100.00

Part 2: PDR

----- DCCT closeout ETDRS level comb DCCT10-DCCT50=2 -----

The FREQ Procedure

Table of event by GROUP

event
 GROUP(GROUP Treatment Group (EXPERIMENTAL
 STANDARD))

Frequency	GROUP(GROUP Treatment Group (EXPERIMENTAL STANDARD))		Total
Percent	EXPERIMENTAL	STANDARD	
Row Pct			
Col Pct	EXPERIMENTAL	STANDARD	Total
0	265	199	464
	53.75	40.37	94.12
	57.11	42.89	
	96.72	90.87	
1	9	20	29
	1.83	4.06	5.88
	31.03	68.97	
	3.28	9.13	
Total	274	219	493
	55.58	44.42	100.00

Part 2: PDR

----- DCCT closeout ETDRS level comb DCCT10-DCCT50=3 -----

The FREQ Procedure

Table of event by GROUP

event
 GROUP(GROUP Treatment Group (EXPERIMENTAL
 STANDARD))

Frequency	GROUP(GROUP		Treatment Group (EXPERIMENTAL
Percent	STANDARD		
Row Pct	NTAL		Total
Col Pct	EXPERIME	STANDARD	
	NTAL		
0	133	160	293
	38.33	46.11	84.44
	45.39	54.61	
	89.86	80.40	
1	15	39	54
	4.32	11.24	15.56
	27.78	72.22	
	10.14	19.60	
Total	148	199	347
	42.65	57.35	100.00

Part 2: PDR

----- DCCT closeout ETDRS level comb DCCT10-DCCT50=4 -----

The FREQ Procedure

Table of event by GROUP

event
 GROUP(GROUP Treatment Group (EXPERIMENTAL
 STANDARD))

Frequency	GROUP(GROUP Treatment Group (EXPERIMENTAL		Total
Percent	EXPERIME	STANDARD	
Row Pct	NTAL		
Col Pct			
0	30	46	76
	19.48	29.87	49.35
	39.47	60.53	
	60.00	44.23	
1	20	58	78
	12.99	37.66	50.65
	25.64	74.36	
	40.00	55.77	
Total	50	104	154
	32.47	67.53	100.00

Part 2: PDR

The FREQ Procedure

DCCTSCAT Any SCATTER through DCCT (0=n 1=y)

DCCTSCAT	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	1312	100.00	1312	100.00

Part 2: PDR

The LIFEREG Procedure

Model Information

Data Set	WORK.SURVIVAL_PDR
Dependent Variable	Log(survyr)
Censoring Variable	event
Censoring Value(s)	0
Number of Observations	1312
Noncensored Values	164
Right Censored Values	1148
Left Censored Values	0
Interval Censored Values	0
Name of Distribution	Weibull
Log Likelihood	-534.020551

Number of Observations Read	1312
Number of Observations Used	1312

Fit Statistics

-2 Log Likelihood	1068.041
AIC (smaller is better)	1074.041
AICC (smaller is better)	1074.059
BIC (smaller is better)	1089.579

Algorithm converged.

Type III Analysis of Effects

Effect	DF	Wald	
		Chi-Square	Pr > ChiSq
tgroup	1	31.8835	<.0001

Analysis of Maximum Likelihood Parameter Estimates

Parameter	DF	Estimate	Standard Error	95% Confidence Limits		Chi-Square	Pr > ChiSq
Intercept	1	3.1648	0.0802	3.0075	3.3220	1555.65	<.0001
tgroup	1	0.5753	0.1019	0.3756	0.7750	31.88	<.0001
Scale	1	0.5313	0.0398	0.4588	0.6154		
Weibull Shape	1	1.8821	0.1410	1.6250	2.1798		

Part 2: PDR

The FREQ Procedure

Table of DTCLSETD by dtclsetd_cut3

DTCLSETD(DCCT closeout ETDRS level comb DCCT10-DCCT50)
dtclsetd_cut3

Frequency				
Percent				
Row Pct				
Col Pct	1	3	4	Total
1	316	0	0	316
	24.12	0.00	0.00	24.12
	100.00	0.00	0.00	
	39.06	0.00	0.00	
2	493	0	0	493
	37.63	0.00	0.00	37.63
	100.00	0.00	0.00	
	60.94	0.00	0.00	
3	0	347	0	347
	0.00	26.49	0.00	26.49
	0.00	100.00	0.00	
	0.00	100.00	0.00	
4	0	0	154	154
	0.00	0.00	11.76	11.76
	0.00	0.00	100.00	
	0.00	0.00	100.00	
Total	809	347	154	1310
	61.76	26.49	11.76	100.00

Frequency Missing = 2

Part 2: PDR

----- dtclsetd_cut3=. -----

The LIFEREG Procedure

Model Information

Data Set	WORK.SURVIVAL_PDR
Dependent Variable	Log(survyr)
Censoring Variable	event
Censoring Value(s)	0
Number of Observations	2
Noncensored Values	0
Right Censored Values	2
Left Censored Values	0
Interval Censored Values	0
Name of Distribution	Weibull
Log Likelihood	-2.2794E-12

Number of Observations Read	2
Number of Observations Used	2

Fit Statistics

-2 Log Likelihood	0.000
AIC (smaller is better)	6.000
AICC (smaller is better)	.
BIC (smaller is better)	2.079

WARNING: Negative of Hessian not positive definite.

Analysis of Maximum Likelihood Parameter Estimates

Parameter	DF	Estimate	Standard Error	95% Confidence Limits		Chi-Square	Pr > ChiSq
Intercept	1	1.5539	0.2042	1.1538	1.9541	57.93	<.0001
tgroup	1	0.3906	0.2887	-0.1754	0.9565	1.83	0.1762
Scale	0	0.0000	0.0000	0.0000	0.0000		
Weibull Shape	0	4587821	0.0000	4587821	4587821		

Part 2: PDR

----- dtclsetd_cut3=1 -----

The LIFEREG Procedure

Model Information

Data Set	WORK.SURVIVAL_PDR
Dependent Variable	Log(survyr)
Censoring Variable	event
Censoring Value(s)	0
Number of Observations	809
Noncensored Values	32
Right Censored Values	777
Left Censored Values	0
Interval Censored Values	0
Name of Distribution	Weibull
Log Likelihood	-125.4764652

Number of Observations Read	809
Number of Observations Used	809

Fit Statistics

-2 Log Likelihood	250.953
AIC (smaller is better)	256.953
AICC (smaller is better)	256.983
BIC (smaller is better)	271.040

Algorithm converged.

Type III Analysis of Effects

Effect	DF	Wald	
		Chi-Square	Pr > ChiSq
tgroup	1	6.9593	0.0083

Analysis of Maximum Likelihood Parameter Estimates

Parameter	DF	Estimate	Standard Error	95% Confidence Limits		Chi-Square	Pr > ChiSq
Intercept	1	3.2356	0.1679	2.9065	3.5646	371.48	<.0001
tgroup	1	0.3740	0.1418	0.0961	0.6518	6.96	0.0083
Scale	1	0.3322	0.0569	0.2374	0.4647		
Weibull Shape	1	3.0105	0.5159	2.1517	4.2122		

Part 2: PDR

----- dtclsetd_cut3=3 -----

The LIFEREG Procedure

Model Information

Data Set	WORK.SURVIVAL_PDR
Dependent Variable	Log(survyr)
Censoring Variable	event
Censoring Value(s)	0
Number of Observations	347
Noncensored Values	54
Right Censored Values	293
Left Censored Values	0
Interval Censored Values	0
Name of Distribution	Weibull
Log Likelihood	-160.0234836

Number of Observations Read	347
Number of Observations Used	347

Fit Statistics

-2 Log Likelihood	320.047
AIC (smaller is better)	326.047
AICC (smaller is better)	326.117
BIC (smaller is better)	337.595

Algorithm converged.

Type III Analysis of Effects

Effect	DF	Wald	
		Chi-Square	Pr > ChiSq
tgroup	1	5.4277	0.0198

Analysis of Maximum Likelihood Parameter Estimates

Parameter	DF	Estimate	Standard Error	95% Confidence Limits		Chi-Square	Pr > ChiSq
Intercept	1	3.0245	0.1194	2.7906	3.2585	642.09	<.0001
tgroup	1	0.3451	0.1481	0.0548	0.6353	5.43	0.0198
Scale	1	0.4678	0.0607	0.3628	0.6031		
Weibull Shape	1	2.1378	0.2772	1.6581	2.7564		

Part 2: PDR

----- dtclsetd_cut3=4 -----

The LIFEREG Procedure

Model Information

Data Set	WORK.SURVIVAL_PDR
Dependent Variable	Log(survyr)
Censoring Variable	event
Censoring Value(s)	0
Number of Observations	154
Noncensored Values	78
Right Censored Values	76
Left Censored Values	0
Interval Censored Values	0
Name of Distribution	Weibull
Log Likelihood	-149.2844722

Number of Observations Read	154
Number of Observations Used	154

Fit Statistics

-2 Log Likelihood	298.569
AIC (smaller is better)	304.569
AICC (smaller is better)	304.729
BIC (smaller is better)	313.680

Algorithm converged.

Type III Analysis of Effects

Effect	DF	Wald	
		Chi-Square	Pr > ChiSq
tgroup	1	3.2677	0.0707

Analysis of Maximum Likelihood Parameter Estimates

Parameter	DF	Estimate	Standard Error	95% Confidence Limits		Chi-Square	Pr > ChiSq
Intercept	1	2.4293	0.0790	2.2744	2.5842	944.47	<.0001
tgroup	1	0.2757	0.1525	-0.0232	0.5746	3.27	0.0707
Scale	1	0.5810	0.0586	0.4767	0.7080		
Weibull Shape	1	1.7212	0.1737	1.4124	2.0976		

Part 2: PDR

The LIFEREG Procedure

Model Information

Data Set	WORK.SURVIVAL_PDR
Dependent Variable	Log(survyr)
Censoring Variable	event
Censoring Value(s)	0
Number of Observations	1310
Noncensored Values	164
Right Censored Values	1146
Left Censored Values	0
Interval Censored Values	0
Name of Distribution	Weibull
Log Likelihood	-428.075576

Number of Observations Read	1312
Number of Observations Used	1310
Missing Values	2

Class Level Information

Name	Levels	Values
dtclsetd_cut3	3	1 3 4

Fit Statistics

-2 Log Likelihood	856.151
AIC (smaller is better)	872.151
AICC (smaller is better)	872.262
BIC (smaller is better)	913.573

Algorithm converged.

Type III Analysis of Effects

Effect	DF	Wald	
		Chi-Square	Pr > ChiSq
tgroup	1	18.1614	<.0001
dtclsetd_cut3	2	70.9694	<.0001
retstratum	1	1.6376	0.2007
HBAEL	1	20.0618	<.0001
DURYR0	1	0.0315	0.8591

Part 2: PDR

The LIFEREG Procedure

Analysis of Maximum Likelihood Parameter Estimates

Parameter	DF	Estimate	Standard Error	95% Confidence Limits		Chi- Square	Pr > ChiSq
Intercept	1	3.3832	0.3050	2.7855	3.9810	123.06	<.0001
tgroup	1	0.4032	0.0946	0.2178	0.5887	18.16	<.0001
dtclsetd_cut3 1	1	1.2059	0.1483	0.9152	1.4965	66.11	<.0001
dtclsetd_cut3 3	1	0.6318	0.1001	0.4356	0.8280	39.84	<.0001
dtclsetd_cut3 4	0	0.0000	.	.	.	.	.
retstratum	1	0.1483	0.1159	-0.0788	0.3755	1.64	0.2007
HBAEL	1	-0.1093	0.0244	-0.1572	-0.0615	20.06	<.0001
DURYR0	1	0.0023	0.0132	-0.0235	0.0282	0.03	0.8591
Scale	1	0.4942	0.0353	0.4296	0.5684		
Weibull Shape	1	2.0237	0.1445	1.7594	2.3276		

Part 2: PDR

----- dtclsetd_cut3=. -----

The LIFEREG Procedure

Model Information

Data Set	WORK.SURVIVAL_PDR
Dependent Variable	Log(survyr)
Censoring Variable	event
Censoring Value(s)	0
Number of Observations	2
Noncensored Values	0
Right Censored Values	2
Left Censored Values	0
Interval Censored Values	0
Name of Distribution	Weibull
Log Likelihood	-2.2794E-12

Number of Observations Read	2
Number of Observations Used	2

Fit Statistics

-2 Log Likelihood	0.000
AIC (smaller is better)	6.000
AICC (smaller is better)	.
BIC (smaller is better)	2.079

WARNING: Negative of Hessian not positive definite.

Analysis of Maximum Likelihood Parameter Estimates

Parameter	DF	Estimate	Standard Error	95% Confidence Limits		Chi-Square	Pr > ChiSq
Intercept	1	1.5539	0.2042	1.1538	1.9541	57.93	<.0001
tgroup	1	0.3906	0.2887	-0.1754	0.9565	1.83	0.1762
retstratum	0	0.0000	.	.	.	.	.
HBAEL	0	0.0000	.	.	.	.	.
DURYR0	0	0.0000	.	.	.	.	.
Scale	0	0.0000	0.0000	0.0000	0.0000	.	.
Weibull Shape	0	4587821	0.0000	4587821	4587821	.	.

Part 2: PDR

----- dtclsetd_cut3=1 -----

The LIFEREG Procedure

Model Information

Data Set	WORK.SURVIVAL_PDR
Dependent Variable	Log(survyr)
Censoring Variable	event
Censoring Value(s)	0
Number of Observations	809
Noncensored Values	32
Right Censored Values	777
Left Censored Values	0
Interval Censored Values	0
Name of Distribution	Weibull
Log Likelihood	-118.8425345

Number of Observations Read	809
Number of Observations Used	809

Fit Statistics

-2 Log Likelihood	237.685
AIC (smaller is better)	249.685
AICC (smaller is better)	249.790
BIC (smaller is better)	277.860

Algorithm converged.

Type III Analysis of Effects

Effect	DF	Wald	
		Chi-Square	Pr > ChiSq
tgroup	1	8.5082	0.0035
retstratum	1	2.3395	0.1261
HBAEL	1	8.8067	0.0030
DURYR0	1	0.0409	0.8397

Analysis of Maximum Likelihood Parameter Estimates

Parameter	DF	Estimate	Standard Error	95% Confidence Limits		Chi-Square	Pr > ChiSq
Intercept	1	4.0652	0.4683	3.1474	4.9830	75.37	<.0001
tgroup	1	0.4301	0.1475	0.1411	0.7191	8.51	0.0035

Part 2: PDR

----- dtclsetd_cut3=1 -----

The LIFEREG Procedure

Analysis of Maximum Likelihood Parameter Estimates

Parameter	DF	Estimate	Standard Error	95% Confidence Limits		Chi- Square	Pr > ChiSq
retstratum	1	0.2536	0.1658	-0.0714	0.5786	2.34	0.1261
HBAEL	1	-0.1135	0.0382	-0.1884	-0.0385	8.81	0.0030
DURYR0	1	0.0048	0.0239	-0.0420	0.0516	0.04	0.8397
Scale	1	0.3336	0.0571	0.2385	0.4666		
Weibull Shape	1	2.9976	0.5131	2.1433	4.1925		

Part 2: PDR

----- dtclsetd_cut3=3 -----

The LIFEREG Procedure

Model Information

Data Set	WORK.SURVIVAL_PDR
Dependent Variable	Log(survyr)
Censoring Variable	event
Censoring Value(s)	0
Number of Observations	347
Noncensored Values	54
Right Censored Values	293
Left Censored Values	0
Interval Censored Values	0
Name of Distribution	Weibull
Log Likelihood	-150.7546109

Number of Observations Read	347
Number of Observations Used	347

Fit Statistics

-2 Log Likelihood	301.509
AIC (smaller is better)	313.509
AICC (smaller is better)	313.756
BIC (smaller is better)	336.605

Algorithm converged.

Type III Analysis of Effects

Effect	DF	Wald	
		Chi-Square	Pr > ChiSq
tgroup	1	5.9356	0.0148
retstratum	1	0.2553	0.6134
HBAEL	1	14.3300	0.0002
DURYR0	1	0.0142	0.9052

Analysis of Maximum Likelihood Parameter Estimates

Parameter	DF	Estimate	Standard Error	95% Confidence Limits		Chi-Square	Pr > ChiSq
Intercept	1	4.4294	0.4925	3.4641	5.3947	80.88	<.0001
tgroup	1	0.3840	0.1576	0.0751	0.6930	5.94	0.0148

Part 2: PDR

----- dtclsetd_cut3=3 -----

The LIFEREG Procedure

Analysis of Maximum Likelihood Parameter Estimates

Parameter	DF	Estimate	Standard Error	95% Confidence Limits		Chi- Square	Pr > ChiSq
retstratum	1	-0.0897	0.1776	-0.4377	0.2583	0.26	0.6134
HBAEL	1	-0.1455	0.0384	-0.2208	-0.0702	14.33	0.0002
DURYR0	1	-0.0027	0.0223	-0.0463	0.0410	0.01	0.9052
Scale	1	0.4534	0.0579	0.3530	0.5822		
Weibull Shape	1	2.2058	0.2816	1.7176	2.8328		

Part 2: PDR

----- dtclsetd_cut3=4 -----

The LIFEREG Procedure

Model Information

Data Set	WORK.SURVIVAL_PDR
Dependent Variable	Log(survyr)
Censoring Variable	event
Censoring Value(s)	0
Number of Observations	154
Noncensored Values	78
Right Censored Values	76
Left Censored Values	0
Interval Censored Values	0
Name of Distribution	Weibull
Log Likelihood	-147.7133211

Number of Observations Read	154
Number of Observations Used	154

Fit Statistics

-2 Log Likelihood	295.427
AIC (smaller is better)	307.427
AICC (smaller is better)	307.998
BIC (smaller is better)	325.648

Algorithm converged.

Type III Analysis of Effects

Effect	DF	Wald	
		Chi-Square	Pr > ChiSq
tgroup	1	3.2764	0.0703
retstratum	1	1.6496	0.1990
HBAEL	1	1.0956	0.2952
DURYR0	1	0.7337	0.3917

Analysis of Maximum Likelihood Parameter Estimates

Parameter	DF	Estimate	Standard Error	95% Confidence Limits		Chi-Square	Pr > ChiSq
Intercept	1	2.6565	0.5194	1.6385	3.6746	26.16	<.0001
tgroup	1	0.2794	0.1544	-0.0231	0.5819	3.28	0.0703

Part 2: PDR

----- dtclsetd_cut3=4 -----

The LIFEREG Procedure

Analysis of Maximum Likelihood Parameter Estimates

Parameter	DF	Estimate	Standard Error	95% Confidence Limits		Chi- Square	Pr > ChiSq
retstratum	1	0.2909	0.2265	-0.1530	0.7347	1.65	0.1990
HBAEL	1	-0.0454	0.0434	-0.1305	0.0396	1.10	0.2952
DURYR0	1	0.0179	0.0210	-0.0231	0.0590	0.73	0.3917
Scale	1	0.5740	0.0577	0.4714	0.6989		
Weibull Shape	1	1.7421	0.1750	1.4308	2.1212		