**Summary Table for Multivariable Linear Regression**

**Macro:** MULTIPLE\_LINREG

**Created Date/Author:** March 18, 2013/Dana Nickleach

**Last Update Date/Person**: April 17, 2013/Dana Nickleach

**Current Version**: V2

**Working Environment:** SAS 9.3 English version

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**Purpose:** To produce a summary table in a Microsoft Word Document from a multivariable general linear model. The modeling must be done before using this macro.

**Notes:** The regression must be conducted using PROC GLM before calling this macro. Three tables must be created using ODS output when running PROC GLM (nobs, type3, and estimate) as in the example below. The options SOLUTION and CLPARM must also be used in the model statement. Variable names must not be more than 20 characters. This macro is not set up to handle models including interaction terms and will produce incorrect results.

**Parameters:**

|  |  |
| --- | --- |
| **Macro variable** | **Description** |
| DSN | The name of the data set to be analyzed. |
| OUTPATH | File path for output table to be stored. |
| FNAME | File name for output table. |
| FOOTNOTE | Text of footnote to include in the table (optional). It should be in quotes. This footnote will appear below the footnote containing the number of observations. Leave this field blank if not including an additional footnote. |
| TYPE3 | Set to F to suppress type III p-values from being reported in the table (optional). The default value is T. |
| DEBUG | Set to T if running in debug mode (optional). Work datasets will not be deleted in debug mode. This is useful if you are editing the code or want to further manipulate the resulting data sets. The default value is F. |

**Usage Example:**

**DATA** analysis;

input id os\_censor Sex $ Age duration os progress $ trt $;

LABEL os = 'Overall Survival (months)'

progress = 'Progression'

trt = 'Treatment'

duration = 'Duration of Radiation';

DATALINES;

1 1 M 40 44 20 No B

2 1 F 45 46 16 Yes A

3 1 F 40 32 20 No B

4 1 F 47 32 23 No B

5 0 M 41 25 22 No B

6 1 M 54 35 13 No B

7 1 M 48 50 9 Yes A

8 1 M 36 33 12 Yes B

9 0 F 49 51 8 Yes A

10 1 M 49 52 10 Yes A

11 1 M 44 35 12 No A

12 1 M 49 50 8 Yes A

13 1 M 44 44 14 Yes A

14 1 M 50 31 10 Yes A

15 1 M 53 40 15 No B

16 0 M 52 29 20 Yes B

17 1 F 46 45 5 Yes A

18 1 F 37 44 11 Yes A

19 1 M 49 46 13 No B

20 1 M 42 31 11 No A

;

ODS OUTPUT NObs = nobs 'Type III Model ANOVA'=type3 ParameterEstimates=estimate;

PROC GLM DATA = analysis;

class trt sex;

model duration = trt sex age/SOLUTION CLPARM;

QUIT;

TITLE 'Table 4 Regression Model';

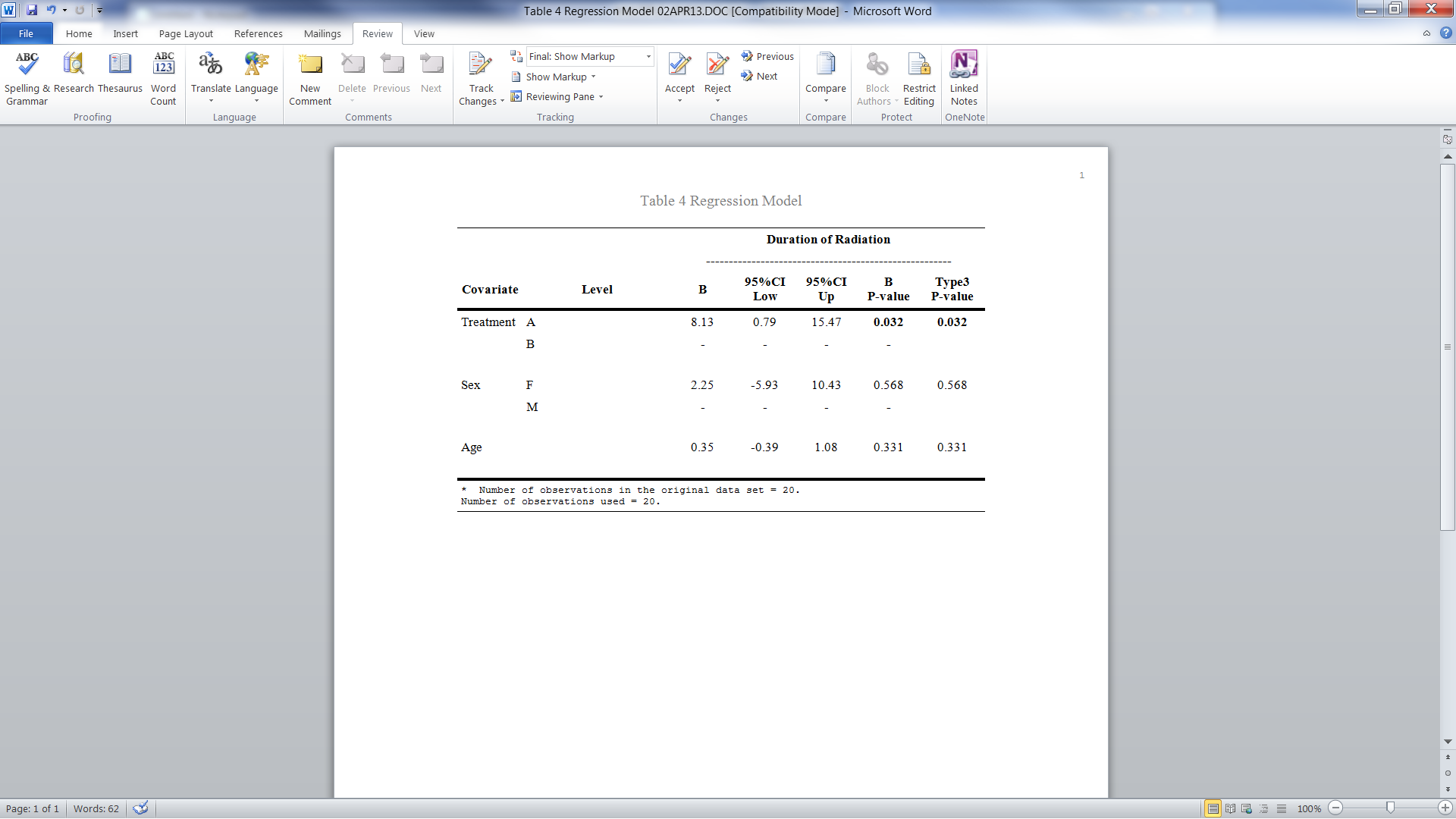
%MULTIPLE\_LINREG(DSN=analysis,

OUTPATH=C:\Users\,

FNAME=Table 4 Regression Model);

TITLE;

**Summary Table Example:**



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**Log of Updates:**

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| **Date** | **By** | **Description** | **Version** |
| 3/17/13 | Dana Nickleach ([dnickle@emory.edu](mailto:dnickle@emory.edu)) | Added TYPE3 parameter. | V2 |
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