

```
/*Evaluation of FLuorometholone as Adjunctive MEDical Therapy for Trachomatous Trichiasis Surgery: The FLAME Randomized  
Controlled Clinical Trial*/
```

```
/*purpose: summary baseline eye characteristics by randomized treatment groups*/
```

```
/*Note: raw datasets in SAS library 'in' corresponds to the shared data file in.xlsx format, their relationship are as below:
```

```
in.Baselineinfo - DS
```

```
in.eligibility2 - EL
```

```
in.eyeeexam_baseline - BE*/
```

```
/*set up SAS library, TLF path, TLF title, format catalog which will be used in later analysis*/
```

```
%include "setup.sas";
```

```
libname in "&_root_in";
```

```
libname fm "&_root_fm";
```

```
libname data "&_root_data";
```

```
%let TLF_path = &_root_output\tb2_ocular_characteristics.rtf;
```

```
%let TLF_title = Table 2: Baseline ocular characteristics of study eyes by randomized treatment groups;
```

```
OPTIONS FMTSEARCH=(fm.fmsurgery fm.fmbaseline fm.fmelig fm.fmbaseexam);
```

```
option mprint;
```

```
/*set up variable format for visualization*/
```

```
proc format;
```

```
    value gf 0 = "Placebo" 1 = "FML";
```

```
    value surgeryf 0='BLTR'
```

```
                1='PLTR'
```

```
                9='No surgery due to withdrawal';
```

```
    value surgeryo 1='BLTR'
```

```
                2='PLTR'
```

3='No surgery due to withdrawal';
 value \$bevaf '20/20'='20/20'
 '20/25 – 20/40'='20/25 – 20/40'
 '20/50 – 20/63'='20/50 – 20/63'
 '20/80 – 20/160'='20/80 – 20/160'
 '20/200 - 20/400'='20/200 - 20/400'
 'Worse than 20/400'='Worse than 20/400';
 value bevao **1**='20/20'
 2='20/25 – 20/40'
 3='20/50 – 20/63'
 4='20/80 – 20/160'
 5='20/200 - 20/400'
 6='Worse than 20/400';
 invalue beva '20/20'=**0**
 '20/25 – 20/40'=**1**
 '20/50 – 20/63'=**2**
 '20/80 – 20/160'=**3**
 '20/200 - 20/400'=**4**
 'Worse than 20/400'=**5**;
 value \$becorneaf 'No trichiasis'='No trichiasis'
 'Zero (epilating)'='Zero (epilating)'
 '1-5'='1-5'
 '6 or more'='6 or more';
 value becorneao **1**='No trichiasis'
 2='Zero (epilating)'
 3='1-5'
 4='6 or more';

invalue becornea 'No trichiasis'=**0**

'Zero (epilating)'=**1**

'1-5'=**2**

'6 or more'=**3**;

value \$totallashf '0'='0 (epilating)'

'1-5'='1-5'

'6-9'='6-9'

'10-19'='10-19'

'20+'='20+';

value totallasho **1**='0 (epilating)'

2='1-5'

3='6-9'

4='10-19'

5='20+';

invalue totallash '0'=**0**

'1-5'=**1**

'6-9'=**2**

'10-19'=**3**

'20+'=**4**;

value beepilationf **0**='None'

1='<1/3 of the lid margin'

2='>=1/3 to <= 2/3 of the lid margin'

3='>2/3 of the lid margin';

value beepilationo **1**='None'

2='<1/3 of the lid margin'

3='>=1/3 to <= 2/3 of the lid margin'

4='>2/3 of the lid margin';

value trichsevf **1**='Severe: (total number of lashes ≥ 6 , or epilation $\geq 1/3$)'
0='Not severe';

value trichsevo **1**='Severe: (total number of lashes ≥ 6 , or epilation $\geq 1/3$)'
2='Not severe';

value beentropionf **0**='E0: None'
1='E1: Mild'
2='E2: Moderate'
3='E3: Severe'
4='E4: Total';

value beentropiono **1**='E0: None'
2='E1: Mild'
3='E2: Moderate'
4='E3: Severe'
5='E4: Total';

value beconjunctf **0**='CM0: None'
1='CM1: posterior to the line of meibomian gland'
2='CM2: less than 50% of the lid'
3='CM3: greater than 50% of the lid';

value beconjuncto **1**='CM0: None'
2='CM1: posterior to the line of meibomian gland'
3='CM2: less than 50% of the lid'
4='CM3: greater than 50% of the lid';

value ynf **0** = "No" **1** = "Yes";

value yno **1**='No' **2**='Yes';

value becornealscarf **0**='C0: None'
1='C1: Peripheral'
2='C2a: Off center faint'

3='C2b: Off center dense'

4='C2c: Central faint'

5='C2d: Central dense'

6='C3: Total/central dense'

7='C4: Phthisis';

value becornealscaro **1**='C0: None'

2='C1: Peripheral'

3='C2a: Off center faint'

4='C2b: Off center dense'

5='C2c: Central faint'

6='C2d: Central dense'

7='C3: Total/central dense'

8='C4: Phthisis';

value bepapillaf **0**='P0: Absent'

1='P1: Minimal'

2='P2: Moderate'

3='P3: Pronounced';

value bepapillao **1**='P0: Absent'

2='P1: Minimal'

3='P2: Moderate'

4='P3: Pronounced';

value beconjf **0**='S0: None'

1='S1: Mild'

2='S2: Moderate'

3='S3: Severe';

value beconjo **1**='S0: None'

2='S1: Mild'

```

3='S2: Moderate'
4='S3: Severe';
invalue tab_order 'sisurgery_ul_n'=1
    'bevac_n'=2
    'becornea_ul'=3
    'becornea_ulc_n'=3
    'total_lash'=4
    'total_lashc_n'=4
    'beepilation_ul'=5
    'trich_sev'=6
    'beentropion_ul'=7
    'beconjunct_ul'=8
    'TT_ll'=9
    'becornealscar'=10
    'bepapilla_ul'=11
    'beconj_no_surg_ul'=12
    'beserous'=13
    'bepurulent'=13
    'befoamy'=13
    'eliopmedian'=14
    'mhcataeye'=15
    'mhsurgeye'=16
    'mhinjeye'=17
    'beconjinf'=18;
value pval (default=8)
    low - <0.00095 = '<0.001'
    0.00095 - <0.0095 = [8.3]

```

```

0.0095 - <0.045 = [8.2]
0.045 - <0.0495 = [8.3]
0.0495 - <0.04995 = [8.4]
0.04995 - <0.05 = '~<0.05'
0.05 = '0.05'
0.05< - <0.05005 = '~>0.05'
0.05005 - <0.0505 = [8.4]
0.0505 - <0.055 = [8.3]
0.055 - 0.99 = [8.2]
0.99< - high = [8.2];

```

run;

* combine covariate used for analysis;

proc sql;

```

create table tbl2_data_1 as

```

```

select root.subjid, root.sisurgery_rul, root.sisurgery_lul, c.redcap_event_name,
       a.mhcataeye_r,a.mhcataeye_l,a.mhsurgeye_r,a.mhsurgeye_l,a.mhinjeeye_r,a.mhinjeeye_l,
       b.eliopmedian_r,b.eliopmedian_l,

```

```

c.beva_r,c.bevisual_r,c.beva_l,c.bevisual_l,c.beserous_r,c.bepurulent_r,c.befoamy_r,c.beserous_l,c.bepurulent_l,c.befoamy_l,

```

```

c.becornea_rul,c.bemedial_rul,c.belateral_rul,c.becornea_lul,c.bemedial_lul,c.belateral_lul,c.betrich_rul,c.betrich_lul,

```

```

c.becornea_rll,c.bemedial_rll,c.belateral_rll,c.becornea_lll,c.bemedial_lll,c.belateral_lll,c.beepilation_rll,c.beepilation_lll,
       c.beepilation_rul,c.beepilation_lul,c.beentropion_rul,c.beentropion_lul,c.beconjunct_lul,c.beconjunct_rul,

```

```

c.becornealscar_r,c.becornealscar_l,c.bepapilla_rul,c.bepapilla_lul,c.beconj_no_surg_rul,c.beconj_no_surg_lul,

```

```

        c.becataract_r,c.becataract_l,c.beconjinf_r,c.beconjinf_l
from data.rand as root
left join in.Baselineinfo as a
on root.subjid=a.subjid
left join in.eligibility2 as b
on root.subjid=b.subjectid
left join in.eyeeexam_baseline as c
on root.subjid=c.subjid;

```

quit;

```
%proc_reshape(indata = tbl2_data_1,memname="TBL2_DATA_1",outdata=tbl2_data_reshape);
```

proc sql;

```

create table data.tbl2_data as
select a.subjid, root.treat,a.eye,
       a.sisurgery_ul,
       case when .<beva<=0 then '20/20'
             when 0<beva<=0.3 then '20/25 – 20/40'
             when 0.3<beva<=0.5 then '20/50 – 20/63'
             when 0.5<beva<1 then '20/80 – 20/160'
             when 1<=beva<=1.3 then '20/200 - 20/400'
             when beva>1.3 then 'Worse than 20/400' end as bevac,
       becornea_ul,
       case when becornea_ul=0 and beepilation_ul<=0 then 'No trichiasis'
             when becornea_ul=0 and beepilation_ul in (1,2,3) then 'Zero (epilating)'
             when 1<=becornea_ul<=5 then '1-5'
             when 5<becornea_ul then '6 or more' end as becornea_ulc,
       sum(becornea_ul,bemedial_ul,belateral_ul) as total_lash,

```

```

case when sum(becornea_ul,bemedial_ul,belateral_ul)=0 then '0'
      when 1<=sum(becornea_ul,bemedial_ul,belateral_ul)<=5 then '1-5'
      when 5<sum(becornea_ul,bemedial_ul,belateral_ul)<=9 then '6-9'
      when 9<sum(becornea_ul,bemedial_ul,belateral_ul)<=19 then '10-19'
      when 19<sum(becornea_ul,bemedial_ul,belateral_ul) then '20+' end as total_lashc,
beepilation_ul,
case when sum(becornea_ul,bemedial_ul,belateral_ul)>=6 or beepilation_ul in (2,3) then 1
      when .<sum(becornea_ul,bemedial_ul,belateral_ul)<6 and beepilation_ul in (0,1) then 0 end as
trich_sev,
beentropion_ul,beconjunct_ul,
case when sum(becornea_ll,bemedial_ll,belateral_ll)>0 or beepilation_ll in (1,2,3) then 1
      when sum(becornea_ll,bemedial_ll,belateral_ll)=0 and beepilation_ll=0 then 0 end as TT_ll,
becornealscar,bepapilla_ul,beconj_no_surg_ul,
beserous,bepurulent,befoamy,a.eliopmedian,
case when a.mhcataeye in (1,2) then 1 else 0 end as mhcataeye,
case when a.mhsurgeye in (1,2) then 1 else 0 end as mhsurgeye,
case when a.mhinjeye in (1,2) then 1 else 0 end as mhinjeye,
a.becataract,a.beconjinf
from tbl2_data_reshape as a
inner join in.eligibility2 as b
on a.subjid=b.subjectid and ((a.eye='OS' and b.elelig_l=1) or (a.eye='OD' and b.elelig_r=1))
left join data.rand as root
on a.subjid=root.subjid;

quit;

* # of eyes in each group;
proc sql noprint;

```

```

select count(*) into :t0_eye
      from data.tbl2_data
      where treat = 0;
select count(*) into :t1_eye
      from data.tbl2_data
      where treat = 1;

```

quit;

```
%put &t0_eye;
```

```
%put &t1_eye;
```

* descriptive statistics, hypothesis test and model building;

```

%stat_char(input=data.tbl2_data,output=tab_1_1,unit=eye,variable=sisurgery_ul,min=1,max=3,cohort=treat,ref=Placebo,questionlabel=Type of TT
surgery,tab_order=1,value_label=surgeryf,order_label=surgeryo,id=subjid,gee_binomial=0,gee_multinomial=0,reverse=0,chi=
0,fisher=0);

```

```
data tbl2_data;
```

```
      set data.tbl2_data;
```

```
      if sisurgery_ul=9 then sisurgery_ul=.;
```

run;

```

%stat_char(input=tbl2_data,output=tab_1_2,unit=eye,variable=sisurgery_ul,min=1,max=2,cohort=treat,ref=Placebo,question
label=,tab_order=1,value_label=surgeryf,order_label=surgeryo,id=subjid,gee_binomial=1,gee_multinomial=0,reverse=0,chi=0,
fisher=0);

```

proc sql;

```
      create table tab_1 as
```

```
      select distinct a.*,b.pvalue
```

```
      from tab_1_1 as a
```

```
      left join tab_1_2 as b
```

```

on a.answer_order^=0
order by a.answer_order;

quit;
%stat_char(input=data.tbl2_data,output=tab_2,unit=eye,variable=bevac,min=1,max=6,cohort=treat,ref=Placebo,questionlabel=Presenting Visual
acuity,tab_order=2,value_label=$bevaf,order_label=bevao,id=subjid,gee_binomial=0,gee_multinomial=0,reverse=1,chi=0,fisher=0);
%stat_num(input=data.tbl2_data,output=tab_3_1,variable=becornea_ul,cohort=treat,ref=Placebo,questionlabel=,tab_order=
3,id=subjid,gee_linear=0,pois=1,ttest=0,anova=0,wilcoxon_rank_sum=0,kruskal_wallis=0);
%stat_char(input=data.tbl2_data,output=tab_3_2,unit=eye,variable=becornea_ulc,min=1,max=4,cohort=treat,ref=Placebo,questionlabel=Number of upper eyelid lashes touching the
cornea,tab_order=3,value_label=$becorneaf,order_label=becorneao,id=subjid,gee_binomial=0,gee_multinomial=0,reverse=1,chi=0,fisher=0);
data tab_3;
    format answerlabel $200.;
    set tab_3_1(in=a) tab_3_2(in=b);
    if a and index(answerlabel,'Mean (SD)')=0 then delete;
    else if a then do; answer_order=0.5; answerlabel=' Mean (SD)'; end;
run;
proc sort data=tab_3; by answer_order; run;
%stat_num(input=data.tbl2_data,output=tab_4_1,variable=total_lash,cohort=treat,ref=Placebo,questionlabel=,tab_order=4,id=subjid,gee_linear=0,pois=1,ttest=0,anova=0,wilcoxon_rank_sum=0,kruskal_wallis=0);
%stat_char(input=data.tbl2_data,output=tab_4_2,unit=eye,variable=total_lashc,min=1,max=5,cohort=treat,ref=Placebo,questionlabel=Total number of upper eyelid lashes touching the globe or the
cornea,tab_order=4,value_label=$totallashf,order_label=totallasho,id=subjid,gee_binomial=0,gee_multinomial=0,reverse=1,chi=0,fisher=0);
data tab_4;

```

```

format answerlabel $200.;
set tab_4_1(in=a) tab_4_2(in=b);
if a and index(answerlabel,'Mean (SD)')=0 then delete;
else if a then do; answer_order=0.5; answerlabel=' Mean (SD)'; end;
run;
proc sort data=tab_4; by answer_order; run;
%stat_char(input=data.tbl2_data,output=tab_5,unit=eye,variable=beepilation_ul,min=1,max=4,cohort=treat,ref=Placebo,questionlabel=Evidence/extent of epilation in the upper eyelid,tab_order=5,value_label=beepilationf,order_label=beepilationo,id=subjid,gee_binomial=0,gee_multinomial=0,reverse=1,chi=0,fisher=0);
%stat_char(input=data.tbl2_data,output=tab_6,unit=eye,variable=trich_sev,min=1,max=2,cohort=treat,ref=Placebo,questionlabel=Severity of upper eyelid trichiasis,tab_order=6,value_label=trichsevf,order_label=trichsevo,id=subjid,gee_binomial=1,gee_multinomial=0,reverse=0,chi=0,fisher=0);
%stat_char(input=data.tbl2_data,output=tab_7,unit=eye,variable=beentropion_ul,min=1,max=5,cohort=treat,ref=Placebo,questionlabel=Upper Eyelid Entropion,tab_order=7,value_label=beentropionf,order_label=beentropiono,id=subjid,gee_binomial=0,gee_multinomial=0,reverse=1,chi=0,fisher=0);
%stat_char(input=data.tbl2_data,output=tab_8,unit=eye,variable=beconjunct_ul,min=1,max=4,cohort=treat,ref=Placebo,questionlabel=Conjunctivalization of the lid margin grade,tab_order=8,value_label=beconjunctf,order_label=beconjuncto,id=subjid,gee_binomial=0,gee_multinomial=0,reverse=1,chi=0,fisher=0);
%stat_char(input=data.tbl2_data,output=tab_9,unit=eye,variable=TT_ll,min=1,max=2,cohort=treat,ref=Placebo,questionlabel=Trachomatous trichiasis at lower eyelid*,tab_order=9,value_label=ynf,order_label=yno,id=subjid,gee_binomial=1,gee_multinomial=0,reverse=0,chi=0,fisher=0);
%stat_char(input=data.tbl2_data,output=tab_10,unit=eye,variable=becornealscar,min=1,max=8,cohort=treat,ref=Placebo,questionlabel=Corneal

```

```

opacity,tab_order=10,value_label=becornealscarf,order_label=becornealscaro,id=subjid,gee_binomial=0,gee_multinomial=0,
reverse=1,chi=0,fisher=0);
%stat_char(input=data.tbl2_data,output=tab_11,unit=eye,variable=bepapilla_ul,min=1,max=4,cohort=treat,ref=Placebo,que
stionlabel=Upper eyelid papillary
hypertrophy,tab_order=11,value_label=bepapillaf,order_label=bepapillao,id=subjid,gee_binomial=0,gee_multinomial=0,rever
se=1,chi=0,fisher=0);
%stat_char(input=data.tbl2_data,output=tab_12,unit=eye,variable=beconj_no_surg_ul,min=1,max=4,cohort=treat,ref=Placebo,
questionlabel=Upper eyelid conjunctival
scarring,tab_order=12,value_label=beconjf,order_label=beconjjo,id=subjid,gee_binomial=0,gee_multinomial=0,reverse=1,chi
=0,fisher=0);
%stat_char(input=data.tbl2_data,output=tab_13_1,unit=eye,variable=beserous,min=2,max=2,cohort=treat,ref=Placebo,ques
tionlabel=Ocular surface
discharge,tab_order=13,value_label=ynf,order_label=yno,id=subjid,gee_binomial=1,gee_multinomial=0,reverse=0,chi=0,fishe
r=0);
%stat_char(input=data.tbl2_data,output=tab_13_2,unit=eye,variable=bepurulent,min=2,max=2,cohort=treat,ref=Placebo,que
stionlabel=,tab_order=13,value_label=ynf,order_label=yno,id=subjid,gee_binomial=1,gee_multinomial=0,reverse=0,chi=0,fish
er=0);
%stat_char(input=data.tbl2_data,output=tab_13_3,unit=eye,variable=befoamy,min=2,max=2,cohort=treat,ref=Placebo,questi
onlabel=,tab_order=13,value_label=ynf,order_label=yno,id=subjid,gee_binomial=1,gee_multinomial=0,reverse=0,chi=0,fisher
=0);
data tab_13;
    format answerlabel $200.;
    set tab_13_1(in=a) tab_13_2(in=b) tab_13_3(in=c);
    if a and answer_order=2 then do; answerlabel=' Serous (%)'; end;
    if b then do; answer_order=3; answerlabel=' Purulent (%)'; end;
    if c then do; answer_order=4; answerlabel=' Foamy (%)'; end;

run;

```

```

proc sort data=tab_13; by answer_order; run;

%stat_num(input=data.tbl2_data,output=tab_14,variable=eliopmedian,cohort=treat,ref=Placebo,questionlabel=,tab_order=14,id=subjid,gee_linear=1,pois=0,ttest=0,anova=0,wilcoxon_rank_sum=0,kruskal_wallis=0);

%stat_char(input=data.tbl2_data,output=tab_15,unit=eye,variable=mhcataeye,min=2,max=2,cohort=treat,ref=Placebo,questionlabel=,tab_order=15,value_label=ynf,order_label=yno,id=subjid,gee_binomial=1,gee_multinomial=0,reverse=0,chi=0,fisher=0);

*%stat_char(input=data.tbl2_data,output=tab_15,unit=eye,variable=becataract,min=1,max=2,cohort=treat,ref=Placebo,questionlabel=,tab_order=15,value_label=ynf,order_label=yno,id=subjid,gee_binomial=1,gee_multinomial=0,reverse=0,chi=0,fisher=0);

%stat_char(input=data.tbl2_data,output=tab_16,unit=eye,variable=mhsurgeye,min=2,max=2,cohort=treat,ref=Placebo,questionlabel=,tab_order=16,value_label=ynf,order_label=yno,id=subjid,gee_binomial=1,gee_multinomial=0,reverse=0,chi=0,fisher=0);

%stat_char(input=data.tbl2_data,output=tab_17,unit=eye,variable=mhinjeye,min=2,max=2,cohort=treat,ref=Placebo,questionlabel=,tab_order=17,value_label=ynf,order_label=yno,id=subjid,gee_binomial=1,gee_multinomial=0,reverse=0,chi=0,fisher=0);

%stat_char(input=data.tbl2_data,output=tab_18,unit=eye,variable=beconjinf,min=1,max=2,cohort=treat,ref=Placebo,questionlabel=Conjunctival Infection,tab_order=18,value_label=ynf,order_label=yno,id=subjid,gee_binomial=1,gee_multinomial=0,reverse=0,chi=0,fisher=0);

data tbl2_result;
    format answerlabel cohort_0 cohort_1 $200.;
    set tab_1 tab_2 tab_3 tab_4 tab_5 tab_6 tab_7 tab_8 tab_9 tab_10
        tab_11 tab_12 tab_13 tab_14(in=a) tab_15(in=b) tab_16(in=c) tab_17(in=d) tab_18;
    if a and index(answerlabel,'Mean (SD)')=0 then delete;
    if a then answerlabel='IOP (mmHg): mean (SD)';
    if b then answerlabel='Diagnosed with cataract: Yes (%)';

```

```
if c then answerlabel='Previous eye surgery: Yes (%)';
```

```
if d then answerlabel='Previous eye injury: Yes (%)';
```

```
run;
```

```
/*SMD calculation*/
```

```
data tbl2_data_;
```

```
set data.tbl2_data_;
```

```
fakewt=1;
```

```
if sisurgery_ul=9 then sisurgery_ul_n=.;
```

```
else sisurgery_ul_n=sisurgery_ul;
```

```
bevac_n=input(bevac,beva.);
```

```
becornea_ulc_n=input(becornea_ulc,becornea.);
```

```
total_lashc_n=input(total_lashc,totallash.);
```

```
run;
```

```
/*for continuous variables, check skewness to see if need rank-based mean and SD to calculate stddif*/
```

```
/*Positive Skewness: if skewness > 0, data is positively skewed, otherwise negative*/
```

```
/*if skewness < -1 or >+1, the distribution is highly skewed
```

```
if skewness is between -1 and -0.5 or between 0.5 and +1, the distribution is moderately skewed
```

```
if skewness > -0.5 and < 0.5, the distribution is approximately symmetric or normal*/
```

```
proc univariate data=tbl2_data_;
```

```
class treat;
```

```
var becornea_ul total_lash eliopmedian;
```

```
ods select moments;
```

```
run;
```

```
proc sgplot data=tbl2_data_;
```

```
histogram becornea_ul / group=treat transparency=0.5;
```

```
run;
```

```

proc sgplot data=tbl2_data_;
  histogram total_lash / group=treat transparency=0.5;
run;
proc sgplot data=tbl2_data_;
  histogram eliopmedian / group=treat transparency=0.5;
run;

```

```

%stddiff( inds = tbl2_data_,
           groupvar = treat,
           numvars = becornea_ul/r total_lash/r eliopmedian,
           charvars = sisurgery_ul_n bevac_n becornea_ulc_n total_lashc_n beepilation_ul trich_sev beentropion_ul
           beconjunct_ul TT_ll becornealscar bepapilla_ul beconj_no_surg_ul beserous bepurulent befoamy mhcataeye mhsurgeye
           mhinjeeye beconjinf,
           wtvvar = fakewt,
           stdfmt = 8.4,
           outds = stddiff_result );

```

```

data stddiff_result;
  set stddiff_result;
  tab_order=input(varname,tab_order.);
  if tab_order in (3,4) and upcase(varname) in ('BECORNEA_UL','TOTAL_LASH') then answer_order=0.5;
  else if tab_order in (3,4) then answer_order=1;
  if tab_order=13 and upcase(varname)='BESEROUS' then answer_order=2;
  else if tab_order=13 and upcase(varname)='BEPURULENT' then answer_order=3;
  else if tab_order=13 and upcase(varname)='BEFOAMY' then answer_order=4;
run;

```

```

proc sql;
    create table data.tbl2_result as
    select a.*,
           put(round(input(b.Stddiff,best.),0.01),8.2) as Stddiff
    from tbl2_result as a
    left join stddiff_result as b
    on a.tab_order=b.tab_order and (b.answer_order=. or (b.answer_order^=. and a.answer_order=b.answer_order))
    order by a.tab_order, a.answer_order;

quit;

/*generate table*/
options nodate nonumber;
ods rtf file = "&TLF_path";
ods escapechar='~';
ods rtf text="~S={just=l font_size=10pt font_weight= bold} &TLF_title";
proc report data=data.tbl2_result nowd spanrows split='|' missing style(column)={background=white fontsize=9pt}

style(header)={background=white fontsize=9pt fontweight=medium};
    columns tab_order answer_order answerlabel cohort_0 cohort_1 /*pvalue*/ Stddiff;
    define tab_order / ' ' order order=internal noprint;
    define answer_order / ' ' order order=internal noprint;
    define answerlabel / 'Baseline participant characteristics' left style(column)={cellwidth=2.3in asis=ON}
style(header)={just=l};
    define cohort_0 / "Placebo|(N=%trim(&t0_eye) study eyes)" center style(column)={cellwidth=1.9in};
    define cohort_1 / "FLuorometholone|(N=%trim(&t1_eye) study eyes)" center style(column)={cellwidth=1.9in};
    *define pvalue / 'P-value' center group style(column)={cellwidth=1.2in};
    define Stddiff / 'SMD' center group style(column)={cellwidth=1.5in};

```

run ;

ods rtf text="~S={just=l font_size=9pt} TT=trachomatous trichiasis; BLTR=bilamellar tarsal rotation; PLTR=Posterior Lamellar Tarsal Rotation; IOP=intraocular pressure; SMD=Standardized Mean Difference.";

ods rtf text="~S={just=l font_size=9pt} *TT is defined as one or more eyelashes touching the eye or evidence of epilation.";

*ods rtf text="~S={just=l} *From generalized regression models that accounted for the inter-eye correlation.";

*ods rtf text="~S={just=l} *Two-sample t-test for comparison of means, chi-squared test for comparison of proportions, wilcoxon rank sum tests for skewed data.";

ods rtf close;

libname in clear;

libname fm clear;

proc datasets library=work nolist kill;

quit;