

```
/*=====
=====*
```

```
| Covance Study Number   : 000000106343          |
|
| Program Name           : t_hpma_sex_pp.sas      |
|
| Purpose                 : Program to create table 15.2.4.3.1.1
|
| Input Data              : ADAM.ADSL, ADAM.ADBX
|                          |
| Output Data             : T_15_02_04_03_01_01    |
|
| Macros Called           :                       |
|
| Originally Performed by : Upender S             |
|
| Date                   : 18May2015
|
|                          |
```

```
|=====
=====|
```

```
| Modification History    |
|-----|
| Modified by             :                       |
| Modification Date       :                       |
|                          |
| Modification Description :                       |
```

```
+=====
=====*/
```

```
%m_printto(route=YES);
```

```
%let TFL_Part=%scan(&_SASPROGRAMFILE,-3,%str(/));
```

```
ods results on;
```

```
ods path sashelp.tmplmst (read);
```

```
data _null_;
```

```
    tmp("&TFL_Part";
```

```
        if tmp not in ("dev" "qc") then call symput("TFL_Part", "prod");
```

```
        call symput('TFLpath', compress("&_SASPROGRAMFILE", ""));
```

```
        call symput('TFLprg',reverse(scan(strip(reverse(compress("&_SASPROGRAMFILE", ""))),1,"/")));
```

```
run;
```

```
data adbx;
```

```
set adam.adbx (where=((pprot1fl = "Y" or pprot2fl = "Y" or pprot3fl = "Y" or pprot4fl = "Y") and  
anl02fl='Y' ));
```

```
run;
```

```
data adsl_sex (keep=usubjid sex);
```

```
set adam.adsl;
```

```
run;
```

```
proc sort data=adsl_sex; by usubjid ; run;
```

```
proc sort data=adbx; by usubjid ; run;
```

```
data adbx_sex;
```

```
merge adbx (in=a drop=sex) adsl_sex (in=b);
```

```
by usubjid ;
```

```
if a;
```

```
run;
```

```
data adbx1 (drop=trtpn rename=(trtpn_=trtpn));
```

```
set adbx_sex;
```

```
if trtp='THSm2.2' then trtpn_=1;
```

```
if trtp='mCC' then trtpn_=2;
```

```
if trtp='SA' then trtpn_=trtpn;
```

```
if trtpn_=1 then cat='1';
```

```
if trtpn_=2 then cat='2';
```

```
if trtpn_=3 then cat='3';
```

```
run;
```

```
proc sql exec; select count(distinct usubjid) into: N1THS_M from adam.adsl(where=(sex='M' and trt01pn = 4 and pprot1fl = "Y")); quit;
```

```
proc sql exec; select count(distinct usubjid) into: N1THS_F from adam.adsl(where=(sex='F' and trt01pn = 4 and pprot1fl = "Y")); quit;
```

```
proc sql exec; select count(distinct usubjid) into: N1MCC_M from adam.adsl(where=(sex='M' and trt01pn = 5 and pprot1fl = "Y"));quit;
```

```
proc sql exec; select count(distinct usubjid) into: N1MCC_F from adam.adsl(where=(sex='F' and trt01pn = 5 and pprot1fl = "Y"));quit;
```

```
proc sql exec; select count(distinct usubjid) into: N1SAA_M from adam.adsl(where=(sex='M' and trt01pn = 3 and pprot1fl = "Y"));quit;
```

```
proc sql exec; select count(distinct usubjid) into: N1SAA_F from adam.adsl(where=(sex='F' and trt01pn = 3 and pprot1fl = "Y"));quit;
```

```
proc sql exec; select count(distinct usubjid) into: N2THS_M from adam.adsl(where=(sex='M' and trt01pn = 4 and pprot2fl = "Y"));quit;
```

```
proc sql exec; select count(distinct usubjid) into: N2THS_F from adam.adsl(where=(sex='F' and trt01pn = 4 and pprot2fl = "Y"));quit;
```

```
proc sql exec; select count(distinct usubjid) into: N2MCC_M from adam.adsl(where=(sex='M' and trt01pn = 5 and pprot2fl = "Y"));quit;
```

```
proc sql exec; select count(distinct usubjid) into: N2MCC_F from adam.adsl(where=(sex='F' and trt01pn = 5 and pprot2fl = "Y"));quit;
```

```
proc sql exec; select count(distinct usubjid) into: N2SAA_M from adam.adsl(where=(sex='M' and trt01pn = 3 and pprot2fl = "Y"));quit;
```

```
proc sql exec; select count(distinct usubjid) into: N2SAA_F from adam.adsl(where=(sex='F' and trt01pn = 3 and pprot2fl = "Y"));quit;
```

```
proc sql exec; select count(distinct usubjid) into: N3THS_M from adam.adsl(where=(sex='M' and trt01pn = 4 and pprot3fl = "Y"));quit;
```

```
proc sql exec; select count(distinct usubjid) into: N3THS_F from adam.adsl(where=(sex='F' and trt01pn = 4 and pprot3fl = "Y"));quit;
```

```
proc sql exec; select count(distinct usubjid) into: N3MCC_M from adam.adsl(where=(sex='M' and trt01pn = 5 and pprot3fl = "Y"));quit;
```

```
proc sql exec; select count(distinct usubjid) into: N3MCC_F from adam.adsl(where=(sex='F' and trt01pn = 5 and pprot3fl = "Y"));quit;
```

```
proc sql exec; select count(distinct usubjid) into: N3SAA_M from adam.adsl(where=(sex='M' and trt01pn = 3 and pprot3fl = "Y"));quit;
```

```
proc sql exec; select count(distinct usubjid) into: N3SAA_F from adam.adsl(where=(sex='F' and trt01pn = 3 and pprot3fl = "Y"));quit;
```

```
proc sql exec; select count(distinct usubjid) into: N4THS_M from adam.adsl(where=(sex='M' and trt01pn = 4 and pprot4fl = "Y"));quit;
```

```
proc sql exec; select count(distinct usubjid) into: N4THS_F from adam.adsl(where=(sex='F' and trt01pn = 4 and pprot4fl = "Y"));quit;
```

```
proc sql exec; select count(distinct usubjid) into: N4MCC_M from adam.adsl(where=(sex='M' and trt01pn = 5 and pprot4fl = "Y"));quit;
```

```
proc sql exec; select count(distinct usubjid) into: N4MCC_F from adam.adsl(where=(sex='F' and trt01pn = 5 and pprot4fl = "Y"));quit;
```

```
proc sql exec; select count(distinct usubjid) into: N4SAA_M from adam.adsl(where=(sex='M' and trt01pn = 3 and pprot4fl = "Y"));quit;
```

```
proc sql exec; select count(distinct usubjid) into: N4SAA_F from adam.adsl(where=(sex='F' and trt01pn = 3 and pprot4fl = "Y"));quit;
```

```
%put ths1m=&N1THS_M. ths1f=&N1THS_F. ;
```

```
%macro param(paramcd=, x=);
```

```
data &paramcd._orig;
```

```
set adbx1;
```

```
where paramcd = "&paramcd.";
```

```
run;
```

```
%macro stats(colvar=);
```

```
data co_1;
```

```
set &paramcd._orig;;
```

```
where (pprot1fl = "Y" and 101<=avisitn <= 105) or (pprot2fl = "Y" and avisitn = 130) or (pprot3fl = "Y"  
and avisitn = 160) or (pprot4fl = "Y" and avisitn = 190);
```

```
where also paramcd = "&paramcd." and avalc ne "" ;
```

```
if avisit in ('DAY -1' 'DAY 0') then delete;
```

```
if not missing(&colvar.) and &colvar. > 0 then ageo=log(&colvar.);
```

```
if not missing(&colvar.) then dataflg=1;
```

```
keep usbjid paramn sex cat avisitn avisit &colvar. aqlfl ageo dataflg apuper apuperc;
```

```
run;
```

```
data baseline ;
```

```
set &paramcd._orig;;
```

```
where paramcd = "&paramcd." ;
```

```
if &colvar. ^=. and &colvar. > 0 then ageo=log(&colvar.);
```

```
if not missing(&colvar.) then dataflg=1;
```

```
    if ablfl='Y' and pprot1fl = "Y" then do; avisit='Baseline'; avisitn=10; apuper = 1; apuperc = "Period 1";  
output; end;
```

```
    if ablfl='Y' and pprot2fl = "Y" then do; avisit='Baseline'; avisitn=10; apuper = 2; apuperc = "Period  
2";output; end;
```

```
    if ablfl='Y' and pprot3fl = "Y" then do; avisit='Baseline'; avisitn=10; apuper = 3; apuperc = "Period 3";  
output; end;
```

```
    if ablfl='Y' and pprot4fl = "Y" then do; avisit='Baseline'; avisitn=10; apuper = 4; apuperc = "Period  
4";output; end;
```

```
    keep usubjid paramn sex cat avisitn avisit &colvar. aqlfl ageo apuper apuperc;
```

```
run;
```

```
proc sort data=baseline NODUPKEY;
```

```
by apuper apuperc usubjid cat sex avisit avisitn &colvar.;
```

```
run;
```

```
data co_1b;
```

```
set co_1 baseline;
```

```
run;
```

```
proc sort data=co_1b; by apuper apuperc avisitn avisit cat sex; run;
```

```
** BLQ Counts **;
```

```
proc sort data=co_1b out=co_1bq nodupkey dupout=blqdups; by usubjid paramn cat sex avisitn ; run;
```

```
proc sql;
```

```
create table co_2t as select apuper, apuperc, cat, sex, count(distinct usubjid) as tot from co_1bq group
by apuper, apuperc, cat, sex order by apuper, apuperc,cat, sex;
```

```
create table co_2c as select apuper, apuperc, cat, sex, avisitn, avisit, 'BLQ' as _stat_ length=8,
sum(AQLFL='Y') as count from co_1bq
```

```
group by apuper, apuperc,cat, sex,
avisitn, avisit order by apuper, apuperc, cat, sex, avisitn;
```

```
create table co_2s as select apuper, apuperc,cat, sex, avisit, avisitn,count(distinct usubjid) as stot from
co_1bq where dataflg=1
```

```
group by apuper, apuperc, cat, sex, avisitn,
avisit order by apuper, apuperc, cat, sex, avisitn;
```

```
quit;
```

```
data co_2bX; /* 1) JH 23OCT2014 */
```

```
merge co_2c(in=a) co_2t /*co_2s*/; /* 1) JH 23OCT2014 */
```

```
by apuper apuperc cat sex;
```

```
if a;
```

```
run;
```

```
/* 1) JH 23OCT2014 - START */
```

```
DATA CO_2B;
```

```
MERGE CO_2BX(IN=A) CO_2S;
```

```
BY apuper apuperc CAT sex AVISITN AVISIT;
```

```
IF A;
```

```
RUN;
```

```
/* 1) JH 23OCT2014 - END */
```

```
proc sort data=co_1b ;
```



```
by apuper apuperc avisitn avisit cat sex &colvar.;
```

```
run;
```

```
** Normal Stats **;
```

```
proc means data=co_1b noprint;
```

```
var &colvar.;
```

```
by apuper apuperc avisitn avisit cat sex;
```

```
output out=co_2s(drop=_freq_ _type_) n=n mean=mean std=std median=med min=min max=max  
p25=q25 p75=q75 lclm =cl95 uclm=cu95 ;
```

```
run;
```

```
****combining BLQ stats with rest of the stats ****;
```

```
proc sort data=CO_2B ; by apuper apuperc avisitn avisit cat sex; run;
```

```
data co_2s_blq;
```

```
merge co_2s (in=a) CO_2B (in=b drop=_stat_ tot stot rename=(count=blq));
```

```
by apuper apuperc avisitn avisit cat sex;
```

```
run;
```

```
data co_2s_1;
```

```
set co_2s_blq;
```

```
if apuper = 1 then do;
```

```
period = "Period 1";
```

```
if cat= '1' and sex='M' then BigN= &N1THS_M;
```

```
if cat= '1' and sex='F' then BigN= &N1THS_F;

if cat= '2' and sex='M' then BigN = &N1MCC_M;

if cat= '2' and sex='F' then BigN = &N1MCC_F;

if cat= '3' and sex='M' then BigN = &N1SAA_M;

if cat= '3' and sex='F' then BigN = &N1SAA_F;

end;

else if apuper = 2 then do;

period = "Period 2";

if cat= '1' and sex='M' then BigN= &N2THS_M;

if cat= '1' and sex='F' then BigN= &N2THS_F;

if cat= '2' and sex='M' then BigN = &N2MCC_M;

if cat= '2' and sex='F' then BigN = &N2MCC_F;

if cat= '3' and sex='M' then BigN = &N2SAA_M;

if cat= '3' and sex='F' then BigN = &N2SAA_F;

end;

else if apuper = 3 then do;

period = "Period 3";

if cat= '1' and sex='M' then BigN= &N3THS_M;

if cat= '1' and sex='F' then BigN= &N3THS_F;

if cat= '2' and sex='M' then BigN = &N3MCC_M;

if cat= '2' and sex='F' then BigN = &N3MCC_F;

if cat= '3' and sex='M' then BigN = &N3SAA_M;

if cat= '3' and sex='F' then BigN = &N3SAA_F;

end;

else if apuper = 4 then do;
```

```

period = "Period 4";

if cat= '1' and sex='M' then BigN= &N4THS_M;

if cat= '1' and sex='F' then BigN= &N4THS_F;

if cat= '2' and sex='M' then BigN = &N4MCC_M;

if cat= '2' and sex='F' then BigN = &N4MCC_F;

if cat= '3' and sex='M' then BigN = &N4SAA_M;

if cat= '3' and sex='F' then BigN = &N4SAA_F;

end;

```

```

msng=BigN-n;

if .<msng^=0 then msng_prcnt=(msng/BigN)*100;

if .<blq^=0 then bloq_prcnt=(blq/N)*100;

run;

```

```

data co_2s_c;

length N mean_sd min_max median q25_q75 cl95_cu95 msg_pct blq_pct $50.;

set co_2s_1(rename=(n=n_orig));

```

```

if cl95 ne . then cl95 = 0.01*floor(100*cl95);

if cu95 ne . then cu95 = 0.01*ceil(100*cu95);

```

```

if n_orig ^=. then N = compress(put(n_orig,best.));

if .<msng^=0 then msg_pct=compress(put(msng, best.))||'('||compress(put(msng_prcnt, 5.1))||')';

if .<blq^=0 then blq_pct=compress(put(blq, best.))||'('||compress(put(bloq_prcnt, 5.1))||')';

```

```

if mean ^=. and std ^=. then mean_sd =strip(put(mean,12.2))||" ("||strip(put(std,12.3))||")";
if min ^=. and max ^=. then min_max = strip(put(min,12.1))||", "||strip(put(max,12.1));
if med ^=. then median = strip(put(med,12.2));
if q25 ^=. and Q75 ^=. then q25_q75= strip(put(q25,12.2))||", "||strip(put(q75,12.2));
if cl95 ^=. and cu95 ^=. then cl95_cu95= strip(put(cl95,12.2))||", "||strip(put(cu95,12.2));

run;

```

```

proc transpose data=co_2s_c out=co_2s_ct (rename=(_name_=_stat_ col1=&colvar.));
by apuper apuperc avisitn avisit cat sex;

var N msg_pct blq_pct mean_sd median min_max q25_q75 cl95_cu95;

run;

```

```

data co_2s_ct (rename=(stat=_stat_));

length stat $10.;

set co_2s_ct;

stat=_stat_;

drop _stat_;

run;

```

```

** Geometric Stas **;

proc means data=co_1b noprint mean std lclm uclm;

where &colvar ne .;

var ageo;

```

```

by apuper apuperc avisitn avisit cat sex;

output out=co_2gs mean=gmean std=gstd lclm=glclm uclm=guclm;

run;

data co_2gs_x (drop=gmean glclm guclm rename=(gmean_x=gmean glclm_x=glclm guclm_x=guclm ));
set co_2gs;

if gmean ne . then gmean_x=exp(gmean);

if glclm ne . then glclm_x=exp(glclm);

if guclm ne . then guclm_x=exp(guclm);

run;

data co_2gs_c;
set co_2gs_x;

if glclm ne . then glclm = 0.01*floor(100*glclm);

if guclm ne . then guclm = 0.01*ceil(100*guclm);

if gstd ^=. then CV=sqrt(exp(gstd*gstd)-1)*100;

if gmean ^=. and CV ^=. then gmean_cv =strip(put(gmean,12.2))||" ("||strip(put(cv,12.3))||")";

if glclm^=. and guclm^=. then glcm_guclm= strip(put(glclm,12.2))||", "||strip(put(guclm,12.2));

if glclm= . and guclm= . then glcm_guclm= 'NA' ||", "||'NA';

run;

```

```
proc transpose data=co_2gs_c out=co_2gs_ct( rename=(_name=_stat_col1=&colvar.));  
by apuper apuperc avisitn avisit cat sex;  
var gmean_cv glcm_guclm;  
run;
```

```
data co_3;  
set co_2s_ct co_2gs_ct;  
run;
```

```
proc sort data=co_3 out=co_4; by apuper apuperc avisitn avisit _stat_; run;
```

```
proc transpose data=co_4 out=transpose_&colvar. prefix=&colvar.;  
by apuper apuperc avisitn avisit _stat_;  
id cat sex;  
var &colvar.;  
run;
```

```
%mend stats;
```

```
%stats(colvar=aval);
```

```
%stats(colvar=pchg);
```

```
data taval;  
set transpose_aval;
```

rename

aval1F = trt\_4\_F

aval1M = trt\_4\_M

aval2F = trt\_5\_F

aval2M = trt\_5\_M

aval3F = trt\_3\_F

aval3M = trt\_3\_M

;

utxt='aval';

uord=1;

run;

data tpchg;

set transpose\_pchg;

rename

pchg1F = trt\_4\_F

pchg1M = trt\_4\_M

pchg2F = trt\_5\_F

pchg2M = trt\_5\_M

pchg3F = trt\_3\_F

pchg3M = trt\_3\_M

;

utxt='pchg';

uord=2;

run;

```
data &paramcd;  
  
set taval (in=a drop=_name_)  
  
        tpchg(in=b drop=_name_);  
  
run;
```

```
data &paramcd._final;  
  
length label $100.;  
  
set &paramcd.;  
  
if upcase(_stat_) = "N" then do; order = 1; label="n";end;  
  
if upcase(_stat_)='MSG_PCT' then do; order=1.5; label='Missing, n (%)'; end;  
  
if upcase(_stat_)='BLQ_PCT' then do; order=1.75; label='BLOQ, n (%)'; end;  
  
  
if upcase(_stat_) = "GMEAN_CV" then do; order = 2; label="Geometric Mean (CV%)";end;  
  
if upcase(_stat_) = "GLCM_GUCLM" then do; order = 3; label="95% CI of Geometric Mean";end;  
  
if upcase(_stat_) = "MEDIAN" then do; order = 4; label="Median";end;  
  
if upcase(_stat_) = "Q25_Q75" then do; order = 5; label="Q25, Q75";end;  
  
if upcase(_stat_) = "MIN_MAX" then do; order = 6; label="Min, Max";end;  
  
if upcase(_stat_) = "MEAN_SD" then do; order = 7; label="Mean (SD)";end;  
  
if upcase(_stat_) = "CL95_CU95" then do; order = 8; label="95% CI of Mean";end;  
  
  
run;  
  
  
proc sort data=&paramcd._final;
```



```
by apuper apuperc avisitn avisit uord order;
```

```
run;
```

```
%mend param;
```

```
%param(paramcd=U3HPMCRE);
```

```
proc sort data = adbx out=param (keep=paramcd param paramn avalu) nodupkey;
```

```
by paramcd;
```

```
run;
```

```
data final;
```

```
length paramcd $8.;
```

```
set U3HPMCRE_final;
```

```
paramcd = "U3HPMCRE";
```

```
run;
```

```
proc sort data=final;
```

```
by paramcd apuper apuperc avisitn avisit uord order;
```

```
run;
```

```
data final1;
```

```
merge final(in=a) param(in=b);
```

```
by paramcd;
```

```
if a;
```

```
run;
```

```
****set pchg to missing for paramcd = 46;
```

```
data final2;
```

```
set final1;
```

```
if apuper in (2 3) then delete;
```

```
if upcase(avisit) = "BASELINE" and utxt='pchg' then delete ;
```

```
if utxt='pchg' and order in (2 3) then delete;
```

```
run;
```

```
data final3;
```

```
set final2;
```

```
rename label = txt
```

```
order = txtn;
```

```
run;
```

```
proc sort data= final3;
```

```
by paramn param apuper apuperc avisitn avisit uord txtn;
```

```
run;
```

```
data final3a;
```

```
set final3;
```

```
if upcase(_stat_)= 'MSG_PCT' and cmiss(trt_3_M, trt_3_F, trt_4_M, trt_4_F, trt_5_F, trt_5_M)=6 then  
delete;
```

```
if upcase(_stat_) = 'BLQ_PCT' and cmiss(trt_3_M, trt_3_F, trt_4_M, trt_4_F, trt_5_F, trt_5_M)=6 then  
delete;
```

```
if upcase(_stat_) = 'BLQ_PCT' and uord=2 then delete;
```

```
if uord=2 then do;
```

```
avisit='%Change from baseline to ' || strip(avisit);
```

```
end;
```

```
if upcase(_stat_) = 'BLQ_PCT' then do;
```

```
array ms {6} trt_3_M trt_3_F trt_4_M trt_4_F trt_5_F trt_5_M;
```

```
do i = 1 to 6;
```

```
if ms{i} = "" then ms{i} = '0';
```

```
end;
```

```
end;
```

```
if upcase(_stat_) = 'MSG_PCT' then do;
```

```
array mb {6} trt_3_M trt_3_F trt_4_M trt_4_F trt_5_F trt_5_M;
```

```
do i = 1 to 6;
```

```
if mb{i} = "" then mb{i} = '0';
```

```
end;
```

```
end;
```

```
run;
```

```
data tflds.t_15_02_04_03_01_01;
```

```
set final3a (drop=paramcd _stat_);
```

```
run;
```

```
proc sort data=final3a; by paramn param apuper apuperc avisitn uord txtn ;
```

```
data final_dp;
```

```
length period $200.;
```

```
set final3a;
```

```
by paramn param apuper apuperc avisitn uord txtn ;
```

```
if apuper = 1 then do;
```

```
period = "Period 1";
```

```
THS_M = &N1THS_M;
```

```
THS_F = &N1THS_F;
```

```
mcc_M = &N1MCC_M;
```

```
mcc_F = &N1MCC_F;
```

```
sa_M = &N1SAA_M;
```

```
sa_F = &N1SAA_F;
```

```
end;
```

```
else if apuper = 2 then do;
```

```
period = "Period 2";
```

```
THS_M = &N2THS_M;  
THS_F = &N2THS_F;  
mcc_M = &N2MCC_M;  
mcc_F = &N2MCC_F;  
sa_M = &N2SAA_M;  
sa_F = &N2SAA_F;  
end;  
  
else if apuper = 3 then do;  
period = "Period 3";  
THS_M = &N3THS_M;  
THS_F = &N3THS_F;  
mcc_M = &N3MCC_M;  
mcc_F = &N3MCC_F;  
sa_M = &N3SAA_M;  
sa_F = &N3SAA_F;  
end;  
  
else if apuper = 4 then do;  
period = "Period 4";  
THS_M = &N4THS_M;  
THS_F = &N4THS_F;  
mcc_M = &N4MCC_M;  
mcc_F = &N4MCC_F;  
sa_M = &N4SAA_M;  
sa_F = &N4SAA_F;  
end;
```

```
if uord=2 then do;
```

```
/*avisit='%Change from Baseline to '||strip(avisit);*/
```

```
avisitn=avisitn+0.5;
```

```
end;
```

```
run;
```

```
proc sort data=final_dp; by paramn param apuper apuperc avisitn uord txtn ;
```

```
proc sql;
```

```
create table page as
```

```
select distinct apuper, apuperc, avisitn
```

```
from final_dp
```

```
order by apuper, avisitn;
```

```
quit;
```

```
data page1;
```

```
set page;
```

```
by apuper avisitn;
```

```
if _n_ = 0 then page = 0;
```

```
page+ 1;
```

```
run;
```

```
proc sql;
```

```

create table final_page as
select distinct a.*, b.page
from final_dp as a
left join page1 as b
on a.avisitn = b.avisitn and a.apuper = b.apuper
order by apuper,avisitn, uord, txtn;
quit;

```

```

data final_page;
set final_page end=last;
by apuper avisitn uord txtn;
if last then call symputx("page", page);
run;

```

```
%let tfl = %str(T_15_02_04_03_01_01);
```

```
%let title1 = %str(Table 15.2.4.3.1.1 Descriptive Statistics of 3-HPMA Urinary Concentration Adjusted for Creatinine (pg/mg creat) in 24-hour Urine Collection by Sex - PP Set);
```

```
%let tflno=&tfl.;
```

```
/* Standard - leave this */
```

```
options number nodate orientation=landscape missing=' ';
```

```
ods escapechar='$';
```

```
%let linetop = \brdrt\brdrs\brdrw30; * needs to be 1.5pt so calculated in twips (1/20 pt) ;
```

```
%let linebot = \brdrb\brdrs\brdrw30;
```

```
/* Standard - macro for paging */
```

```
%macro outrtf(blankn=130, halfblk=N);
```

```
%if &halfblk=N %then %let halfblk=;
```

```
%else %if &halfblk=Y %then %let halfblk=\~;
```

```
ods path stdlib.t106343 (read) ;
```

```
ods rtf toc_data file="/cvn/projects/prj/data/000000106343/TFL/&TFL_Part./Tables/&tflno..rtf"  
style=t106343 startpage=yes headery=1440 footery=1440 ;
```

```
ods noproctitle;
```

```
%do i=1 %to &page;
```

```
title ;
```

```
footnote;
```

```
%let wd=0;
```

```
ods proclabel = ' ';
```

```
data comp;
```

```
set final_page end=eof;
```

```
where page=&i;
```

```
/* Amend title as needed */
```

```
_firtitl="&title1.";
```



```
_upcas=(length("Path: &TFLpath.")-  
length(compress("Path:&TFLpath.",'ABCDEFGHIJKLMNOPQRSTUVWXYZ')))/2;
```

```
len=&blankn.-length("(page &i of &page)");
```

```
if eof then do;
```

```
call symput('_FSRTITL', trim(left(_firtitl)));
```

```
call symput('_blankn', compress(put(len,best.)));
```

```
call symput('period', strip(apuperc));
```

```
call symput('param', strip(param));
```

```
call symput('N3M', strip(put(sa_M, best.)));
```

```
call symput('N3F', strip(put(sa_F, best.)));
```

```
call symput('N4M', strip(put(ths_M, best.)));
```

```
call symput('N4F', strip(put(ths_F, best.)));
```

```
call symput('N5M', strip(put(mcc_M, best.)));
```

```
call symput('N5F', strip(put(mcc_F, best.)));
```

```
end;
```

```
drop _firtitl _upcas len;
```

```
run;
```

```
* most set up in template others below;
```

```
* title arial 12pt bold with 12pt paragraph space below;
```

```
* all headers to be arial 11pt bold;
```

```
* data arial 10pt;
```

```
* headers to be central, text values left aligned and numeric centered around decimal point;
```

```
/* Update with your variables as needed */
```

```
proc report data = comp headline headskip nowd spacing=1 split = '$' %if &i=1 %then %do; contents=' '  
%end; %else %do; contents="" %end;;;
```

```

column page apuper avisitn avisit uord txtn txt ("THSm2.2&linebot" trt_4_M trt_4_F )
("mCC&linebot" trt_5_M trt_5_F)

("SA&linebot" trt_3_M trt_3_F);

define page / order order = internal noprint;

define avisitn / order order = internal noprint;

define apuper / order order = internal noprint;

define uord / order order = internal noprint;

define txtn / order order = internal noprint;

define avisit /"Timepoint" order order=internal style={just=left cellwidth=1.4cm}
style(header)={just=left} ;

define txt /"Statistic" display style={just=left cellwidth=1.9cm}
style(header)={just=left} ;

define trt_3_M /"Males$(N=&N3M)" display style={JUST=c cellwidth=1.3cm}
style(header)={just=center} ;

define trt_4_M /"Males$(N=&N4M)" display style={just=c cellwidth=1.3cm}
style(header)={just=center} ;

define trt_5_M /"Males$(N=&N5M)" display style={just=c cellwidth=1.3cm}
style(header)={just=center};

define trt_3_F /"Females$(N=&N3F)" display style={JUST=c cellwidth=1.3cm}
style(header)={just=center} ;

define trt_4_F /"Females$(N=&N4F)" display style={just=c cellwidth=1.3cm}
style(header)={just=center} ;

define trt_5_F /"Females$(N=&N5F)" display style={just=c cellwidth=1.3cm}
style(header)={just=center};

compute after avisitn;

line " ";

endcomp;

```

```

compute before _page_ / style={just=left protectspecialchars=off};

line "\b\fs24\sa24&_FSRTITL." ; * \b = bold, \fs24 is font size 12pt, \sa24 is space after 12pt;

line "&linebot";

endcomp;


compute after _page_ / style={just=left protectspecialchars=off pretext="&linetop."};

line 'Note: mCC = Menthol Conventional cigarettes; SA = Smoking abstinence; THSm2.2
= Tobacco Heating System 2.2 Menthol.';

LINE 'Note: * % Change from baseline, where baseline is defined as the last assessment
prior to first randomized product use in mCC / THS 2.2 Menthol arms or the last assessment prior to
10AM on Day 1 in the SA arm.';

line "Note: 'Missing' percentages are based on the number of subjects indicated in the
column header (N), while 'BLOQ' percentages are based on the number of subjects being summarized
(n).";

line ";

line 'Appendix 15.3.3.1';

line "Study ID:ZRHM-REXA-08-US    Program: &TFLprg    Status: &status"
&_blankn.*"\~\~" "&sysdate" &_blankn.*"\~\~" "(Page &i of &page)";


endcomp;

run;

%end;

ods rtf close;

ods results on;

ods path sashelp.tmplmst (read);

%mend ;

```

```
%outrtf(blankn=30, halfblnk=N);
```

```
ods listing;
```

```
%m_logchk;
```