

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

```
| Covance Study Number   : 000000106343      |
| Program Name           : t_hpma_cc_pp.sas   |
| Purpose                : Program to create table 15.2.4.3.1.2      |
| Input Data             : ADAM.ADSL, ADAM.ADBX      |
|                         |                      |
| Output Data            : T_15_02_04_03_01_02      |
| Macros Called          : %m_printto, %param, %stats, %outrtf, %m_logchk      |
| Originally Performed by : Upender S          |
| Date                   : 18May2015            |
```

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

```
| Modification History      |
|-----|
```

```
| Modified by      :      |
```

```
| Modification Date :      |
```

```
| Modification Description :      |
```

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

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

```
%let TFL_Part=%scan(&_amp;_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 adbx1 (drop=trtpn rename=(trtpn_=trtpn));
```

```
set adbx;
```

```
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(when=(UCPDGR1N=2 and  
trt01pn = 4 and pprot1fl = "Y")); quit;
```

```
proc sql exec; select count(distinct usubjid) into: N1THS_F from adam.adsl(when=(UCPDGR1N=3 and  
trt01pn = 4 and pprot1fl = "Y")); quit;
```

```
proc sql exec; select count(distinct usubjid) into: N1MCC_M from adam.adsl(when=(UCPDGR1N=2 and  
trt01pn = 5 and pprot1fl = "Y")); quit;
```

```
proc sql exec; select count(distinct usubjid) into: N1MCC_F from adam.adsl(when=(UCPDGR1N=3 and  
trt01pn = 5 and pprot1fl = "Y")); quit;
```

```
proc sql exec; select count(distinct usubjid) into: N1SAA_M from adam.adsl(when=(UCPDGR1N=2 and  
trt01pn = 3 and pprot1fl = "Y")); quit;
```

```
proc sql exec; select count(distinct usubjid) into: N1SAA_F from adam.adsl(when=(UCPDGR1N=3 and  
trt01pn = 3 and pprot1fl = "Y")); quit;
```

```
proc sql exec; select count(distinct usubjid) into: N2THS_M from adam.adsl(when=(UCPDGR1N=2 and  
trt01pn = 4 and pprot2fl = "Y")); quit;
```

```
proc sql exec; select count(distinct usubjid) into: N2THS_F from adam.adsl(when=(UCPDGR1N=3 and  
trt01pn = 4 and pprot2fl = "Y")); quit;
```

```
proc sql exec; select count(distinct usubjid) into: N2MCC_M from adam.adsl(when=(UCPDGR1N=2 and  
trt01pn = 5 and pprot2fl = "Y")); quit;
```

```
proc sql exec; select count(distinct usubjid) into: N2MCC_F from adam.adsl(when=(UCPDGR1N=3 and  
trt01pn = 5 and pprot2fl = "Y")); quit;
```

```
proc sql exec; select count(distinct usubjid) into: N2SAA_M from adam.adsl(when=(UCPDGR1N=2 and  
trt01pn = 3 and pprot2fl = "Y")); quit;
```

```
proc sql exec; select count(distinct usubjid) into: N2SAA_F from adam.adsl(where=(UCPDGR1N=3 and trt01pn = 3 and pprot2fl = "Y"));quit;
```

```
proc sql exec; select count(distinct usubjid) into: N3THS_M from adam.adsl(where=(UCPDGR1N=2 and trt01pn = 4 and pprot3fl = "Y"));quit;
```

```
proc sql exec; select count(distinct usubjid) into: N3THS_F from adam.adsl(where=(UCPDGR1N=3 and trt01pn = 4 and pprot3fl = "Y"));quit;
```

```
proc sql exec; select count(distinct usubjid) into: N3MCC_M from adam.adsl(where=(UCPDGR1N=2 and trt01pn = 5 and pprot3fl = "Y"));quit;
```

```
proc sql exec; select count(distinct usubjid) into: N3MCC_F from adam.adsl(where=(UCPDGR1N=3 and trt01pn = 5 and pprot3fl = "Y"));quit;
```

```
proc sql exec; select count(distinct usubjid) into: N3SAA_M from adam.adsl(where=(UCPDGR1N=2 and trt01pn = 3 and pprot3fl = "Y"));quit;
```

```
proc sql exec; select count(distinct usubjid) into: N3SAA_F from adam.adsl(where=(UCPDGR1N=3 and trt01pn = 3 and pprot3fl = "Y"));quit;
```

```
proc sql exec; select count(distinct usubjid) into: N4THS_M from adam.adsl(where=(UCPDGR1N=2 and trt01pn = 4 and pprot4fl = "Y"));quit;
```

```
proc sql exec; select count(distinct usubjid) into: N4THS_F from adam.adsl(where=(UCPDGR1N=3 and trt01pn = 4 and pprot4fl = "Y"));quit;
```

```
proc sql exec; select count(distinct usubjid) into: N4MCC_M from adam.adsl(where=(UCPDGR1N=2 and trt01pn = 5 and pprot4fl = "Y"));quit;
```

```
proc sql exec; select count(distinct usubjid) into: N4MCC_F from adam.adsl(where=(UCPDGR1N=3 and trt01pn = 5 and pprot4fl = "Y"));quit;
```

```
proc sql exec; select count(distinct usubjid) into: N4SAA_M from adam.adsl(where=(UCPDGR1N=2 and trt01pn = 3 and pprot4fl = "Y"));quit;
```

```
proc sql exec; select count(distinct usubjid) into: N4SAA_F from adam.adsl(where=(UCPDGR1N=3 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 usubjid paramn UCPDGR1N 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 UCPDGR1N cat avisitn avisit &colvar. AQLFL ageo apuper apuperc;
```

```
run;
```

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

```
by apuper apuperc usubjid cat UCPDGR1N avisit avisitn &colvar.;
```

```
run;
```

```
data co_1b;
```

```
set co_1 baseline;
```

```
run;
```

```
proc sort data=co_1b; by apuper apuperc avisitn avisit cat UCPDGR1N; run;
```

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

```
proc sort data=co_1b out=co_1bq nodupkey dupout=blqdups; by usubjid paramn cat UCPDGR1N avisitn  
; run;
```

```
proc sql;
```

```
create table co_2t as select apuper, apuperc, cat, UCPDGR1N, count(distinct usubjid) as tot from  
co_1bq group by apuper, apuperc, cat, UCPDGR1N order by apuper, apuperc, cat, UCPDGR1N;
```

```
create table co_2c as select apuper, apuperc, cat, UCPDGR1N, avisitn, avisit, 'BLQ' as _stat_ length=8,  
sum(AQLFL='Y') as count from co_1bq
```

```
group by apuper, apuperc, cat,  
UCPDGR1N, avisitn, avisit order by apuper, apuperc, cat, UCPDGR1N, avisitn;
```

```
create table co_2s as select apuper, apuperc, cat, UCPDGR1N, avisit, avisitn, count(distinct usubjid) as  
stot from co_1bq where dataflg=1
```

```
group by apuper, apuperc, cat, UCPDGR1N,  
avisitn, avisit order by apuper, apuperc, cat, UCPDGR1N, avisitn;
```

```
quit;
```

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

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

```
by apuper apuperc cat UCPDGR1N ;
```

```
if a;
```

```
run;
```

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

```
DATA CO_2B;
```

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

```
BY apuper apuperc CAT UCPDGR1N AVISITN AVISIT;
```

```
IF A;
```

```
RUN;
```

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

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

```
by apuper apuperc avisitn avisit cat UCPDGR1N &colvar.;
```

```
run;
```

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

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

```
var &colvar.;
```

```
by apuper apuperc avisitn avisit cat UCPDGR1N;
```

```
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 UCPDGR1N; 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 UCPDGR1N;  
  
run;
```

```
data co_2s_1;  
  
set co_2s_blq;  
  
if apuper = 1 then do;  
    period = "Period 1";  
  
    if cat= '1' and UCPDGR1N=2 then BigN= &N1THS_M;  
    if cat= '1' and UCPDGR1N=3 then BigN= &N1THS_F;  
    if cat= '2' and UCPDGR1N=2 then BigN = &N1MCC_M;  
    if cat= '2' and UCPDGR1N=3 then BigN = &N1MCC_F;  
    if cat= '3' and UCPDGR1N=2 then BigN = &N1SAA_M;  
    if cat= '3' and UCPDGR1N=3 then BigN = &N1SAA_F;  
end;  
  
else if apuper = 2 then do;  
    period = "Period 2";  
  
    if cat= '1' and UCPDGR1N=2 then BigN= &N2THS_M;  
    if cat= '1' and UCPDGR1N=3 then BigN= &N2THS_F;  
    if cat= '2' and UCPDGR1N=2 then BigN = &N2MCC_M;  
    if cat= '2' and UCPDGR1N=3 then BigN = &N2MCC_F;  
    if cat= '3' and UCPDGR1N=2 then BigN = &N2SAA_M;
```

```

if cat= '3' and UCPDGR1N=3 then BigN = &N2SAA_F;

end;

else if apuper = 3 then do;

period = "Period 3";

if cat= '1' and UCPDGR1N=2 then BigN= &N3THS_M;

if cat= '1' and UCPDGR1N=3 then BigN= &N3THS_F;

if cat= '2' and UCPDGR1N=2 then BigN = &N3MCC_M;

if cat= '2' and UCPDGR1N=3 then BigN = &N3MCC_F;

if cat= '3' and UCPDGR1N=2 then BigN = &N3SAA_M;

if cat= '3' and UCPDGR1N=3 then BigN = &N3SAA_F;

end;

else if apuper = 4 then do;

period = "Period 4";

if cat= '1' and UCPDGR1N=2 then BigN= &N4THS_M;

if cat= '1' and UCPDGR1N=3 then BigN= &N4THS_F;

if cat= '2' and UCPDGR1N=2 then BigN = &N4MCC_M;

if cat= '2' and UCPDGR1N=3 then BigN = &N4MCC_F;

if cat= '3' and UCPDGR1N=2 then BigN = &N4SAA_M;

if cat= '3' and UCPDGR1N=3 then BigN = &N4SAA_F;

end;

msng=BigN-n;

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

if .<blq^=0 then bloq_prct=(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 .<msg^=0 then msg_pct=compress(put(msgng, best.))||'('||compress(put(msgng_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 UCPDGR1N;

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 UCPDGR1N;
```

```
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 UCPDGR1N;
```

```
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 UCPDGR1N;
```

```
var &colvar.;
```

```
run;
```

```
%mend stats;
```

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

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

```
data taval;
```

```
    set transpose_aval;
```

```
    rename
```

```
        aval12 = trt_4_F
```

```
        aval13 = trt_4_M
```

```
        aval22 = trt_5_F
```

```
        aval23 = trt_5_M
```

```
        aval32 = trt_3_F
```

```
        aval33 = trt_3_M
```

```
    ;
```

```
    utxt='aval';
```

```
    uord=1;
```

```
run;
```

```
data tpchg;
```

```
    set transpose_pchg;
```

rename

pchg12 = trt_4_F

pchg13 = trt_4_M

pchg22 = trt_5_F

pchg23 = trt_5_M

pchg32 = trt_3_F

pchg33 = trt_3_M

;

utxt='pchg';

uord=2;

run;

data ¶mcd;

set taval (in=a drop=_name_)

tpchg(in=b drop=_name_);

run;

data ¶mcd._final;

length label \$100.;

set ¶mcd.;

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 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_02;
```

```
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;

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_02);
```

```
%let title1 = %str(Table 15.2.4.3.1.2 Descriptive Statistics of 3-HPMA Urinary Concentration Adjusted for Creatinine (pg/mg creat) in 24-hour Urine Collection by Cigarette Consumption - 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, halfblnk=N);

%if &halfblnk=N %then %let halfblnk=;

%else %if &halfblnk=Y %then %let halfblnk=\~;


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;

```



```

proc report data = comp headline headskip nowd 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_F trt_4_M )
("mCC&linebot" trt_5_F trt_5_M)

                ("SA&linebot" trt_3_F trt_3_M);

        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          /">19 cig/day$(N=&N3M)" display style={JUST=c
cellwidth=1.3cm} style(header)={just=center} ;

        define trt_4_M          /">19 cig/day$(N=&N4M)" display style={just=c cellwidth=1.3cm}
style(header)={just=center} ;

        define trt_5_M          /">19 cig/day$(N=&N5M)" display style={just=c cellwidth=1.3cm}
style(header)={just=center};

        define trt_3_F          /"10-19 cig/day$(N=&N3F)" display style={JUST=c
cellwidth=1.3cm} style(header)={just=center} ;

        define trt_4_F          /"10-19 cig/day$(N=&N4F)" display style={just=c cellwidth=1.3cm}
style(header)={just=center} ;

        define trt_5_F          /"10-19 cig/day$(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, halfblank=N);
```

```
ods listing;
```

```
%m_logchk;
```