

```

/*=====
*Covance Study ID      : 000000106343
*Program Name          : t_cyp2a6_pp.sas
*Purpose               : Table 15.2.4.35-50 (Descriptive Statistics of biomarkers in 4-hour Urine Fraction - PP Set - PP;
*Input Data            : adam.adsl, ADAM.adbx
*Output Data           :
*Macros Called         :
*Programmed by         : cvn_pshe
*Creation Date         : 2015-05-13
-----
Modification History
-----
Modified by           :
Modification Date     :
Modification Description:
-----*/

proc datasets lib=work kill memtype=data nolist;
run;

%m_printto;

options notes nosource;
options mprint symbolgen;
options replace;

options notes source source2 nofullstimer validvarname=upcase missing=' ';
ods _all_ close;
ods listing;

*=====;
* START OF PROGRAM CODE                               ;
*=====;

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

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;

/*get N values for column headers for each period*/
proc sql;
    %global trt1 trt2 trt3;
    select count(distinct usubjid) into: trt1 from adam.adsl(where=(trt01an = 4 and PPROT4FL='Y'));
    select count(distinct usubjid) into: trt2 from adam.adsl(where=(trt01an = 5 and PPROT4FL='Y'));
    select count(distinct usubjid) into: trt3 from adam.adsl(where=(trt01an = 3 and PPROT4FL='Y'));
quit;

/*get N for each period for column header*/
proc sql;
    %global N4THS N4MCC N4SAA;

    /*select count(distinct usubjid) into: N1THS from adam.adsl(where=(trt01an = 4 and pprot1f1 = "Y"))*/
    /*select count(distinct usubjid) into: N1MCC from adam.adsl(where=(trt01an = 5 and pprot1f1 = "Y"))*/
    /*select count(distinct usubjid) into: N1SAA from adam.adsl(where=(trt01an = 3 and pprot1f1 = "Y"))*/
    /**/
    /*select count(distinct usubjid) into: N2THS from adam.adsl(where=(trt01an = 4 and pprot2f1 = "Y"))*/
    /*select count(distinct usubjid) into: N2MCC from adam.adsl(where=(trt01an = 5 and pprot2f1 = "Y"))*/
    /*select count(distinct usubjid) into: N2SAA from adam.adsl(where=(trt01an = 3 and pprot2f1 = "Y"))*/
    /**/
    /*select count(distinct usubjid) into: N3THS from adam.adsl(where=(trt01an = 4 and pprot3f1 = "Y"))*/
    /*select count(distinct usubjid) into: N3MCC from adam.adsl(where=(trt01an = 5 and pprot3f1 = "Y"))*/
    /*select count(distinct usubjid) into: N3SAA from adam.adsl(where=(trt01an = 3 and pprot3f1 = "Y"))*/

    select count(distinct usubjid) into: N4THS from adam.adsl(where=(trt01an = 4 and pprot4f1 = "Y"));
    select count(distinct usubjid) into: N4MCC from adam.adsl(where=(trt01an = 5 and pprot4f1 = "Y"));
    select count(distinct usubjid) into: N4SAA from adam.adsl(where=(trt01an = 3 and pprot4f1 = "Y"));

quit;

%macro urinbio (tflno=, title=, param=, num=);

/*macro for general mean stats(n mean std median min max Q25 Q75 lclm uclm)for each period per mock*/
%macro mmeans(prd=, class=, var=, out=);

/*Bring in data from ADBX for urine biomarkers - PP Set for each period per Mock*/

```

```

data adbx1;
  set adam.adbx;
  where an102fl='Y' and paramcd in ("&param") and PPROT4FL='Y';
  if trtan=4 then trt=1;
  else if trtan=5 then trt=2;
  else if trtan=3 then trt=3;
run;

data adbx;
  set adbx1;
  if ablfl='Y' then avisit='Baseline';
run;

proc means data=adbx noprint nway;
  var &var.;
  class &class. trt;
  output out=results02 n=n1 mean=mean1 std=sd1 median=median1 min=min1 max=max1 q1=q1 q3=q3 lclm=lci1 uclm=uci1;
run;

proc sort data=results02;
  by avisitn avisit atptn atpt trt;
run;

data adbx_blq;
  set adbx;
  where AQLFL='Y';
run;

proc freq data=adbx_blq noprint;
  table trt*trta*avisitn*avisit*atptn*atpt / out =blq(drop=percent);
run;

proc sort data=blq;
  by avisitn avisit atptn atpt trt;
run;

data results02;
  merge results02 blq;
  by avisitn avisit atptn atpt trt;
  rename count=blq;
run;

/*get N for baseline(for calculate change volume of <missing, n(%)>)/
data bs;
  set results02;
  if avisit="Baseline";
run;

data tot;
  set bs;
  call symput('trtb' || compress(put(trt,best.)), compress(put(n1,best.)));
run;
%put trtb1=&trtb1 trtb2=&trtb2 trtb3=&trtb3;

data results03;
  set results02;
  attrib meansd length=$25.
  minmax length=$25.
  n length=$25.
  miss length=$25.
  median length=$25.
  quart aci length=$25.;

  n = left(compress(put(n1,8.)));
  *for <missing, n(%)>;

  if trt=1 then do;
    if not missing (blq) then blq1=strip(put(blq, 8.)) || ' (' || strip(put(blq*100/n1, 8.1)) || ")" ;
    if &trt1.=n1 then miss="";
    else miss=strip(put((&trt1.-n1), 8.)) || ' (' || strip(put(((&trt1.-n1)*100)/&trt1., 8.1)) || ")";
    end;
  else if trt=2 then do;
    if not missing (blq) then blq1=strip(put(blq, 8.)) || ' (' || strip(put(blq*100/n1, 8.1)) || ")" ;
    if &trt2.=n1 then miss="";
    else miss=strip(put((&trt2.-n1), 8.)) || ' (' || strip(put(((&trt2.-n1)*100)/&trt2., 8.1)) || ")";
    end;
  else if trt=3 then do;
    if not missing (blq) then blq1=strip(put(blq, 8.)) || ' (' || strip(put(blq*100/n1, 8.1)) || ")" ;

```

```

        if &trt3.=n1 then miss="";
        else miss=strip(put((&trt3.-n1), 8.)) || ' (' || strip(put(((&trt3.-n1)*100)/&trt3., 8.1)) || ")";
    end;

    %if &num=1 or &num=2 or &num=12 or &num=15 or &num=3 %then %do;
    IF NOT MISSING(MEDIAN1) THEN MEDIAN = LEFT(COMPRESS(PUT(ROUND(MEDIAN1,0.1),10.1)));
    IF NOT MISSING(MEAN1) AND NOT MISSING(SD1) THEN meansd = LEFT(COMPRESS(PUT(ROUND(MEAN1,0.1),10.1)))||" ("||STRIP(PUT(0.01*CEIL(SD
1/0.01),10.2))||")";
    IF NOT MISSING(MIN1) AND NOT MISSING(MAX1) THEN minmax = strip(put(min1, 10.))||", "||strip(put(max1, 10.));
    IF NOT MISSING(Q1) AND NOT MISSING(Q3) THEN QUART = LEFT(COMPRESS(PUT(ROUND(Q1,0.1),10.1))) || ', ' || LEFT(COMPRESS(PUT(ROUND(Q3
,0.1),10.1)));
    IF NOT MISSING(LCI1) AND NOT MISSING(UCI1) THEN ACI = STRIP(PUT(0.1*FLOOR(LCI1/0.1),10.1)) || ', ' || STRIP(PUT(0.1*CEIL(UCI1/0.1
),10.1));
    %end;

    %if &num=10 or &num=5 or &num=13 or &num=4 or &num=14 %then %do;
    IF NOT MISSING(MEDIAN1) THEN MEDIAN = LEFT(COMPRESS(PUT(ROUND(MEDIAN1,0.01),10.2)));
    IF NOT MISSING(MEAN1) AND NOT MISSING(SD1) THEN meansd = LEFT(COMPRESS(PUT(ROUND(MEAN1,0.01),10.2)))||" ("||STRIP(PUT(0.001*CEIL(
SD1/0.001),10.3))||")";
    IF NOT MISSING(MIN1) AND NOT MISSING(MAX1) THEN minmax = strip(put(min1, 10.1))||", "||strip(put(max1, 10.1));
    IF NOT MISSING(Q1) AND NOT MISSING(Q3) THEN QUART = LEFT(COMPRESS(PUT(ROUND(Q1,0.01),10.2))) || ', ' || LEFT(COMPRESS(PUT(ROUND(Q
3,0.01),10.2)));
    IF NOT MISSING(LCI1) AND NOT MISSING(UCI1) THEN ACI = STRIP(PUT(0.01*FLOOR(LCI1/0.01),10.2)) || ', ' || STRIP(PUT(0.01*CEIL(UCI1/
0.01),10.2));
    %end;

    %if &num=8 or &num=9 or &num=7 or &num=11 %then %do;
    IF NOT MISSING(MEDIAN1) THEN MEDIAN = LEFT(COMPRESS(PUT(ROUND(MEDIAN1,0.001),10.3)));
    IF NOT MISSING(MEAN1) AND NOT MISSING(SD1) THEN meansd = LEFT(COMPRESS(PUT(ROUND(MEAN1,0.001),10.3)))||" ("||STRIP(PUT(0.0001*CEI
L(SD1/0.0001),10.4))||")";
    IF NOT MISSING(MIN1) AND NOT MISSING(MAX1) THEN minmax = strip(put(min1, 10.2))||", "||strip(put(max1, 10.2));
    IF NOT MISSING(Q1) AND NOT MISSING(Q3) THEN QUART = LEFT(COMPRESS(PUT(ROUND(Q1,0.001),10.3))) || ', ' || LEFT(COMPRESS(PUT(ROUND(
Q3,0.001),10.3)));
    IF NOT MISSING(LCI1) AND NOT MISSING(UCI1) THEN ACI = STRIP(PUT(0.001*FLOOR(LCI1/0.001),10.3)) || ', ' || STRIP(PUT(0.001*CEIL(UC
I1/0.001),10.3));
    %end;

    %if &num=6 or &num=16 %then %do;
    IF NOT MISSING(MEDIAN1) THEN MEDIAN = LEFT(COMPRESS(PUT(ROUND(MEDIAN1,0.0001),10.4)));
    IF NOT MISSING(MEAN1) AND NOT MISSING(SD1) THEN meansd = LEFT(COMPRESS(PUT(ROUND(MEAN1,0.0001),10.4)))||" ("||STRIP(PUT(0.00001*C
EIL(SD1/0.00001),10.5))||")";
    IF NOT MISSING(MIN1) AND NOT MISSING(MAX1) THEN minmax = strip(put(min1, 10.3))||", "||strip(put(max1, 10.3));
    IF NOT MISSING(Q1) AND NOT MISSING(Q3) THEN QUART = LEFT(COMPRESS(PUT(ROUND(Q1,0.0001),10.4))) || ', ' || LEFT(COMPRESS(PUT(ROUND
(Q3,0.0001),10.4)));
    IF NOT MISSING(LCI1) AND NOT MISSING(UCI1) THEN ACI = STRIP(PUT(0.0001*FLOOR(LCI1/0.0001),10.4)) || ', ' || STRIP(PUT(0.0001*CEIL
(UCI1/0.0001),10.4));
    %end;

drop n1 mean1 sd1 median1 min1 max1 q1 q3 uci1 lci1 ;
run;

proc transpose data=results03 out=&out prefix=r name=varname;
    by &class.;
    var n miss meansd median minmax aci quart blq1;
    id trt;
run;

data &out.;
set &out.;
length stat $200;
if varname='N' then do; statord=1; stat='n'; end;
if varname='MISS' then do; statord=2; stat='Missing, n(%)'; end;
if varname='BLQ1' then do; statord=2.2; stat='BLOQ, n (%)'; end;
if varname='MEDIAN' then do; statord=5; stat='Median'; end;
if varname='QUART' then do; statord=6; stat='Q25, Q75'; end;
if varname='MINMAX' then do; statord=7; stat='Min, Max'; end;
if varname='MEANSD' then do; statord=8; stat='Mean (SD)'; end;
if varname='ACI' then do; statord=9; stat='95% CI of Mean'; end;
run;
%mend;

%mmeans(prd=(PPROT4FL='Y' and avisit in ('Day 90' 'Day -1')), class=avisitn avisit atptn atpt, var=aval, out=out_p4);
%mmeans(prd=(PPROT4FL='Y' and avisit in ('Day -1' 'Day 90' )), class=avisitn avisit atptn atpt, var=pchg, out=out_c4);

/*macro for Geometric Mean per mock;*/
%macro mmeans(prd=, class=, var=, out=);
/*Bring in data from ADBX for biomarker activity - PP Set for each period per Mock*/
data adbx1;

```

```

set adam.adbx;
where anl02fl='Y' and paramcd in ("&param") and PPR0T4FL='Y';
if trtan=4 then trt=1;
else if trtan=5 then trt=2;
else if trtan=3 then trt=3;
run;

data adbx;
set adbx1;
if ablfl='Y' then avisit='Baseline';
if aval ne 0 and aval ne . then logaval=log(aval);
run;

proc means data=adbx noprint nway;
var &var.;
class &class. trt;
output out=results02 mean=mean std=std1 lclm=lci1 uclm=uci1;
run;

data results03;
set results02;

gmean1=exp(mean);

%if &num=2 or &num=1 or &num=12 or &num=3 or &num=15 %then %do;
gmean=left(compress(put(round(gmean1,0.1), 10.1)));
if not missing(std1) then gcv=compress(put(0.01*ceil((sqrt(exp(std1*std1)-1)*100)/0.01),10.2));
if not missing(lci1) then glci=exp(lci1);
if not missing(uci1) then guci=exp(uci1);
if not missing(gcv) then gmeancv=left(trim(gmean)) || ' (' || left(trim(gcv))||')';
else gmeancv=left(trim(gmean));
if not missing(glci) and not missing(guci) then ci = strip(strip(put(0.1*floor(glci/0.1),10.1)) || ', ' || strip(put(0.1*ceil(guci/0.1),10.1)));
%end;

%if &num=10 or &num=5 or &num=13 or &num=4 or &num=14 %then %do;
gmean=left(compress(put(round(gmean1,0.01), 10.2)));
if not missing(std1) then gcv=compress(put(0.001*ceil((sqrt(exp(std1*std1)-1)*100)/0.001),10.3));
if not missing(lci1) then glci=exp(lci1);
if not missing(uci1) then guci=exp(uci1);
if not missing(gcv) then gmeancv=left(trim(gmean)) || ' (' || left(trim(gcv))||')';
else gmeancv=left(trim(gmean));
if not missing(glci) and not missing(guci) then ci = strip(strip(put(0.01*floor(glci/0.01),10.2)) || ', ' || strip(put(0.01*ceil(guci/0.01),10.2)));
%end;

%if &num=8 or &num=9 or &num=7 or &num=11 or &num=6 %then %do;
gmean=left(compress(put(round(gmean1,0.001), 10.3)));
if not missing(std1) then gcv=compress(put(0.0001*ceil((sqrt(exp(std1*std1)-1)*100)/0.0001),10.4));
if not missing(lci1) then glci=exp(lci1);
if not missing(uci1) then guci=exp(uci1);
if not missing(gcv) then gmeancv=left(trim(gmean)) || ' (' || left(trim(gcv))||')';
else gmeancv=left(trim(gmean));
if not missing(glci) and not missing(guci) then ci = strip(strip(put(0.001*floor(glci/0.001),10.3)) || ', ' || strip(put(0.001*ceil(guci/0.001),10.3)));
%end;

%if &num=16 %then %do;
gmean=left(compress(put(round(gmean1,0.0001), 10.4)));
if not missing(std1) then gcv=compress(put(0.00001*ceil((sqrt(exp(std1*std1)-1)*100)/0.00001),10.5));
if not missing(lci1) then glci=exp(lci1);
if not missing(uci1) then guci=exp(uci1);
if not missing(gcv) then gmeancv=left(trim(gmean)) || ' (' || left(trim(gcv))||')';
else gmeancv=left(trim(gmean));
if not missing(glci) and not missing(guci) then ci = strip(strip(put(0.0001*floor(glci/0.001),10.4)) || ', ' || strip(put(0.001*ceil(guci/0.0001),10.4)));
%end;
run;

proc transpose data=results03 out=&out. prefix=r name=varname;
by &class;
var gmeancv ci;
id trt;
run;

data &out.;
set &out.;
length stat $200;

```

```

    if varname='GMEANCV' then do; statord=3; stat='Geometric Mean (CV%)'; end;
    if varname='CI' then do; statord=4; stat='95% CI of Geometric Mean'; end;
run;

%mend;

%mmmeans(prd=(PPROT4FL='Y' and avisit in ('Day 90' 'Day -1')), class=avisitn avisit atptn atpt, var=logaval, out=out_g4);

/*macro to set together for each period */
%macro mfinp(dsn=, dsng=, dsnc=, out=);
data dsn1;
    set &dsn.(in=p) &dsng.(in=g) ;
run;

proc sort data=dsn1 out=ds1;
    by avisitn avisit atptn statord;
run;

*delete baseline part for Change column;
data dsnc;
    set &dsnc.;
    if avisit="Baseline" then delete;
run;

proc sort data=dsnc out=ds2;
    by avisitn avisit atptn statord;
run;

data &out.;
    retain avisitn avisit atptn tp stat r1 c1 r2 c2 r3 c3 statord;
    merge ds1(in=a) ds2(in=c rename=(r1=c1 r2=c2 r3=c3) drop=ATPT VARNAME STAT);
    by avisitn avisit atptn statord;
    if a;
    if avisit="DAY 5" then tp=atpt;
    else tp=propcase(avisit);

    ***should delete <missing, n(>) if no missing n;

    if stat="Missing, n(>)" and r1="" and r2="" and r3="" and c1="" and c2="" and c3="" then delete;

    keep avisitn avisit atptn statord tp stat r1 c1 r2 c2 r3 c3;
run;
%mend;

%mfinc(dsn=out_p4, dsng=out_g4, dsnc=out_c4, out=finalp4);

/*create final dataset per mock*/
data final;
    set finalp4(in=p4) ;
    if p4 then period="4";
    if stat='BLOQ, n (%)' and r1='' and r2='' and r3='' then delete;
    if stat='BLOQ, n (%)' then do; c1=''; c2=''; c3=''; end;

    if stat='Missing, n(>)' and avisit='Baseline' then do;
        if r1='' then r1='0';
        if r2='' then r2='0';
        if r3='' then r3='0';
    end;
    else if stat='Missing, n(>)' and avisit ^='Baseline' then do;
        if r1='' then r1='0';
        if r2='' then r2='0';
        if r3='' then r3='0';
        if c1='' then c1='0';
        if c2='' then c2='0';
        if c3='' then c3='0';
    end;
    if stat='BLOQ, n (%)' then do;
        if r3='' then r3='0';
        if r2='' then r2='0';
        if r1='' then r1='0';
    end;
run;

/*output report data; */

proc sql noprint;
    create table tflds.&tfldno as
    select period, avisitn, atptn, tp, statord, stat, r1 as thsm2_2, c1 as thsm2_2_chg, r2 as mCC, c2 as mCC_chg, r3 as SA, c3 as SA_ch

```

```

g
  from final
  order by period, avisitn, atptn, statord;
quit;

proc sort data=final;
  by period avisitn atptn statord;
run;

data paging;
  set final;
  by period avisitn atptn statord;
  if first.atptn then ln=1; /*Amend to look presentable, and avoid page overflows*/
  else ln+1;
  if ln=1 then page+1;
  call symput("page",compress(put(page,best.)));
run;

*****;
*create output report ;
*****;
options number nodate orientation=landscape /* papersize=&P_PGSIZE*/ 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;

%macro outrtf(blankn=130, halfblank=N, dsn=);

ods listing;
ods path stdlib.t106343 (read) ;
ods results off;
ods rtf toc_data/* contents*/ 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;
  %let subpage=1;

  %do j=1 %to &subpage;

    %let maxpage=%eval(&page*&subpage);

    %let npage=%eval(&subpage*&i+&j-&subpage);

    title ;
    footnote;
    ods proclabel = ' ';

data comp;
  set paging end=eof;
  where page=&i;

  /* Amend title as needed */
  /* _firtitl="&title"; */
  _upcas=(length("Path: &TFLpath.")-length(compress("Path:&TFLpath.", 'ABCDEFGHIJKLMNOPQRSTUVWXYZ')))/2;
  len=&blankn.-length("(page &npage of &maxpage)");
  if eof then do;
    /* call symput('_FSRTITL', trim(left(_firtitl)));*/
    call symput('_blankn', compress(put(len,best.)));
  end;

  drop _upcas len;

  if _n_ =1 then
  do;
    call symput('title2', "Product Use Time Period: Period " || Period );
    *create trt1/trt2/trt3 N for each period for column header;
    /* if period="1" then do; */
    /* call symput('trt1', strip(put(&N1THS., best.)));*/
    /* call symput('trt2', strip(put(&N1MCC., best.)));*/
    /* call symput('trt3', strip(put(&N1SAA., best.))); */
    /* end;*/
    /* else if period="2" then do; */
    /* call symput('trt1', strip(put(&N2THS., best.)));*/
    /* call symput('trt2', strip(put(&N2MCC., best.)));*/

```

```

/*      call symput('trt3', strip(put(&N3SAA., best.))); */
/*      end;*/
/*      else if period="3" then do; */
/*          call symput('trt1', strip(put(&N3THS., best.)));*/
/*          call symput('trt2', strip(put(&N3MCC., best.)));*/
/*          call symput('trt3', strip(put(&N3SAA., best.))); */
/*      end;*/
      if period="4" then do;
          call symput('trt1', strip(put(&N4THS., best.)));
          call symput('trt2', strip(put(&N4MCC., best.)));
          call symput('trt3', strip(put(&N4SAA., best.)));
      end;
    end;
run;

ods proclabel = ' ';
ods listing close;

* 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 split = '$' %if &i=1 %then %do; contents=' ' %end; %else %do; contents='' %end;;;

      column page avisitn atptn tp statord stat
      %if &j=1 %then %do; ("THSm2.2 $(N=&trt1)&linebot" r1 c1) ("mCC$(N=&trt2)&linebot" r2 c2)
          ("SA$(N=&trt3)&linebot" r3 c3) %end;;

      define page          / order order = internal noprint;
      define avisitn       / order order=internal noprint;
      define atptn         / order order=internal noprint;
      define tp            / group style={just=left cellwidth=1.5cm} style(header)={just=center} "Time-$point";
      define statord       / order order = internal noprint;
      define stat          / display style={just=left cellwidth=2.7cm} style(header)={just=center} "Statistic";
%if &j=1 %then %do;
      define r1            / "Value" display style={just=c cellwidth=3cm} style(header)={just=center} ;
      define r2            / "Value" display style={just=c cellwidth=3cm} style(header)={just=center} ;
      define r3            / "Value" display style={just=c cellwidth=3cm} style(header)={just=center};
      define c1            / "% Change(*)" display style={JUST=c cellwidth=3cm} style(header)={just=center};
      define c2            / "% Change(*)" display style={just=c cellwidth=3cm} style(header)={just=center};
      define c3            / "% Change(*)" display style={just=c cellwidth=3cm} style(header)={just=center};
%end;

      break after page / page;

compute before page / style={protectspecialchars=off};
      line "&linetop";
endcomp;

compute before _page_ / style={just=left protectspecialchars=off};
      line "\b\fs24\sa24&title" ; * \b = bold, \fs24 is font size 12pt, \sa24 is space after 12pt;
      line " ";
      line "&title2";
      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: 'Missing' percentages are based on the number of subjects indicated in the column header (N), while 'BLOQ' percentage
s are based on the number of subjects being summarized (n).";
line "Note: * % change from baseline, where baseline is defined as the last assessment prior to first randomized product use in m
CC / THS 2.2 Menthol arms or the";
line "last assessment prior to 10 AM on Day 1 in the SA arm.";
line ' ';
line "Appendix 15.3.3.5";
line "Study ID:ZRHM-REXA-08-US Program:&TFLprg Status: &status" &_blankn.*"\~\~" "&sysdate" &_blankn.*"\~\~" "(Page &i of &pag
e)";
endcomp;
run;
%end;
%end;
ods rtf close;
ods results on;
ods path sashelp.tmplmst (read);

```

```

%mend ;

%outtrtf(blankn=36, halfblnk=N);

%mend urinbio;

%urinbio (tflno=T_15_02_04_35, title=%str(Table 15.2.4.35 Descriptive Statistics of MHBMA (pg/mg creat) in 4-hour Urine Fraction - P
P Set), param=UHBMCRE4, num=1);
%urinbio (tflno=T_15_02_04_36, title=%str(Table 15.2.4.36 Descriptive Statistics of 3-HPMA (pg/mg creat) in 4-hour Urine Fraction -
PP Set), param=UHPMCRE4, num=2);
%urinbio (tflno=T_15_02_04_37, title=%str(Table 15.2.4.37 Descriptive Statistics of S-PMA (pg/mg creat) in 4-hour Urine Fraction - P
P Set), param=UPMACRE4, num=3);
%urinbio (tflno=T_15_02_04_38, title=%str(Table 15.2.4.38 Descriptive Statistics of NNAL (pg/mg creat) in 4-hour Urine Fraction - PP
Set), param=UNALCRE4, num=4);
%urinbio (tflno=T_15_02_04_39, title=%str(Table 15.2.4.39 Descriptive Statistics of 1-OHP (pg/mg creat) in 4-hour Urine Fraction - P
P Set), param=UOHPCRE4, num=5);
%urinbio (tflno=T_15_02_04_40, title=%str(Table 15.2.4.40 Descriptive Statistics of Total NNN (pg/mg creat) in 4-hour Urine Fraction
- PP Set), param=UNNNCRE4, num=6);
%urinbio (tflno=T_15_02_04_41, title=%str(Table 15.2.4.41 Descriptive Statistics of 4-ABP (pg/mg creat) in 4-hour Urine Fraction -
PP Set), param=UABPCRE4, num=7);
%urinbio (tflno=T_15_02_04_42, title=%str(Table 15.2.4.42 Descriptive Statistics of 1-NA (pg/mg creat) in 4-hour Urine Fraction - P
P Set), param=U1NACRE4, num=8);
%urinbio (tflno=T_15_02_04_43, title=%str(Table 15.2.4.43 Descriptive Statistics of 2-NA (pg/mg creat) in 4-hour Urine Fraction - P
P Set), param=U2NACRE4, num=9);
%urinbio (tflno=T_15_02_04_44, title=%str(Table 15.2.4.44 Descriptive Statistics of o-tol (pg/mg creat) in 4-hour Urine Fraction -
PP Set), param=UTOLCRE4, num=10);
%urinbio (tflno=T_15_02_04_45, title=%str(Table 15.2.4.45 Descriptive Statistics of CEMA (pg/mg creat) in 4-hour Urine Fraction - P
P Set), param=UCMACRE4, num=11);
%urinbio (tflno=T_15_02_04_46, title=%str(Table 15.2.4.46 Descriptive Statistics of HEMA (pg/mg creat) in 4-hour Urine Fraction - P
P Set), param=UHMACRE4, num=12);
%urinbio (tflno=T_15_02_04_47, title=%str(Table 15.2.4.47 Descriptive Statistics of B[a]P (pg/mg creat) in 4-hour Urine Fraction -
PP Set), param=UBAPCRE4, num=13);
%urinbio (tflno=T_15_02_04_48, title=%str(Table 15.2.4.48 Descriptive Statistics of HMPMA (pg/mg creat) in 4-hour Urine Fraction -
PP Set), param=UMPMCRE4, num=14);
%urinbio (tflno=T_15_02_04_49, title=%str(Table 15.2.4.49 Descriptive Statistics of S-BMA (pg/mg creat) in 4-hour Urine Fraction -
PP Set), param=UBMACRE4, num=15);
%urinbio (tflno=T_15_02_04_50, title=%str(Table 15.2.4.50 Descriptive Statistics of NEQ (pg/mg creat) in 4-hour Urine Fraction - PP
Set), param=UNEQCRE4, num=16);

ods listing close;

proc printto ; run;
%m_logchk;
*=====;
* END OF PROGRAM CODE ;
*=====;

```