

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

```
| Covance Study Number   : 000000106343          |
| Program Name           : t_anl_boexp.sas        |
| Purpose                : Analysis of COHB, MHBMA, 3-HPMA, S-PMA, and total NNAL on Day 5/90  |
|                        : for primary obj and sensitivity analysis for primary obj - compliant |
| Input Data             : ADAM.ADBX              |
| Output Data            : tflds.T_15_02_03_01_01 tflds.T_15_02_03_01_03 & RTFs          |
| Macros Called          : m_printto, m_logchk    |
| Originally Performed by : kpothuri              |
| Date                   : 23Apr2015              |
```

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|
|=====
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```

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

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

```
options notes source source2 nfullstimer validvarname=upcase missing=' ' NOQUOTELNMAX;
```

```
ods _all_ close;
```

```
ods listing;
```

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

```

*=====;

* START OF PROGRAM CODE                                ;

*=====;

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

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

/* Standard - leave this */

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;

proc sort data=adam.adbx out=bx_units (keep=paramcd param paramn avalu) nodupkey; by paramcd;
where paramcd in ("CARBXHGB", "UMHBMCRE", "U3HPMCRE", "USPMACRE", "UNNALCRE"); run;

data _null_;

    set bx_units;

    call symput ("u_" || compress(paramcd), strip(param));

    call symput ("n_" || compress(paramcd), strip(put(paramn,best.)));

run;

%put &u_CARBXHGB &u_UMHBMCRE &u_U3HPMCRE &u_USPMACRE &u_UNNALCRE;

%put &n_CARBXHGB &n_UMHBMCRE &n_U3HPMCRE &n_USPMACRE &n_UNNALCRE;

```

```

%macro p (tabn=, day=, where=, seq=, dset=);

*Counts;

proc sort data=adam.adbx(where=(&where))

    out=adbxin1;

    by SUBJID;

run;

proc freq data=adbxin1 (where=(BASE ne .)) noprint;

    table trtp/out=f_param (drop=percent);

run;

data f_param;

length count_ $27;

    set f_param;

    if trtp="THSm2.2" then trtp="THS";

    count_=put(count,best.);

run;

proc transpose data=f_param out=t_count;

    id trtp;

    var count_;

run;


data adbx1 missing;

    set adbxin1;

    if aval not in (.,0) and base not in (.,0) then do; *need to add BASE for missing value calculation;

```

```

logaval=log(aval);

logbase=log(base);

output adbx1;

end;

else output missing;

run;

proc glm data=adbx1;

class trtp sex UCPDGR1;

model logaval = logbase sex UCPDGR1 trtp;

lsmeans trtp / pdiff alpha=0.05 cl;

ods output diff=pval (keep=rowname _3); *p-value;

ods output LSMeanCL=LSMeanCL (keep=trtp lowercl uppercl lsmean); *lsmean, C.I.;

ods output LSMeanDiffCL=LSMeanDiffCL (keep=trtp _trtp lowercl uppercl difference); *lsmean
and C.I. for ratios;

ods output FitStatistics=ROOTMSE (keep=rootmse); *RootMSE;

run;

*RootMSE;

data mse;

set ROOTMSE;

format rootmse;

estimate="rootmse";

run;

data _null_;

set mse;

```

```

        call symput ("e_" || compress(estimate), strip(put(rootmse,best.)));

run;

%put &e_rootmse;

*lsmean and C.I. for ratios;

data LSMeanDiffCL_1;

    set LSMeanDiffCL;

    format lowercl uppercl difference;

    if trtp="SA" and _trtp="mCC" then delete;

run;

data LSM_CL;

    set LSMeanDiffCL_1;

    if trtp="SA" and _trtp="THSm2.2" then diff_neg=difference*(-1);

    else diff_neg=difference;

    diff_=exp(diff_neg);

    L_CI_=exp(LowerCL);

    U_CI_=exp(UpperCL);

    Cl=compress(put(floor(100*L_CI_*100)/100,12.2))||',
'||compress(put(ceil(100*U_CI_*100)/100,12.2));

    MSE=(&e_rootmse)**2;

    CV_=10000*sqrt(exp(MSE)-1);

```

```

CV=put((ceil(CV_)/10000)*100,12.2);

lsmean_=compress(put(round(100*diff_,0.01),12.2))||'('||compress(CV)||')';

if _trtp="THSm2.2" then _trtp="SA";

run;

proc transpose data=LSM_CL out=t_LSM_CL (rename=(SA=ths_sa_ratio mcc=ths_mcc_ratio));

    id _trtp;

    var lsmean_ Cl;

run;

*p-value;

data pval1;

    set pval;

    rowname=compress(rowname);

    if rowname="2";

run;

data stat_pval;

    set pval1;

    if not missing(_3) then pval=_3/2;

    if pval_ < 0.001 then pval="<0.001";

        else if pval_ > 0.999 then pval=">0.999";

        else if 0.001 < pval_ < 0.999 then pval=put(pval_,5.3);

    %if &day="Day 5" %then %do;

```

```

        %if &pcd ne "UNNALCRE" %then %do;

        if pval_ <= 0.025;

        %end;

    %end;

run;

proc transpose data=stat_pval out=t_stat_pval (rename=(_2=ths_mcc_ratio));

    id rowname;

    var pval;

run;


*lsmean, C.I.;

proc sort data=lsmeanc1 out=lsmeanc11 nodupkey; by trtp lowercl uppercl lsmean; run;

data lsmeanc11;

    set lsmeanc1;

    format lowercl uppercl lsmean;

run;

data stat;

    set LSMeanCL1;

    lsmean_=put(exp(lsmean),8.2);


    LowerCL_=exp(LowerCL);

    UpperCL_=exp(UpperCL);


    Cl=compress(put(floor(100*LowerCL_)/100,8.2))||',
'| |compress(put(ceil(100*UpperCL_)/100,8.2));

```

```

        if trtp="THSm2.2" then trtp="THS";
run;

proc transpose data=stat out=t_stat;

    id trtp;

    var lsmean_ CI;

run;

*set of stats for one day;

proc sort data=t_count; by _name_; run;

proc sort data=T_STAT; by _name_; run;

data set5;

    merge t_count T_STAT;

    by _name_ SA THS MCC;

run;

proc sort data=set5; by _name_; run;

proc sort data=t_lsm_cl; by _name_; run;

data set5_a;

    merge set5 t_lsm_cl;

    by _name_;

run;

data &dset (drop=THS_SA_RATIO THS_MCC_RATIO THS SA MCC);

length _name_ $30 visit $20;

    set set5_a t_stat_pval;

    seq=&seq; *depends on what day;

    tabn=&tabn; *parameter;

```



```
if _name_="COUNT_" then do;
    _name_="n";
    visit="&day";
    num=1;
end;

else if _name_="LSMEAN_" then do;
    _name_="Geometric LS Mean (CV%)";
    num=2;
end;

else if _name_="CI" then do;
    _name_="95% CI";
    num=3;
end;

else if _name_="PVAL" then do;
    _name_="p-value (one-sided)";
    num=4;
end;

SA_=strip(SA);
THS_=strip(THS);
MCC_=strip(MCC);
THS_MCC_RATIO_=strip(THS_MCC_RATIO);
THS_SA_RATIO_=strip(THS_SA_RATIO);

run;
```

```
proc sort data=&dset; by num; run;
```

```
%mend p;
```

```
*PP set table;
```

```
%p(tabn=1, day=Day 5,
```

```
where=%str(anl02fl="Y" and pprot1fl="Y" and paramcd="CARBXHGB" and avisitn=105 and atpt="DAY 5  
- 20:00 - 21:30"),
```

```
seq=1, dset=cohb_5);
```

```
%p(tabn=1, day=Day 90,
```

```
where=%str(anl02fl="Y" and pprot4fl="Y" and paramcd="CARBXHGB" and avisitn=190),
```

```
seq=2, dset=cohb_90);
```

```
%p(tabn=2, day=Day 5,
```

```
where=%str(anl02fl="Y" and pprot1fl="Y" and paramcd="UMHBMCRE" and avisitn=105), seq=1,  
dset=mhbma_5);
```

```
%p(tabn=2, day=Day 90,
```

```
where=%str(anl02fl="Y" and pprot4fl="Y" and paramcd="UMHBMCRE" and avisitn=190), seq=2,  
dset=mhbma_90);
```

```
%p(tabn=3, day=Day 5,
```

```
where=%str(anl02fl="Y" and pprot1fl="Y" and paramcd="U3HPMCRE" and avisitn=105), seq=1,  
dset=HPMA_5);
```

```
%p(tabn=3, day=Day 90,
```

```
where=%str(anl02fl="Y" and pprot4fl="Y" and paramcd="U3HPMCRE" and avisitn=190), seq=2,  
dset=HPMA_90);
```

```
%p(tabn=4, day=Day 5,
```

```
where=%str(anl02fl="Y" and pprot1fl="Y" and paramcd="USPMACRE" and avisitn=105), seq=1,  
dset=PMA_5);
```

```
%p(tabn=4, day=Day 90,
```

```
where=%str(anl02fl="Y" and pprot4fl="Y" and paramcd="USPMACRE" and avisitn=190), seq=2,  
dset=PMA_90);
```

```
%p(tabn=5, day=Day 5,
```

```
where=%str(anl02fl="Y" and pprot1fl="Y" and paramcd="UNNALCRE" and avisitn=105), seq=1,  
dset=NNAL_5);
```

```
%p(tabn=5, day=Day 90,
```

```
where=%str(anl02fl="Y" and pprot4fl="Y" and paramcd="UNNALCRE" and avisitn=190), seq=2,  
dset=NNAL_90);
```

```
%let l_name = %str(L_15_04_03_01_01);
```

```
%let t_title_l = %nrquote(Analysis of COHb, MHBMA, 3-HPMA, S-PMA, and Total NNAL on Day 5/90  
Visit for THS 2.2 Menthol versus mCC for the Primary Objective “ PP Set);
```

```
ods rtf
```

```
file="/cvn/projects/prj/data/000000106343/TFL/dev/Tables/&l_name..rtf";
```

```
title "&t_title_l";
```

```
options orientation=landscape;
```

```
%p(tabn=1, day=Day 5,
```

```
where=%str(anl02fl="Y" and pprot1fl="Y" and paramcd="CARBXHGB" and avisitn=105 and atpt="DAY 5  
- 20:00 - 21:30"),
```

```
seq=1, dset=cohb_5);
```

%p(tabn=1, day=Day 90,
where=%str(anl02fl="Y" and pprot4fl="Y" and paramcd="CARBXHGB" and avisitn=190),
seq=2, dset=cohb_90);

%p(tabn=2, day=Day 5,
where=%str(anl02fl="Y" and pprot1fl="Y" and paramcd="UMHBMCRE" and avisitn=105), seq=1,
dset=mhbma_5);

%p(tabn=2, day=Day 90,
where=%str(anl02fl="Y" and pprot4fl="Y" and paramcd="UMHBMCRE" and avisitn=190), seq=2,
dset=mhbma_90);

%p(tabn=3, day=Day 5,
where=%str(anl02fl="Y" and pprot1fl="Y" and paramcd="U3HPMCRE" and avisitn=105), seq=1,
dset=HPMA_5);

%p(tabn=3, day=Day 90,
where=%str(anl02fl="Y" and pprot4fl="Y" and paramcd="U3HPMCRE" and avisitn=190), seq=2,
dset=HPMA_90);

%p(tabn=4, day=Day 5,
where=%str(anl02fl="Y" and pprot1fl="Y" and paramcd="USPMACRE" and avisitn=105), seq=1,
dset=PMA_5);

%p(tabn=4, day=Day 90,
where=%str(anl02fl="Y" and pprot4fl="Y" and paramcd="USPMACRE" and avisitn=190), seq=2,
dset=PMA_90);

%p(tabn=5, day=Day 5,
where=%str(anl02fl="Y" and pprot1fl="Y" and paramcd="UNNALCRE" and avisitn=105), seq=1,
dset=NNAL_5);

```
%p(tabn=5, day=Day 90,
```

```
where=%str(anl02fl="Y" and pprot4fl="Y" and paramcd="UNNALCRE" and avisitn=190), seq=2,  
dset=NNAL_90);
```

```
ods rtf close;
```

```
*Compliant table;
```

```
%p(tabn=1, day=Day 5,
```

```
where=%str(anl02fl="Y" and compp1fl="Y" and paramcd="CARBXHGB" and avisitn=105 and atpt="DAY 5  
- 20:00 - 21:30"),
```

```
seq=1, dset=cohb_5_c);
```

```
%p(tabn=1, day=Day 90,
```

```
where=%str(anl02fl="Y" and compp4fl="Y" and paramcd="CARBXHGB" and avisitn=190 and  
atptn=12.22),
```

```
seq=2, dset=cohb_90_c);
```

```
%p(tabn=2, day=Day 5,
```

```
where=%str(anl02fl="Y" and compp1fl="Y" and paramcd="UMHBMCRE" and avisitn=105), seq=1,  
dset=mhbma_5_c);
```

```
%p(tabn=2, day=Day 90,
```

```
where=%str(anl02fl="Y" and compp4fl="Y" and paramcd="UMHBMCRE" and avisitn=190), seq=2,  
dset=mhbma_90_c);
```

```
%p(tabn=3, day=Day 5,
```

```
where=%str(anl02fl="Y" and compp1fl="Y" and paramcd="U3HPMCRE" and avisitn=105), seq=1,  
dset=HPMA_5_c);
```

%p(tabn=3, day=Day 90,

where=%str(anl02fl="Y" and compp4fl="Y" and paramcd="U3HPMCRE" and avisitn=190), seq=2,
dset=HPMA_90_c);

%p(tabn=4, day=Day 5,

where=%str(anl02fl="Y" and compp1fl="Y" and paramcd="USPMACRE" and avisitn=105), seq=1,
dset=PMA_5_c);

%p(tabn=4, day=Day 90,

where=%str(anl02fl="Y" and compp4fl="Y" and paramcd="USPMACRE" and avisitn=190), seq=2,
dset=PMA_90_c);

%p(tabn=5, day=Day 5,

where=%str(anl02fl="Y" and compp1fl="Y" and paramcd="UNNALCRE" and avisitn=105), seq=1,
dset=NNAL_5_c);

%p(tabn=5, day=Day 90,

where=%str(anl02fl="Y" and compp4fl="Y" and paramcd="UNNALCRE" and avisitn=190), seq=2,
dset=NNAL_90_c);

%let l_name = %str(L_15_04_03_01_03);

%let t_title_l = %nrbrquote(Sensitivity Analysis of COHb, MHBMA, 3-HPMA, S-PMA, and Total NNAL on
Day 5/90 Visit for THS 2.2 Menthol versus mCC for the Primary Objective - Compliant Population);

ods rtf

file="/cvn/projects/prj/data/000000106343/TFL/dev/Tables/&l_name..rtf";

title "&t_title_l";

options orientation=landscape;

%p(tabn=1, day=Day 5,

where=%str(anl02fl="Y" and compp1fl="Y" and paramcd="CARBXHGB" and avisitn=105 and atpt="DAY 5
- 20:00 - 21:30"),

seq=1, dset=cohb_5_c);

%p(tabn=1, day=Day 90,

where=%str(anl02fl="Y" and compp4fl="Y" and paramcd="CARBXHGB" and avisitn=190 and
atptn=12.22),

seq=2, dset=cohb_90_c);

%p(tabn=2, day=Day 5,

where=%str(anl02fl="Y" and compp1fl="Y" and paramcd="UMHBMCRE" and avisitn=105), seq=1,
dset=mhbma_5_c);

%p(tabn=2, day=Day 90,

where=%str(anl02fl="Y" and compp4fl="Y" and paramcd="UMHBMCRE" and avisitn=190), seq=2,
dset=mhbma_90_c);

%p(tabn=3, day=Day 5,

where=%str(anl02fl="Y" and compp1fl="Y" and paramcd="U3HPMCRE" and avisitn=105), seq=1,
dset=HPMA_5_c);

%p(tabn=3, day=Day 90,

where=%str(anl02fl="Y" and compp4fl="Y" and paramcd="U3HPMCRE" and avisitn=190), seq=2,
dset=HPMA_90_c);

%p(tabn=4, day=Day 5,

where=%str(anl02fl="Y" and compp1fl="Y" and paramcd="USPMACRE" and avisitn=105), seq=1,
dset=PMA_5_c);

%p(tabn=4, day=Day 90,

where=%str(anl02fl="Y" and compp4fl="Y" and paramcd="USPMACRE" and avisitn=190), seq=2,
dset=PMA_90_c);

```

%p(tabn=5, day=Day 5,

where=%str(anl02fl="Y" and compp1fl="Y" and paramcd="UNNALCRE" and avisitn=105), seq=1,
dset=NNAL_5_c);

%p(tabn=5, day=Day 90,

where=%str(anl02fl="Y" and compp4fl="Y" and paramcd="UNNALCRE" and avisitn=190), seq=2,
dset=NNAL_90_c);


ods rtf close;


*assemble for one parameter;

%macro param_set (param_5=, param_90=, dset_1=, page=, parm=);

data all;

    set &param_5 &param_90;

run;


data dum;

length visit $200;

    seq=1;

    num=0;

    visit="&parm";

output;


    seq=1;

    num=5;

    visit="";

```



```

        output;

run;

data &dset_1;

        merge dum all;

        by seq num visit;

        pageord=&page;

run;

%mend param_set;


*PP set table;

%param_set (param_5=cohb_5, param_90=cohb_90, dset_1=cohb, page=4, parm=&u_CARBXHGB);

%param_set (param_5=mhbma_5, param_90=mhbma_90, dset_1=mhbma, page=1,
parm=&u_UMHBMCRE);

%param_set (param_5=HPMA_5, param_90=HPMA_90, dset_1=HPMA, page=2, parm=&u_U3HPMCRE);

%param_set (param_5=PMA_5, param_90=PMA_90, dset_1=PMA, page=3, parm=&u_USPMACRE);

%param_set (param_5=NNAL_5, param_90=NNAL_90, dset_1=NNAL, page=5, parm=&u_UNNALCRE);


*Compliant table;

%param_set (param_5=cohb_5_c, param_90=cohb_90_c, dset_1=cohb_c, page=4,
parm=&u_CARBXHGB);

%param_set (param_5=mhbma_5_c, param_90=mhbma_90_c, dset_1=mhbma_c, page=1,
parm=&u_UMHBMCRE);

%param_set (param_5=HPMA_5_c, param_90=HPMA_90_c, dset_1=HPMA_c, page=2,
parm=&u_U3HPMCRE);

%param_set (param_5=PMA_5_c, param_90=PMA_90_c, dset_1=PMA_c, page=3,
parm=&u_USPMACRE);

```

```
%param_set (param_5=NNAL_5_c, param_90=NNAL_90_c, dset_1=NNAL_c, page=5,  
parm=&u_UNNALCRE);
```

```
*PP set table - primary obj;
```

```
data comb_pp_prim (drop=THS_SA_RATIO_SA_);
```

```
    set cohbmhbma HPMA PMA NNAL;
```

```
    by pageord;
```

```
run;
```

```
**Compliant table - primary obj;
```

```
data comb_comp_prim (drop=THS_SA_RATIO_SA_);
```

```
    set cohbmhbma_c HPMA_c PMA_c NNAL_c;
```

```
    by pageord;
```

```
run;
```

```
%macro anlout (din=, tfl=, tabname=);
```

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

```
data tflds.&tflno;
```

```
    set &din;
```

```
run;
```

```

data tflds.&tflno;

    set tflds.&tflno end=last;

    by pageord;

    if last then call symputx("page", pageord);

run;

%put &page;


/* 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 results off;

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 tflds.&tflno end=eof;
```

```
where pageord=&i;
```

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

```
    _firtitl="&tabname";
```

```
    _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.)));
```

```
    end;
```

```
drop _firtitl _upcas len;
```

```
run;
```

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 headsip nowd split = '$' %if &i=1 %then %do; contents=' ' %end;  
%else %do; contents="" %end;;;
```

```
column pageord visit _name_ ths_ mcc_ THS_MCC_RATIO_;
```

```
define pageord / order order = internal noprint;
```

```
define visit /"Variable" display style={just=left cellwidth=1.8cm}  
style(header)={just=left} "";
```

```
define _name_ /"Statistic" display style={just=left cellwidth=2.0cm} style(header)={just=left} "";
```

```
define ths_ /"THSm2.2" display style={just=c cellwidth=1.2cm}  
style(header)={just=center} ;
```

```
define mcc_ /"mCC" display style={just=c cellwidth=1.4cm}  
style(header)={just=center};
```

```
define THS_MCC_RATIO_ /"THSm2.2 : mCC$ Ratio (%)" display style={just=c  
cellwidth=1.4cm} style(header)={just=center};
```

```
break after pageord / page;
```

```
compute after pageord;
```

```
line " ";
```

endcomp;

compute before pageord / style={protectspecialchars=off};;

line "&linetop";

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: Adjusted geometric least squares (LS) means and confidence intervals (CIs) from an ANCOVA model conducted on log-transformed values with log-transformed baseline value, study arm, sex and mCC consumption reported at screening as fixed effect factors. Geometrical CV% of the ratio is estimated from the residual mean squares.';

line 'Note: mCC = Menthol conventional cigarettes; THSm2.2 = Tobacco Heating System 2.2 Menthol.';

line 'Note: p-value for one-sided test for comparison between THSm2.2 and mCC. P-value at Day 90 is evaluated only if P-value at Day 5 is significant, in all biomarkers except for Total NNAL.';

line 'Note: For the primary objective, Total NNAL is evaluated at Day 90 while the other biomarkers are evaluated at Day 5. For the secondary objective, Total NNAL is evaluated at Day 5 while the other biomarkers are evaluated at Day 90.';

line ";

line 'Appendix 15.3.3.1 and 15.3.3.2';

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=36, halfblnk=N);


ods listing;


%mend anlout;

%anlout (din=comb_pp_prim, tfl=%str(T_15_02_03_01_01), tabname=%str(Table 15.2.3.1.1
      Analysis of COHb, MHBMA, 3-HPMA, S-PMA, and Total NNAL on Day 5/90 Visit for THS 2.2
Menthol versus mCC for the Primary Objective - PP Set));

%anlout (din=comb_comp_prim, tfl=%str(T_15_02_03_01_03), tabname=%str(Table 15.2.3.1.3
      Sensitivity Analysis of COHb, MHBMA, 3-HPMA, S-PMA, and Total NNAL on Day 5/90 Visit for
THS 2.2 Menthol versus mCC for the Primary Objective - Compliant Population));


*=====;

* END OF PROGRAM CODE                               ;

*=====;


%m_logchk;
```

