

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

```
| Covance Study Number   : 000000106343          |
```

```
| Program Name           : f_mnws_fas.sas         |
```

```
| Purpose                 : Figure 15.1.2.8.2
|
```

```
| Input Data              : tflds.t_15_02_04_56_02_f
|
```

```
| Output Data             : F_15_01_02_08_02      |
```

```
| Macros Called           :                      |
```

```
| Originally Performed by :Jyothsna Reddy         |
```

```
| Date                    : 28MAY2015             |
```

```
|                      |
```

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

```
| Modification History    |
```

```
|-----|
```

```
| Modified by            :                      |
```

```
| Modification Date      :
|
```

```
| Modification Description :                      |
```

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

```
options replace;
```

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

```
run;
```

```
%m_printto;
```

```
%let tflno=F_15_01_02_08_02;
```

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

```
%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", ""));
```

```
run;
```

```
options notes source source2 nofullstimer validvarname=upcase
```

```
nonumber nodate orientation=portrait missing=' ';
```

```
ods graphics on; /* As we are effectively using ODS graphics we need to ensure that it is turned on */
```

```
ods graphics / height=12cm width=16cm noborder; /* Removes border around the image */
```

```
ods path reset;
```

```
/* please include styles template */
```

```
%include "/cvn/projects/prj/development/000000106343/dev/figures/figtmplt.sas";
```

```
ods rtf toc_data file="/cvn/projects/prj/data/000000106343/TFL/dev/Tables/&tflno..rtf"
```

```
style=t106343_g startpage=yes headery=1440 footery=1440 ;
```

```
ods exclude all;
```

```
data forest;
```

```
length trtp $50;

set tflds.t_15_02_04_56_02_f;

if trtpN=5 then trtp="mCC";

if trtpN=4 then trtp="THSm2.2";

if trtpN=3 then trtp="SA";

if not missing(trtp);

run;
```

```
proc sort data=forest out=forest1;

  by param ;

run;
```

```
proc sort data=forest out=uqparam nodupkey;

  by paramn ;

run;
```

```
data dforest1(keep= param paramn avisit1 trtpn trtp avisitn avisit mean LCLM UCLM gmean tpt);

format gmean 6.2;

length tpt 3 avisit1 8;

set forest1;

  IF avisitn=100 THEN avisit1=0;

  IF avisitn=10 THEN avisit1=0;

    IF avisitn=102 THEN avisit1=1;

    IF avisitn=103 THEN avisit1=2;

    IF avisitn=104 THEN avisit1=3;
```

```

        IF avisitn=105 THEN avisit1=4;

        IF avisitn=106 THEN avisit1=5;

        IF avisitn=130 THEN avisit1=6;

        IF avisitn=160 THEN avisit1=7;

        IF avisitn=190 THEN avisit1=8;

        if not missing(lclm) then lclmx = 0.1*floor(lclm/0.1);

        if not missing(uclm) then uclmx = 0.1*ceil(uclm/0.1);

        tpt=avisit1;

        paramn=1;

        if not missing(mean) then mean=round(mean,0.1);

        gmean=mean;IF AVISITN=99 THEN DELETE;

run;

proc sort data=dforest1;

    by param ;

run;

```

```

data adbx3;

    set dforest1 ;

par=1;

run;

```

```

PROC SQL;

CREATE TABLE ADBX3_X AS

SELECT PARAM, trtp, AVISIT, mean, lclm, uclm

```

```
FROM ADBX3;
```

```
QUIT;
```

```
PROC EXPORT DATA=ADBX3_X DBMS=XLSX
```

```
OUTFILE="/cvn/projects/prj/data/000000106343/TFL/dev/Tables/&tflno..xlsx" REPLACE;
```

```
SHEET=Sheet1;
```

```
title;
```

```
footnote;
```

```
proc sort data=adbx3;
```

```
by par;
```

```
run;
```

```
PROC FORMAT;
```

```
VALUE XAXIS_
```

```
4.5='1'
```

```
9='2'
```

```
13.5='3'
```

```
18='4'
```

```
22.5='5'
```

```
45='30'
```

```
67.5='60'
```

```
90='90'
```

```
0='Baseline'
```

```
;
```

RUN;

data paging; /* paging is derived normally as with RTF type TFL */

set adbx3 end=last;

page = 1;

if trtpn=3 then trtord=3;

else if trtpn=4 then trtord=1;

else if trtpn=5 then trtord=2;

if tpt=1 then newvis=4.5;

else if tpt=2 then newvis=9;

else if tpt=3 then newvis=13.5;

else if tpt=4 then newvis=18;

else if tpt=5 then newvis=22.5;

else if tpt=6 then newvis=45;

else if tpt=7 then newvis=67.5;

else if tpt=8 then newvis=90;

else newvis=tpt;

run;

proc sort data=paging out=uniqpar nodupkey;by paramn;run;

%let maxpage=1;

```
%macro graph();
```

```
%do i=1 %to 1; /* paging can either be done through a do loop or multiple macro calls */
```

```
%do j=1 %to &maxpage %by 1;
```

```
data plot1;
```

```
set paging;
```

```
parm=strip(param);
```

```
drop param;
```

```
rename parm=param;
```

```
run;
```

```
proc sql noprint;
```

```
select param into:param trimmed
```

```
from plot1;
```

```
quit;
```

```
data plot;
```

```
set plot1;
```

```
run;
```

```
proc sort data=plot; by avisitn;run;
```

```
proc template;
```

```
define statgraph splot ;
```

```
begingraph ;
```

```
layout overlay / border=false
```

```

        xaxisopts=(linearopts=(tickvaluelist=(0 4.5 9 13.5 18 22.5 45 67.5 90)
TICKVALUEFITPOLICY=ROTATE ) label="Study Day")

        yaxisopts=(linearopts=(tickvaluesequence=(start=0 end=2 increment=.5) viewmin=0
viewmax=2)

        label("&param") cycleattrs=false;

        seriesplot x=newvis y=mean / index=trtpn primary=true group=trtp display=(markers)
legendlabel="mean" name="series";

        scatterplot x=newvis y=gmean / index=trtpn group=trtp yerrorlower=lclm yerrorupper=uclm
legendlabel="mean"

        name="scatter" ;

        discretelegend "series";

        endlayout;

        endgraph;

        end;

run;

ods select all;

ODS ESCAPECHAR='^';

ODS RTF PREPAGE="^S={outputwidth=100% just=l font_size=12pt font_weight=bold background=white
foreground=black font_face=arial}^R/RTF\QL' Figure 15.1.2.8.2 MNWS Total Score Arithmetic Mean and
95% CI - FAS";

ods rtf style=t106343_g;

proc sort data=plot; by trtord;run;

proc sgrender data=plot template=splot; /* applies the above template to the specified data */
FORMAT newvis XAXIS_.;

```



```
run;
```

```
ODS RTF TEXT="^S={outputwidth=100% just=l font_size=9pt background=white foreground=black  
font_face=arial}^R/RTF'\QL' Note: mCC = Menthol conventional cigarettes; SA = Smoking abstinence;  
THSm2.2 = Tobacco Heating System 2.2 Menthol.";
```

```
ODS RTF TEXT="^S={outputwidth=100% just=l font_size=9pt background=white foreground=black  
font_face=arial}^R/RTF'\QL' Note: Baseline is the last assessment prior to first product use in mCC/THS  
2.2 arms on Day 1 or last assessment prior to 10:00 AM in SA arm on Day 1.";
```

```
ODS RTF TEXT="^S={outputwidth=100% just=l font_size=9pt background=white foreground=black  
font_face=arial}^R/RTF'\QL' Note: MNWS-R total score reported a scale of 0 to 4. Higher scores indicate  
greater intensity of withdrawal symptoms.";
```

```
ODS RTF TEXT="^S={outputwidth=100% just=l font_size=9pt background=white foreground=black  
font_face=arial}^R/RTF'\QL"";
```

```
ODS RTF TEXT="^S={outputwidth=100% just=l font_size=9pt background=white foreground=black  
font_face=arial}^R/RTF'\QL' Appendix 15.2.4.56.2";
```

```
%let tflprg=f_mnws_fas;
```

```
ODS RTF TEXT="^S={outputwidth=100% just=l font_size=9pt background=white foreground=black  
font_face=arial}^R/RTF'\QL' Study ID:ZRHM-REXA-08-US Program:&tflprg..sas &sysdate Status:  
&status. (Page &j of &maxpage)";
```

```
%end;
```

```
%end;
```

```
%mend graph;
```

```
%graph;
```

```
ods _all_ close;
```

```
ods graphics / reset;
```

```
%m_logchk;
```