

/*****

** STUDY ID : 000000106343

**

** PROGRAM NAME : t_cough2.sas

**

** DATE : 05Jun2015

**

** PROGRAMMER : cvn_aramasah

**

** PURPOSE : QC the table Summary of cough assessments by study day-
safety population (t_15_2_6_25)

**

** INPUT DATA : ADAM.ADSL, ADAM.adqssym

**

** OUTPUT DATA :

**

** SAS MACROS USED :

**

** MODIFICATIONS : DATE : MODIFIED BY : NOTES :

**

**

** PROGRAMMED USING SAS VERSION 9.3 **

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-----/

```

%m_printto;

options notes source source2 nofullstimer validvarname=upcase missing=' ';

ods _all_ close;

ods listing;

options notes nosource replace;

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

*=====;

* START OF PROGRAM CODE                                ;

*=====;


%let tflno=T_15_02_06_25_01;

%let TFLprg=t_cough2.sas;

%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", ""));

run;


proc sql;

```

```

select count(distinct usubjid) into: pre_ths from adam.adsl(where =(safbfl = "Y" and trt01an = 4));
select count(distinct usubjid) into: pre_mcc from adam.adsl(where =(safbfl = "Y" and trt01an = 5));
select count(distinct usubjid) into: pre_sa from adam.adsl(where =(safbfl = "Y" and trt01an = 3));
select count(distinct usubjid) into: pre_prod from adam.adsl(where =(safbfl = "Y" and trt01an = 96));
select count(distinct usubjid) into: pre_all from adam.adsl(where =(safbfl = "Y" and trt01an in (3 4 5 96)));

```

```
quit;
```

```
proc sql;
```

```

select count(distinct usubjid) into: rand_ths from adam.adsl(where =(safaf1 = "Y" and trt01an = 4));
select count(distinct usubjid) into: rand_mcc from adam.adsl(where =(safaf1 = "Y" and trt01an = 5));
select count(distinct usubjid) into: rand_sa from adam.adsl(where =(safaf1 = "Y" and trt01an = 3));
select count(distinct usubjid) into: rand_all from adam.adsl(where =(safaf1 = "Y" and trt01an in (3 4 5)));

```

```
quit;
```

```
%macro cough(flag=,name=);
```

```
*****,
```

```
* read in data ;
```

```
*****,
```

```
data ex_&name. vas_&name. int_&name. courfeq_&name. sput_&name.;
```

```
set adam.adqssym,* (where=(anl01fl='Y'));
```

```

&flag.;

if missing(avalc) then avalc='Missing';

if trta='THSm2.2' then trtan=1;

if trta='mCC' then trtan=2;

if trta='SA' then trtan=3;

if trta='Product Test' then trtan=96;

if missing(trtan) then delete;

if index(trta,'Expos') then delete;


if paramn=1 then output ex_&name.;

if paramn=2 then output vas_&name.;

if paramn=3 and not missing(aval) then output int_&name.;

if paramn=4 and not missing(aval) then output courfeq_&name.;

if paramn=5 and not missing(aval) then output sput_&name.;

run;

/* VAS start */


data vas;

set vas_&name.;

output;

trta='Overall';

trtan=99;

output;

run;

```

```
proc sort data=vas out=vas01;
```

```
by trtan trta avisitn avisit;
```

```
run;
```

```
proc means data=vas01 noprint;
```

```
by trtan trta avisitn avisit paramn param;
```

```
var aval;
```

```
output out=vas02 n=n1 mean=mean1 std=std1 median=median1 min=min1 max=max1;
```

```
run;
```

```
data vas03;
```

```
set vas02;
```

```
n = left(compress(put(n1,8.)));
```

```
IF N1 GT 1 THEN DO;
```

```
if not missing(median1) then median = left(compress(put(median1,8.1)));
```

```
if not missing(mean1) and not missing(std1) then meansd =  
left(compress(put(round(mean1,0.1),8.1))) || ' (' || left(compress(put(0.01*ceil(std1/0.01),8.2))) || ' ';
```

```
if not missing(min1) and not missing(max1) then minmax = left(compress(put(min1,8.))) || ' , '  
|| left(compress(put(max1,8.)));
```

```
END;
```

```
ELSE IF N1 LT 2 THEN DO;
```

```
if not missing(median1) then median = left(compress(put(median1,8.1)));
```

```
if not missing(mean1) /*and not missing(std1)*/ then meansd =  
left(compress(put(round(mean1,0.1),8.1))) || ' (NC)' ;* || left(compress(put(0.01*ceil(std1/0.01),8.2)))  
|| ' ';
```

```
if not missing(min1) and not missing(max1) then minmax = left(compress(put(min1,8.))) || ' , '  
|| left(compress(put(max1,8.)));
```

```

        END;

        drop mean1 std1 _: n1;

run;

proc sort data=vas03;

        by avisitn avisit;

run;

proc transpose data=vas03 out=vas04 prefix=_;

        by avisitn avisit paramn param;

        var n meansd median minmax;

        id trtan;

        idlabel trta;

run;

data vas05;

        set vas04;

        attrib stat format=$20.;

        by avisitn avisit;

        if first.avisit then varnum=1;

        else varnum+1;

        if _name_='MEDIAN' then stat='Median';

        else if _name_='MINMAX' then stat='Min, Max';

        else if _name_='MEANSD' then stat='Mean (SD)';

        else stat=lowercase(_name_);

```

```

        vargroup=2;

        drop _name_;

        place=&name.;

run;

/* VAS end */

data ex01;

    set ex_&name.;

    if missing(avalc) then avalc='Missing';

run;

proc sort data=ex01;

    by subjid avisitn descending avalc;

run;

proc freq data=ex01 noprint;

    tables subjid*avisitn*avisit*trtan*avalc / out=ex02(drop=percent);

run;

proc sort data=ex02;

    by subjid avisitn avisit descending avalc;

run;

data ex03;

    set ex02;

```

```

        by subjid avisitn avisit descending avalc;

/*   if first.subjid;*/

    if first.avisitn;

run;


proc summary data=ex03;

    class avisitn avisit avalc trtan;

    var count;

    output out=ex04

    sum(count)=sum;

run;


data ex04a(where=(avisit ne " and avisitn ne . and avalc ne " and trtan ne .));

    set ex04(keep=avalc trtan sum avisitn avisit);

run;


proc sort data=ex04a;

    by avisitn avisit descending avalc;

run;


proc transpose data=ex04a out=ex_ev02 (drop=_name_ _label_) prefix=ev;

    by avisitn avisit descending avalc;

    id trtan;

    var sum;

run;

```



```

data ex_ev03;

    set ex_ev02;

    rown=_n_+1;

    text='Has subject experienced cough in the study period assessed';

    variable=put(avalc,$80.);

run;


proc sort data=ex_ev03;

by rown;

run;

/*Pull out event numbers for bottom half of table*/

data int_ev;

    set int_&name.;

    if missing(aval) then delete;

run;

proc freq data=int_ev;

    table subjid*avisitn*avisit*trtan*avalc*aval / noprint out=int_ev01(drop=percent);

run;

proc sort data=int_ev01;

    by subjid avisitn avisit descending aval;

run;


data int_ev01a;

    set int_ev01;

    by subjid avisitn avisit descending aval;

```

```
/* if first.subjid then output;*/
```

```
if first.avisitn then output;
```

```
run;
```

```
proc summary data=int_ev01a;
```

```
class avisitn avisit aval avalc trtan;
```

```
var count;
```

```
output out=int_ev01b
```

```
sum(count)=sum;
```

```
run;
```

```
data int_ev01c(where=(avisitn ne . and avisit ne " and avalc ne " and aval ne . and trtan ne .));
```

```
set int_ev01b(keep=avisitn avisit aval avalc trtan sum);
```

```
run;
```

```
proc sort data=int_ev01c;
```

```
by avisitn avisit aval avalc;
```

```
run;
```

```
proc transpose data=int_ev01c out=int_ev02 (drop=_name_ _label_) prefix=ev;
```

```
by avisitn avisit aval avalc;
```

```
id trtan;
```

```
var sum;
```

```
run;
```

```
data int_ev03;
```

```

        set int_ev02;

        rown=aval+6;

        text='Intensity of cough';

        variable=put(avalc,$80.);

run;

/*Pull out n numbers for top half*/

proc sort data=ex01 out=ex_sub1;

    by trtan usubjid avisitn avisit descending avalc ;

run;

proc sort data=ex_sub1 out=ex_sub2 nodupkey;

    by trtan usubjid avisitn avisit descending avalc;

run;

proc sort data=ex_sub2;

    by descending avalc;

run;

proc freq data=ex_sub2 noprint;

    tables trtan*usubjid*avisitn*avisit*avalc / out=ex_sub3(drop=percent rename=(count=count2));

run;

proc sort data=ex_sub3;

    by trtan usubjid avisitn avisit descending avalc;

run;

```

```
proc sort data=ex_sub3 nodupkey out=ex_sub4;
```

```
    by trtan usubjid avisitn avisit ;
```

```
run;
```

```
proc freq data=ex_sub4;
```

```
    table trtan*avisitn*avisit*avalc / noprint out=ex_sub01(drop=percent);
```

```
run;
```

```
/* for missing */
```

```
proc sort data=ex_sub01;
```

```
    by trtan avisitn avisit ;
```

```
run;
```

```
proc transpose data=ex_sub01 out=ex_sub01_trans;
```

```
    by trtan avisitn avisit;
```

```
    id avalc;
```

```
    var count;
```

```
run;
```

```
data ex_sub01_trans;
```

```
    set ex_sub01_trans;
```

```
    _Y_N=sum(y, n/*, Missing*/);
```

```
    if trtan=1 and _Y_N ne &pre_ths. then do;
```

```

        avalc='Missing';

        count= (&pre_ths. - _Y_N);

    end;

/*
    else count=0;*/

    if trtan=2 and _Y_N ne &pre_mcc. then do;

        avalc='Missing';

        count= (&pre_mcc. - _Y_N);

    end;

    if trtan=3 and _Y_N ne &pre_sa. then do;

        avalc='Missing';

        count= (&pre_sa. - _Y_N);

    end;

    %if &name.=1 %then %do;

        if trtan=96 and _y_n ne &pre_prod. then do;

            avalc='Missing';

            count= (&pre_prod. - _y_n);

        end;

    %end;

    keep trtan count avisitn avisit avalc;

run;


data ex_sub01_;

    set ex_sub01 ex_sub01_trans;

run;

```

```

/* missing end */

proc sort data=ex_sub01_;
    by avisitn avisit descending avalc;
run;

proc transpose data=ex_sub01_ out=ex_sub02 (drop=_name__label_) prefix=sub;
    by avisitn avisit descending avalc;
    id trtan;
    var count;
run;

data ex_sub03;
    set ex_sub02;
    if avalc ne "";
    rown=_n_+1;
    text='Has subject experienced cough in the study period assessed';
    variable=put(avalc,$80.);

run;

/* for % other than has subject experienced cough in the study assessed */

data perc_1_&name.;
    set ex_sub03;
    if avalc='Y';
    place=&name.;
    if sub1 ne . then ths_perc_1=sub1;

```

```

if sub2 ne . then mcc_perc_1=sub2;

if sub3 ne . then sa_perc_1=sub3;

%if &name.=1 %then %do;

if sub96 ne . then prod_perc_1=sub96;

total_perc=sum(sub1, sub2, sub3, sub96);

drop sub1 sub2 sub3 sub96 avalc;

%end;

%else %do;

total_perc=sum(sub1, sub2, sub3);

drop sub1 sub2 sub3 avalc;

%end;

run;

```

```

proc sort data= perc_1_&name.;

by place;

run;

```

```

/*Pull out n numbers for bottom third*/

data int_sub;

    set int_&name. (where=(not missing(aval)));

    by subjid avisitn avisit;

    retain subcount maxint;

    maxint=max(maxint,aval);

/*    if first.subjid then do;*/

    if first.avisitn then do;

```

```

        maxint=aval;

        subcount=subjid;

        end;

    keep subjid aval avalc maxint subcount trtan avisitn avisit;

run;

proc sort data=int_sub out=int_sub01;

    by subjid avisitn avisit descending aval;

run;

data int_sub02;

    set int_sub01;

    by subjid avisitn avisit descending aval;

/*    if not first.subjid then delete;*/

    if not first.avisitn then delete;

run;

proc freq data=int_sub02;

    table trtan*avisitn*avisit*aval*avalc / noprint out=int_sub03;

run;


proc sort data=int_sub03;

    by avisitn avisit aval avalc;

run;

proc transpose data=int_sub03 out=int_sub04 (drop=_name__label_) prefix=sub;

    by avisitn avisit aval avalc;

    id trtan;

```



```

        var count;

run;

data int_sub05;

    set int_sub04;

    length variable $80.;

    rown=aval+6;

    text='Intensity of cough';

    variable=put(avalc,$50.);

run;


/*FREQUENCY OF COUGH*/

data courfeq2;

    set courfeq_&name.;

    if missing(avalc) then avalc='Missing';

run;


proc sort data=courfeq2;

    by subjid avisitn avisit descending aval;

run;


proc freq data=courfeq2 noprint;

    tables subjid*avisitn*avisit*trtan*aval*avalc / out=courfeq3(drop=percent);

run;


proc sort data=courfeq3;

```

```
    by subjid avisitn avisit descending aval;  
run;
```

```
data courfeq4;  
    set courfeq3;  
    by subjid avisitn avisit descending aval;  
/*  if first.subjid;*/  
    if first.avisitn;  
run;
```

```
proc summary data=courfeq4;  
    class avisitn avisit aval avalc trtan;  
    var count;  
    output out=courfeq5  
    sum(count)=sum;  
run;
```

```
data courfeq6(where=(avisitn ne . and avisit ne " and avalc ne " and trtan ne . and aval ne .));  
    set courfeq5(keep=avalc trtan sum aval avisitn avisit);  
run;
```

```
proc sort data=courfeq6;  
    by avisitn avisit aval avalc;  
run;
```

```

proc transpose data=courfeq6 out=courfeq7 (drop=_name__label_) prefix=ev;

    by avisitn avisit aval avalc;

    id trtan;

    var sum;

run;

```

```

data courfeq8; /* THIS IS NUMBER OF EVENTS FOR SOUGH FREQUENCY */

    set courfeq7;

    rown=aval+13;

    text='Frequency of cough';

    variable=strip(put(avalc,$80.));

run;

```

```

data courfeqsub;

    set courfeq_&name.(where=(not missing(aval)));

    by subjid avisitn avisit ;

    retain subcount maxint;

    maxint=max(maxint,aval);

/*    if first.subjid then do;*/

    if first.avisitn then do;

        maxint=aval;

        subcount=subjid;

        end;

    keep subjid aval avalc maxint subcount trtan avisitn avisit;

run;

```

```

proc sort data=courfeqsub out=courfeqsub1;
    by subjid avisitn avisit descending aval;
run;

data courfeqsub2;
    set courfeqsub1;
    by subjid avisitn avisit descending aval;
/*    if not first.subjid then delete;*/
    if not first.avisitn then delete;
run;

proc freq data=courfeqsub2;
    table trtan*avisitn*avisit*aval*avalc / noprint out=courfeqsub3;
run;

```

```

proc sort data=courfeqsub3;
    by avisitn avisit aval avalc;
run;

proc transpose data=courfeqsub3 out=courfeqsub4 (drop=_name__label_) prefix=sub;
    by avisitn avisit aval avalc;
    id trtan;
    var count;
run;

data courfeqsub5; /*THIS IS NUMBER OF SUBJECTS FOR COUGH FREQUENCY*/
    set courfeqsub4;
    length variable $80.;

```

```
    rown=aval+13;  
    text='Frequency of cough';  
    variable=strip(put(avalc,$50.));  
run;
```

```
/*SPUTUM*/
```

```
data sput2;  
    set sput_&name.;  
    if missing(avalc) then avalc='Missing';  
run;
```

```
proc sort data=sput2;  
    by subjid avisitn avisit descending aval;  
run;
```

```
proc freq data=sput2 noprint;  
    tables subjid*avisitn*avisit*trtan*aval*avalc / out=sput3(drop=percent);  
run;
```

```
proc sort data=sput3;  
    by subjid avisitn avisit descending aval;  
run;
```

```
data sput4;  
    set sput3;
```

```
by subjid avisitn avisit descending aval;
```

```
/* if first.subjid;*/
```

```
if first.avisitn;
```

```
run;
```

```
proc summary data=sput4;
```

```
class avisitn avisit aval avalc trtan;
```

```
var count;
```

```
output out=sput5
```

```
sum(count)=sum;
```

```
run;
```

```
data sput6(where=(avisitn ne . and avisit ne " and avalc ne " and trtan ne . and aval ne .));
```

```
set sput5(keep=avalc aval trtan sum avisitn avisit );
```

```
run;
```

```
proc sort data=sput6;
```

```
by avisitn avisit aval avalc;
```

```
run;
```

```
proc transpose data=sput6 out=sput7 (drop=_name__label_) prefix=ev;
```

```
by avisitn avisit aval avalc;
```

```
id trtan;
```

```
var sum;
```

```
run;
```

```
data sput8; /* THIS IS NUMBER OF EVENTS FOR SPUTUM */
```

```
    set sput7;
```

```
    rown=aval+21;
```

```
    text='Amount of sputum produced';
```

```
    variable=put(avalc,$80.);
```

```
run;
```

```
data sputsub;
```

```
    set sput_&name. (where=(not missing(aval)));
```

```
    by subjid avisitn avisit ;
```

```
    retain subcount maxint;
```

```
    maxint=max(maxint,aval);
```

```
/*    if first.subjid then do;*/
```

```
    if first.avisitn then do;
```

```
        maxint=aval;
```

```
        subcount=subjid;
```

```
    end;
```

```
    keep subjid aval avalc maxint subcount trtan avisitn avisit ;
```

```
run;
```

```
proc sort data=sputsub out=sputsub1;
```

```
    by subjid avisitn avisit descending aval;
```

```
run;
```

```
data sputsub2;
```

```
    set sputsub1;
```

```

        by subjid avisitn avisit descending aval;

/*      if not first.subjid then delete;*/

        if not first.avisitn then delete;

run;

proc freq data=sputsub2;

        table trtan*avisitn*avisit*aval*avalc / noprint out=sputsub3;

run;


proc sort data=sputsub3;

        by avisitn avisit aval avalc;

run;

proc transpose data=sputsub3 out=sputsub4 (drop=_name_ _label_) prefix=sub;

        by avisitn avisit aval avalc;

        id trtan;

        var count;

run;

data sputsub5;/*THIS IS NUMBER OF SUBJECTS FOR SPUTUM*/

        set sputsub4;

        length variable $80.;

        rown=aval+21;

        text='Amount of sputum produced';

        variable=put(avalc,$50.);

run;

```



```
data rows;

    length variable $80.;

sect=1;

    rown=1; variable='Has subject experienced cough in the study period assessed?';

    output;

    rown=2; variable='Yes';

    output;

    rown=3; variable='No';

    output;

    rown=4; variable='Missing';

    output;

sect=2;

    rown=6;      variable='Intensity of cough';

    output;

    rown=7;      variable='Very mild';

    output;

    rown=8; variable='Mild';

    output;

    rown=9; variable='Moderate';

    output;

    rown=10; variable='Severe';

    output;

    rown=11; variable='Very severe';

    output;

/*    rown=12; variable='Missing';*/
```

```
/*      output;*/  
sect=3;  
  
    rown=13; variable='Frequency of cough';  
  
    output;  
  
    rown=14; variable='Rarely';  
  
    output;  
  
    rown=15; variable='Sometimes';  
  
    output;  
  
    rown=16; variable='Fairly often';  
  
    output;  
  
    rown=17; variable='Often';  
  
    output;  
  
    rown=18; variable='Almost always';  
  
    output;  
  
/*      rown=19; variable='Missing';*/  
  
/*      output;*/  
sect=4;  
  
    rown=20; variable='Amount of sputum produced';  
  
    output;  
  
    rown=21; variable='No sputum';  
  
    output;  
  
    rown=22; variable='A moderate amount of sputum';  
  
    output;  
  
    rown=23; variable='A large amount of sputum';  
  
    output;
```

```
        rown=24; variable='A very large amount of sputum';  
        output;  
/*      rown=25; variable='Missing';*/  
/*      output;*/  
run;
```

```
data rows_visit;  
length avisit $40. avisitn 8.;  
set rows;  
avisitn=101;  
avisit="Day 1";  
output;  
avisitn=102;  
avisit="Day 2";  
output;  
avisitn=103;  
avisit="Day 3";  
output;  
avisitn=104;  
avisit="Day 4";  
output;  
avisitn=105;  
avisit="Day 5";  
output;  
avisitn=106;
```

```
avisit="Day 6/Discharge Confinement";
```

```
output;
```

```
avisitn=130;
```

```
avisit="Day 30";
```

```
output;
```

```
avisitn=160;
```

```
avisit="Day 60";
```

```
output;
```

```
avisitn=190;
```

```
avisit="Day 90";
```

```
output;
```

```
run;
```

```
/* n of the 2,3,4 sections of the table */
```

```
proc freq data=int_sub02;
```

```
    table trtan*avisitn*avisit / noprint out=int_sub03_n;
```

```
run;
```

```
proc freq data=courfeqsub2;
```

```
    table trtan*avisitn*avisit / noprint out=courfeqsub3_n;
```

```
run;
```

```
proc freq data=sputsub2;  
    table trtan*avisitn*avisit / noprint out=sputsub3_n;  
run;
```

```
proc sort data=int_sub03_n;  
by avisitn avisit;  
run;
```

```
proc transpose data=int_sub03_n out=int_sub03_n_1;  
by avisitn avisit;  
id trtan;  
var count;  
run;
```

```
data int_sub03_n_1;  
length item $50.;  
set int_sub03_n_1;  
item='n';  
run;
```

```
data int_sub03_n_1;  
length item $50.;  
set int_sub03_n_1;  
item='n';  
drop _name__label_;
```

```
rown=6.5;

%if &name.=2 %then %do; all=sum(_1, _2, _3); %end;

%if &name.=1 %then %do; all=sum(_1, _2, _3, _96); %end;

run;
```

```
proc sort data=courfeqsub3_n;

by avisitn avisit;

run;
```

```
proc transpose data=courfeqsub3_n out=courfeqsub3_n_1;

by avisitn avisit;

id trtan;

var count;

run;
```

```
data courfeqsub3_n_1;

length item $50.;

set courfeqsub3_n_1;

item='n';

drop _name__label_;

rown=13.5;

%if &name.=2 %then %do; all=sum(_1, _2, _3); %end;

%if &name.=1 %then %do; all=sum(_1, _2, _3, _96); %end;

run;
```

```
proc sort data=sputsub3_n;
```

```
by avisitn avisit;
```

```
run;
```

```
proc transpose data=sputsub3_n out=sputsub3_n_1;
```

```
by avisitn avisit;
```

```
id trtan ;
```

```
var count;
```

```
run;
```

```
data sputsub3_n_1;
```

```
length item $50.;
```

```
set sputsub3_n_1;
```

```
item='n';
```

```
drop _name__label_;
```

```
rown=20.5;
```

```
%if &name.=2 %then %do; all=sum(_1, _2, _3); %end;
```

```
%if &name.=1 %then %do; all=sum(_1, _2, _3, _96); %end;
```

```
run;
```

```
/* missing */
```

```
/* section 1 */
```

```
proc sort data=int_sub03;
```

```
by trtan avisitn avisit;
```

```
run;
```

```
proc transpose data=int_sub03 out=int_sub03_trans;
```

```
    by trtan avisitn avisit;
```

```
    id avalc;
```

```
    var count;
```

```
run;
```

```
data int_sub03_trans;
```

```
length item $50.;
```

```
    set int_sub03_trans;
```

```
    _Y_N=sum(VERY_MILD, MILD,MODERATE, /*VERY_SEVERE,*/ SEVERE/*, Missing*/);
```

```
        item='n';
```

```
    keep item trtan _Y_N avisitn avisit;
```

```
run;
```

```
proc sort data=int_sub03_trans;
```

```
by item avisitn avisit;
```

```
run;
```

```
proc transpose data=int_sub03_trans out=int_sub03_trans_ suffix=_;
```

```
by item avisitn avisit;
```

```
id trtan;
```

```
var _Y_N;
```

```
run;
```



```
proc sort data=int_sub03_n_1;  
by item avisitn avisit;  
proc sort data=int_sub03_trans_  
by item avisitn avisit;  
run;
```

```
data int_sub03_n_1_  
merge int_sub03_n_1 int_sub03_trans_ (drop=_name_);  
by item avisitn avisit;  
if _1 ne _1_ then do; item='Missing'; _1=_1 - _1_; end;  
if _2 ne _2_ then do; item='Missing'; _2=_2 - _2_; end;  
if _3 ne _3_ then do; item='Missing'; _3=_3 - _3_; end;  
%if &name.=1 %then %do;  
if _96 ne _96_ then do; item='Missing'; _96=_96 - _96_; end;  
drop _1_ _2_ _3_ _96_  
%end;  
drop _1_ _2_ _3_  
run;
```

```
/* section 2 */  
proc sort data=courfeqsub3;  
by trtan avisitn avisit;  
run;
```

```
proc transpose data=courfeqsub3 out=courfeqsub3_trans;
```

```
    by trtan avisitn avisit;
```

```
    id avalc;
```

```
    var count;
```

```
run;
```

```
data courfeqsub3_trans;
```

```
length item $50.;
```

```
    set courfeqsub3_trans;
```

```
    _Y_N=sum(RARELY, SOMETIMES, FAIRLY_OFTEN, OFTEN/*, ALMOST_ALWAYS, Missing*/);
```

```
        item='n';
```

```
    keep item trtan _Y_N avisitn avisit ;
```

```
run;
```

```
proc sort data=courfeqsub3_trans;
```

```
by item avisitn avisit;
```

```
run;
```

```
proc transpose data=courfeqsub3_trans out=courfeqsub3_trans_ suffix=_;
```

```
by item avisitn avisit;
```

```
id trtan;
```

```
var _Y_N;
```

```
run;
```

```
proc sort data=courfeqsub3_n_1;  
by item avisitn avisit;  
proc sort data=courfeqsub3_trans_  
by item avisitn avisit;  
run;
```

```
data courfeqsub3_n_1_  
merge courfeqsub3_n_1 courfeqsub3_trans_ (drop=_name_);  
by item avisitn avisit;  
if _1 ne _1_ then do; item='Missing'; _1=_1 - _1_; end;  
if _2 ne _2_ then do; item='Missing'; _2=_2 - _2_; end;  
if _3 ne _3_ then do; item='Missing'; _3=_3 - _3_; end;  
drop _1_ _2_ _3_  
%if &name.=1 %then %do;  
if _96 ne _96_ then do; item='Missing'; _96=_96 - _96_; end;  
drop _1_ _2_ _3_ _96_  
%end;
```

```
/* section 3 */
```

```
proc sort data=sputsub3;  
by trtan avisitn avisit;  
run;
```

```
proc transpose data=sputsub3 out=sputsub3_trans;
```

```
    by trtan avisitn avisit;
```

```
    id avalc;
```

```
    var count;
```

```
run;
```

```
data sputsub3_trans;
```

```
length item $50.;
```

```
    set sputsub3_trans;
```

```
    _Y_N=sum(NO_SPUTUM, A_MODERATE_AMOUNT_OF_SPUTUM,  
A_LARGE_AMOUNT_OF_SPUTUM/*, A_VERY_LARGE_AMOUNT_OF_SPUTUM, Missing*/);
```

```
        item='n';
```

```
    keep item trtan _Y_N avisitn avisit;
```

```
run;
```

```
proc sort data=sputsub3_trans;
```

```
by item avisitn avisit;
```

```
run;
```

```
proc transpose data=sputsub3_trans out=sputsub3_trans_suffix=_;
```

```
by item avisitn avisit;
```

```
id trtan;
```

```
var _Y_N;
```

```
run;
```

```
proc sort data=sputsub3_n_1;
```

```
by item avisitn avisit;
```

```
proc sort data=sputsub3_trans_;
```

```
by item avisitn avisit;
```

```
run;
```

```
data sputsub3_n_1_;
```

```
merge sputsub3_n_1 sputsub3_trans_ (drop=_name_);
```

```
by item avisitn avisit;
```

```
if _1 ne _1_ then do; item='Missing'; _1=_1 - _1_; end;
```

```
if _2 ne _2_ then do; item='Missing'; _2=_2 - _2_; end;
```

```
if _3 ne _3_ then do; item='Missing'; _3=_3 - _3_; end;
```

```
drop _1_ _2_ _3_;
```

```
%if &name.=1 %then %do;
```

```
if _96 ne _96_ then do; item='Missing'; _96=_96 - _96_; end;
```

```
drop _1_ _2_ _3_ _96_;
```

```
%end;
```

```
run;
```

```
/* all together */
```

```
data all_missing;
```

```
set int_sub03_n_1_ (in=sec_2) courfeqsub3_n_1_ (in=sec_3) sputsub3_n_1_ (in=sec_4);
```

```
if sec_2 and item='Missing' then rown=12; else delete;
```

```
if sec_3 and item='Missing' then rown=19; else delete;
```

```
if sec_4 and item='Missing' then rown=25; else delete;
```

```
run;
```

```
/* end */
```

```
proc sort data=ex_sub03;
```

```
/*      by text rown variable avalc;*/
```

```
      by text avisitn avisit variable avalc;
```

```
proc sort data=ex_ev03;
```

```
/*      by text rown variable avalc;*/
```

```
      by text avisitn avisit variable avalc;
```

```
proc sort data=int_sub05;
```

```
/*      by text rown variable avalc aval;*/
```

```
      by text rown avisitn avisit aval avalc variable;
```

```
proc sort data=int_ev03;
```

```
/*      by text rown variable avalc aval;*/
```

```
      by text rown avisitn avisit aval avalc variable;
```

```
proc sort data=sputsub5;
```

```
/*      by text rown variable avalc aval;*/
```

```
      by text rown avisitn avisit aval avalc variable;
```

```
proc sort data=sput8;
```

```
/*      by text rown variable avalc aval;*/
```

```
      by text rown avisitn avisit aval avalc variable;
```

```
proc sort data=courfeqsub5;
```

```
/*      by text rown variable avalc aval;*/
```

```
      by text rown avisitn avisit aval avalc variable;
```

```
proc sort data=courfeq8;
```

```
/*      by text rown variable avalc aval;*/  
  
      by text rown avisitn avisit aval avalc variable;  
  
run;
```

```
data part_1;  
  
      merge ex_sub03 ex_ev03(drop=row);  
  
/*      by text rown variable avalc;*/  
  
      by text avisitn avisit variable avalc;  
  
      vargroup=1;  
  
run;
```

```
data part_2;  
  
      merge int_sub05 int_ev03;  
  
/*      by text rown variable avalc aval;*/  
  
      by text rown avisitn avisit aval avalc variable;  
  
run;
```

```
data part_3;  
  
      merge courfeqsub5 courfeq8;  
  
/*      by text rown variable avalc aval;*/  
  
      by text rown avisitn avisit aval avalc variable;  
  
run;
```

```
data part_4;  
  
      merge sputsub5 sput8;
```

```
/*      by text rown variable avalc aval;*/  
      by text rown avisitn avisit aval avalc variable;  
run;
```

```
data part_2_;  
set part_2 int_sub03_n_1;  
      vargroup=3;  
run;
```

```
data part_3_;  
set part_3 courfeqsub3_n_1;  
      vargroup=4;  
run;
```

```
data part_4_;  
set part_4 sputsub3_n_1;  
      vargroup=5;  
run;
```

```
/* setting all sections of the table and missing */  
data together;  
      set part_1 part_2_ part_3_ part_4_ all_missing;  
      drop text;  
      if compress(variable)='Y' then variable='Yes';  
      if compress(variable)='N' then variable='No';
```



```

    if _1 ne . then sub1=_1;

    if _2 ne . then sub2=_2;

    if _3 ne . then sub3=_3;

    if item ne " then variable=item;

    %if &name.=1 %then %do; if _96 ne . then sub96=_96; %end;

run;


%if &name.=1 %then %do;

proc sort data=together;

    by rown variable;

run;

%end;

%if &name.=2 %then %do;

proc sort data=together;

    by avisitn avisit variable;

proc sort data=rows_visit;

    by avisitn avisit variable;

run;

%end;

data table_pre;

    %if &name.=1 %then %do; merge together rows;by rown variable;%end;

    %if &name.=2 %then %do; merge together(drop=rown) rows_visit;by avisitn avisit variable;

%end;

length variable1 variable2 $200.;

if rown=4 and variable='Missing' then go to zero;

else if rown=4 and variable ne 'Missing' then delete;

```

```

else if rown in(2,3,7,8,9,10,11, 14, 15, 16, 17, 18, 21, 22, 23, 24) then do;

    zero: if missing(ev1) then ev1=0;

    if missing(ev2) then ev2=0;

    if missing(ev3) then ev3=0;

    if missing(ev96) then ev96=0;

    if missing(sub1) then sub1=0;

    if missing(sub2) then sub2=0;

    if missing(sub3) then sub3=0;

    if missing(sub96) then sub96=0;

end;

if not missing(sub1) then ov_sub=sum(sub1, sub2, sub3, sub96);

if not missing(ev1) then ov_ev=sum(ev1, ev2, ev3, ev96);

/*      end;*/

attrib wrap length = $200;

wrap =variable;

    if rown in(2,3,4,7,8,9,10,11, 14, 15, 16, 17, 18, 21, 22, 23, 24) then
variable1="$S={foreground=white} . $S={}" || wrap ;

    if rown in (22, 23, 24) then variable1=tranwrd(variable1,'of sputum',"$n $S={foreground=white} .
$S={}" || 'of sputum');

variable2=variable1;

if variable2="" and variable ne "" then variable2=variable;

    bynum=1;

    drop aval variable1 variable2 wrap;

/*      if avalc ne "" then variable=' ' ||strip(variable);*/

```

```

        if rown not in (1 6 13 20) then variable=' '||strip(variable);

        else variable=strip(variable);

place=&name.;

run;


proc sort data=table_pre;

        by place avisitn rown;

run;


data table01_;

        merge table_pre perc_1_&name. (drop=variable avisit rown);

        by place avisitn;

run;


data table01_&name.;

        %if &name.=1 %then %do;set table01_ vas05 (rename=(_1=_1__2=_2__3=_3__96=_96_
_99=_99_));%end;

        %if &name.=2 %then %do;set table01_ vas05 (rename=(_1=_1__2=_2__3=_3_
_99=_99_));%end;

%if &name.=1 %then %do;

        attrib   sub1 sub2 sub3 sub96 ov_sub label="n"

                p1 p2 p3 p96 ov_p label='(%)' length=$8.

                ev1 ev2 ev3 ev96 ov_ev label="Events";

%end;

%if &name.=2 %then %do;

```

```

attrib sub1 sub2 sub3 ov_sub label="n"

p1 p2 p3 ov_p label='(%)' length=$8.

ev1 ev2 ev3 ov_ev label="Events";

%end;

%if &name.=1 %then %do;

if rown not in (6.5 13.5 20.5) then do;

    if rown in (2 3 4) then do;

        if sub1>0 then p1a=(sub1/&pre_ths.)*100;

        if sub2>0 then p2a=(sub2/&pre_mcc.)*100;

        if sub3>0 then p3a=(sub3/&pre_sa.)*100;

        if sub96>0 then p96a=(sub96/&pre_prod.)*100;

        if ov_sub>0 then ov_pa=(ov_sub/&pre_all.)*100;

        end;

    else do;

        if sub1>0 then p1a=(sub1/THS_PERC_1)*100;

        if sub2>0 then p2a=(sub2/MCC_PERC_1)*100;

        if sub3>0 then p3a=(sub3/SA_PERC_1)*100;

        if sub96>0 then p96a=(sub96/prod_perc_1)*100;

        if ov_sub>0 then ov_pa=(ov_sub/total_perc)*100;

        end;

    end;

end;

%end;

if vargroup=3 and compress(variable)='n' then rown=6.5;

if vargroup=4 and compress(variable)='n' then rown=13.5;

if vargroup=5 and compress(variable)='n' then rown=20.5;

```

```

%if &name.=2 %then %do;

if rown not in (6.5 13.5 20.5) then do;

    if rown in (2 3 4) then do;

        if not missing(sub1) and sub1>0 then p1a=(sub1/&rand_ths.)*100;

        if not missing(sub2) and sub2>0 then p2a=(sub2/&rand_mcc.)*100;

        if not missing(sub3) and sub3>0 then p3a=(sub3/&rand_sa.)*100;

        if not missing(ov_sub) and ov_sub>0 then ov_pa=(ov_sub/&rand_all.)*100;

    end;

    else do;

        if not missing(sub1) and sub1>0 then p1a=(sub1/THS_PERC_1)*100;

        if not missing(sub2) and sub2>0 then p2a=(sub2/MCC_PERC_1)*100;

        if not missing(sub3) and sub3>0 then p3a=(sub3/SA_PERC_1)*100;

        if not missing(ov_sub) and ov_sub>0 then ov_pa=(ov_sub/total_perc)*100;

    end;

end;

%end;

if p1a=100 then p1=trim(''|compress(put(p1a,8.))||'');

else if not missing(p1a) and p1a>=10 and p1a<100 then
p1=trim(''|compress(put(p1a,8.1))||''); /* 1) JH 22OCT2014 */

else if not missing(p1a) and p1a<10 then p1=trim(''|compress(put(p1a,8.1))||'');

if p2a=100 then p2=trim(''|compress(put(p2a,8.))||'');

else if not missing(p2a) and p2a>=10 and p2a<100 then
p2=trim(''|compress(put(p2a,8.1))||''); /* 1) JH 22OCT2014 */

```

```

else if not missing(p2a) and p2a<10 then p2=trim(''|compress(put(p2a,8.1))||'%');

if p3a=100 then p3=trim(''|compress(put(p3a,8.))||'%');

else if not missing(p3a) and p3a>=10 and p3a<100 then
p3=trim(''|compress(put(p3a,8.1))||'%'); /* 1) JH 22OCT2014 */

else if not missing(p3a) and p3a<10 then p3=trim(''|compress(put(p3a,8.1))||'%');

%if &name.=1 %then %do;

if p96a=100 then p96=trim(''|compress(put(p96a,8.))||'%');

else if not missing(p96a) and p96a>=10 and p96a<100 then
p96=trim(''|compress(put(p96a,8.1))||'%'); /* 1) JH 22OCT2014 */

else if not missing(p96a) and p96a<10 then p96=trim(''|compress(put(p96a,8.1))||'%');

%end;

if ov_pa=100 then ov_p=trim(''|compress(put(ov_pa,8.))||'%');

else if not missing(ov_pa) and ov_pa>=10 and ov_pa<100 then
ov_p=trim(''|compress(put(ov_pa,8.1))||'%'); /* 1) JH 22OCT2014 */

else if not missing(ov_pa) and ov_pa<10 then ov_p=trim(''|compress(put(ov_pa,8.1))||'%');

*if rown not in (1 6 13 20) and ov_sub = 0 then delete; /* deleting unwanted records because of the
rown */

if rown=1 then vargroup=1;

if rown=6 then vargroup=3;

if rown=13 then vargroup=4;

if rown=20 then vargroup=5;

if place=1 then do;avisitn=100;avisit='Day 0'; end;

if paramn=2 then do;

rown=varnum;

```

```
variable=stat;
```

```
end;
```

```
if variable='Mean (SD)' then vargroup=2;
```

```
run;
```

```
%mend cough;
```

```
%cough(flag=where safbfl='Y' and asper=1, name=1);
```

```
%cough(flag=where safaf1='Y' and asper gt 1, name=2);
```

```
data table;
```

```
length category $50.;
```

```
set table01_1 table01_2;
```

```
    if place=1 then category="Pre-Randomization Period";
```

```
    else if place=2 then category="Randomized Period";
```

```
    drop avalc;
```

```
    if sub1 ne 0 then ths_num=strip(put(sub1,best.))||' '||strip(p1); else  
ths_num=strip(put(sub1,best.));
```

```
    if sub2 ne 0 then mcc_num=strip(put(sub2,best.))||' '||strip(p2); else  
mcc_num=strip(put(sub2,best.));
```

```
    if sub3 ne 0 then sa_num=strip(put(sub3,best.))||' '||strip(p3); else  
sa_num=strip(put(sub3,best.));
```

```
    if sub96 ne 0 then PRODUCT_TEST_num=strip(put(sub96,best.))||' '||strip(p96); else  
PRODUCT_TEST_num=strip(put(sub96,best.));
```

```
        if ov_sub ne 0 then overall_num=strip(put(ov_sub,best.))||' '||strip(ov_p); else  
overall_num=strip(put(ov_sub,best.));
```

```
if compress(variable)='Y' then variable='Has subject experienced cough in the study period assessed?';
```

```
    drop sub1 sub2 sub3 sub96 p1 p2 p3 p96 ov_p;
```

```
    if EV1 ne . then ths_eve=strip(put(EV1,best.));
```

```
    if EV2 ne . then mcc_eve=strip(put(EV2,best.));
```

```
    if EV3 ne . then sa_eve=strip(put(EV3,best.));
```

```
    if EV96 ne . then prod_eve=strip(put(EV96,best.));
```

```
    if ov_ev ne . then all_eve=strip(put(ov_ev,best.));
```

```
    if place=2 then do;prod_eve="";PRODUCT_TEST_num="";end;
```

```
    if vargroup=2 then do;
```

```
        ths_num=_1_;
```

```
        mcc_num=_2_;
```

```
        sa_num=_3_;
```

```
        overall_num=_99_;
```

```
        product_test_num=_96_;
```

```
    end;
```

```
run;
```

```
/* for VAS extra line */
```

```
data vas_dum_1;
```

```
variable='VAS';
```

```
rown=0.1;
```



```
vargroup=2;
```

```
run;
```

```
data vas_dum_2;
```

```
length avisitn 8. avisit $40.;
```

```
set vas_dum_1;
```

```
avisitn=100;
```

```
avisit='Day 0';
```

```
output;
```

```
avisitn=101;
```

```
avisit="Day 1";
```

```
output;
```

```
avisitn=102;
```

```
avisit="Day 2";
```

```
output;
```

```
avisitn=103;
```

```
avisit="Day 3";
```

```
output;
```

```
avisitn=104;
```

```
avisit="Day 4";
```

```
output;
```

```
avisitn=105;
```

```
avisit="Day 5";
```

```
output;
```

```
avisitn=106;
```

```
avisit="Day 6/Discharge Confinement";
```

```
output;
```

```
avisitn=130;
```

```
avisit="Day 30";
```

```
output;
```

```
avisitn=160;
```

```
avisit="Day 60";
```

```
output;
```

```
avisitn=190;
```

```
avisit="Day 90";
```

```
output;
```

```
run;
```

```
data table_vas;
```

```
set table vas_dum_2 (in=a);
```

```
if a then do;
```

```
if avisitn=100 then do;category='Pre-Randomization Period';place=1;end;
```

```
else do;category='Randomized Period';place=2;end;
```

```
end;
```

```
if rown ne 0.1 and vargroup=2 then variable=' ' || strip(stat);
```

```
if rown=11 and compress(variable)='Verysevere' then vargroup=3;
```

```
if rown=18 and compress(variable)='Almostalways' then vargroup=4;
```

```
if rown=24 and compress(variable)='Averylargeamountofsputum' then vargroup=5;
```

```
if rown=23 and compress(variable)='Alargeamountofsputum' then vargroup=5;
```

```
if variable='Has subject experienced cough in the study period assessed?' then  
do;vargroup=1;rown=1;end;
```

```

if compress(variable)='Severe' then vargroup=3;

if vargroup=1 and compress(variable)='Missing' then rown=4;

if vargroup=3 and compress(variable)='n' then rown=6.5;

if vargroup=4 and compress(variable)='n' then rown=13.5;

if vargroup=5 and compress(variable)='n' then rown=20.5;

if compress(variable)='Missing' and rown=4 then vargroup=1;


if compress(variable)='Missing' then do;

if compress(ths_num)='0' then do;ths_num="";THS_EVE="";end;

if sa_num='0' then do;sa_num="";sa_EVE="";end;

if mcc_num='0' then do; mcc_num=""; mcc_EVE="";end;

if PRODUCT_TEST_NUM='0' then do;PRODUCT_TEST_NUM="";PROD_EVE="";end;

if OVERALL_NUM='0' then do; OVERALL_NUM="";ALL_EVE="";end;

end;

if compress(variable)='Missing' and OVERALL_NUM in ('0' '') then delete;


if compress(variable)='n' then do;

if ths_num="" then ths_num='0';

if sa_num="" then sa_num='0';

if mcc_num="" then mcc_num='0';

if place=1 then do; if PRODUCT_TEST_NUM="" then PRODUCT_TEST_NUM='0';end;

if OVERALL_NUM="" then OVERALL_NUM='0';

end;

run;

```

```
proc sort data=table_vas;
```

```
by place avisitn vargroup rown;
```

```
run;
```

```
proc sql noprint;
```

```
create table tflds.&tflno as
```

```
select category, avisit, variable, ths_num as ths_count, ths_eve as ths_events, mcc_num as  
mcc_count, mcc_eve as mcc_events,
```

```
sa_num as sa_count, sa_eve as sa_events, PRODUCT_TEST_num as product_test_count,  
prod_eve as product_test_events,
```

```
overall_num as overall_count, all_eve as overall_events, vargroup, rown
```

```
from table_vas
```

```
order by place, avisitn, vargroup, rown, sect;
```

```
quit;
```

```
/*data paging;*/
```

```
/* set table_vas;*/
```

```
/* by place avisitn vargroup rown;*/
```

```
/* if missing(ov_sub) and ln>8 then ln=1; */
```

```
/* else ln+1;*/
```

```
/* if ln=1 then page+1;*/
```

```
/* call symput("page",compress(put(page,best.)));*/
```

```
/* flag=1;*/
```

```
/*run;*/
```

```
proc sort data=table_vas out=page_num (keep=avisitn vargroup) nodupkey ;
```

```
by avisitn vargroup;
```

```
run;
```

```
data page_num_;
```

```
set page_num;
```

```
page=_n_;
```

```
run;
```

```
proc sort data=table_vas;
```

```
by avisitn vargroup;
```

```
proc sort data=page_num_;
```

```
by avisitn vargroup;
```

```
run;
```

```
data paging;
```

```
merge table_vas page_num_;
```

```
by avisitn vargroup;
```

```
    maxpage=50;
```

```
    call symput("page",compress(put(page,best.)));
```

```
    call symput("maxpage",compress(put(maxpage,best.)));
```

```
    flag=1;
```

```
run;
```

```
proc sort data=paging;
```

```
by place avisitn vargroup rown sect;
```

```
run;
```

```
data paging_;  
set paging;  
by place avisitn vargroup rown sect;  
if first.vargroup then avisit=avisit;  
else avisit="";  
run;
```

```
options number nodate orientation=landscape /*papersize=&p_pgsz*/ 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=, halfblnk=);
```

```
%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/dev/Tables/&tflno..rtf" style=t106343
startpage=yes headery=1440 footery=1440 ;
```

```
ods noproctitle;
```

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

```
title ;
```

```
footnote;
```

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

```
%let supfl=0;
```

```
%let npage=%eval(&i);
```

```
data comp;
```

```
    set paging_end=eof;
```

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

```
            call symput("place",compress(put(place,best.)));
```

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

```
        _firtitl="Table 15.2.6.25.1 Summary of Cough Assessments by Study Day - Safety
Population";
```

```
        _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('perid', strip(category));
```

```

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

    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 missing nowd split = '$';;

    column flag place page avisitn avisit vargroup rown /*with paramn PARAMC*/variable /*avisitn
ord visit statord stat*/

        %if &place.=2 %then %do;

            ("THSm2.2$(N=%cmpres(&rand_ths.)) &linebot" THS_NUM ths_eve)

            ("mCC$(N=%cmpres(&rand_mcc.)) &linebot" MCC_NUM mcc_eve)

            ("SA$(N=%cmpres(&rand_sa.)) &linebot" SA_NUM sa_eve)

            ( "Overall Safety$(N=%cmpres(&rand_all.)) &linebot" OVERALL_NUM
all_eve)

        %end;

    %else %if &place.=1 %then %do;

        ("THSm2.2$(N=%cmpres(&pre_ths.)) &linebot" THS_NUM ths_eve )

```



```

("mCC$(N=%cmpres(&pre_mcc.)) &linebot" MCC_NUM mcc_eve)

("SA$(N=%cmpres(&pre_sa.)) &linebot" SA_NUM sa_eve)

( "Product Test$(N=%cmpres(&pre_prod.)) &linebot"
PRODUCT_TEST_NUM prod_eve)

( "Overall Safety$(N=%cmpres(&pre_all.)) &linebot" OVERALL_NUM
all_eve)

%end;;

```

```
;
```

```

define flag / order order=internal noprint;

define place / order order=internal noprint;

define page / order order = internal noprint;

define avisitn / order order = internal noprint;

define vargroup / order order = internal noprint;

define rown / order order = internal noprint;

/* define avisit / display style={just=l cellwidth=0.3 cm} style(header)={just=left}
'Study$Day'; */

/* define variable / display style={just=l cellwidth=1.0 cm}
style(header)={just=left}'Variable'; /* 11) JMH 16Sep2014 */ */

%if &place.=2 %then %do;

define avisit / display style={just=l cellwidth=0.7 cm} style(header)={just=left}
'Study$Day';

define variable / display style={just=l cellwidth=1.3 cm}
style(header)={just=left}'Variable'; /* 11) JMH 16Sep2014 */

define THS_NUM / display style={just=center cellwidth=0.43 cm}
style(header)={just=center} 'n(%)';

define ths_eve / display style={just=center cellwidth=0.28 cm}
style(header)={just=center} 'Events';

```

```

define MCC_NUM      / display style={just=center cellwidth=0.43 cm}
style(header)={just=center} 'n(';

define mcc_eve      / display style={just=center cellwidth=0.28 cm}
style(header)={just=center} 'Events';

define SA_NUM      / display style={just=center cellwidth=0.43 cm}
style(header)={just=center} 'n(';

define sa_eve      / display style={just=center cellwidth=0.28 cm}
style(header)={just=center} 'Events';

define OVERALL_NUM  / display style={just=center cellwidth=0.45 cm}
style(header)={just=center} 'n(';

define all_eve      / display style={just=center cellwidth=0.25 cm}
style(header)={just=center} 'Events';

%end;

%else %if &place.=1 %then %do;

define avisit      / display style={just=l cellwidth=0.3 cm} style(header)={just=left}
'Study$Day';

define variable      / display style={just=l cellwidth=1.3 cm}
style(header)={just=left}'Variable'; /* 11) JMH 16Sep2014 */

define THS_NUM      / display style={just=center cellwidth=0.45 cm}
style(header)={just=center} 'n(';

define ths_eve      / display style={just=center cellwidth=0.26 cm}
style(header)={just=center} 'Events';

define MCC_NUM      / display style={just=center cellwidth=0.45 cm}
style(header)={just=center} 'n(';

define mcc_eve      / display style={just=center cellwidth=0.26 cm}
style(header)={just=center} 'Events';

define SA_NUM      / display style={just=center cellwidth=0.45 cm}
style(header)={just=center} 'n(';

define sa_eve      / display style={just=center cellwidth=0.26 cm}
style(header)={just=center} 'Events';

```

```
define PRODUCT_TEST_NUM / display style={just=center cellwidth=0.45
cm} style(header)={just=center} 'n(%)';
```

```
define prod_eve / display style={just=center cellwidth=0.26 cm}
style(header)={just=center} 'Events';
```

```
define OVERALL_NUM / display style={just=center cellwidth=0.45 cm}
style(header)={just=center} 'n(%)';
```

```
define all_eve / display style={just=center cellwidth=0.22 cm}
style(header)={just=center} 'Events';
```

```
%end;
```

```
compute variable;
```

```
if substr(variable,1,1)=' ' then do;
```

```
call define (_col_,'style','style={backgroundcolor=white indent=50}');
```

```
end;
```

```
endcomp;
```

```
break before flag / page %if &i=1 %then %do;
```

```
contents="&_fsrtitl" %end; %else %do; contents="" %end;;
```

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

```
/* compute after ord;*/
```

```
/* line " ",*/
```

```
/* endcomp;*/
```

```
compute before page / style={protectspecialchars=off};;
```

```
line "&linetop";
```

```
endcomp;
```

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

```
%if &place.=1 %then %do;
```

```
line "\b\fs24\sa24&_FSRTITL." ;
```

```
line "&linebot";
```

```
line "Safety Time Period: Pre-Randomization Period";
```

```
%end;
```

```
%else %do;
```

```
line "\b\fs24\sa24&_FSRTITL." ;
```

```
line "&linebot";
```

```
line "Safety Time Period: Randomization Period";
```

```
%end;
```

```
endcomp;
```

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

line "Note: 'Product Test' refers to all subjects who tested the THS product but were not randomized. The Overall Safety refers to all subjects exposed to THSm2.2.";

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

line "Note: Percentages for 'Has the subject experienced a cough' are based on the number of subjects indicated in the column header (N). Percentages for intensity of cough are based on the number of subjects who have experienced a cough.";

line "Note: Cough experienced in the previous 24h by the subjects is assessed in the morning of Day 0 to Day 6. If subject has answered question more than once then the most severe intensity is presented.";

line "Note: The assessments performed at Day 0 to Day 6, Day 31, 61, and 91 are used to evaluate cough at Day - 1 to Day 5, Day 30, 60, and 90, respectively."

```
        line "";

        line "Appendix 15.3.6.23";

        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=40, halfblk=N);


ods listing;


ods listing close;


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


%m_logchk;
```

*=====;

* END OF PROGRAM CODE ;

*=====;