

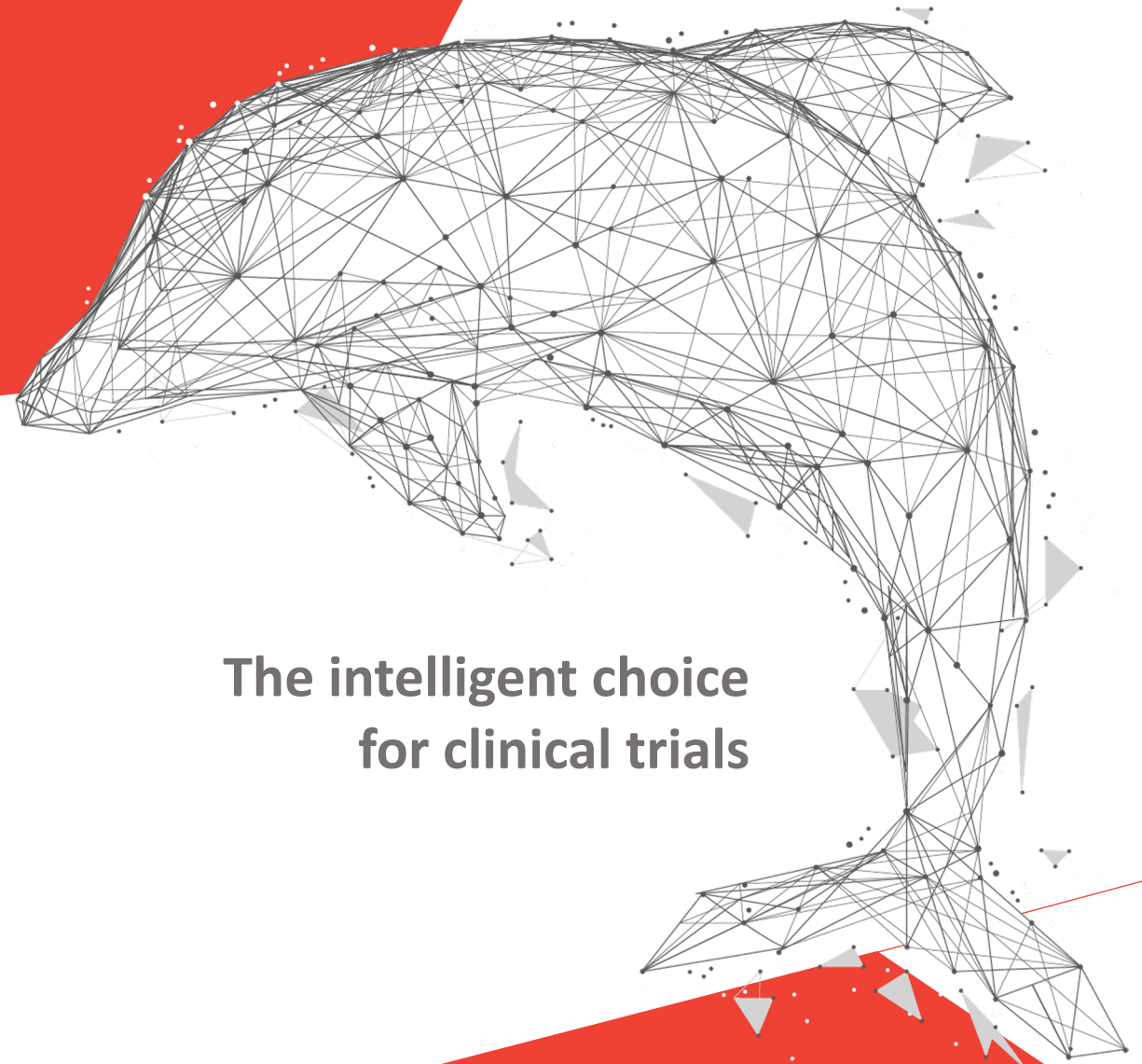
Streamlining final editing and review of outputs

Phuse EU Connect 2020

Helen Nicholson

Punitha Philip

Nov 2020



**The intelligent choice
for clinical trials**

Background

Functionality

Future Improvements

Summary

Highly skilled and strategic hunter with detailed vision, silent flight and careful timing



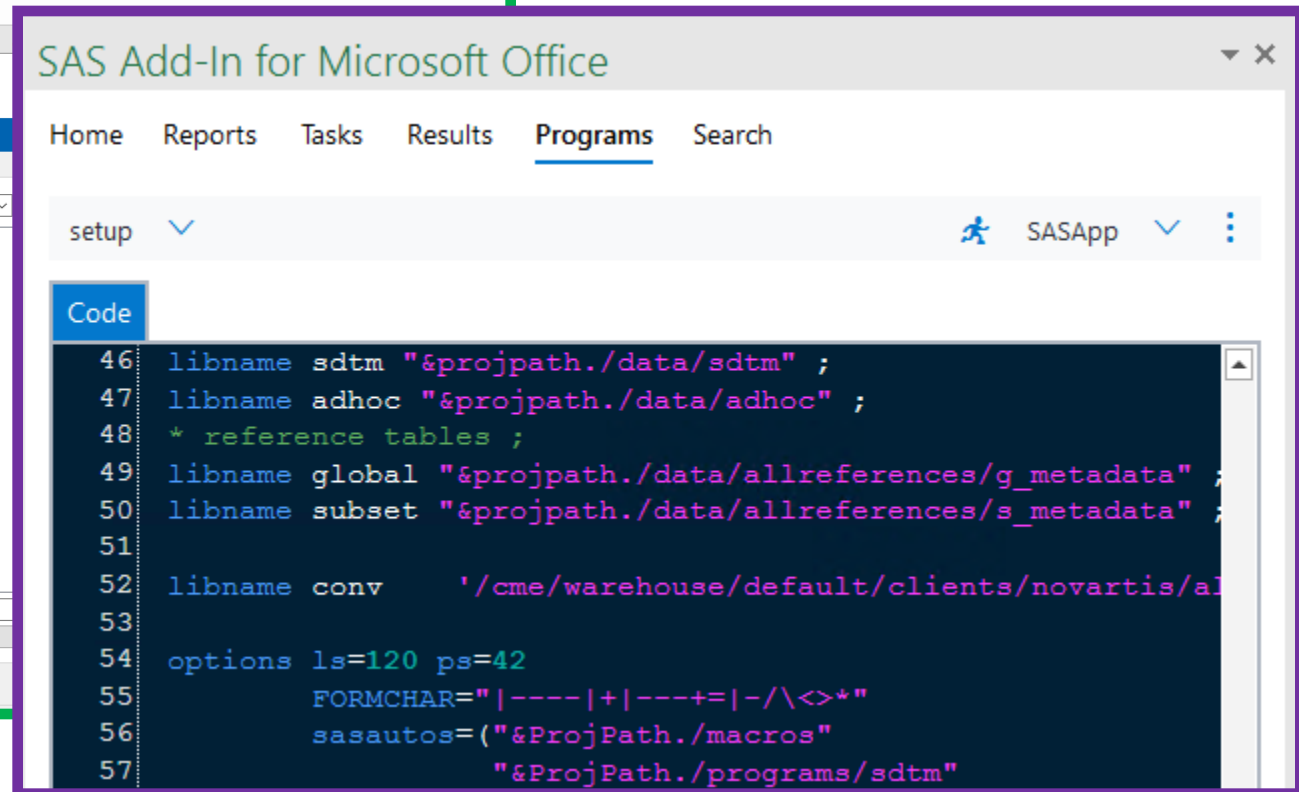
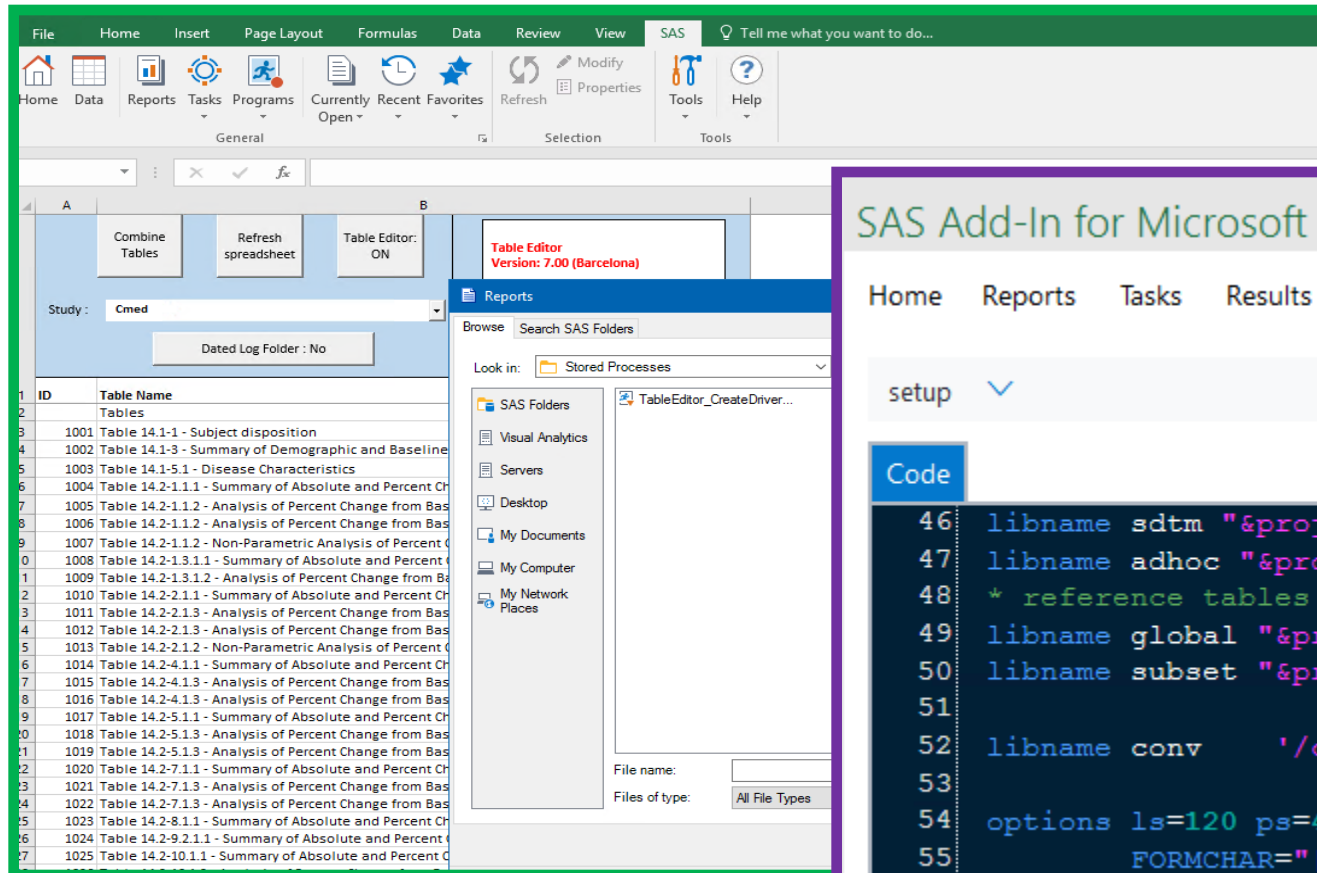
Delivering an output package of tables, listing and figures involves a number of steps, checking information from different folders



```
          _WR01):  _WR01)
          _C(TXT_WR01):  %DO loop i.
          _PRINT(TXT_WR01):  *derive maxi.
          MPRINT(TXT_WR01):  wrapv = max(of _
          SYMBOLGEN:  Macro variable CONT reso.
581 MLOGIC(TXT_WR01):  %IF condition %upca.
582 MPRINT(TXT_WR01):  run;
583
584 NOTE: There were 10 observations read fr
585 NOTE: The data set WORK.WRAPPED has 10 ob
586 NOTE: Compressing data set WORK.WRAPPED i
587       Compressed is 2 pages; un-compresse
588 NOTE: DATA statement used (Total process
589 15
590
91      real time          0.01 second
      user cpu time       0.02 secon
      system cpu time     0.00 ser
      memory              1338
      % Memory            %
```



The solution to make reviews and updates easier is an Excel tool developed in-house - TABLE EDITOR



SAS add-ins and a SAS stored process are used by TABLE EDITOR allowing us to run code

ID	Table_Name	Title1	Title2	Title3
1001	Table 14.1-1 - Subject disposition	<<Protocol: Cmed trial1	Delivery: Test Analysis - Final	Table 14.1-1 - Su
1002	Table 14.1-3 - Summary of Demographic and Baseline Ch	<<Protocol: Cmed trial1	Delivery: Test Analysis - Final	Table 14.1-3 - Su
1003	Table 14.1-5.1 - Disease Characteristics	<<Protocol: Cmed trial1	Delivery: Test Analysis - Final	Table 14.1-5.1 -


```
195 proc printto file="%ProjPath/output/lst/&outfile.lst" new;
196 run;
197
198 proc report data=final nowd missing headline skip nowd split='\ '
199 out=&outfile.;
200 column ord1 ord2 ord3 txt1 col1 col2 col3 col99;
201 define ord1 / group order order=internal noprint;
202 define ord2 / group order order=internal noprint;
203 define ord3 / group order order=internal noprint;
204 define txt1 / id display width=5;
205 define col1 / id display width=1;
206 define col2 / id display width=1;
207 define col3 / id display width=1;
208 define col99 / id display width=1;
```

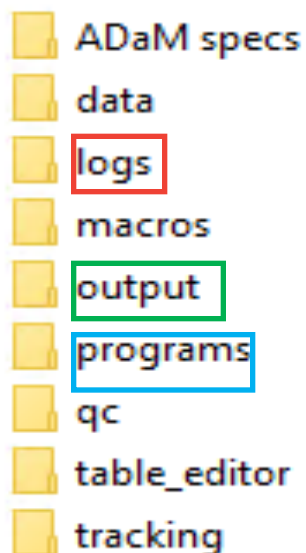
 adae
 adcm
 adda
 addh
 addv
 adec
 adeg
 adex

Table Editor

- ➔ Studies spreadsheet
- ➔ Table editor spreadsheet
- ➔ Driver creation and submission

 t14_2_12_1_1_SUM24LIV_ITT	.rtf
 t14_2_12_2_1_SUMGP24LIV_ITT	.rtf
 t14_2_12_2_4_B_SA_SUMGP24LIV...	.rtf
 t14_2_12_2_4_SA_SUMGP24LIV_ITT	.rtf
 t14_2_12_2_4_B_SA_SUMGP24LIV_ITT	.log
 t14_2_12_2_4_SA_SUMGP24LIV_ITTb	.log
 t14_2_13_1_1_2_ANC12COLL_ITT	.log
 t14_2_13_2_1_1_SUM24COLL_ITT	.log
 t14_2_13_2_1_2_ANC24COLL_ITT	.log
 t14_2_15_3_ANC24PBC_ITT	.log
 t14_2_18_2_SUMIL6CK18_ITT	.log
 t14_2_18_3_SUMIGMILIFNG_ITT	.log

Programs, outputs, logs are available in the same place for review



Study : Cmed

Previous ID 1001 Table Name Table 14.1-1 - Subject disposition

Titles & Footnotes Lst File Rtf File Pdf File SAS Log SAS Program

Log Summary			
Log	Count	Message	Count
"ERROR:"	0	"UNINITIALIZED"	0
"WARNING"	0	"REPEATS OF BY"	0
"ERROR"	0	"NO BY STATEMENT"	0
"TRUNC"	0	"DOES NOT EXIST"	0
"HAS 0 OBS"	1	"OUTSIDE THE AXIS"	0

	Name	Last modified	Sequence	Size	Mac
Program:	dstab01	5/6/2020 3:56:30 PM	1	17003	tab
Lst File:	t14_1_1_DISPO RAND	5/13/2020 3:16:56 PM	2	5547	
Rtf File:	t14_1_1_DISPO RAND	5/13/2020 3:16:57 PM	3	5078	
Pdf File:	t14_1_1_DISPO RAND				
Log:	t14_1_1_DISPO RAND	5/13/2020 3:16:57 PM	3	109796	Total

Titles

1 <<Protocol: Cmed trial1 ||Delivery: Test Analysis - Final >>>Page 1 of xxx

2

3 Table 14.1-1 - Subject disposition

4 (Randomized Population)

5

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10

Footnotes

1 <<OD: Once Daily; BID: Twice Daily; UDCA: Ursodeoxycholic Acid; DILI: Drug Induced Liver Injury

2 <<Primary reason for discontinuation from study treatment is summarized.

3 <<Percentages are based on the number of subjects randomized. The number of subjects treated is

4 <<the allocated treatment group.

Last minute editing/running of programs made possible



Study : Cmed

Previous

ID

Table Name

1003

Table 14.1-5.1 - Disease Characteristics

Titles & Footnotes

Lst File

Rtf File

Pdf File

SAS Log

SAS Program

Edit SAS Program

Save SAS Program

Study: SAS Test

Previous

ID

Table Name

1002

Table 14.1-3 - Summary of Demographic and Baseline Characteristics

Titles & Footnotes

Lst File

Rtf File

Pdf File

SAS Log

SAS Program

Log Summary

"ERROR:"

0

"UNINITIALIZED"

0

"WARNING"

0

"REPEATS OF BY"

0

"ERROR"

0

"NO BY STATEMENT"

0

"TRUNC"

0

"DOES NOT EXIST"

0

"HAS 0 OBS"

0

"OUTSIDE THE AXIS"

0

Program:

dmtab01

5/6/2020 4:00:35 PM

1

12883

Lst File:

t14_1_3_DM_ITT

5/13/2020 3:16:57 PM

2

14983

Rtf File:

t14_1_3_DM_ITT

5/13/2020 3:16:57 PM

2

11979

Pdf File:

t14_1_3_DM_ITT

Log:

t14_1_3_DM_ITT

5/13/2020 3:16:57 PM

2

77863

Titles

1

<<Protocol: Cmed trial1 ||Delivery: Test Analysis - Final

>>>Page 1 of xxx

2

3

Table 14.1-3 - Summary of Demographic and Baseline Characteristics

4

(ITT Population)

5

6

7

8

Save

▼

►

Screen Shift

Easy log review with highlighting of errors, warning and some notes

Study : Cmed

Previous 1003 Table 14.1-5.1 - Disease Characteristics

Titles & Footnotes Lst File Rtf File Pdf File SAS Log

Log Summary

"ERROR:"	7	"INITIALIZED"	62
"WARNING"	2	"REPEATS OF BY"	
"ERROR"	9	"NO BY STATEMENT"	0
"TRUNC"	0	"DOES NOT EXIST"	0
"HAS 0 OBS"	1	"OUTSIDE THE AXIS"	0

Program: dhtab01 7/21/2020 5:26:
Lst File: t14_1_5_1_DH_ITT 5/13/2020 3:16:
Rtf File: t14_1_5_1_DH_ITT 5/13/2020 3:16:
Pdf File: t14_1_5_1_DH_ITT
Log: t14_1_5_1_DH_ITT 5/13/2020 3:16:

Titles

1	<<Protocol: Cmed trial1 Delivery: Test Anaysis - Final
2	
3	Table 14.1-5.1 - Disease Characteristics
4	(ITT Population)
5	
6	
7	
8	

Edit

Screen Shift

Block Input Operations 0
Block Output Operations 392

MACROGEN(DHTAB01): ** summarize continuous data;
MACROGEN(DHTAB01): proc summary data=dh1 nway;
MACROGEN(DHTAB01): by trt01pn;
ERROR: Variable BGGT not found.
ERROR: Variable BALP not found.
ERROR: Variable BALT not found.
ERROR: Variable BAST not found.
ERROR: Variable BBIL not found.
MACROGEN(DHTAB01): var diagdur diagage BUDCA BUDCADUR BGGT BALP B
ERROR: Variable BHSCR not found.
MACROGEN(DHTAB01): output out=stats (drop=_freq_ _type_) n= n1 n2 n3 n
min5 min6 min7 min8 min9 min10 max= max1 max2 max3 max4 max5 max6 ma
mean5 mean6 mean7 mean8 mean9 mean10 median= median1 median2 medi
median10 std= std1 std2 std3 std4 std5 std6 std7 std8 std9 std10 run;
NOTE: The SAS System stopped processing this step because of error
WARNING: The data set WORK.STATS may be incomplete. When the data
was disabled for data set WORK.STATS

Checking the program is the oldest file

programs > analysis

Name	Date modified
aelst01	8/12/2020 11:46 AM
aelst02	8/12/2020 7:50 AM

logs > analysis > 20200813

Name	Date modified
t17_1_1_1	8/13/2020 10:05 AM
t17_1_2_1	8/13/2020 10:05 AM

output > rtf

Name	Date modified
t17_1_10_1	8/13/2020 10:05 AM
t17_1_9_1	8/13/2020 10:05 AM
t17_1_8_1	8/14/2020 1:18 PM
t17_1_7_1	8/14/2020 1:18 PM
t17_1_6_1	8/14/2020 1:18 PM
t17_1_5_1	8/13/2020 10:05 AM
t17_1_4_1	8/13/2020 10:07 AM
t17_1_3_1	8/13/2020 10:05 AM

Study: Cmed

Table Name: 1001 Table 14.1-1 - Subject disposition

Log Summary

"ERROR:"	0	"UNINITIALIZED"	0
"WARNING"	0	"REPEATS OF BY"	0
"ERROR"	0	"NO BY STATEMENT"	0
"TRUNC"	0	"DOES NOT EXIST"	0
"HAS 0 OBS"	0	"OUTSIDE THE AXIS"	0

Files & Footnotes

	Name	Last modified	Sequence	Size
Program:	dstab01	8/28/2020 11:39:46 AM	4	6990
Lst File:	t14_1_1_DISPO_RAND	8/28/2020 11:38:31 AM	1	5549
Rtf File:	t14_1_1_DISPO_RAND	8/28/2020 11:38:58 AM	2	49501
Pdf File:	t14_1_1_DISPO_RAND			
Log:	t14_1_1_DISPO_RAND	8/28/2020 11:39:22 AM	3	109797

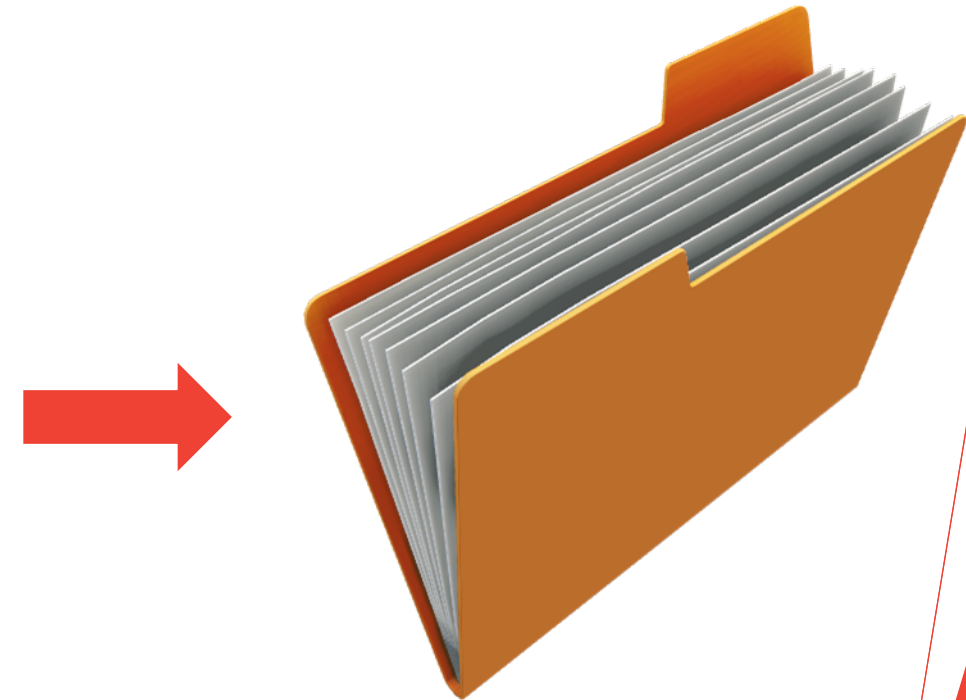
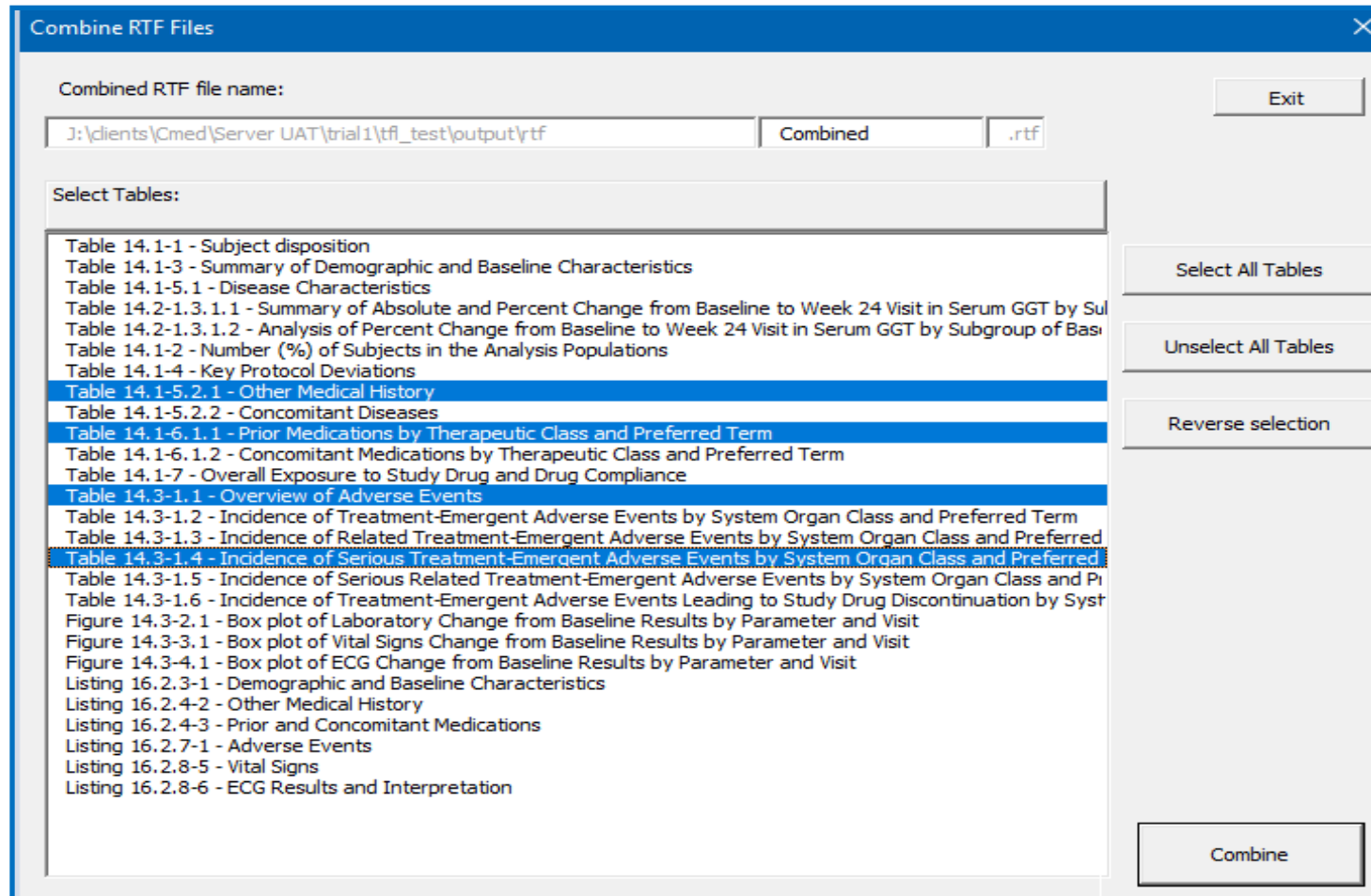
Titles

1	<<Protocol: Cmed trial1 Delivery: Test Analysis - Final >>>Page 1 of xxx
2	
3	Table 14.1-1 - Subject disposition
4	(Randomized Population)
5	
6	
7	
8	
9	
10	

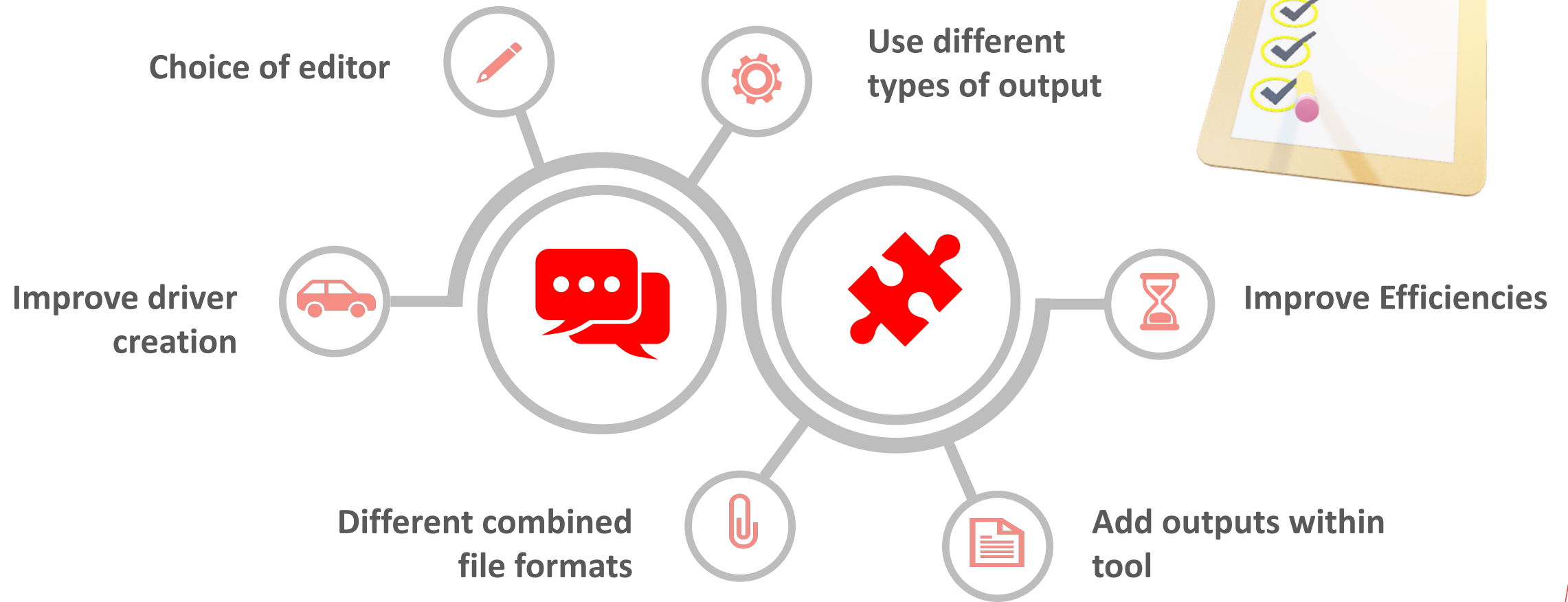
Footnotes

1	<<OD: Once Daily; BID: Twice Daily; UDCA: Ursodeoxycholic Acid; DILI: Drug Induced Liver Injury
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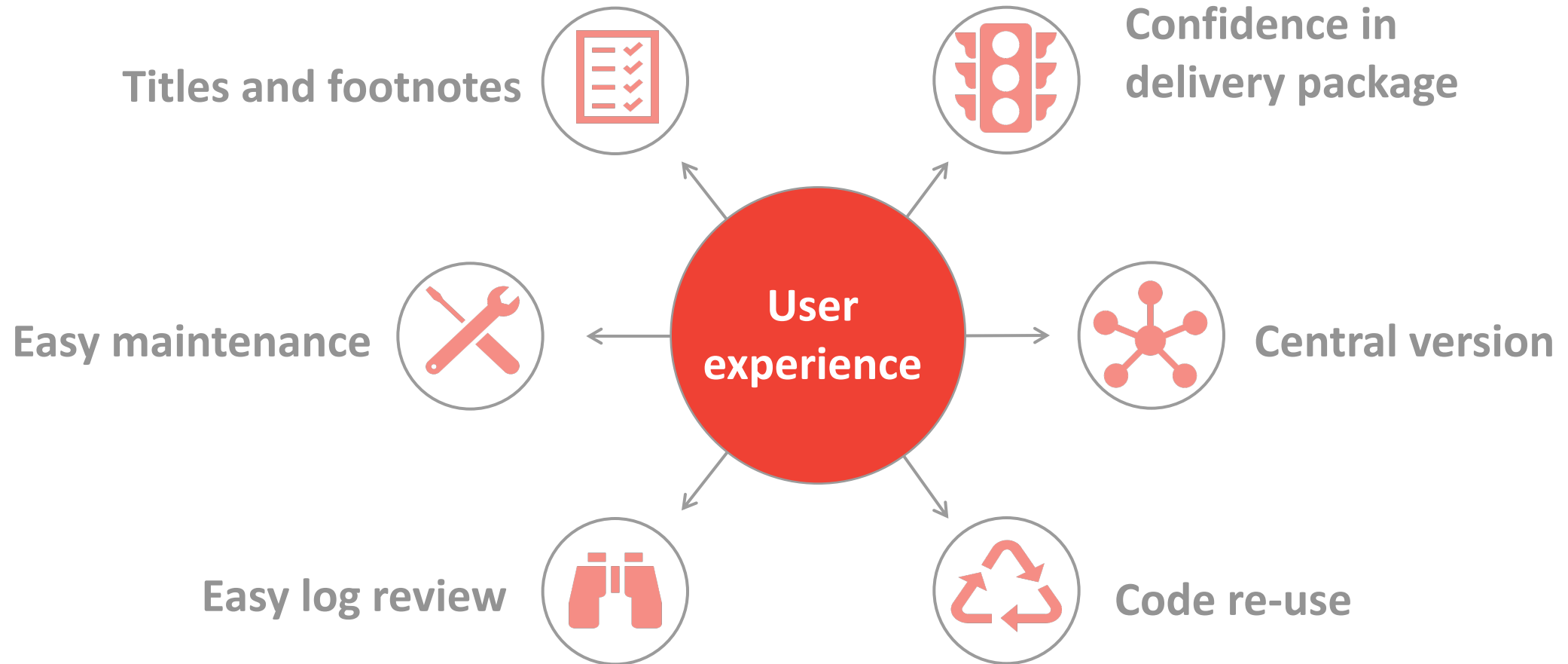
Enables combining all or a selection of outputs into one file for delivery at a click of a button



Future improvements



Greatly improved user experience!

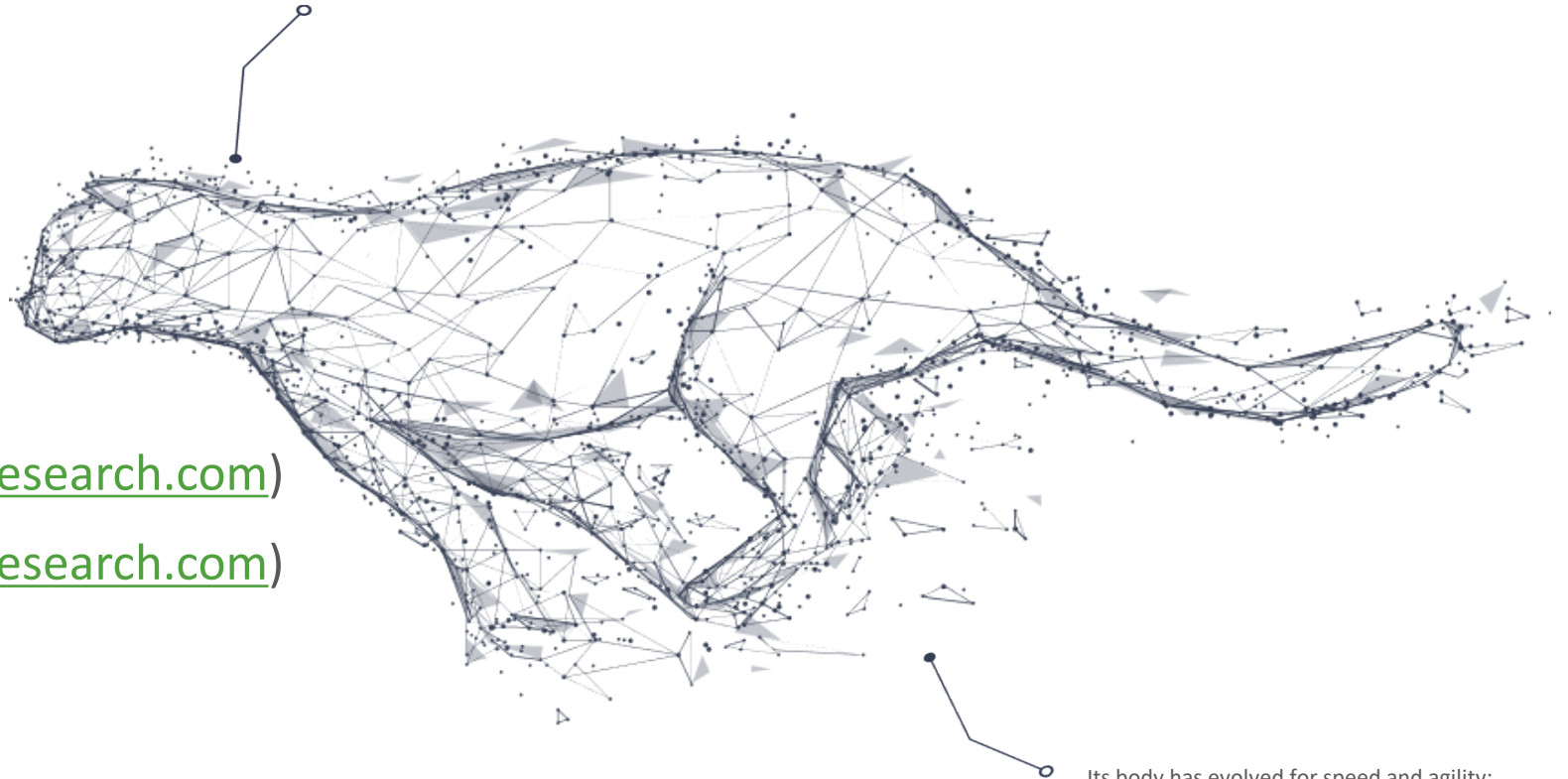


Thank you

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The fastest land animal in the world, it can reach 70mph (112km/h) in just 3 seconds.



Its body has evolved for speed and agility: long legs, elongated spine, adapted claws for grip and a long tail for balance.