

Noory Kim is a senior statistical programmer at SDC. He has previously presented four papers at PharmaSUG.

- 2017: Converting Non-Imputed Dates for SDTM Data Sets With PROC FCMP
- 2019: Making the Days Count: Counting Distinct Days in Overlapping or Disjoint Date Intervals
- 2020: Text Wrangling with Regular Expressions: A Short Practical Introduction
- 2021: Annotating CRFs More Efficiently (co-authored with B. Shivakumar)
- 2022: Using Boolean Functions to Excel at Validation Tracking (QT-021)
- 2022: Bookmarking CRFs More Efficiently (EP-096)



# Using Boolean Functions to Excel at Validation Tracking

Paper QT-021

Noory Kim SDC



A	В	c	D	E	F	G	н
1 _			SDTM	ADs	Tables	Listings	Figures
2							
All		Number of Outputs Planned	56	12	76	34	20
1					E - E		
	Since Start of Study	Number of Outputs Ready	56	12	74	30	1
		Number Validated (not necessarily Passed)	56	12	50	29	0
		Number Passed	56	12	41	20	0
	Since Reference Date	Number of Outputs Ready (on or after reference date)	56	12	74	30	1
0		Number Validated after Primary Completion Date and Reference Date	56	12	38	13	0
		Number Passed after Primary Completion Date and Reference Date	56	12	35	10	0
4 Topline		Number of Topline Outputs Planned			52	24	2
6	Since Start of Study	Number of Topline Outputs Ready			52	24	1
7		Number of Topline Validated (not necessarily Passed)			50	24	0
3		Number of Topline Passed			41	20	0
0	Since Reference Date	Number of Topline Outputs Ready (on or after reference date)			52	24	1
1		Number of Topline Validated after Primary Completion Date and Reference Date		1	38	11	0
2		Number of Topline Passed after Primary Completion Date and Reference Date			35	10	0
4 5 Reference Date	2		11/30/2021	12/31/2021	1/31/2022	1/31/2022	1/31/2022
4 →   Si	DTM ADs Tables	Listings   Figures   Status   CDISC Deliverables   🕂 :					Į£



Α	В	G	M	N
Table Number	Topline	 Primary Completion Date	 Validation Date	Pass/ Issues
14.1.1.1	Υ	01JAN2022	01MAR2022	Pass

#### Counting rows satisfying a single criteria

# primary outputs completed

# outputs validated

#### Counting rows satisfying multiple criteria

- # topline primary outputs completed
- # outputs validated on or after primary completion date





#### Counting rows satisfying a single criteria

 # primary outputs completed

Α	В	G
Table Number	Topline	Primary Completion Date
14.1.1.1	Y	01JAN2022

BAF = Boolean Array Function

BAF1: Check if a cell is not blank

= SUM( IF(ISBLANK(Tables!\$G\$2:\$G\$777), 0, 1) )



#### Counting rows satisfying multiple criteria

- # topline primary programs completed

Α	В		G	
Table Number	Topline	 Primary Comple	y etion	Date
14.1.1.1	Υ	01JAN2	2022	

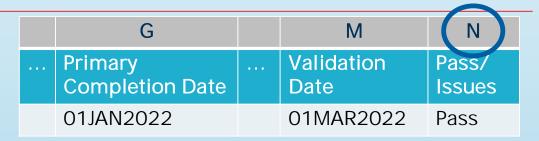
BAF1: Check if a cell is not blank

BAF5: Check if a primary output is indicated as a topline output

= SUM( IF(ISBLANK(Tables!\$G\$2:\$G\$777), 0, 1)
\* IF(Tables!\$B\$2:\$B\$777="Y", 0, 1)



## Counting rows satisfying a single criteria



# outputs validated

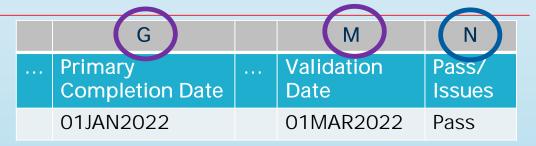
BAF2: Check if a cell has the substring "Pass" (case insensitive).

= SUM( ISNUMBER(SEARCH("Pass", Tables!\$N\$2:\$N\$777)) )

#PharmaSUG2022 Paper Number QT-021 Paper Number QT-021 7



Counting rows satisfying multiple criteria



 # outputs validated on or after primary completion date

BAF2: Check if a cell has the substring "Pass" (case insensitive).

BAF4: Check if the validation date is on or after the primary date.

- = SUM( ISNUMBER(SEARCH("Pass", Tables!\$N\$2:\$N\$777))
  - \* IF(ISERROR(DATEDIF(Tables!\$G\$2:\$G\$777,

Tables!\$M\$2:\$M\$777, "d")), 0, 1))



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4 5 Reference Date	2		11/30/2021	12/31/2021	1/31/2022	1/31/2022	1/31/2022
4 →   Si	DTM ADs Tables	Listings   Figures   Status   CDISC Deliverables   🕂 :					Į£



Thank you for your time and attention!

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