



Example 5.1.4 from the Ph. Eur.

Remarks:

Standard			
Id.	S		
Ass. pot.	20 µg protein/ml		
Doses	(1)	(2)	(3)
1/16000	0.043	0.045	0.051
1/8000	0.093	0.099	0.082
1/4000	0.159	0.154	0.166
1/2000	0.283	0.295	0.362
1/1000	0.514	0.531	0.545

Sample 1			
Id.	T		
Ass. pot.	20 µg protein/ml		
Doses	(1)	(2)	(3)
1/16000	0.097	0.097	0.094
1/8000	0.167	0.157	0.178
1/4000	0.327	0.355	0.345
1/2000	0.501	0.665	0.576
1/1000	1.140	1.386	1.051

Sample 2			
Id.	U		
Ass. pot.	20 µg protein/ml		
Doses	(1)	(2)	(3)
1/16000	0.086	0.071	0.073
1/8000	0.127	0.146	0.133
1/4000	0.277	0.268	0.269
1/2000	0.586	0.489	0.546
1/1000	0.957	0.866	1.045

Sample 3			
Id.	V		
Ass. pot.	20 µg protein/ml		
Doses	(1)	(2)	(3)
1/16000	0.082	0.082	0.086
1/8000	0.145	0.144	0.173
1/4000	0.318	0.306	0.316
1/2000	0.552	0.551	0.624
1/1000	1.037	1.039	1.068

Model: Parallel lines
 Design: Completely randomised
 Transformation: $y' = \ln(y)$
 Variance: Observed residuals

Common slope(factor) = 0.908479 (0.890357 to 0.926601)
 Correlation | r |: 0.996560

Source of variation	Degrees of freedom	Sum of squares	Mean square	F-ratio	Probability
Preparations	3	4.47522	1.49174	223.392	0.000 (***)
Regression	1	47.5841	47.5841	>1000	0.000 (***)
Non-parallelism	3	0.0186856	0.00622854	0.933	0.434
Non-linearity	12	0.0742323	0.00618603	0.926	0.531
Standard	3	0.0170324	0.00567748	0.850	0.475
Sample 1	3	0.0282553	0.00941843	1.410	0.254
Sample 2	3	0.0177542	0.00591808	0.886	0.456
Sample 3	3	0.0111903	0.00373012	0.559	0.645
Treatments	19	52.1523	2.74486	411.049	0.000 (***)
Residual error	40	0.267107	0.00667768		
Total	59	52.4194	0.888464		

	Slope per Sample	Difference with Standard	Ratio with Standard
Standard	0.881284 (0.845041 to 0.917528)	0	1
Sample 1	0.903702 (0.867459 to 0.939946)	0.0224179 (-0.0288382 to 0.0736740)	1.02544 (0.968195 to 1.08616)
Sample 2	0.927850 (0.891607 to 0.964094)	0.0465660 (-0.00469009 to 0.0978221)	1.05284 (0.994828 to 1.11442)
Sample 3	0.921080 (0.884836 to 0.957323)	0.0397952 (-0.0114609 to 0.0910513)	1.04516 (0.987362 to 1.10649)

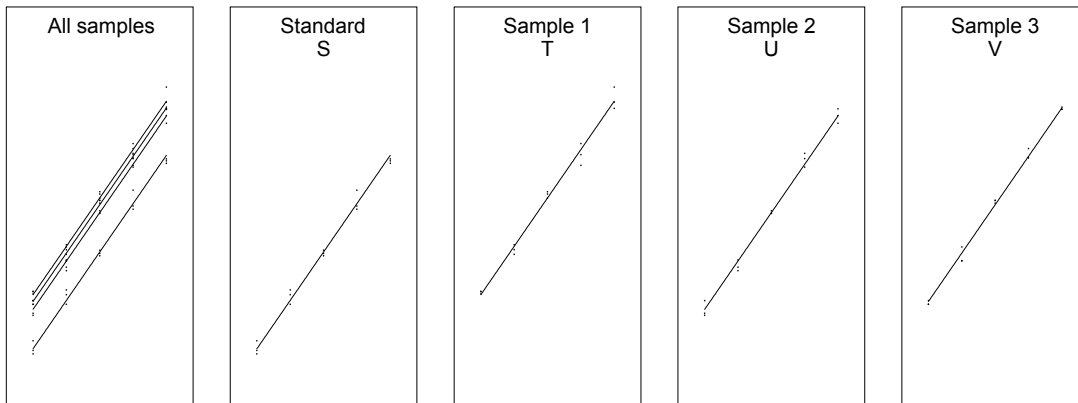
Sample 1			
Id.	T		
(µg protein/ml)	Lower limit	Estimate	Upper limit
Potency	40.5448	43.4196	46.5397
Rel. to Ass.	202.7%	217.1%	232.7%
Rel. to Est.	93.4%	100.0%	107.2%

Sample 2			
Id.	U		
(µg protein/ml)	Lower limit	Estimate	Upper limit
Potency	32.8698	35.1630	37.6405
Rel. to Ass.	164.3%	175.8%	188.2%
Rel. to Est.	93.5%	100.0%	107.0%



Example 5.1.4 from the Ph. Eur.

Sample 3			
Id.	V		
(µg protein/ml)	Lower limit	Estimate	Upper limit
Potency	36.8125	39.4017	42.2057
Rel. to Ass.	184.1%	197.0%	211.0%
Rel. to Est.	93.4%	100.0%	107.1%



Executed by:

Calculated by:

Approved by: