

Statistika

3. vježbe

Statistica

- ◆ Unos podataka
- ◆ Deskriptivna statistika
- ◆ Kolmogorov-Smirnov test normalnosti raspodjele

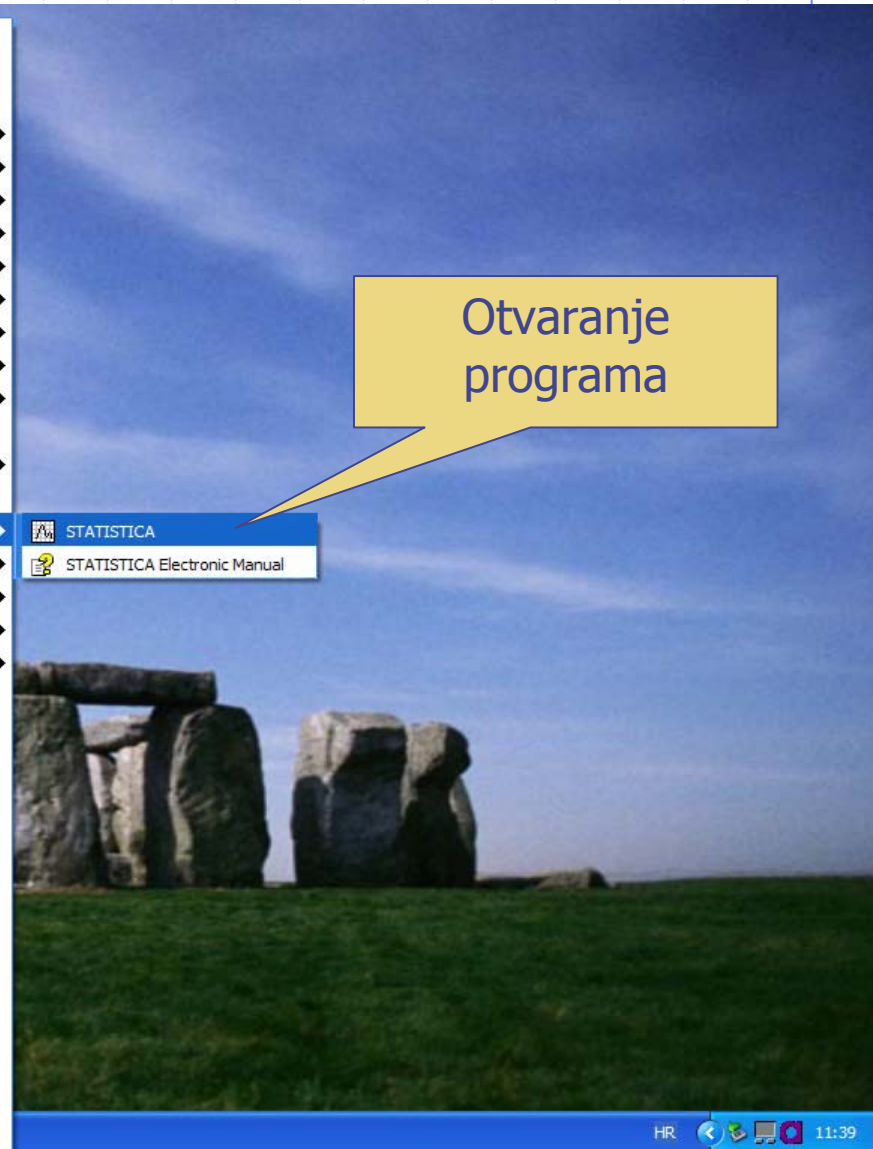
Unos podataka:

- ◆ Unutar tri skupine prasadi promatrali smo porodnu težinu, težinu 21. dana života (prije odbića), broj leukocita te aktivnost enzima alanin aminotransferaze (ALT) u perifernoj krvi. Promatranje smo provodili na farmi XY, od 1. do 21. svibnja 2004. godine. Prasad je svrstana u tri skupine s obzirom na porodnu masu:
 - 1. skupina (M): prasad porodne mase do 1000 g
 - 2. skupina (S): prasad porodne mase 1001-1900 g
 - 3. skupina (T): prasad porodne mase veće od 1901 g

- ◆ Jedinice u kojima su izraženi pojedini pokazatelji:
 - Težina prasadi: grami
 - broj leukocita: $\times 10^9/l$
 - ALT: U/l

The Start menu is open, displaying a list of installed programs. The programs are organized into several sections:

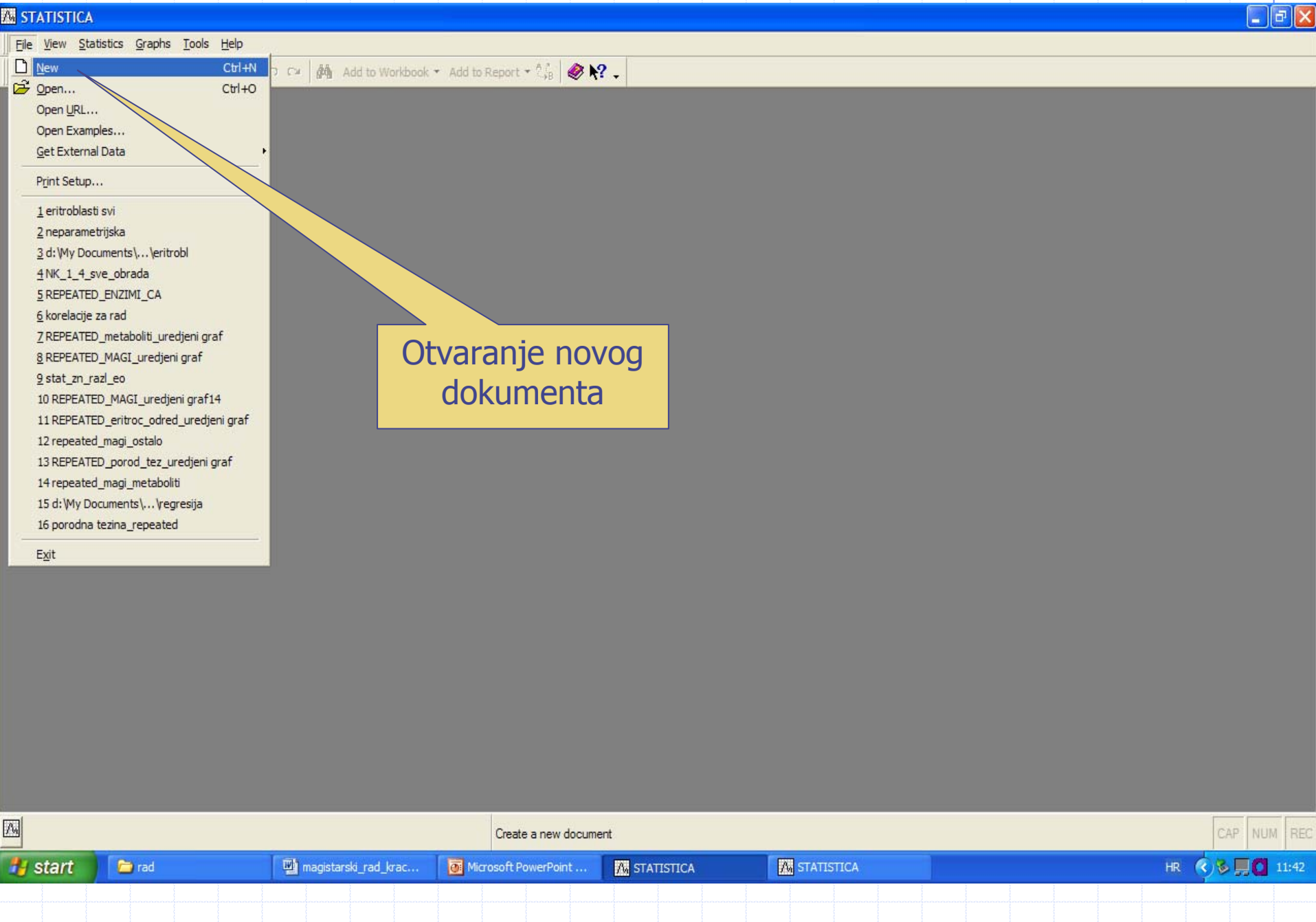
- System and Utility Programs:** PowerArchiver, Set Program Access and Defaults, Windows Catalog, Windows Update, AC3Filter, Accessories, CDEX, ChronoShutDown, CorelDRAW Graphics Suite 12, CyberLink PowerDVD, DivxG400, DVD Decrypter, DVD Shrink, ffdshow, Games, IrfanView, Lavasoft Ad-Aware SE Personal, MadOnion.com, Microsoft Office, Nero, PowerArchiver, PrintMe Internet Printing, QuickTime, REALTEK Gigabit and Fast Ethernet NIC Driver, Spybot - Search & Destroy, Startup, TuneUp Utilities 2004, Webteh, Adobe Reader 6.0, Internet Explorer, MSN, Outlook Express, Remote Assistance, and TuneUp Utilities 2004.
- Media and Entertainment Programs:** Windows Media Player, Windows Messenger, Windows Movie Maker, InterVideo MSIPVS, Canon PhotoRecord, Canon PIXMA iP2000, Canon PIXMA iP2000 Manual, Canon Utilities, DivX Repair, DigiBookShelf Freeware, Firefly Studios, Guitar Pro 4 Demo, Post-it@ Software Notes Lite, Rainbow Islands - Candyland (Demo), and Microsoft Plus! Dancer LE.
- STATISTICA 7 Suite:** STATISTICA 7, Digital Cam, AVG Free Edition, Kao - 2nd round (demo), and Učilica 2003.



Otvaranje programa

A sub-menu is displayed for the selected 'STATISTICA 7' program. It contains two items:

- STATISTICA
- STATISTICA Electronic Manual



- New Ctrl+N
- Open... Ctrl+O
- Open URL...
- Open Examples...
- Get External Data
- Print Setup...
- 1 eritroblasti svi
- 2 neparametrijska
- 3 d:\My Documents\... \eritrobl
- 4 NK_1_4_sve_obrada
- 5 REPEATED_ENZIMI_CA
- 6 korelacije za rad
- 7 REPEATED_metaboliti_uredjeni graf
- 8 REPEATED_MAGI_uredjeni graf
- 9 stat_zn_razl_eo
- 10 REPEATED_MAGI_uredjeni graf14
- 11 REPEATED_eritroc_odred_uredjeni graf
- 12 repeated_mag_i_ostalo
- 13 REPEATED_porod_tez_uredjeni graf
- 14 repeated_mag_i_metaboliti
- 15 d:\My Documents\... \regresija
- 16 porodna tezina_repeated
- Exit

Otvoravanje novog dokumenta

Broj promatranih svojstava

Broj promatranih slučajeva (jedinki skupa, životinja)

Create New Document

Macro (SVB) Program | Workbook | Browser Window
Spreadsheet | Report

Number of variables: 10
Number of cases: 10
Case name length: 0
MD code: -9999
Default data type: Double
Variable length: 8

Placement
 In a new Workbook
 As a stand-alone window

Var name prefix: Var
Var name start number: 1

Display format
General
Number
Date
Time
Scientific
Currency
Percentage
Fraction
Custom

Default

OK Cancel

OK = prihvaćanje odabranih mogućnosti

Promjena naziva
varijable
2 x L tipka miša

Data: Spreadsheet1 (10v by 10c)

	1 Var1	2 Var2	3 Var3	8 Var8	9 Var9	10 Var10
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

Data: Spreadsheet1 (10v by 10c)

	1 Var1	2 Var2	3 Var3	4 Var4	5 Var5
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

Variable 1

Arial 10 B I U x_2 x^2

Name: Type: Double OK

Measurement Type: Auto Length: 8

Excluded Label Case State MD code: -9999

Display format

- General
- Number
- Date
- Time
- Scientific
- Currency
- Percentage
- Fraction
- Custom

All Specs...
Text Labels...
Values/Stats...
Properties...

Long name (label or formula with): Function guide

Labels: use any text. Formulas: use variable names or v1, v2, ..., v0 is case #.
Examples: (a) = mean(v1:v3, sqrt(v7), AGE) (b) = v1+v2; comment (after;)

Unos naziva varijable

Data: Spreadsheet1 (10v by 10c)

	1 Var1	2 Var2	3 Var3	4 Var4	5 Var5
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

Variable 1

Name: Type:

Measurement Type: Length:

Excluded Label Case State MD code:

Display format

- General
- Number
- Date
- Time
- Scientific
- Currency
- Percentage
- Fraction
- Custom

Long name (label or formula with): Function guide

Labels: use any text. Formulas: use variable names or v1, v2, ..., v0 is case #.
Examples: (a) = mean(v1:v3, sqrt(v7), AGE) (b) = v1+v2; comment (after;)

OK = prihvaćanje odabranih postavki

Data: Spreadsheet1* (10v by 10c)

	1	2	3	4	5	6	7	8	9	10
	Visina	Var2	Var3	Var4	Var5	Var6	Var7	Var8	Var9	Var10
1										
2										
3										
6										
7										
8										
9										
10										

Promjena imena slučaja (oznaka jedinke)
2 x L tipka miša i upis

STATISTICA - Spreadsheet1

File Edit View Insert Format Statistics Graphs Tools Data Window Help

Arial 10 B I U

Data: Spreadsheet1* (10v by 10c)

	1	2	3	4
	Visina	Var2	Var3	Var4
MB21				
2				
3				
4				
5				
6				
7				
8				
9				
10				

Save As

Save in: My Documents

- CyberLink
- luka
- ljetopis04_05
- magisterij_05
- marcela
- moje
- My Music
- My Pictures
- My Videos
- statistika_ana
- tin

File name: Spreadsheet1

Save as type: STATISTICA Spreadsheet Files (*.sta)

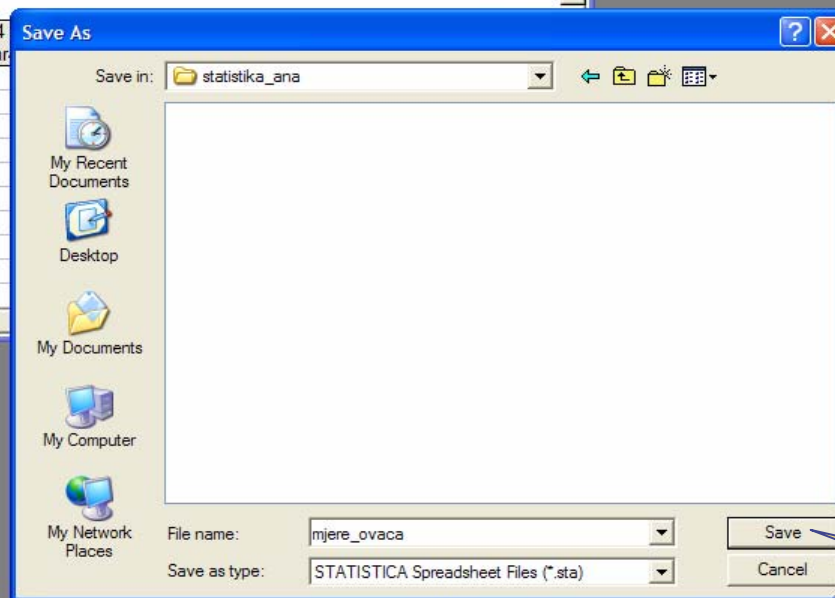
Save Cancel

Odabir mape 2 x L tipka miša

Upis naziva dokumenta

Data: Spreadsheet1* (10v by 10c)

	1	2	3	4
	Visina	Var2	Var3	Var4
MB21				
2				
3				
4				
5				
6				
7				
8				
9				
10				

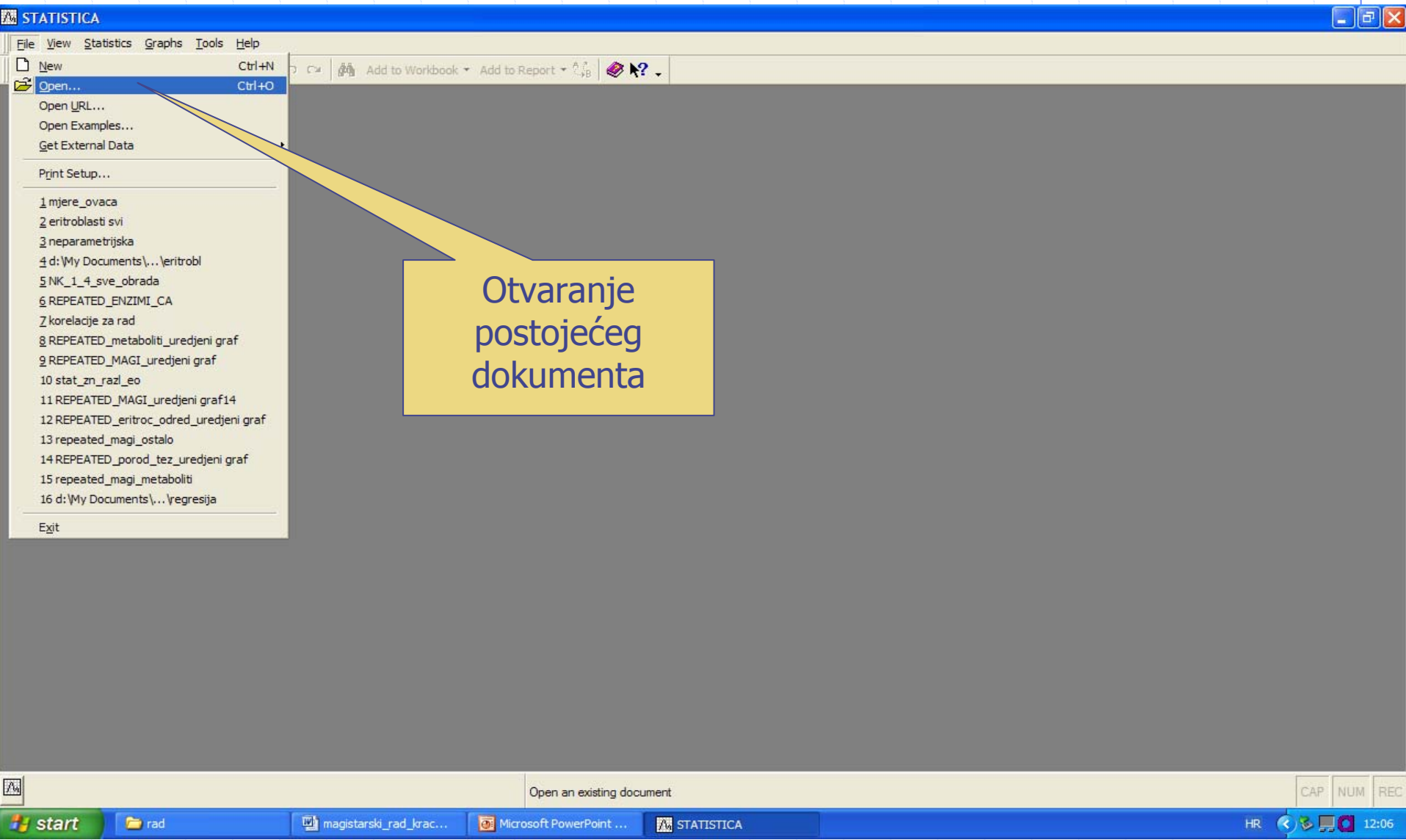


Spremanje
podataka

Data: mjere_ovaca (10v by 10c)

	1	2	3	4	5	6	7	8	9	10
	Visina	Var2	Var3	Var4	Var5	Var6	Var7	Var8	Var9	Var1
MB21										
2										
3										
4										
5										
6										
7										
8										
9										
10										

Na okviru dokumenta nalazi se ime pod kojim smo ga spremili



STATISTICA

File View Statistics Graphs Tools Help

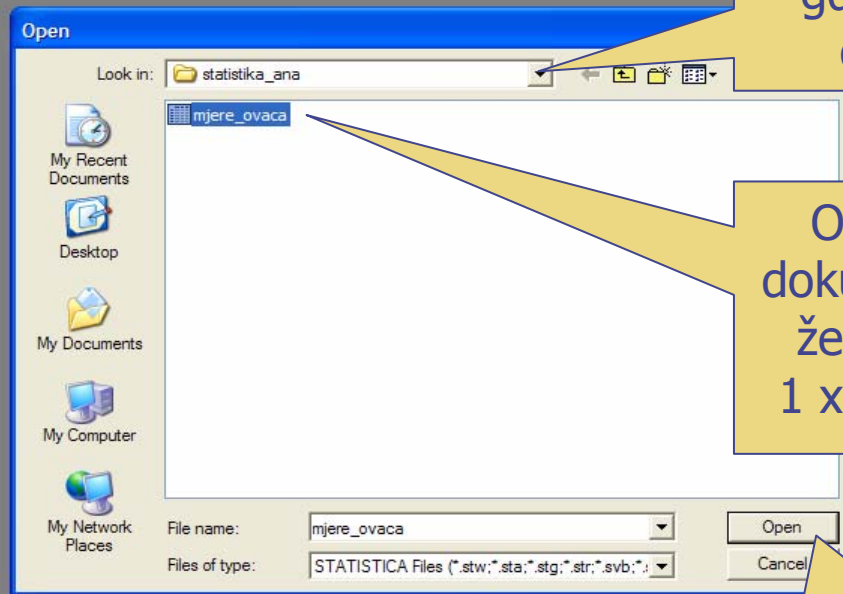
- New Ctrl+N
- Open... Ctrl+O**
- Open URL...
- Open Examples...
- Get External Data
- Print Setup...
- 1 mjere_ovaca
- 2 eritroblasti svi
- 3 neparametrijska
- 4 d:\My Documents\... \eritrobl
- 5 NK_1_4_sve_obrada
- 6 REPEATED_ENZIMI_CA
- 7 korelacije za rad
- 8 REPEATED_metaboliti_uredjeni graf
- 9 REPEATED_MAGI_uredjeni graf
- 10 stat_zn_razl_eo
- 11 REPEATED_MAGI_uredjeni graf14
- 12 REPEATED_eritroc_odred_uredjeni graf
- 13 repeated_mag_i_ostalo
- 14 REPEATED_porod_tez_uredjeni graf
- 15 repeated_mag_i_metaboliti
- 16 d:\My Documents\... \regresija
- Exit

Otvoravanje postojećeg dokumenta

Open an existing document

start rad magistarski_rad_krac... Microsoft PowerPoint ... STATISTICA

HR 12:06 CAP NUM REC



Otvaranje mape gdje se nalazi dokument

Označavanje dokumenta kojeg želimo otvoriti 1 x L tipka miša

Naredba za otvaranje označenog dokumenta

	1	2	3	4	5
	kod	porod.tež(g)	tež.21d	leukoc.(10 ⁹ /l)	ALT
1	M	800	4200	7,3	70
2	M	970	5010	12,7	30
3	M	825	2560	7,7	60
4	M	985	6500	7,1	40
5	M	990	6200	11,4	74
6	M	825	4800	6,2	58
7	M	995	5000	8,6	39
8	M	860	5200	4,1	45
9	M	705	3930	7,8	60
10	M	805	6000	7,6	41
11	M	965	5600	9,6	46
12	M	820	3900	9,2	48
13	M	960	2690	19,3	38
14	M	780	3950	20,8	52
15	M	857	2110	11,8	67
16	M	798	4800	10,2	50
17	M	806	4420	8,7	57
18	M	930	4560	11,9	52
19	M	906	4740	16,8	51
20	M	750	4960	31,9	44
21	M	770	4880	11,5	38
22	M	840	4320	31,3	61
23	M	808	3200	11,1	57
24	M	801	3870	12,1	61
25	M	925	4100	6,1	44
26	M	835	4000	15,1	41
27	M	750	1700	8,9	66
28	M	825	5400	8,3	39
29	M	822	3500	11,1	51
30	M	970	4600	10,2	34
31	S	1225	5900	12,2	40
32	S	1250	5100	7,1	43
33	S	1670	8600	15	51
34	S	1810	7400	32,8	41
35	S	1500	6800	11,9	39
36	S	1645	7030	9,6	40
37	S	1565	7700	6,2	39
38	S	1845	5950	7,2	37
39	S	1375	5000	10,9	54
40	S	1555	6450	5,8	46
41	S	1610	6500	8,2	46
42	S	1325	7100	27,6	41
43	S	1560	6800	7,6	66
44	S	1650	6840	9,7	35

Basic Statistics and Tabl

Quick

- Descriptive statistics
- Correlation matrices
- t-test, independent, by groups
- t-test, independent, by variables
- t-test, dependent samples
- t-test, single sample
- Breakdown & one-way ANOVA
- Breakdown; non-factorial tables
- Frequency tables
- Tables and banners
- Multiple response tables
- Difference tests: t, %, means
- Probability calculator

Buttons: OK, Cancel, Options, Open Data, SELECT CASES, W

	1 kod	2 porod.tež(g)	3 tež.21d	4 leukoc.(10 ⁹ /l)	5 ALT
1	M	800	4200	7,3	70
2	M	970	5010	12,7	30
3	M	825	2560	7,7	60
4	M	985	6500	7,1	40
5	M	990	6200	11,4	74
6	M	825	4800	6,2	58
7	M	995	5000	8,6	39
8	M	860	5200	4,1	45
9	M	705	3930	7,8	60
10	M	805	6000		
11	M	965	5600		
12	M	820	3900		
13	M	960	2690		
14	M	780	3950		
15	M	857	2110		
16	M	798	4800		
17	M	806	4420		
18	M	930	4560		
19	M	906	4740		
20	M	750	4960		
21	M	770	4880		
22	M	840	4320		
23	M	808	3200		
24	M	801	3870		
25	M	925	4100		
26	M	835	4000		
27	M	750	1700		
28	M	825	5400		
29	M	822	3500		
30	M	970	4600		
31	S	1225	5900		
32	S	1250	5100	7,1	43
33	S	1670	8600	15	51
34	S	1810	7400	32,8	41
35	S	1500	6800	11,9	39
36	S	1645	7030	9,6	40
37	S	1565	7700	6,2	39
38	S	1845	5950	7,2	37
39	S	1375	5000	10,9	54
40	S	1555	6450	5,8	46
41	S	1610	6500	8,2	46
42	S	1325	7100	27,6	41
43	S	1560	6800	7,6	66
44	S	1650	6840	9,7	35

Odabir više varijabli:

- ako biramo sve varijable po redu: kliknuti na prvu, potom stisnuti tipku Shift i držati je dok kliknemo na zadnju varijablu
- ako nasumično biramo varijable: držati tipku Ctrl i kliknuti na željene varijable

Descriptive Statistics: prasad.vj.3_5_leuc

Select the variables for the display:

Variable

Quick Advan

Summ

Location, va

Valid N

Mean

Sum

Median

Mode

Geom. m

Harm. m

Select variables:

2-5

Show appropriate variables only

Select All Spread Zoom

Use the "Show appropriate variables only" option to pre-screen variable lists and show categorical and continuous variables. Press F1 for more information.

Cancel

Save settings as default

	1	2	3	4	5	
	kod	porod.tež(g)	tež.21d	eozin.	ALT	
1	M	800	4200	0	70	
2	M	970	5010	1	30	
3	M	825	2560	0	60	
4	M	985	6500	0	40	
5	M	990	6200	0	74	
6	M	825	4800	1	58	
7	M	995	5000	0	39	
8	M	860	5200	0	45	
9	M	705	3930	1	60	
10	M	805	6000			
11	M	965	5600			
12	M	820	3900			
13	M	960	2690			
14	M	780	3950			
15	M	857	2110			
16	M	798	4800			
17	M	806	4420			
18	M	930	4560			
19	M	906	4740			
20	M	750	4960			
21	M	770	4880			
22	M	840	4320			
23	M	808	3200			
24	M	801	3870			
25	M	925	4100			
26	M	835	4000			
27	M	750	1700			
28	M	825	5400			
29	M	822	3500			
30	M	970	4600			
31	S	1225	5900			
32	S	1250	5100	0	43	
33	S	1670	8600	0	51	
34	S	1810	7400	0	41	
35	S	1500	6800	0	39	
36	S	1645	7030	0	40	
37	S	1585	7700	0	39	
38	S	1845	5950	0	37	
39	S	1375	5000	0	54	
40	S	1555	6450	0	46	
41	S	1610	6500	0	46	
42	S	1325	7100	0	41	
43	S	1560	6800	3	66	
44	S	1650	6840	0	35	
45	S	1655	6800	4	35	

Descriptive Statistics: prasad.vj.3_5_ok

Variables: porod.tež(g)-ALT

Summary

Quick Advanced Normality Prob. & Scatterplots Categ. plots Options

Summary: Descriptive statistics Compute statistics:

Location, valid N

- Valid N
- Mean
- Sum
- Median
- Mode
- Geom. mean
- Harm. mean

Variation, moments

- Standard Deviation
- Variance
- Std. err. of mean
- Conf. limits for means
Interval: 95,00 %
- Skewness
- Std. err., Skewness
- Kurtosis
- Std. err., Kurtosis

Percentiles, ranges

- Minimum & maximum
- Lower & upper quartiles
- Percentile boundaries
First: 10,00 %
Second: 90,00 %
- Range
- Quartile range

SELECT CASES W

Wghtd moments
DF =
 W-1 N-1

MD deletion
 Casewise
 Pairwise

Select all stats Reset

Save settings as default

Cancel Options

	1	2	3	4	5
	kod	porod.tež(g)	tež.21d	eozin.	ALT
1	M	800	4200	0	70
2	M	970	5010	1	30
3	M	825	2560	0	60
4	M	985	6500	0	40
5	M	990	6200	0	74
6	M	825	4800	1	58
7	M	995	5000	0	39
8	M	860	5200	0	45
9	M	705	3930	1	60
10	M	805	6000	0	30
11	M	965	5600	0	30
12	M	820	3900	0	30
13	M	960	2690	0	30
14	M	780	3950	0	30
15	M	857	2110	0	30
16	M	798	4800	0	30
17	M	806	4420	0	30
18	M	930	4560	0	30
19	M	906	4740	0	30
20	M	750	4960	0	30
21	M	770	4880	0	30
22	M	840	4320	0	30
23	M	808	3200	0	30
24	M	801	3870	0	30
25	M	925	4100	0	30
26	M	835	4000	0	30
27	M	750	1700	0	30
28	M	825	5400	0	30
29	M	822	3500	0	30
30	M	970	4600	0	30
31	S	1225	5900	0	43
32	S	1250	5100	0	43
33	S	1670	8600	0	51
34	S	1810	7400	0	41
35	S	1500	6800	0	39
36	S	1645	7030	0	40
37	S	1565	7700	0	39
38	S	1845	5950	0	37
39	S	1375	5000	0	54
40	S	1555	6450	0	46
41	S	1610	6500	0	46
42	S	1325	7100	0	41
43	S	1560	6800	3	66
44	S	1650	6840	0	35
45	S	1655	6880	4	30

Descriptive Statistics: prasad.vj.3_5_ok

Variables: porod.tež(g)-ALT

Quick Advanced Normality Prob. & Scatterplots Categ. plots Options

Summary: Descriptive statistics Compute statistics:

Location, valid N: Valid N, Mean, Sum, Median, Mode, Geom. mean, Harm. mean

Variation, moments: Standard Deviation, Variance, Std. err. of mean, Conf. limits for means, Interval: 95.00%, Skewness, Std. err., Skewness, Kurtosis, Std. err., Kurtosis

Percentiles, ranges: Minimum & maximum, Lower & upper quartiles, Percentile boundaries, First: 10.00%, Second: 90.00%, Range, Quartile range

Select all stats, Reset, Save settings as default

Summary, Cancel, Options, SELECT CASES, W, W, DF = W-1, N-1, MD deletion: Casewise, Pairwise

Ukoliko u jednom dokumentu imamo podatke za više grupa životinja, odabrati od kojeg do kojeg promatranja se obrađuju podaci

	1	2	3	4	5				
	kod	porod.tež(g)	tež.21d	eozin.	ALT				
1	M	800	4200	0	70				
2	M	970	5010	1	30				
3	M	825	2560	0	60				
4	M	985	6500	0	40				
5	M	990	6200	0	74				
6	M	825	4800	1	58				
7	M	995	5000						
8	M	860	5200						
9	M	705	3930						
10	M	805	6000						
11	M	965	5600						
12	M	820	3900						
13	M	960	2690						
14	M	780	3950						
15	M	857	2110						
16	M	798	4800						
17	M	806	4420						
18	M	930	4560						
19	M	906	4740						
20	M	750	4960						
21	M	770	4880						
22	M	840	4320						
23	M	808	3200						
24	M	801	3870						
25	M	925	4100						
26	M	835	4000						
27	M	750	1700						
28	M	825	5400						
29	M	822	3500						
30	M	970	4600						
31	S	1225	5900						
32	S	1250	5100						
33	S	1670	8600						
34	S	1810	7400						
35	S	1500	6800						
36	S	1645	7030						
37	S	1565	7700						
38	S	1845	5950						
39	S	1375	5000						
40	S	1555	6450						
41	S	1610	6500						
42	S	1325	7100						
43	S	1560	6800						
44	S	1650	6840						
45	S	1655	6800						

Analysis/Graph Case Selection Conditions

Use current Spreadsheet selection conditions
 Use selection conditions for this Analysis/Graph only

Enable Selection Conditions
 Review Variables
Clear All
OK

Include cases:

- All
- Specific, selected by:
 - By Expression:
 - or case number:

Exclude cases (from the set of cases defined in the 'Include cases' section)

- By expression:
- or case number:

By case number: Enter case numbers and/or ranges. Example: 1, 3, 5-12
 By expression: Use the same operators, functions, and syntax as in the spreadsheet formulas:
 Use variable names or v1, v2... v0 is the case number (v0<4 means cases 1-3)
 Examples: (a) v1=0 OR age>18 (b) gender=MALE AND v4<>(v5+v6)

Cancel
Open...
Save As...

- Workbook3*
- Basic Statistics/Tables
- Descriptive statistic
- Descriptive Stat

Descriptive Statistics (prasad.vj.3_5_leuk)
Include cases: 1:30

Variable	Valid N	Mean	Minimum	Maximum	Std.Dev.
porod.tez(g)	30	855,933	705,000	995,000	82,372
tez.21d	30	4356,667	1700,000	6500,000	1134,960
leukoc.(10 ⁹ /l)	30	11,837	4,100	31,900	6,544
ALT	30	50,467	30,000	74,000	11,285

Descriptive Statistics (prasad.vj.3_5_leuk)
Include cases: 1:30

Variable	Valid N	Mean	Minimum	Maximum	Std.Dev.
porod.tež(g)	30	855,933	705,000	996,000	82,372
tež.21d	30	4356,667	1700,000	6500,000	1134,960
leukoc.(10 ⁹ /l)	30	11,837	4,100	31,900	6,544
ALT	30	50,467	30,000	74,000	11,285

Descriptive Statistics: prasad.vj.3_5_leuk

Variables: porod.tež(g)-ALT

Quick | Advanced | Normality | Prob. & Scatterplots | Categ. plots | Options

Frequency tables Histograms

Categorization

Number of intervals: 10

Integer intervals (categories)

Normal expected frequencies

Kolmogorov-Smirnov & Lilliefors test for normality

Shapiro-Wilk's W test

Use Distribution Fitting, Process Analysis, or Graphs (P-P or Q-Q) to fit other distributions; use Survival Analysis to fit distributions to censored data.

Wghdtd momnts

DF = W-1 N-1

Stem and leaf

Stem & leaf plot

Compressed

MD deletion

Casewise

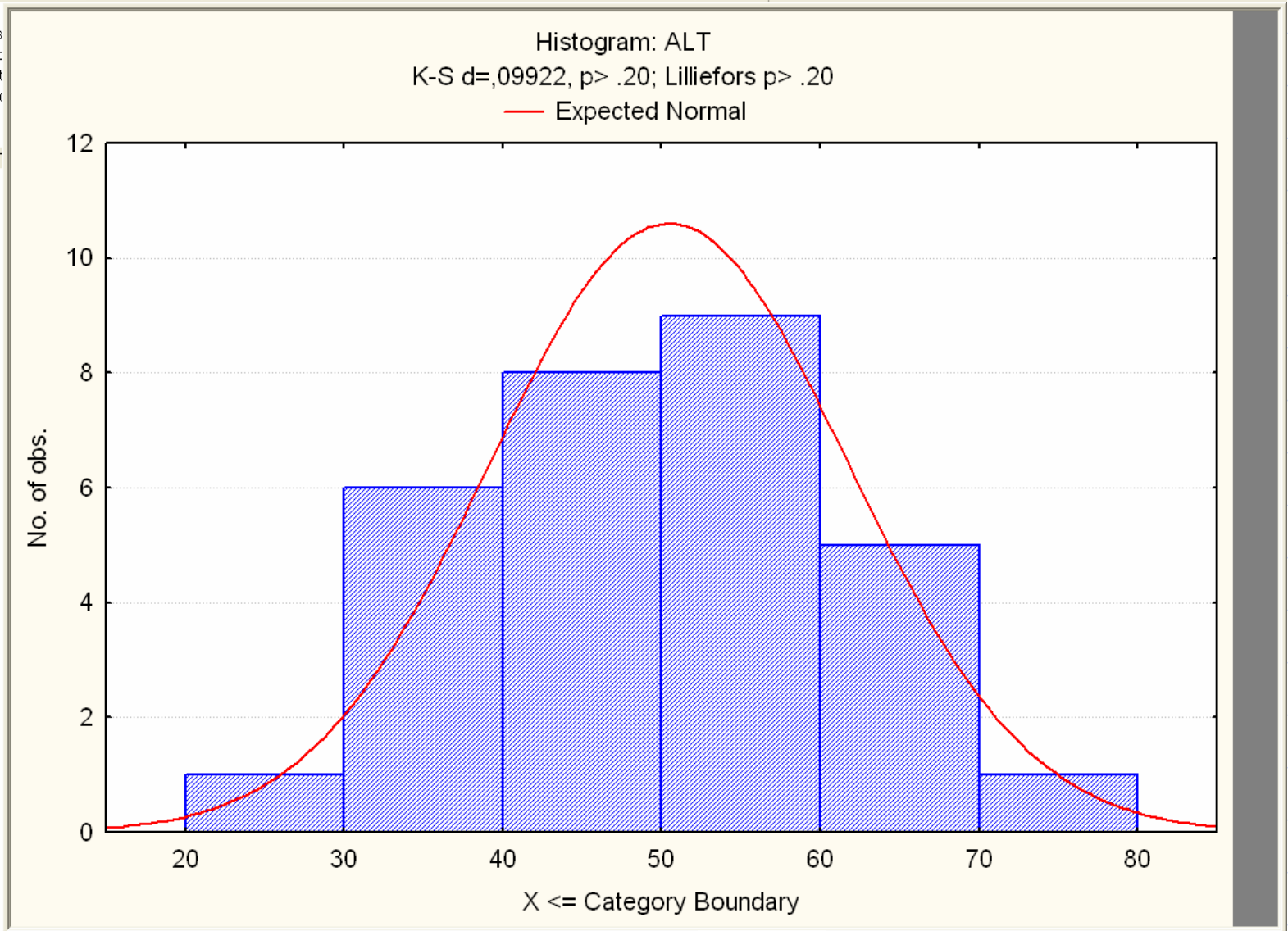
Pairwise

SELECT CASES

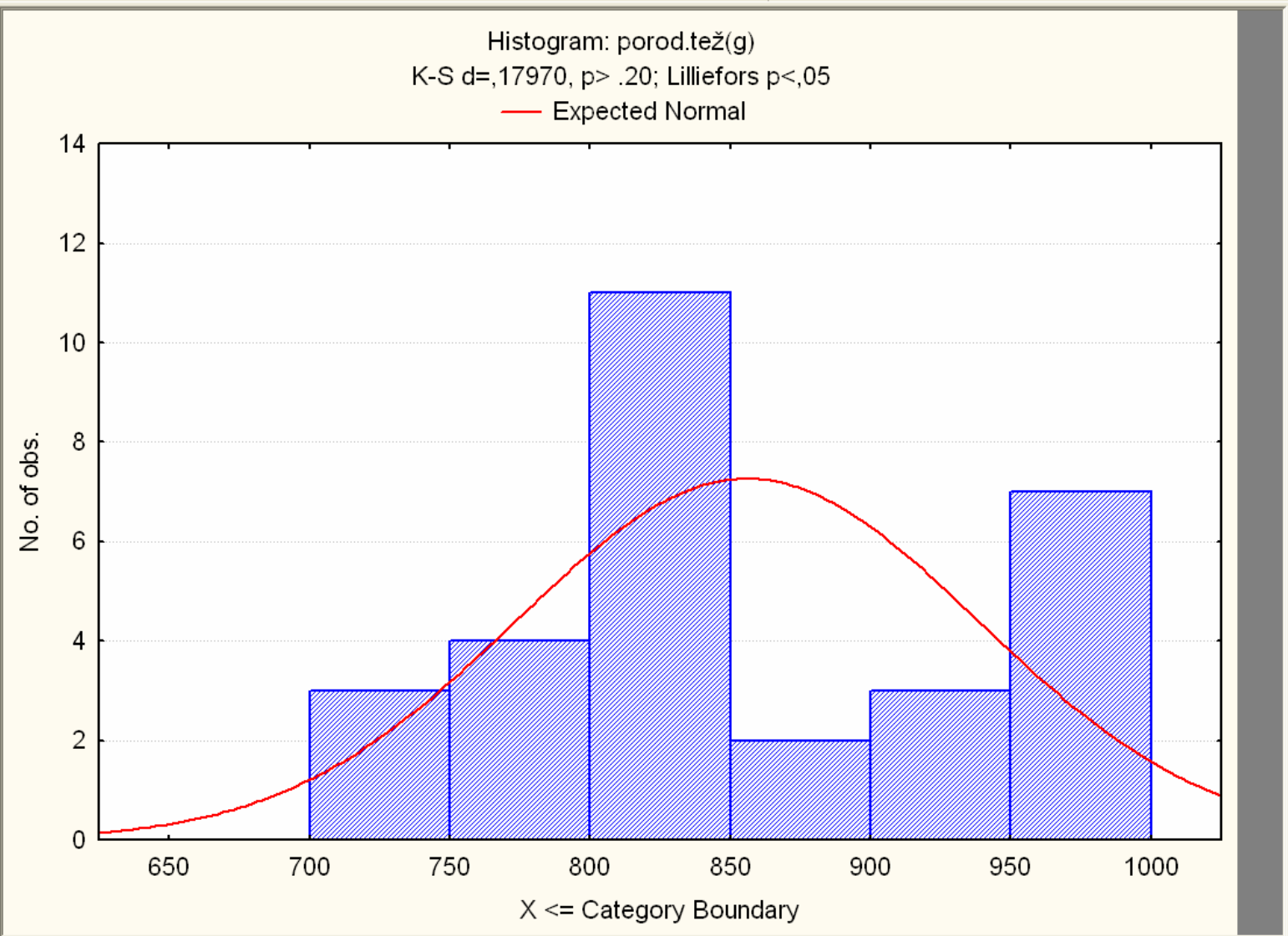
Options

Cancel

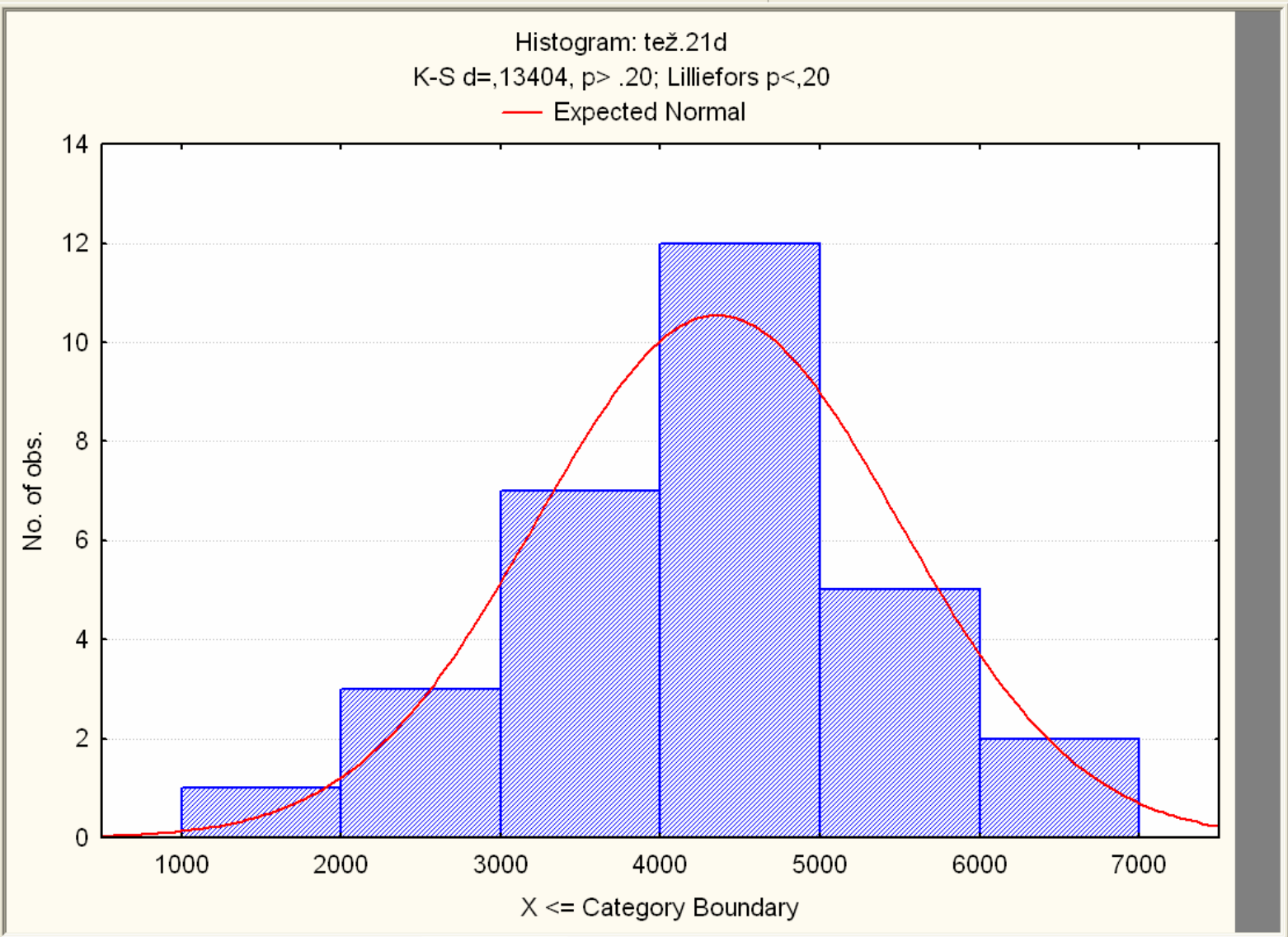
- Workbook1*
- Basic Statistics/Tables
 - Descriptive statistic
 - Descriptive Stat
 - Histogram: porod
 - Histogram: tež
 - Histogram: eoz
 - Histogram: ALT



- Basic Statistics/Tables
 - Descriptive statistic
 - Descriptive Stat
 - Histogram: porod.tež(g)
 - Histogram: tež.
 - Histogram: eoz
 - Histogram: ALT
 - Descriptive Stat
 - Histogram: porod.tež(g)
 - Histogram: tež.
 - Histogram: eoz
 - Histogram: ALT
 - Descriptive Stat
 - Histogram: porod.tež(g)
 - Histogram: tež.
 - Histogram: eoz
 - Histogram: ALT



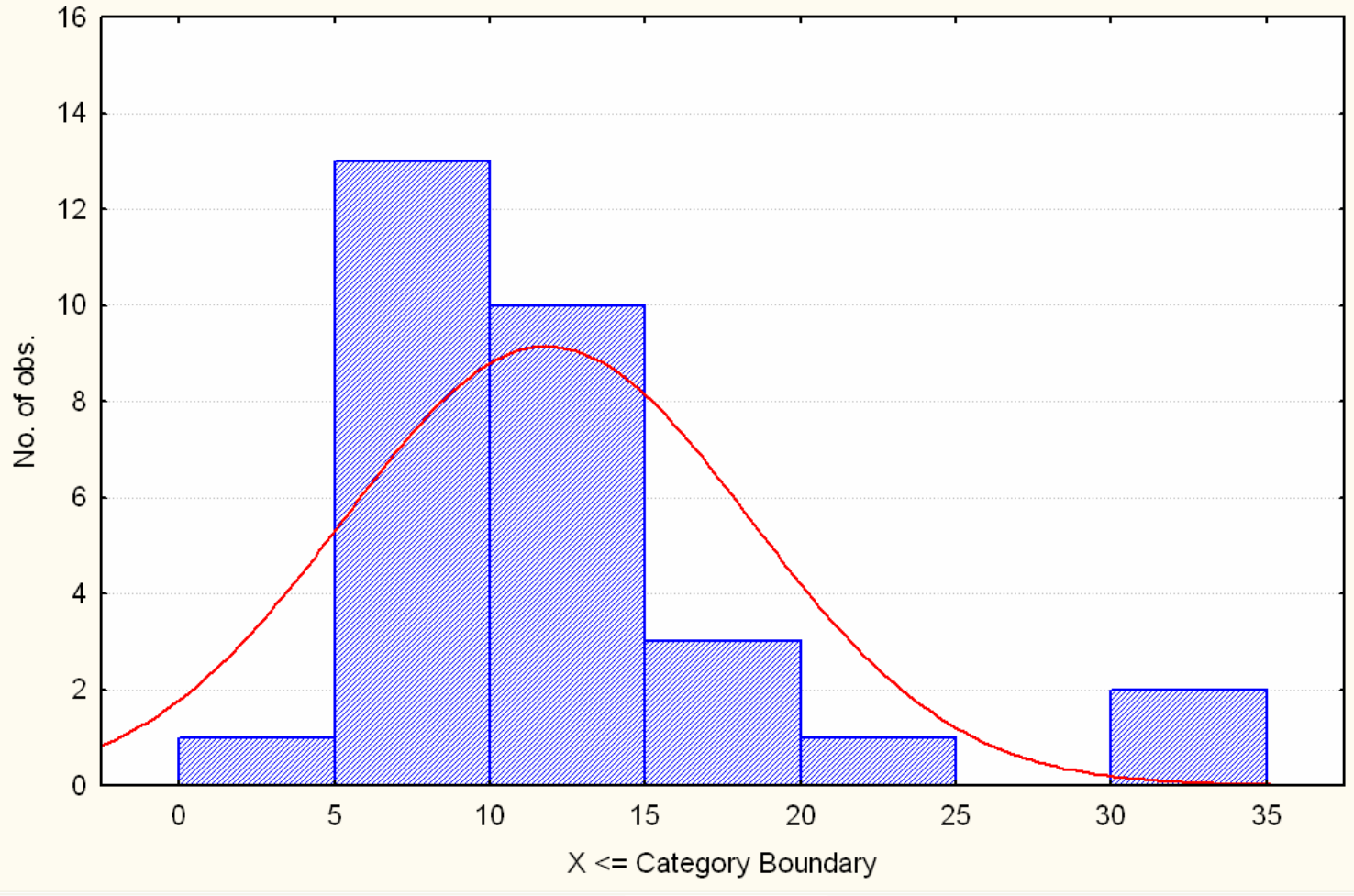
- Workbook1*
- Basic Statistics/Tables
- Descriptive statistic
 - Descriptive Stat
 - Histogram: porod.
 - Histogram: tež.
 - Histogram: eoz
 - Histogram: ALT
- Descriptive Stat
- Histogram: porod.
- Histogram: tež.
- Histogram: eoz
- Histogram: ALT
- Descriptive Stat
- Histogram: porod.
- Histogram: tež.
- Histogram: eoz
- Histogram: ALT



Histogram: leukoc.(10⁹/l)

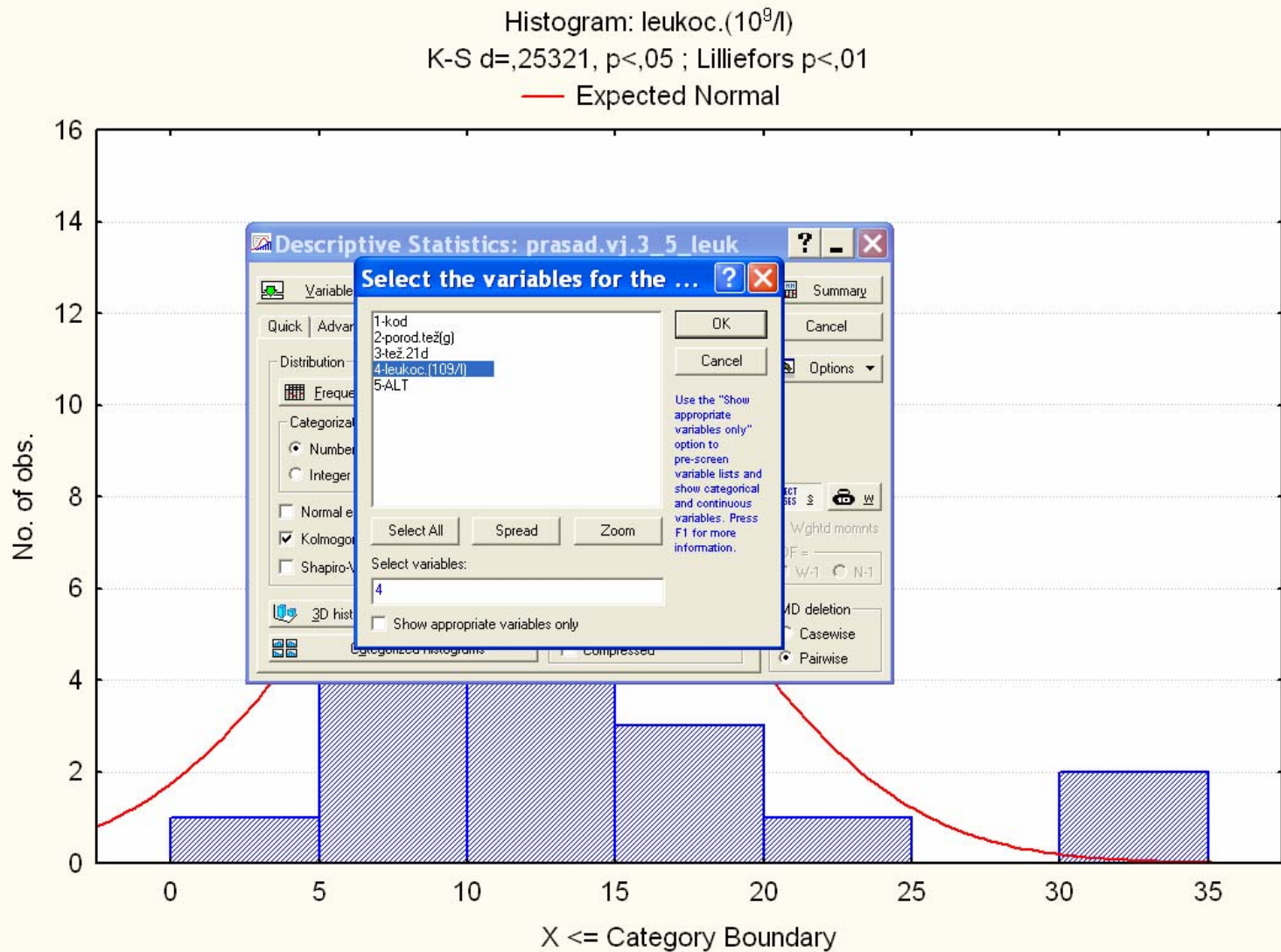
K-S d=,25062, p<,05 ; Lilliefors p<,01

— Expected Normal



Workbook2*

- Basic Statistics/Tables
- Descriptive statistic
 - Descriptive Stat
 - Histogram: porod.
 - Histogram: tež.
 - Histogram: leuk
 - Histogram: ALT



Descriptive Statistics: prasad.vj.3_5_leuk

Select the variables for the ...

Variable

Quick | Advan

Distribution

Frequency

Categorical

Number

Integer

Normal e

Kolmogor

Shapiro-W

3D hist

Weighted moments

W-1

N-1

AD deletion

Casewise

Pairwise

OK

Cancel

Options

Use the "Show appropriate variables only" option to pre-screen variable lists and show categorical and continuous variables. Press F1 for more information.

Select variables:

4

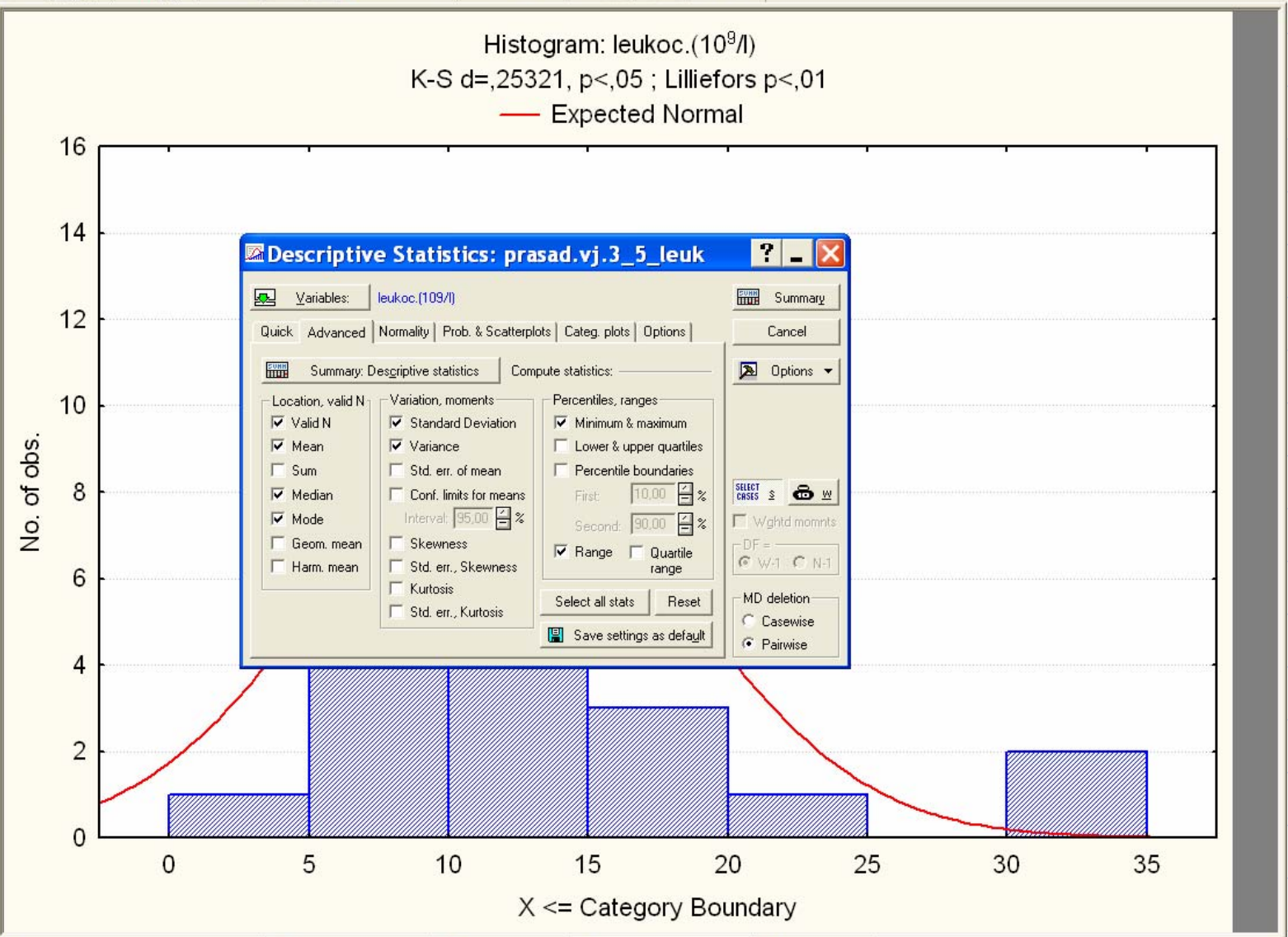
Show appropriate variables only

Select All

Spread

Zoom

- Basic Statistics/Tables
- Descriptive statistic
 - Descriptive Stat
 - Histogram: por
 - Histogram: tež.
 - Histogram: leuk
 - Histogram: ALT



Descriptive Statistics: prasad.vj.3_5_leuk

Variables: leukoc.(10⁹/l)

Summary: Descriptive statistics

Compute statistics:

- Location, valid N
 - Valid N
 - Mean
 - Sum
 - Median
 - Mode
 - Geom. mean
 - Harm. mean
- Variation, moments
 - Standard Deviation
 - Variance
 - Std. err. of mean
 - Conf. limits for means
 - Interval: 95.00 %
 - Skewness
 - Std. err., Skewness
 - Kurtosis
 - Std. err., Kurtosis
- Percentiles, ranges
 - Minimum & maximum
 - Lower & upper quartiles
 - Percentile boundaries
 - First: 10.00 %
 - Second: 90.00 %
 - Range
 - Quartile range

Options: Wghtd momnts, DF = W-1, N-1, MD deletion (Casewise, Pairwise)

Buttons: Summary, Cancel, Options, Select all stats, Reset, Save settings as default

File Edit View Insert Format Statistics Graphs Tools Data Workbook Window Help

Arial 10 B I U [Text Formatting Icons]

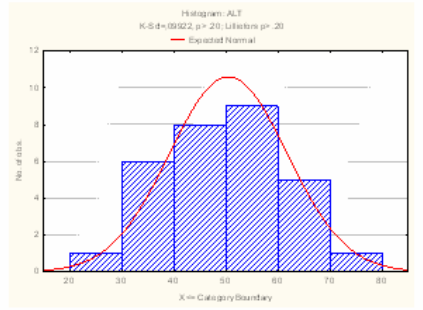
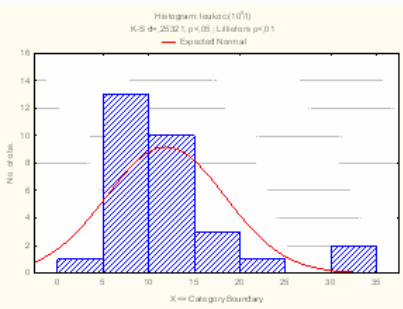
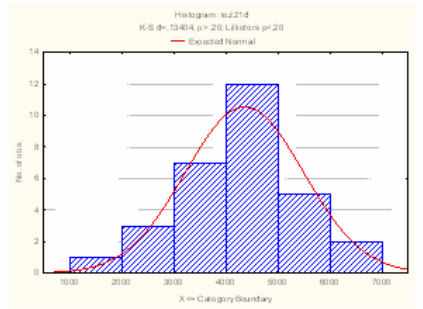
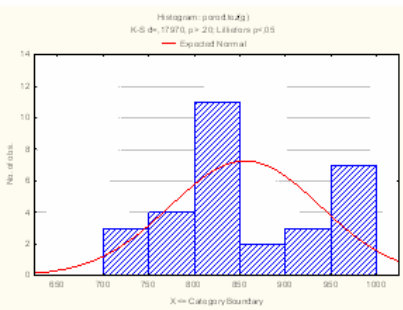
- Workbook3*
 - Basic Statistics/Tables
 - Descriptive statistic
 - Descriptive Stat
 - Histogram: por
 - Histogram: tež.
 - Histogram: leuk
 - Histogram: ALT
 - Descriptive Stat

Descriptive Statistics (prasad.vj.3_5_leuk)
Include cases: 1:30

Variable	Valid N	Mean	Median	Mode	Frequency of Mode	Minimum	Maximum	Std.Dev.
leukoc.(10 ⁹ /l)	30	11,83667	10,20000	7,800000	4	4,100000	31,90000	6,544252

- Basic Statistics/Tables
- Descriptive statistic
- Descriptive Stat
- Histogram: porod.tež(g)
- Histogram: tež.21d
- Histogram: leuk
- Histogram: ALT
- Descriptive Stat

Descriptive Statistics (prasad.vj.3)				
Include cases: 1:30				
Variable	Valid N	Mean	Minimum	M
porod.tež(g)	30	855,933	705,000	
tež.21d	30	4356,667	1700,000	
leukoc.(10 ⁹ /l)	30	11,880	4,100	
ALT	30	50,467	30,000	

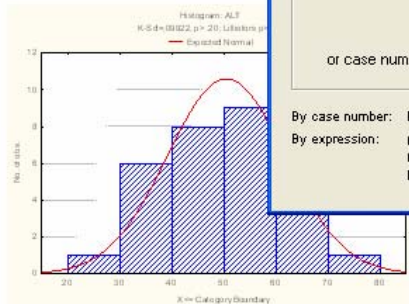
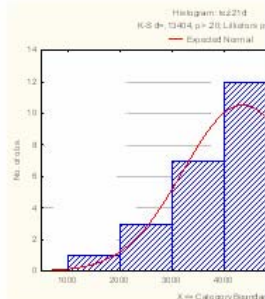
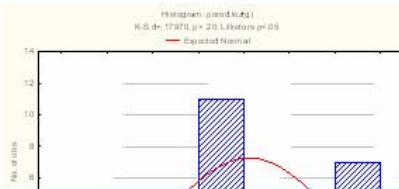


Descriptive Statistics (prasad.vj.3)				
Include cases: 1:30				
Variable	Valid N	Mean	Median	M
leukoc.(10 ⁹ /l)	30	11,88000	10,20000	M

Workbook1*

- Basic Statistics/Tables
- Descriptive statistic
 - Descriptive Stat
 - Histogram: porod.
 - Histogram: tež.
 - Histogram: eozin.
 - Histogram: ALT

Variable	Descriptive Statistics (prasad.vj.3)			
	Valid N	Mean	Minimum	Maximum
porod.tež(g)	30	855,933	705,000	1700,000
tež.21d	30	4356,667	1700,000	8700,000
eozin.	30	0,267	0,000	1,000
ALT	30	50,467	30,000	100,000



Analysis/Graph Case Selection Conditions

Use current Spreadsheet selection conditions
 Use selection conditions for this Analysis/Graph only

Enable Selection Conditions
 Review Variables:

Include cases

All

Specific, selected by:

By Expression:

or case number:

Exclude cases (from the set of cases defined in the 'Include cases' section)

By expression:

or case number:

By case number: Enter case numbers and/or ranges. Example: 1, 3, 5-12
 By expression: Use the same operators, functions, and syntax as in the spreadsheet formulas:
 Use variable names or v1, v2... v0 is the case number (v0<4 means cases 1-3)
 Examples: (a) v1=0 OR age>18 (b) gender=MALE AND v4<>(v5+v6)

File Edit View Insert Format Statistics Graphs Tools Data Workbook Window Help

Arial 10 B I U [Text Formatting Icons] [Color/Background Icons] [Number Formatting Icons] Vars Cases [Grid Icons]

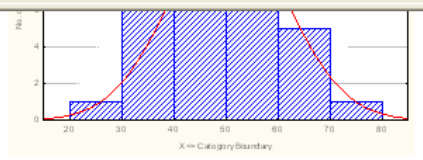
- Workbook3*
- Basic Statistics/Tables
- Descriptive statistic
 - Descriptive Stat
 - Histogram: porod.tež(g)
 - Histogram: tež.21d
 - Histogram: leukoc.(10⁹/l)
 - Histogram: leuk
 - Histogram: ALT
 - Descriptive Stat
 - Descriptive Stat

Descriptive Statistics (prasad.vj.3_5_leuk)					
Include cases: 31:60					
Variable	Valid N	Mean	Minimum	Maximum	Std.Dev.
porod.tež(g)	30	1548,333	1100,000	1845,000	183,149
tež.21d	30	6060,000	4150,000	8600,000	1037,331
leukoc.(10 ⁹ /l)	30	12,133	5,100	32,800	7,410
ALT	30	44,500	28,000	73,000	11,557

Navigation icons: Back, Forward, Home, Stop, Refresh, Print, Copy, Paste, Undo, Redo, Find, Help, Close, Maximize, Minimize, Full Screen, Window, Close

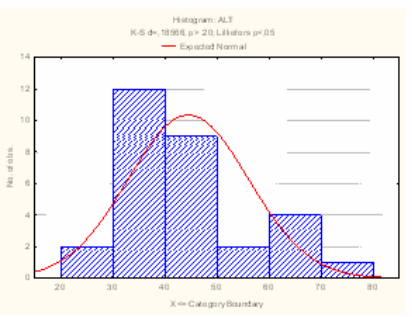
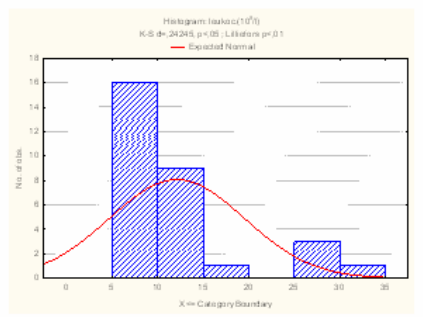
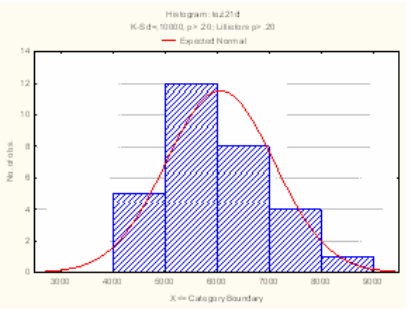
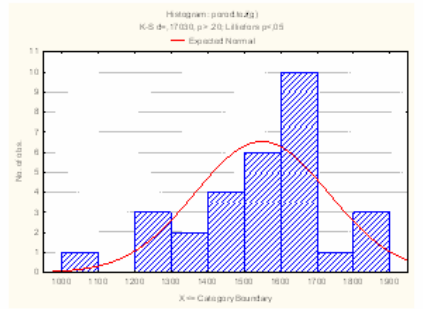
Descriptive Statistics:...

- basic Statistics/Tables (prasad.v.j.3)
- Descriptive statistics dialog
- Descriptive Statistics (p...)
- Histogram: porod.tez(g)
- Histogram: tez.21d
- Histogram: leukoc.(10⁹/l)
- Histogram: ALT
- Descriptive Statistics (p...)
- Descriptive Statistics (p...)
- Descriptive Statistics (p...)
- Histogram: porod.tez(g)
- Histogram: tez.21d
- Histogram: leukoc.(10⁹/l)
- Histogram: ALT

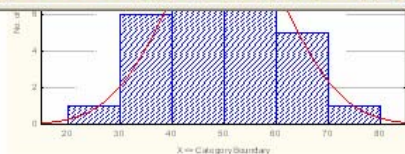


Descriptive Statistics (prasad.v.j.3)				
Include cases: 31:60				
Variable	Valid N	Mean	Median	N
leukoc.(10 ⁹ /l)	30	12,12667	9,650000	6,...

Descriptive Statistics (prasad.v.j.3)				
Include cases: 31:60				
Variable	Valid N	Mean	Median	N
porod.tez(g)	30	1548,333	1577,500	N
tez.21d	30	6060,000	5975,000	N
leukoc.(10 ⁹ /l)	30	12,127	9,650	6,...
ALT	30	44,500	41,000	N



tics/Tables (prasad.vj.3_5_le
 ive statistics dialog
 riptive Statistics (prasad.vj.3
 gram: porod.tež(g)
 gram: tež.21d
 gram: leukoc.(109/l)
 gram: ALT
 riptive Statistics (prasad.vj.3
 riptive Statistics (prasad.vj.3
 riptive Statistics (prasad.vj.3
 gram: porod.tež(g)
 gram: tež.21d
 gram: leukoc.(109/l)
 gram: ALT
 riptive Statistics (prasad.vj.3
 gram: porod.tež(g)
 gram: tež.21d
 gram: leukoc.(109/l)
 gram: ALT



Variable	Valid N	Mean
leukoc.(10 ⁹ /l)	30	12,126

Variable	Valid N	Mean
leukoc.(10 ⁹ /l)	31	12,126

Analysis/Graph Case Selection Conditions

- Use current Spreadsheet selection conditions
 Use selection conditions for this Analysis/Graph only

Enable Selection Conditions

Review Variables

Clear All

OK

Cancel

Open...

Save As...

Include cases

All

Specific, selected by:

By Expression:

or case number: 61:90

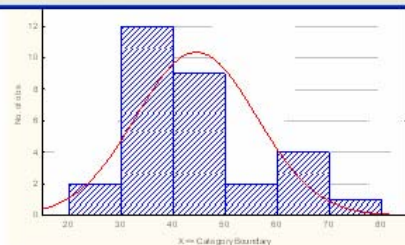
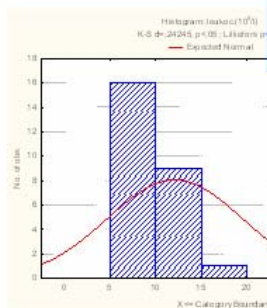
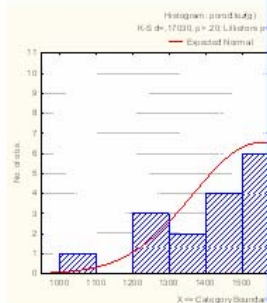
Exclude cases (from the set of cases defined in the 'Include cases' section)

By expression:

or case number:

By case number: Enter case numbers and/or ranges. Example: 1, 3, 5-12

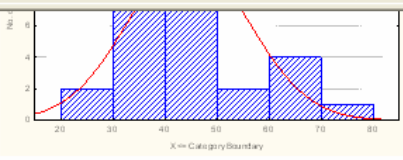
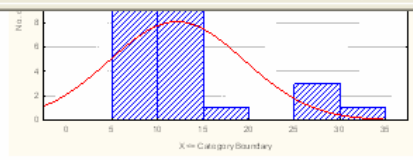
By expression: Use the same operators, functions, and syntax as in the spreadsheet formulas:
 Use variable names or v1, v2... v0 is the case number (v0<4 means cases 1-3)
 Examples: (a) v1=0 OR age>18 (b) gender=MALE AND v4<>(v5+v6)



- Workbook3*
 - Basic Statistics/Tables
 - Descriptive statistic
 - Descriptive Stat
 - Histogram: porod.tez(g)
 - Histogram: tez.21d
 - Histogram: leukoc.(10⁹/l)
 - Histogram: leuk
 - Histogram: ALT
 - Descriptive Stat
 - Descriptive Stat
 - Descriptive Stat

Descriptive Statistics (prasad.vj.3_5_leuk)					
Include cases: 61:90					
Variable	Valid N	Mean	Minimum	Maximum	Std.Dev.
porod.tez(g)	30	2035,167	1905,000	2250,000	78,2181
tez.21d	30	8075,000	5700,000	9000,000	927,7104
leukoc.(10 ⁹ /l)	30	12,340	4,200	30,100	8,0818
ALT	30	40,633	30,000	50,000	4,8600

tics/Tables (prasad.vj.3_5_le
 ive statistics dialog
 riptive Statistics (prasad.vj.3
 gram: porod.tež(g)
 gram: tež.21d
 gram: leukoc.(109/l)
 gram: ALT
 riptive Statistics (prasad.vj.3
 riptive Statistics (prasad.vj.3
 riptive Statistics (prasad.vj.3
 gram: porod.tež(g)
 gram: tež.21d
 gram: leukoc.(109/l)
 gram: ALT
 riptive Statistics (prasad.vj.3
 gram: porod.tež(g)
 gram: tež.21d
 gram: leukoc.(109/l)
 gram: ALT



Descriptive Statistics (prasad.vj.3 Include cases: 61:90)				
Variable	Valid N	Mean	Median	M
porod.tež(g)	30	2035,167	2012,500	M
tež.21d	30	8075,000	8355,000	M
leukoc.(10 ⁹ /l)	30	12,310	9,350	M
ALT	30	40,633	40,500	M

