

## The FACTOR Procedure

Input Data Type	Raw Data
Number of Records Read	46620
Number of Records Used	46620
N for Significance Tests	46620

Means and Standard Deviations from 46620 Observations		
Variable	Mean	Std Dev
mxOvarian	0.00000000	0.99934705
mxNonhodgkin	0.00000000	0.99924404
mxPancreatic	0.00000000	0.99954339
mxUterine	0.00000000	0.99924401
mxTesticular	0.00000000	0.99924381
mxTracheal	0.00000000	0.99924404
mxThroid	0.00000000	0.99924406
mxStomach	0.00000000	0.99924406
mxProstate	0.00000000	0.99924379
mxMultiplemyeloma	-.00003763	0.99923139
mxMalignantSkinMeloma	-.00001778	0.99924172
mxLiver	-.00001171	0.99924463
mxkidney	0.00000000	0.99924395
mxcolon	0.00000000	0.99975008
mybreast	0.00000000	0.99950842
mxbladder	0.00000000	0.99949142

**The FACTOR Procedure**  
**Initial Factor Method: Principal Components**

**Prior Communality Estimates: ONE**

Eigenvalues of the Correlation Matrix: Total = 16 Average = 1				
	Eigenvalue	Difference	Proportion	Cumulative
1	6.12435074	3.61921200	0.3828	0.3828
2	2.50513874	0.52499967	0.1566	0.5393
3	1.98013907	0.81598480	0.1238	0.6631
4	1.16415427	0.24177812	0.0728	0.7359
5	0.92237615	0.30491138	0.0576	0.7935
6	0.61746478	0.09068874	0.0386	0.8321
7	0.52677604	0.05174234	0.0329	0.8650
8	0.47503370	0.10485598	0.0297	0.8947
9	0.37017772	0.09200685	0.0231	0.9179
10	0.27817086	0.04025190	0.0174	0.9352
11	0.23791896	0.03363551	0.0149	0.9501
12	0.20428345	0.03363768	0.0128	0.9629
13	0.17064577	0.00645823	0.0107	0.9735
14	0.16418755	0.02148140	0.0103	0.9838
15	0.14270615	0.02623009	0.0089	0.9927
16	0.11647605		0.0073	1.0000

**5 factors will be retained by the NFACTOR criterion.**

Factor Pattern					
	Factor1	Factor2	Factor3	Factor4	Factor5
mxOvarian	0.48354	0.43448	0.33865	0.23793	-0.37809
mxNonhodgkin	0.48503	0.66125	0.02756	0.19907	0.24601
mxPancreatic	0.88416	-0.15841	0.13994	-0.12747	-0.06560
mxUterine	0.45453	-0.02083	0.54844	0.54326	0.12331
mxTesticular	0.28185	0.42572	-0.64450	0.22092	-0.05796
mxTracheal	0.78860	0.18713	-0.17231	-0.40587	0.01106
mxThroid	0.53468	-0.08390	-0.40037	0.56838	-0.17035
mxStomach	0.64276	-0.59952	-0.23861	0.02116	-0.24983
mxProstate	0.60393	-0.35618	0.32255	-0.12135	0.07151
mxMultiplemyeloma	0.72781	-0.22632	0.41975	-0.11596	0.17190
mxMalignantSkinMeloma	-0.11431	-0.75347	0.10677	0.39419	0.16461
mxLiver	-0.61800	0.38760	0.51160	0.07766	0.28868
mxkidney	0.58445	0.13170	-0.46593	0.07285	0.54900

**The FACTOR Procedure**  
**Initial Factor Method: Principal Components**

Factor Pattern					
	Factor1	Factor2	Factor3	Factor4	Factor5
<b>mxcolon</b>	0.85578	0.05604	-0.03909	-0.11342	0.26762
<b>mybreast</b>	0.83813	-0.08843	0.16744	-0.10455	-0.08348
<b>mxbladder</b>	0.44810	0.58867	0.28641	-0.02830	-0.28177

Variance Explained by Each Factor				
Factor1	Factor2	Factor3	Factor4	Factor5
6.1243507	2.5051387	1.9801391	1.1641543	0.9223762

Final Communality Estimates: Total = 12.696159								
<b>mxOvarian</b>	<b>mxNonhodgkin</b>	<b>mxPancreatic</b>	<b>mxUterine</b>	<b>mxTesticular</b>	<b>mxTracheal</b>	<b>mxThroid</b>	<b>mxStomach</b>	<b>mxProstate</b>
0.73683191	0.77340710	0.84696402	0.81814953	0.72822085	0.85144487	0.80529077	0.89236797	0.61546716

<b>mxMultiplemyeloma</b>	<b>mxMalignantSkinMeloma</b>	<b>mxLiver</b>	<b>mxkidney</b>	<b>mxcolon</b>	<b>mybreast</b>	<b>mxbladder</b>
0.80010768	0.77466711	0.88325615	0.88272007	0.82150035	0.75621496	0.70954847

**The FACTOR Procedure**  
**Rotation Method: Varimax**

Orthogonal Transformation Matrix					
	1	2	3	4	5
1	0.76820	0.33199	0.39377	0.36663	0.10094
2	-0.34234	0.76761	-0.31932	0.40849	-0.15730
3	0.35427	0.26736	-0.58809	-0.48305	0.47310
4	-0.38547	0.05760	0.34027	0.15853	0.84094
5	0.13631	-0.47514	-0.53042	0.66352	0.18457

Rotated Factor Pattern					
	Factor1	Factor2	Factor3	Factor4	Factor5
mxOvarian	0.19944	0.77793	0.13402	-0.02197	0.27099
mxNonhodgkin	0.11278	0.57055	-0.09912	0.62941	0.17080
mxPancreatic	0.82321	0.23318	0.30786	0.12812	0.06107
mxUterine	0.35799	0.25425	-0.01745	0.06115	0.78823
mxTesticular	-0.25061	0.28831	0.45998	0.58513	-0.16835
mxTracheal	0.63865	0.33075	0.20813	0.39179	-0.37062
mxThroid	0.05531	0.11975	0.75654	0.33222	0.32428
mxStomach	0.57227	-0.19068	0.72458	-0.05640	0.01798
mxProstate	0.75666	-0.02764	0.08263	-0.05167	0.18074
mxMultiplemyeloma	0.85341	0.09177	-0.01863	0.06730	0.24186
mxMalignantSkinMeloma	0.07845	-0.64328	0.17962	-0.22956	0.51937
mxLiver	-0.41678	0.09645	-0.79468	-0.11151	0.23728
mxkidney	0.28557	-0.08610	0.19567	0.86896	-0.01956
mxcolon	0.70457	0.18299	0.16153	0.51511	0.01310
mybreast	0.76236	0.28878	0.26849	0.11831	0.07440
mxbladder	0.21667	0.80946	-0.04014	0.07496	0.01233

Variance Explained by Each Factor				
Factor1	Factor2	Factor3	Factor4	Factor5
4.3463684	2.5047510	2.2841683	2.1385946	1.4222766

**The FACTOR Procedure**  
**Rotation Method: Varimax**

Final Communalities Estimates: Total = 12.696159								
mxOvarian	mxNonhodgkin	mxPancreatic	mxUterine	mxTesticular	mxTracheal	mxThroid	mxStomach	mxProstate
0.73683191	0.77340710	0.84696402	0.81814953	0.72822085	0.85144487	0.80529077	0.89236797	0.61546716

mxMultiplemyeloma	mxMaligantSkinMeloma	mxLiver	mxkidney	mxcolon	mybreast	mxbladder
0.80010768	0.77466711	0.88325615	0.88272007	0.82150035	0.75621496	0.70954847

**The FACTOR Procedure**  
**Rotation Method: Varimax**

**Scoring Coefficients Estimated by Regression**

Squared Multiple Correlations of the Variables with Each Factor				
Factor1	Factor2	Factor3	Factor4	Factor5
1.0000000	1.0000000	1.0000000	1.0000000	1.0000000

Standardized Scoring Coefficients					
	Factor1	Factor2	Factor3	Factor4	Factor5
<b>mxOvarian</b>	-0.07279	0.41160	0.16210	-0.22240	0.15782
<b>mxNonhodgkin</b>	-0.05416	0.11575	-0.14457	0.33421	0.16609
<b>mxPancreatic</b>	0.19010	0.04577	0.03594	-0.07159	-0.04725
<b>mxUterine</b>	-0.00368	0.05567	-0.04312	0.05271	0.55694
<b>mxTesticular</b>	-0.21985	0.09949	0.25317	0.23191	-0.02809
<b>mxTracheal</b>	0.17854	0.05104	-0.04697	0.07245	-0.33089
<b>mxThroid</b>	-0.20647	0.06509	0.42807	0.07085	0.29491
<b>mxStomach</b>	0.07594	-0.05133	0.33846	-0.17791	-0.04348
<b>mxProstate</b>	0.23288	-0.07569	-0.08816	-0.06569	0.03603
<b>mxMultiplemyeloma</b>	0.26112	-0.06750	-0.18177	0.01214	0.07713
<b>mxMalignantSkinMeloma</b>	0.00153	-0.28795	0.07754	0.01634	0.38862
<b>mxLiver</b>	-0.02201	0.00948	-0.38439	0.11965	0.20158
<b>mxkidney</b>	0.02896	-0.27007	-0.13525	0.57497	0.05252
<b>mxcolon</b>	0.16979	-0.08518	-0.12756	0.24697	-0.02713
<b>mybreast</b>	0.16945	0.07878	0.03287	-0.07938	-0.03286
<b>mxbladder</b>	-0.00526	0.38708	0.02247	-0.15360	-0.03797