

https://dspace.org/

The sagittal soft-tissue changes of the lower lip and chin associated with surgical maxillary impaction and consequent mandibular autorotation

Ksiezycki-Ostoya, Beata Katarzyna

2006-11-17T12:45:41Z
http://hdl.handle.net/10539/1875

Downloaded from a DSpace repository. https://dspace.org/

23 Apr 2004, 11:25:07

Dear Kasia

Your output starts out with summary statistics for surgery group 1 then for group 2 and then for the total group. Following this I printed out the data for patient 1 – the reason for this is two – fold, first long variable names are often abbreviated in the output and the names in the latter compared to those in column 1 of any of the above 3 tables will help you decipher variable names when abbreviated in the output(see example at bottom of file).

Next for each variable the following is done: **(i)** first or pre-op and repeat measurements are compared using a paired t-test and from this output the coefficient of repeatability can be calculated as 2*(standard deviation of the differences) **(ii)** pre- and post-op differences are calculated(new name is original variable name followed by '_2') and then the two surgery groups are compared with respect to these differences using a two-sample t-test **(iii)** pre-op and post-op are compared using an paired t-test first for surgery groups separately and then for the total group and finally **(iv)** a correlation matrix is given(note that not all correlations will make sense but it is easier to just ask for everything) and included in the correlation analysis are pre-op, post-op and newly created variables for thickness, length and gap.

With kind regards

Piet

Summary data by surgery group & also for total group

```
. by surgery: summ  n_h -  li_me1_2_h;

-------------------------------------------------------------------------------
-> surgery = 1
```

Variable	Obs	Mean	Std. Dev.	Min	Max
n_h	16	72.07494	6.267857	61.468	81.666
n_v	16	7.894875	.6014963	7.032	8.82
n_r_h	10	71.8323	6.278581	61.304	80.213
n_r_v	10	7.7041	.5756765	6.83	8.497
n_2_h	16	72.06606	6.254273	61.239	81.665
n_2_v	16	7.829125	.6111361	6.83	8.761
lit_h	16	65.06925	7.013246	53.683	77.208
lit_v	16	80.25094	6.80193	68.502	96.828
lit_r_h	10	64.3479	8.023002	53.486	76.227
lit_r_v	10	81.0836	3.969001	76.492	89.067
lit_2_h	16	66.37538	6.36256	54.974	75.677
lit_2_v	16	75.46975	5.857859	65.62	88.202
lia_h	16	65.63925	7.037364	54.499	77.502
lia_v	16	81.58175	6.568256	70.236	97.773
lia_r_h	10	64.9374	8.182368	54.107	76.717
lia_r_v	10	82.4079	3.975706	77.344	90.145
lia_2_h	16	67.20075	6.368144	55.621	76.799
lia_2_v	16	77.71794	5.572822	69.281	90.785
in_h	16	59.74525	7.617663	45.39	73.003
in_v	16	92.77669	7.920547	78.862	112.541
in_r_h	10	58.5841	9.057996	45.684	73.624
in_r_v	10	94.1847	4.0841	90.365	104.332
in_2_h	16	60.94556	7.031091	46.14	74.291
in_2_v	16	90.08544	6.156202	82.286	105.786
b_h	16	55.04188	7.173765	43.56	66.565
b_v	16	104.0018	9.939951	85.926	123.291
b_r_h	10	53.9279	8.395177	43.201	66.828
b_r_v	10	105.1093	7.081645	97.935	117.829
b_2_h	16	57.94656	6.587339	44.717	68.416
b_2_v	16	98.96231	7.899897	84.476	114.018
pog_h	16	55.74194	7.511161	43.789	66.533
pog_v	16	113.3303	10.03224	98.509	138.252
pog_r_h	10	54.272	8.500457	43.723	67.186
pog_r_v	10	113.2405	7.32977	103.786	126.218
pog_2_h	16	59.61906	7.1448	44.975	69.578
pog_2_v	16	110.6272	9.636546	97.025	135.039
gn_h	16	53.59381	7.440608	41.077	64.334
gn_v	16	120.5961	10.44943	102.56	144.885
gn_r_h	10	52.0836	8.400512	40.848	64.768
gn_r_v	10	121.4807	7.224575	113.424	133.458
gn_2_h	16	57.42488	6.958293	43.778	67.03
gn_2_v	16	117.5181	10.07797	100.653	141.451
me_h	16	49.85719	7.403626	37.155	60.969
me_v	16	122.4114	10.57055	103.831	146.809
me_r_h	10	48.3098	8.313603	36.828	61.337
me_r_v	10	123.3608	7.397114	114.104	136.107
me_2_h	16	53.47744	6.475345	41.578	61.052

me_2_v	16	119.1588	10.29351	101.795	143.449
stms_h	16	76.1105	8.119898	63.723	89.624
stms_v	16	75.86475	6.189073	65.594	85.689
stms_r_h	10	75.3209	8.819543	63.821	89.232
stms_r_v	10	77.3038	5.180417	71.729	85.545
stms_2_h	16	75.85113	6.950891	63.71	86.531
stms_2_v	16	75.19469	6.418563	63.953	87.708
stmi_h	16	72.26969	7.251733	60.315	83.886
stmi_v	16	80.5035	7.357075	64.648	95.161
stmi_r_h	10	71.3825	7.855231	60.283	81.859
stmi_r_v	10	81.8075	4.502379	75.724	89.864
stmi_2_h	16	73.87781	6.570458	61.316	83.396
stmi_2_v	16	75.65225	5.880625	64.249	86.398
li_h	16	77.60931	7.8857	64.474	89.427
li_v	16	92.37406	9.637338	68.86	109.57
li_r_h	10	76.8273	8.888114	64.572	89.832
li_r_v	10	93.928	5.909164	86.215	107.157
li_2_h	16	79.28194	7.092198	65.813	89.8
li_2_v	16	86.85312	7.286878	71.534	99.846
si_h	16	68.33981	7.837527	55.194	82.12
si_v	16	101.1433	9.269969	82.037	121.687
si_r_h	10	66.8181	9.076546	54.997	82.97
si_r_v	10	102.6065	5.829229	95.998	114.252
si_2_h	16	70.84175	6.897604	57.012	81.485
si_2_v	16	96.85187	7.631786	80.391	109.656
pog1_h	16	69.52481	8.017319	55.912	83.068
pog1_v	16	109.0204	9.511256	92.038	128.776
pog1_r_h	10	68.2436	9.211873	55.618	83.918
pog1_r_v	10	110.8424	6.964054	102.907	125.473
pog1_2_h	16	72.95494	7.085642	60.053	83.564
pog1_2_v	16	107.7157	9.271551	91.667	127.228
gn1_h	16	63.42519	7.521244	50.422	76.042
gn1_v	16	124.3082	10.07099	105.796	145.802
gn1_r_h	10	62.0192	8.61141	49.9	76.99
gn1_r_v	10	126.0645	7.499997	117.08	138.454
gn1_2_h	16	67.04762	6.729621	55.912	77.261
gn1_2_v	16	121.5957	10.1101	104.999	143.422
me1_h	16	49.61231	6.836108	36.436	60.324
me1_v	16	130.176	10.57283	111.813	152.649
me1_r_h	10	47.5535	7.084066	35.423	59.017
me1_r_v	10	131.8517	8.401318	120.903	146.631
me1_2_h	16	53.47675	6.059378	43.723	63.069
me1_2_v	16	126.8879	10.37753	110.228	149.17
lit_li_h	16	-12.54006	1.924792	-15.097	-8.514999
lit_li_h_2	16	-12.90656	2.055839	-15.516	-9.574997
lia_li_h	16	-11.97006	1.900766	-14.506	-7.986
lia_li_h_2	16	-12.08119	1.994257	-14.83	-8.954002
li_in_h	16	17.86406	3.362294	14.411	26.819
li_in_h_2	16	18.33638	2.44967	14.851	22.931
me1_stmi_v	16	49.6725	5.682554	43.03799	63.219
me1_stmi_2v	16	51.23562	5.059583	45.688	62.772
stmi_s_v	16	4.638749	4.399326	-2.449005	9.574997
stmi_s_2_v	16	.4575632	1.620816	-2.264	4.443001
pog1_pog_h	16	13.78287	1.472777	11.172	16.732
pog1_pog_2_h	16	13.33587	1.729254	9.800003	16.014
me1_me_h	16	-.244875	2.947225	-5.378998	5.479
me1_me_2_h	16	-.0006869	2.188507	-4.444	4.142002

Variable	Obs	Mean	Std. Dev.	Min	Max
gn1_gn_h	16	9.831376	1.026359	8.428001	11.829
gn1_gn_2_h	16	9.62275	1.636023	7.022999	12.134
li_me1_h	16	27.997	5.458398	19.541	36.749
li_me1_2_h	16	25.80519	4.274951	16.66	30.881

-> surgery = 2

Variable	Obs	Mean	Std. Dev.	Min	Max
n_h	6	73.4615	4.318702	68.171	78.853
n_v	6	7.930833	.422604	7.321	8.465
n_r_h	5	72.4682	4.047982	68.137	78.461
n_r_v	5	7.7986	.4182047	7.386	8.431
n_2_h	6	73.39117	4.412746	68.105	78.657
n_2_v	6	7.902333	.4957507	7.217	8.529
lit_h	6	61.0325	9.032306	52.351	74.049
lit_v	6	80.663	4.694854	74.9	85.653
lit_r_h	5	58.4032	7.311096	52.383	69.572
lit_r_v	5	80.6886	5.018805	74.737	85.193
lit_2_h	6	64.67567	9.759899	55.425	76.761
lit_2_v	6	75.30083	5.034343	67.531	80.333
lia_h	6	61.62617	9.340789	52.579	75.193
lia_v	6	82.54733	5.097556	76.143	87.839
lia_r_h	5	58.9062	7.33532	52.873	70.095
lia_r_v	5	81.8108	5.115654	75.978	86.467
lia_2_h	6	65.39417	9.908911	55.948	77.84
lia_2_v	6	77.40217	5.422771	68.761	83.186
in_h	6	56.975	9.800311	48.168	72.121
in_v	6	92.53033	5.362298	86.011	98.623
in_r_h	5	53.7692	6.956881	48.2	64.441
in_r_v	5	92.173	5.861974	85.912	97.881
in_2_h	6	60.01483	10.69793	48.758	75.748
in_2_v	6	88.49217	6.418644	78.532	96.961
b_h	6	49.9545	9.820113	40.096	64.965
b_v	6	105.733	7.86297	93.627	114.014
b_r_h	5	47.0506	7.39914	40.26	58.265
b_r_v	5	104.7304	8.147978	93.79	113.897
b_2_h	6	55.14033	12.09652	43.895	72.382
b_2_v	6	98.38733	6.869733	86.848	104.208
pog_h	6	49.60067	10.78722	37.547	65.683
pog_v	6	114.2728	8.152946	104.509	124.569
pog_r_h	5	46.5994	8.386671	37.351	58.363
pog_r_v	5	111.8758	6.885453	104.802	121.706
pog_2_h	6	58.754	13.83947	43.196	78.135
pog_2_v	6	112.6748	7.026224	101.214	118.45
gn_h	6	47.335	11.06354	34.508	64.115
gn_v	6	122.9655	8.861683	110.717	131.955
gn_r_h	5	43.9526	8.55326	34.214	55.749
gn_r_v	5	120.9888	8.444582	110.717	130.596
gn_2_h	6	56.71233	14.04742	40.704	76.63
gn_2_v	6	117.6845	7.466108	106.586	126.266
me_h	6	43.65283	11.32955	30.652	61.141
me_v	6	124.763	8.812954	113.07	133.229
me_r_h	5	40.1356	8.46138	30.521	52.056
me_r_v	5	123.168	8.641737	113.232	133.113
me_2_h	6	53.05917	14.03149	36.789	73.624

me_2_v	6	119.2553	7.145311	108.529	127.837
stms_h	6	75.43317	10.279	65.749	87.97
stms_v	6	74.63383	4.413535	66.638	78.69
stms_r_h	5	73.1608	9.840714	65.915	88.264
stms_r_v	5	74.6914	4.734422	66.635	78.034
stms_2_h	6	75.39483	10.25113	64.292	88.983
stms_2_v	6	75.3195	2.881249	72.063	78.794
stmi_h	6	70.08467	10.82256	59.278	83.591
stmi_v	6	83.03683	5.298655	75.33	88.166
stmi_r_h	5	67.8014	9.972806	59.246	84.146
stmi_r_v	5	82.4898	5.592226	75.687	88.307
stmi_2_h	6	71.415	11.29544	59.901	84.179
stmi_2_v	6	76.10417	3.287632	72.226	80.732
li_h	6	73.43417	11.17827	61.337	88.689
li_v	6	95.88	5.859871	88.107	103.427
li_r_h	5	70.566	9.362471	61.337	85.486
li_r_v	5	96.1806	6.368325	88.337	103.297
li_2_h	6	76.71184	11.50361	65.522	89.702
li_2_v	6	87.6585	4.425316	82.686	94.099
si_h	6	63.54867	10.6451	52.122	79.212
si_v	6	101.7347	6.077322	92.127	109.015
si_r_h	5	60.4032	8.280757	51.795	72.219
si_r_v	5	100.2554	5.421439	92.355	106.344
si_2_h	6	69.27717	11.70387	57.921	85.911
si_2_v	6	95.049	4.098608	90.585	99.332
pog1_h	6	63.2385	11.61883	50.488	79.343
pog1_v	6	107.8132	6.936039	96.506	113.753
pog1_r_h	5	60.1678	9.450111	50.488	73.853
pog1_r_v	5	106.8296	7.023367	96.8	113.754
pog1_2_h	6	71.12417	14.10256	57.368	90.748
pog1_2_v	6	107.4395	6.596654	98.6	115.077
gn1_h	6	56.13617	11.17777	44.475	72.284
gn1_v	6	124.3702	8.494361	113.11	132.837
gn1_r_h	5	52.8998	8.79868	45.227	65.781
gn1_r_v	5	122.6602	7.965143	113.632	130.206
gn1_2_h	6	65.44917	13.78296	51.803	84.67
gn1_2_v	6	120.0308	5.989432	111.473	125.382
me1_h	6	41.20767	12.53911	26.666	58.167
me1_v	6	131.1132	8.916491	119.703	139.079
me1_r_h	5	37.9072	10.30245	27.417	52.089
me1_r_v	5	129.643	8.610948	120.324	137.478
me1_2_h	6	51.91983	16.21152	33.564	76.533
me1_2_v	6	125.2862	6.689485	115.355	131.6
lit_li_h	6	-12.40167	2.462936	-15.784	-8.986
lit_li_h_2	6	-12.03617	2.608944	-16.111	-9.142002
lia_li_h	6	-11.808	2.24744	-15.098	-8.758003
lia_li_h_2	6	-11.31767	2.582182	-15.359	-8.509003
li_in_h	6	16.45917	2.268443	13.137	20.228
li_in_h_2	6	16.697	4.391953	12.425	23.92101
me1_stmi_v	6	48.07633	4.254807	41.404	53.103
me1_stmi_2v	6	49.182	4.982225	42.03201	53.81999
stmi_s_v	6	8.403	3.461583	3.887001	12.645
stmi_s_2_v	6	.7846642	1.70415	-1.831001	3.402
pog1_pog_h	6	13.63783	1.38981	12.124	16.077
pog1_pog_2_h	6	12.37017	1.627429	9.509998	14.172
me1_me_h	6	-2.445167	4.438367	-8.039001	1.862999

me1_me_2_h	6	-1.139334	4.435374	-7.096001	3.461998
gn1_gn_h	6	8.801167	1.816034	6.765003	11.078
gn1_gn_2_h	6	8.736834	1.562749	6.993	11.099
li_me1_h	6	32.2265	3.836197	28.201	38.266
li_me1_2_h	6	24.792	6.402163	12.71101	32.014

. summ n_h - li_me1_2_h; Total group

Variable	Obs	Mean	Std. Dev.	Min	Max
n_h	22	72.45309	5.736	61.468	81.666
n_v	22	7.904682	.5488334	7.032	8.82
n_r_h	15	72.04427	5.488155	61.304	80.213
n_r_v	15	7.7356	.5149188	6.83	8.497
n_2_h	22	72.42745	5.739432	61.239	81.665
n_2_v	22	7.849091	.5713201	6.83	8.761
lit_h	22	63.96832	7.612033	52.351	77.208
lit_v	22	80.36332	6.191173	68.502	96.828
lit_r_h	15	62.36633	8.066349	52.383	76.227
lit_r_v	15	80.95193	4.166623	74.737	89.067
lit_2_h	22	65.91182	7.224684	54.974	76.761
lit_2_v	22	75.42368	5.527271	65.62	88.202
lia_h	22	64.54477	7.7133	52.579	77.502
lia_v	22	81.84509	6.098882	70.236	97.773
lia_r_h	15	62.927	8.189886	52.873	76.717
lia_r_v	15	82.20887	4.209888	75.978	90.145
lia_2_h	22	66.70805	7.281658	55.621	77.84
lia_2_v	22	77.63182	5.404198	68.761	90.785
in_h	22	58.98973	8.118615	45.39	73.003
in_v	22	92.7095	7.188158	78.862	112.541
in_r_h	15	56.97913	8.490734	45.684	73.624
in_r_v	15	93.51413	4.637268	85.912	104.332
in_2_h	22	60.69173	7.920896	46.14	75.748
in_2_v	22	89.65091	6.116155	78.532	105.786
b_h	22	53.65441	8.06832	40.096	66.565
b_v	22	104.474	9.269121	85.926	123.291
b_r_h	15	51.63547	8.497721	40.26	66.828
b_r_v	15	104.983	7.158332	93.79	117.829
b_2_h	22	57.18123	8.214063	43.895	72.382
b_2_v	22	98.8055	7.475466	84.476	114.018
pog_h	22	54.06705	8.708668	37.547	66.533
pog_v	22	113.5874	9.375542	98.509	138.252
pog_r_h	15	51.71447	8.975738	37.351	67.186
pog_r_v	15	112.7856	6.96612	103.786	126.218
pog_2_h	22	59.38314	9.067583	43.196	78.135
pog_2_v	22	111.1856	8.885731	97.025	135.039
gn_h	22	51.88686	8.765151	34.508	64.334
gn_v	22	121.2423	9.892282	102.56	144.885
gn_r_h	15	49.37327	9.055888	34.214	64.768
gn_r_v	15	121.3167	7.347501	110.717	133.458
gn_2_h	22	57.23055	9.037312	40.704	76.63
gn_2_v	22	117.5635	9.264156	100.653	141.451
me_h	22	48.16509	8.815496	30.652	61.141
me_v	22	123.0528	9.972626	103.831	146.809
me_r_h	15	45.58507	8.988679	30.521	61.337
me_r_v	15	123.2965	7.518064	113.232	136.107

me_2_h	22	53.36336	8.767168	36.789	73.624
me_2_v	22	119.1851	9.372361	101.795	143.449
stms_h	22	75.92577	8.505692	63.723	89.624
stms_v	22	75.52905	5.684471	65.594	85.689
stms_r_h	15	74.60087	8.876016	63.821	89.232
stms_r_v	15	76.433	5.028052	66.635	85.545
stms_2_h	22	75.72668	7.71844	63.71	88.983
stms_2_v	22	75.22873	5.604187	63.953	87.708
stmi_h	22	71.67377	8.151211	59.278	83.886
stmi_v	22	81.19441	6.832283	64.648	95.161
stmi_r_h	15	70.1888	8.43427	59.246	84.146
stmi_r_v	15	82.03493	4.698682	75.687	89.864
stmi_2_h	22	73.20614	7.904085	59.901	84.179
stmi_2_v	22	75.7755	5.22658	64.249	86.398
li_h	22	76.47064	8.819886	61.337	89.427
li_v	22	93.33023	8.779036	68.86	109.57
li_r_h	15	74.7402	9.228411	61.337	89.832
li_r_v	15	94.67887	5.936571	86.215	107.157
li_2_h	22	78.581	8.295087	65.522	89.8
li_2_v	22	87.07277	6.536441	71.534	99.846
si_h	22	67.03314	8.69636	52.122	82.12
si_v	22	101.3046	8.381328	82.037	121.687
si_r_h	15	64.6798	9.074717	51.795	82.97
si_r_v	15	101.8228	5.617655	92.355	114.252
si_2_h	22	70.41505	8.191861	57.012	85.911
si_2_v	22	96.36018	6.802796	80.391	109.656
pog1_h	22	67.81036	9.287955	50.488	83.068
pog1_v	22	108.6912	8.739247	92.038	128.776
pog1_r_h	15	65.55167	9.777309	50.488	83.918
pog1_r_v	15	109.5048	7.007488	96.8	125.473
pog1_2_h	22	72.45564	9.160296	57.368	90.748
pog1_2_v	22	107.6404	8.472187	91.667	127.228
gn1_h	22	61.43727	9.01081	44.475	76.042
gn1_v	22	124.3251	9.467135	105.796	145.802
gn1_r_h	15	58.9794	9.465298	45.227	76.99
gn1_r_v	15	124.9297	7.55293	113.632	138.454
gn1_2_h	22	66.61168	8.838004	51.803	84.67
gn1_2_v	22	121.1689	9.058705	104.999	143.422
me1_h	22	47.32014	9.246289	26.666	60.324
me1_v	22	130.4316	9.947777	111.813	152.649
me1_r_h	15	44.33807	9.205542	27.417	59.017
me1_r_v	15	131.1155	8.229278	120.324	146.631
me1_2_h	22	53.05214	9.450084	33.564	76.533
me1_2_v	22	126.451	9.386765	110.228	149.17
lit_li_h	22	-12.50232	2.023507	-15.784	-8.514999
lit_li_h_2	22	-12.66918	2.190193	-16.111	-9.142002
lia_li_h	22	-11.92586	1.946464	-15.098	-7.986
lia_li_h_2	22	-11.87296	2.132939	-15.359	-8.509003
li_in_h	22	17.48091	3.116142	13.137	26.819
li_in_h_2	22	17.88927	3.072048	12.425	23.92101
me1_stmi_v	22	49.23718	5.282521	41.404	63.219
me1_stmi_2v	22	50.67555	5.007169	42.03201	62.772
stmi_s_v	22	5.665363	4.429633	-2.449005	12.645
stmi_s_2_v	22	.5467725	1.609395	-2.264	4.443001
pog1_pog_h	22	13.74332	1.419016	11.172	16.732
pog1_pog_2_h	22	13.0725	1.720561	9.509998	16.014

me1_me_h	22	-.8449546	3.449728	-8.039001	5.479
me1_me_2_h	22	-.3112271	2.893866	-7.096001	4.142002
gn1_gn_h	22	9.550409	1.325974	6.765003	11.829
gn1_gn_2_h	22	9.381136	1.629845	6.993	12.134
li_me1_h	22	29.1505	5.338777	19.541	38.266
li_me1_2_h	22	25.52887	4.798542	12.71101	32.014

Data for Patient number 1

```
. list if patient == 1;
```

	patient	surgery	n_h	n_v	n_r_h	n_r_v	n_2_h	n_2_v
7.	1	1	72.676	8.335	73.036	8.007	72.938	8.007

lit_h	lit_v	lit_r_h	lit_r_v	lit_2_h	lit_2_v	lia_h
67.906	79.669	67.415	79.898	73.787	73.429	68.722

lia_v	lia_r_h	lia_r_v	lia_2_h	lia_2_v	in_h	in_v	in_r_h
80.258	68.069	80.487	74.408	74.868	59.965	93.46	59.605

in_r_v	in_2_h	in_2_v	b_h	b_v	b_r_h	b_r_v	b_2_h
93.656	66.892	88.298	56.958	98.655	56.239	101.924	64.441

b_2_v	pog_h	pog_v	pog_r_h	pog_r_v	pog_2_h	pog_2_v
95.978	55.423	110.942	55.259	111.204	64.997	104.507

gn_h	gn_v	gn_r_h	gn_r_v	gn_2_h	gn_2_v	me_h
52.743	118.295	53.037	118.328	62.644	114.083	49.965

me_v	me_r_h	me_r_v	me_2_h	me_2_v	stms_h	stms_v
120.126	49.507	120.747	59.18	115.781	80.422	71.304

stms_r_h	stms_r_v	stms_2_h	stms_2_v	stmi_h	stmi_v	stmi_r_h
80.29	71.729	80.062	69.574	76.108	80.879	75.683

stmi_r_v	stmi_2_h	stmi_2_v	li_h	li_v	li_r_h	li_r_v
81.207	79.212	74.017	78.428	93.231	78.199	93.983

li_2_h	li_2_v	si_h	si_v	si_r_h	si_r_v	si_2_h	si_2_v
83.362	85.879	67.807	98.198	67.48	98.526	74.572	94.311

pog1_h	pog1_v	pog1_r_h	pog1_r_v	pog1_2_h	pog1_2_v	gn1_h
68.069	103.296	68.755	103.917	76.598	106.109	61.631

gn1_v	gn1_r_h	gn1_r_v	gn1_2_h	gn1_2_v	me1_h	me1_v
121.988	61.991	123.776	70.683	118.525	46.893	127.51

me1_r_h	me1_r_v	me1_2_h	me1_2_v	lit_li_h	lit_li_~2	lia_li_h
46.436	129.641	56.991	123.656	-10.522	-9.574997	-9.706001

lia_li_~2	li_in_h	li_in_~2	me1_s~_v	me1_s~2v	stmi_s_v
-8.954002	18.463	16.47	46.631	49.639	9.574997

s~_s_2_v	pog1~g_h	pog1_p..	me1_me_h	me1_m~2_h	gn1_gn_h
4.443001	12.646	11.601	-3.071999	-2.188999	8.888

gn~n_2_h	li_me1_h	li_m~2_h
8.038998	31.535	26.371

Number of tests and computations per variable

```
. for var  n_h n_v  lit_h lit_v lia_h lia_v in_h in_v b_h b_v pog_h pog_v gn_h
> gn_v me_h me_v stms_h stms_v stmi_h stmi_v li_h li_v si_h si_v pog1_h pog1_v
>  gn1_h gn1_v me1_h me1_v \ var  n_r_h n_r_v  lit_r_h lit_r_v lia_r_h lia_r_v
> in_r_h in_r_v b_r_h b_r_v pog_r_h pog_r_v gn_r_h gn_r_v me_r_h me_r_v stms_r_h
>  stms_r_v stmi_r_h stmi_r_v li_r_h li_r_v si_r_h si_r_v pog1_r_h pog1_r_v gn1_r
> _h
> gn1_r_v me1_r_h me1_r_v \ var  n_2_h n_2_v lit_2_h lit_2_v lia_2_h lia_2_v
>  in_2_h in_2_v b_2_h b_2_v pog_2_h pog_2_v gn_2_h gn_2_v me_2_h me_2_v
> stms_2_h stms_2_v stmi_2_h stmi_2_v li_2_h li_2_v si_2_h si_2_v pog1_2_h
>  pog1_2_v gn1_2_h gn1_2_v me1_2_h me1_2_v:  ttest X=Y \ gen X_d2 = X - Z \
> ttest X_d2, by( surgery ) \ ttest X = Z if surgery == 1 \  ttest X = Z if
> surgery == 2 \ ttest X = Z;
```

```
->  ttest n_h=n_r_h
```

Paired t test **Onset vs Repeat**

```
---------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+-----------------------------------------------------------------
     n_h |      15    72.01447    1.431154    5.542834    68.94495    75.08399
   n_r_h |      15    72.04427    1.417035    5.488155    69.00503    75.08351
---------+-----------------------------------------------------------------
    diff |      15   -.0298012    .0786128     .304466   -.1984088    .1388065
---------------------------------------------------------------------------

                    Ho: mean(n_h - n_r_h) = mean(diff) = 0

  Ha: mean(diff) < 0          Ha: mean(diff) != 0         Ha: mean(diff) > 0
       t =  -0.3791                 t =  -0.3791               t =  -0.3791
   P < t =   0.3552          P > |t| =   0.7103           P > t =   0.6448
```

Coefficient of repeatability for n_h = 2*(Std. Dev. For diff)
= 2* 0.304
= .608 **You will have to do similar calculation for rest of variables**

```
->  gen n_h_d2 = n_h - n_2_h
```

```
-> ttest n_h_d2, by( surgery )

Two-sample t test with equal variances

------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       1 |      16    .0088754    .0697449    .2789797   -.1397824    .1575331
       2 |       6    .0703316    .0996262    .2440334   -.1857657    .3264289
---------+--------------------------------------------------------------------
combined |      22    .0256362    .0566314    .2656248   -.0921353    .1434076
---------+--------------------------------------------------------------------
    diff |           -.0614562    .1295717                -.331738    .2088256
------------------------------------------------------------------------------
Degrees of freedom: 20

                     Ho: mean(1) - mean(2) = diff = 0

     Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
       t =  -0.4743               t =  -0.4743                  t =  -0.4743
   P < t =   0.3202           P > |t| =   0.6404          P > t =   0.6798

-> ttest n_h = n_2_h if surgery == 1

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
     n_h |      16    72.07494    1.566964    6.267857    68.73503    75.41484
   n_2_h |      16    72.06606    1.563568    6.254273     68.7334    75.39873
---------+--------------------------------------------------------------------
    diff |      16    .0088754    .0697449    .2789797   -.1397824    .1575331
------------------------------------------------------------------------------

                  Ho: mean(n_h - n_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0         Ha: mean(diff) > 0
       t =   0.1273               t =   0.1273                t =   0.1273
   P < t =   0.5498           P > |t| =   0.9004          P > t =   0.4502

-> ttest n_h = n_2_h if surgery == 2

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
     n_h |       6     73.4615    1.763103    4.318702     68.9293     77.9937
   n_2_h |       6    73.39117    1.801496    4.412746    68.76027    78.02206
---------+--------------------------------------------------------------------
    diff |       6    .0703316    .0996262    .2440334   -.1857657    .3264289
------------------------------------------------------------------------------

                  Ho: mean(n_h - n_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0         Ha: mean(diff) > 0
       t =   0.7060               t =   0.7060                t =   0.7060
   P < t =   0.7441           P > |t| =   0.5117          P > t =   0.2559
```

-> ttest n_h = n_2_h **All Patients**

Paired t test

Variable	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf.	Interval]
n_h	22	72.45309	1.222919	5.736	69.90989	74.99629
n_2_h	22	72.42745	1.223651	5.739432	69.88273	74.97218
diff	22	.0256362	.0566314	.2656248	-.0921353	.1434076

Ho: mean(n_h - n_2_h) = mean(diff) = 0

Ha: mean(diff) < 0	Ha: mean(diff) != 0	Ha: mean(diff) > 0
t = 0.4527	t = 0.4527	t = 0.4527
P < t = 0.6723	P > |t| = 0.6554	P > t = 0.3277

-> ttest n_v=n_r_v

Paired t test

Variable	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf.	Interval]
n_v	15	7.8464	.1306829	.5061329	7.566113	8.126687
n_r_v	15	7.7356	.1329515	.5149188	7.450447	8.020752
diff	15	.1108	.0394701	.152867	.0261451	.1954549

Ho: mean(n_v - n_r_v) = mean(diff) = 0

Ha: mean(diff) < 0	Ha: mean(diff) != 0	Ha: mean(diff) > 0
t = 2.8072	t = 2.8072	t = 2.8072
P < t = 0.9930	P > |t| = 0.0140	P > t = 0.0070

-> gen n_v_d2 = n_v - n_2_v

-> ttest n_v_d2, by(surgery)

Two-sample t test with equal variances

Group	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf.	Interval]
1	16	.0657499	.031137	.1245481	-.000617	.1321169
2	6	.0284998	.0630205	.154368	-.1334994	.1904991
combined	22	.0555908	.0278324	.1305456	-.0022899	.1134715
diff		.0372501	.0634933		-.0951945	.1696947

Degrees of freedom: 20

Ho: mean(1) - mean(2) = diff = 0

Ha: diff < 0	Ha: diff != 0	Ha: diff > 0
t = 0.5867	t = 0.5867	t = 0.5867
P < t = 0.7180	P > |t| = 0.5640	P > t = 0.2820

```
->  ttest n_v = n_2_v if surgery == 1

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
     n_v |      16    7.894875    .1503741    .6014963     7.57436     8.21539
   n_2_v |      16    7.829125     .152784    .6111361    7.503474    8.154776
---------+--------------------------------------------------------------------
    diff |      16    .0657499     .031137    .1245481    -.000617    .1321169
------------------------------------------------------------------------------

                    Ho: mean(n_v - n_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   2.1116               t =   2.1116             t =   2.1116
   P < t =   0.9740          P > |t| =   0.0519          P > t =   0.0260

->  ttest n_v = n_2_v if surgery == 2

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
     n_v |       6    7.930833    .1725274     .422604    7.487338    8.374329
   n_2_v |       6    7.902333    .2023894    .4957507    7.382075    8.422592
---------+--------------------------------------------------------------------
    diff |       6    .0284998    .0630205     .154368   -.1334994    .1904991
------------------------------------------------------------------------------

                    Ho: mean(n_v - n_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   0.4522               t =   0.4522             t =   0.4522
   P < t =   0.6650          P > |t| =   0.6700          P > t =   0.3350

->  ttest n_v = n_2_v

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
     n_v |      22    7.904682    .1170117    .5488334    7.661343    8.148021
   n_2_v |      22    7.849091    .1218059    .5713201    7.595782      8.1024
---------+--------------------------------------------------------------------
    diff |      22    .0555908    .0278324    .1305456   -.0022899    .1134715
------------------------------------------------------------------------------

                    Ho: mean(n_v - n_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   1.9973               t =   1.9973             t =   1.9973
   P < t =   0.9705          P > |t| =   0.0589          P > t =   0.0295
```

```
->  ttest lit_h=lit_r_h

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   lit_h |      15    62.36493    2.092454    8.104041    57.87707     66.8528
 lit_r_h |      15    62.36633    2.082722    8.066349    57.89934    66.83333
---------+--------------------------------------------------------------------
    diff |      15   -.0013995     .107573    .4166286   -.2321207    .2293217
------------------------------------------------------------------------------

                Ho: mean(lit_h - lit_r_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -0.0130               t =  -0.0130             t =  -0.0130
   P < t =   0.4949          P > |t| =   0.9898          P > t =   0.5051

->  gen lit_h_d2 = lit_h - lit_2_h

->  ttest lit_h_d2, by( surgery )

Two-sample t test with equal variances

------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       1 |      16   -1.306125      .58961     2.35844   -2.562849   -.0494011
       2 |       6   -3.643166    .9419524    2.307303   -6.064532     -1.2218
---------+--------------------------------------------------------------------
combined |      22     -1.9435    .5383254     2.52497   -3.063009   -.8239908
---------+--------------------------------------------------------------------
    diff |            2.337041    1.122947               -.0053854    4.679468
------------------------------------------------------------------------------
Degrees of freedom: 20

                    Ho: mean(1) - mean(2) = diff = 0

     Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
       t =   2.0812                 t =   2.0812                 t =   2.0812
   P < t =   0.9748          P > |t| =   0.0505          P > t =   0.0252

->  ttest lit_h = lit_2_h if surgery == 1

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   lit_h |      16    65.06925    1.753312    7.013246    61.33215    68.80635
 lit_2_h |      16    66.37538     1.59064     6.36256    62.98501    69.76574
---------+--------------------------------------------------------------------
    diff |      16   -1.306125      .58961     2.35844   -2.562849   -.0494011
------------------------------------------------------------------------------

                Ho: mean(lit_h - lit_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -2.2152               t =  -2.2152             t =  -2.2152
   P < t =   0.0213          P > |t| =   0.0426          P > t =   0.9787
```

```
->  ttest lit_h = lit_2_h if surgery == 2

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   lit_h |       6     61.0325    3.687423    9.032306    51.55368    70.51133
 lit_2_h |       6    64.67567    3.984462    9.759899    54.43328    74.91805
---------+--------------------------------------------------------------------
    diff |       6   -3.643166    .9419524    2.307303   -6.064532     -1.2218
------------------------------------------------------------------------------

                Ho: mean(lit_h - lit_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -3.8677                t =  -3.8677             t =  -3.8677
   P < t =   0.0059          P > |t| =   0.0118          P > t =   0.9941

->  ttest lit_h = lit_2_h

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   lit_h |      22    63.96832    1.622891    7.612033    60.59333    67.34331
 lit_2_h |      22    65.91182    1.540308    7.224684    62.70857    69.11506
---------+--------------------------------------------------------------------
    diff |      22     -1.9435    .5383254     2.52497   -3.063009   -.8239908
------------------------------------------------------------------------------

                Ho: mean(lit_h - lit_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -3.6103                t =  -3.6103             t =  -3.6103
   P < t =   0.0008          P > |t| =   0.0016          P > t =   0.9992

->  ttest lit_v=lit_r_v

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   lit_v |      15    80.84333    1.117387    4.327621    78.44678    83.23989
 lit_r_v |      15    80.95193    1.075817    4.166623    78.64453    83.25933
---------+--------------------------------------------------------------------
    diff |      15   -.1086009    .0811871    .3144363   -.2827299    .0655281
------------------------------------------------------------------------------

                Ho: mean(lit_v - lit_r_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -1.3377                t =  -1.3377             t =  -1.3377
   P < t =   0.1012          P > |t| =   0.2023          P > t =   0.8988

->  gen lit_v_d2 = lit_v - lit_2_v
```

```
->  ttest lit_v_d2, by( surgery )

Two-sample t test with equal variances

------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       1 |      16    4.781187     .513558    2.054232    3.686564     5.87581
       2 |       6    5.362167    .6716921    1.645303    3.635528    7.088807
---------+--------------------------------------------------------------------
combined |      22    4.939636     .411696    1.931025    4.083468    5.795805
---------+--------------------------------------------------------------------
    diff |           -.5809803    .9382856                -2.53821    1.376249
------------------------------------------------------------------------------
Degrees of freedom: 20

                     Ho: mean(1) - mean(2) = diff = 0

     Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
       t =  -0.6192                 t =  -0.6192                 t =  -0.6192
   P < t =   0.2714           P > |t| =   0.5428           P > t =   0.7286

->  ttest lit_v = lit_2_v if surgery == 1

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   lit_v |      16    80.25094    1.700483     6.80193    76.62644    83.87543
 lit_2_v |      16    75.46975    1.464465    5.857859    72.34832    78.59118
---------+--------------------------------------------------------------------
    diff |      16    4.781187     .513558    2.054232    3.686564     5.87581
------------------------------------------------------------------------------

                 Ho: mean(lit_v - lit_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0           Ha: mean(diff) != 0           Ha: mean(diff) > 0
       t =   9.3099                 t =   9.3099                 t =   9.3099
   P < t =   1.0000           P > |t| =   0.0000           P > t =   0.0000

->  ttest lit_v = lit_2_v if surgery == 2

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   lit_v |       6      80.663    1.916666    4.694854    75.73605    85.58995
 lit_2_v |       6    75.30083    2.055262    5.034343    70.01761    80.58405
---------+--------------------------------------------------------------------
    diff |       6    5.362167    .6716921    1.645303    3.635528    7.088807
------------------------------------------------------------------------------

                 Ho: mean(lit_v - lit_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0           Ha: mean(diff) != 0           Ha: mean(diff) > 0
       t =   7.9831                 t =   7.9831                 t =   7.9831
   P < t =   0.9998           P > |t| =   0.0005           P > t =   0.0002
```

```
->  ttest lit_v = lit_2_v

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   lit_v |      22    80.36332    1.319962    6.191173    77.61831    83.10833
 lit_2_v |      22    75.42368    1.178418    5.527271    72.97303    77.87434
---------+--------------------------------------------------------------------
    diff |      22    4.939636     .411696    1.931025    4.083468    5.795805
------------------------------------------------------------------------------

                Ho: mean(lit_v - lit_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  11.9983                t =  11.9983             t =  11.9983
   P < t =   1.0000          P > |t| =   0.0000          P > t =   0.0000

->  ttest lia_h=lia_r_h

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   lia_h |      15     62.9164    2.118503    8.204927    58.37266    67.46014
 lia_r_h |      15      62.927    2.114619    8.189886    58.39159    67.46241
---------+--------------------------------------------------------------------
    diff |      15   -.0106003    .1133103     .438849   -.2536267    .2324262
------------------------------------------------------------------------------

                Ho: mean(lia_h - lia_r_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -0.0936                t =  -0.0936             t =  -0.0936
   P < t =   0.4634          P > |t| =   0.9268          P > t =   0.5366

->  gen lia_h_d2 = lia_h - lia_2_h

->  ttest lia_h_d2, by( surgery )

Two-sample t test with equal variances

------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       1 |      16   -1.561499    .5686818    2.274727   -2.773616   -.3493829
       2 |       6      -3.768    .9245562    2.264691   -6.144647   -1.391352
---------+--------------------------------------------------------------------
combined |      22   -2.163272    .5191253    2.434913   -3.242852   -1.083692
---------+--------------------------------------------------------------------
    diff |              2.2065    1.087744               -.062493    4.475494
------------------------------------------------------------------------------
Degrees of freedom: 20

                    Ho: mean(1) - mean(2) = diff = 0

     Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
       t =   2.0285                 t =   2.0285                  t =   2.0285
   P < t =   0.9720          P > |t| =   0.0560          P > t =   0.0280
```

```
-> ttest lia_h = lia_2_h if surgery == 1

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   lia_h |      16    65.63925    1.759341    7.037364     61.8893     69.3892
 lia_2_h |      16    67.20075    1.592036    6.368144    63.80741    70.59409
---------+--------------------------------------------------------------------
    diff |      16   -1.561499    .5686818    2.274727   -2.773616   -.3493829
------------------------------------------------------------------------------

                Ho: mean(lia_h - lia_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -2.7458               t =  -2.7458             t =  -2.7458
   P < t =   0.0075          P > |t| =   0.0150          P > t =   0.9925

-> ttest lia_h = lia_2_h if surgery == 2

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   lia_h |       6    61.62617    3.813361    9.340789    51.82361    71.42872
 lia_2_h |       6    65.39417    4.045296    9.908911     54.9954    75.79293
---------+--------------------------------------------------------------------
    diff |       6      -3.768    .9245562    2.264691   -6.144647   -1.391352
------------------------------------------------------------------------------

                Ho: mean(lia_h - lia_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -4.0755               t =  -4.0755             t =  -4.0755
   P < t =   0.0048          P > |t| =   0.0096          P > t =   0.9952

-> ttest lia_h = lia_2_h

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   lia_h |      22    64.54477    1.644481      7.7133    61.12489    67.96466
 lia_2_h |      22    66.70805    1.552455    7.281658    63.47954    69.93655
---------+--------------------------------------------------------------------
    diff |      22   -2.163272    .5191253    2.434913   -3.242852   -1.083692
------------------------------------------------------------------------------

                Ho: mean(lia_h - lia_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -4.1671               t =  -4.1671             t =  -4.1671
   P < t =   0.0002          P > |t| =   0.0004          P > t =   0.9998
```

```
->  ttest lia_v=lia_r_v

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   lia_v |      15     82.1536    1.140076    4.415496    79.70838    84.59882
 lia_r_v |      15    82.20887    1.086988    4.209888    79.87751    84.54023
---------+--------------------------------------------------------------------
    diff |      15   -.0552684    .1425552    .5521141    -.361019    .2504822
------------------------------------------------------------------------------

                Ho: mean(lia_v - lia_r_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -0.3877                t =  -0.3877             t =  -0.3877
   P < t =   0.3520          P > |t| =   0.7041          P > t =   0.6480

->  gen lia_v_d2 = lia_v - lia_2_v

->  ttest lia_v_d2, by( surgery )

Two-sample t test with equal variances

------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       1 |      16    3.863812    .5372675     2.14907    2.718653    5.008971
       2 |       6    5.145164    .7053805    1.727822    3.331926    6.958403
---------+--------------------------------------------------------------------
combined |      22    4.213272    .4447113    2.085881    3.288444      5.1381
---------+--------------------------------------------------------------------
    diff |           -1.281353    .9822636               -3.330319    .7676135
------------------------------------------------------------------------------
Degrees of freedom: 20

                    Ho: mean(1) - mean(2) = diff = 0

     Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
       t =  -1.3045                 t =  -1.3045                 t =  -1.3045
   P < t =   0.1034           P > |t| =   0.2069           P > t =   0.8966

->  ttest lia_v = lia_2_v if surgery == 1

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   lia_v |      16    81.58175    1.642064    6.568256    78.08177    85.08173
 lia_2_v |      16    77.71794    1.393205    5.572822    74.74839    80.68748
---------+--------------------------------------------------------------------
    diff |      16    3.863812    .5372675     2.14907    2.718653    5.008971
------------------------------------------------------------------------------

                Ho: mean(lia_v - lia_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   7.1916                t =   7.1916             t =   7.1916
   P < t =   1.0000          P > |t| =   0.0000          P > t =   0.0000
```

```
->  ttest lia_v = lia_2_v if surgery == 2

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   lia_v |       6    82.54733    2.081069    5.097556    77.19777    87.89689
 lia_2_v |       6    77.40217    2.213837    5.422771    71.71132    83.09302
---------+--------------------------------------------------------------------
    diff |       6    5.145164    .7053805    1.727822    3.331926    6.958403
------------------------------------------------------------------------------

                Ho: mean(lia_v - lia_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   7.2942               t =   7.2942             t =   7.2942
   P < t =   0.9996          P > |t| =   0.0008          P > t =   0.0004

->  ttest lia_v = lia_2_v

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   lia_v |      22    81.84509    1.300286    6.098882      79.141    84.54918
 lia_2_v |      22    77.63182    1.152179    5.404198    75.23573    80.02791
---------+--------------------------------------------------------------------
    diff |      22    4.213272    .4447113    2.085881    3.288444      5.1381
------------------------------------------------------------------------------

                Ho: mean(lia_v - lia_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   9.4742               t =   9.4742             t =   9.4742
   P < t =   1.0000          P > |t| =   0.0000          P > t =   0.0000

->  ttest in_h=in_r_h

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    in_h |      15    57.00147    2.221032    8.602019    52.23783    61.76511
  in_r_h |      15    56.97913    2.192298    8.490734    52.27712    61.68114
---------+--------------------------------------------------------------------
    diff |      15    .0223335     .108969    .4220351   -.2113817    .2560487
------------------------------------------------------------------------------

                 Ho: mean(in_h - in_r_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   0.2050               t =   0.2050             t =   0.2050
   P < t =   0.5797          P > |t| =   0.8406          P > t =   0.4203

->  gen in_h_d2 = in_h - in_2_h
```

```
->  ttest in_h_d2, by( surgery )

Two-sample t test with equal variances

------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       1 |      16   -1.200311    .8628401     3.45136   -3.039412    .6387887
       2 |       6   -3.039833    1.470752    3.602591   -6.820521    .7408547
---------+--------------------------------------------------------------------
combined |      22   -1.701999    .7477781     3.50739   -3.257089   -.1469095
---------+--------------------------------------------------------------------
    diff |            1.839522    1.670606               -1.645302    5.324345
------------------------------------------------------------------------------
Degrees of freedom: 20

                     Ho: mean(1) - mean(2) = diff = 0

     Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
       t =   1.1011                 t =   1.1011                 t =   1.1011
   P < t =   0.8580           P > |t| =   0.2839           P > t =   0.1420

->  ttest in_h = in_2_h if surgery == 1

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    in_h |      16    59.74525    1.904416    7.617663    55.68608    63.80442
  in_2_h |      16    60.94556    1.757773    7.031091    57.19896    64.69217
---------+--------------------------------------------------------------------
    diff |      16   -1.200311    .8628401     3.45136   -3.039412    .6387887
------------------------------------------------------------------------------

                  Ho: mean(in_h - in_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0           Ha: mean(diff) != 0           Ha: mean(diff) > 0
       t =  -1.3911                 t =  -1.3911                 t =  -1.3911
   P < t =   0.0922           P > |t| =   0.1845           P > t =   0.9078

->  ttest in_h = in_2_h if surgery == 2

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    in_h |       6      56.975     4.00096    9.800311    46.69021     67.2598
  in_2_h |       6    60.01483    4.367412    10.69793    48.78804    71.24162
---------+--------------------------------------------------------------------
    diff |       6   -3.039833    1.470752    3.602591   -6.820521    .7408547
------------------------------------------------------------------------------

                  Ho: mean(in_h - in_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0           Ha: mean(diff) != 0           Ha: mean(diff) > 0
       t =  -2.0669                 t =  -2.0669                 t =  -2.0669
   P < t =   0.0468           P > |t| =   0.0936           P > t =   0.9532
```

```
->  ttest in_h = in_2_h

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    in_h |      22    58.98973    1.730894    8.118615    55.39014    62.58932
  in_2_h |      22    60.69173    1.688741    7.920896     57.1798    64.20366
---------+--------------------------------------------------------------------
    diff |      22   -1.701999    .7477781     3.50739   -3.257089   -.1469095
------------------------------------------------------------------------------

                  Ho: mean(in_h - in_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -2.2761                t =  -2.2761             t =  -2.2761
   P < t =   0.0167          P > |t| =   0.0334          P > t =   0.9833

->  ttest in_v=in_r_v

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    in_v |      15     93.4654    1.199356    4.645085    90.89304    96.03776
  in_r_v |      15    93.51413    1.197337    4.637268     90.9461    96.08217
---------+--------------------------------------------------------------------
    diff |      15    -.048732     .087866    .3403036   -.2371858    .1397218
------------------------------------------------------------------------------

                  Ho: mean(in_v - in_r_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -0.5546                t =  -0.5546             t =  -0.5546
   P < t =   0.2940          P > |t| =   0.5879          P > t =   0.7060

->  gen in_v_d2 = in_v - in_2_v

->  ttest in_v_d2, by( surgery )

Two-sample t test with equal variances

------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       1 |      16    2.691249    .9285529    3.714211    .7120858    4.670413
       2 |       6    4.038167    1.502988    3.681554    .1746134    7.901721
---------+--------------------------------------------------------------------
combined |      22    3.058591    .7821274    3.668503    1.432068    4.685114
---------+--------------------------------------------------------------------
    diff |           -1.346918    1.774148               -5.047726     2.35389
------------------------------------------------------------------------------
Degrees of freedom: 20

                     Ho: mean(1) - mean(2) = diff = 0

     Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
       t =  -0.7592                 t =  -0.7592                  t =  -0.7592
   P < t =   0.2283          P > |t| =   0.4566          P > t =   0.7717
```

```
-> ttest in_v = in_2_v if surgery == 1

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    in_v |      16    92.77669    1.980137    7.920547    88.55613    96.99725
  in_2_v |      16    90.08544    1.539051    6.156202    86.80503    93.36585
---------+--------------------------------------------------------------------
    diff |      16    2.691249    .9285529    3.714211    .7120858    4.670413
------------------------------------------------------------------------------

                Ho: mean(in_v - in_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   2.8983               t =   2.8983             t =   2.8983
   P < t =   0.9945          P > |t| =   0.0110          P > t =   0.0055

-> ttest in_v = in_2_v if surgery == 2

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    in_v |       6    92.53033    2.189149    5.362298    86.90295    98.15772
  in_2_v |       6    88.49217      2.6204    6.418644    81.75621    95.22812
---------+--------------------------------------------------------------------
    diff |       6    4.038167    1.502988    3.681554    .1746134    7.901721
------------------------------------------------------------------------------

                Ho: mean(in_v - in_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   2.6868               t =   2.6868             t =   2.6868
   P < t =   0.9783          P > |t| =   0.0435          P > t =   0.0217

-> ttest in_v = in_2_v

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    in_v |      22     92.7095     1.53252    7.188158    89.52245    95.89655
  in_2_v |      22    89.65091    1.303969    6.116155    86.93916    92.36266
---------+--------------------------------------------------------------------
    diff |      22    3.058591    .7821274    3.668503    1.432068    4.685114
------------------------------------------------------------------------------

                Ho: mean(in_v - in_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   3.9106               t =   3.9106             t =   3.9106
   P < t =   0.9996          P > |t| =   0.0008          P > t =   0.0004
```

```
->  ttest b_h=b_r_h

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
     b_h |      15    51.65087     2.19946    8.518473    46.93349    56.36824
   b_r_h |      15    51.63547    2.194102    8.497721    46.92959    56.34135
---------+--------------------------------------------------------------------
    diff |      15    .0154007     .129862    .5029532   -.2631255    .2939269
------------------------------------------------------------------------------

                  Ho: mean(b_h - b_r_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   0.1186               t =   0.1186             t =   0.1186
   P < t =   0.5464          P > |t| =   0.9073          P > t =   0.4536

->  gen b_h_d2 = b_h - b_2_h

->  ttest b_h_d2, by( surgery )

Two-sample t test with equal variances

------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       1 |      16   -2.904688    .6412184    2.564874   -4.271412   -1.537963
       2 |       6   -5.185834    1.551405    3.800151   -9.173848    -1.19782
---------+--------------------------------------------------------------------
combined |      22   -3.526819    .6473241    3.036219   -4.873003   -2.180634
---------+--------------------------------------------------------------------
    diff |            2.281147    1.399304               -.6377494    5.200043
------------------------------------------------------------------------------
Degrees of freedom: 20

                     Ho: mean(1) - mean(2) = diff = 0

     Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
       t =   1.6302               t =   1.6302                  t =   1.6302
   P < t =   0.9406          P > |t| =   0.1187          P > t =   0.0594

->  ttest b_h = b_2_h if surgery == 1

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
     b_h |      16    55.04188    1.793441    7.173765    51.21925    58.86451
   b_2_h |      16    57.94656    1.646835    6.587339    54.43642    61.45671
---------+--------------------------------------------------------------------
    diff |      16   -2.904688    .6412184    2.564874   -4.271412   -1.537963
------------------------------------------------------------------------------

                  Ho: mean(b_h - b_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -4.5300               t =  -4.5300             t =  -4.5300
   P < t =   0.0002          P > |t| =   0.0004          P > t =   0.9998
```

```
->  ttest b_h = b_2_h if surgery == 2

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
     b_h |       6     49.9545    4.009044    9.820113    39.64892    60.26008
   b_2_h |       6    55.14033    4.938383    12.09652    42.44582    67.83485
---------+--------------------------------------------------------------------
    diff |       6   -5.185834    1.551405    3.800151   -9.173848    -1.19782
------------------------------------------------------------------------------

                    Ho: mean(b_h - b_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -3.3427                 t =  -3.3427              t =  -3.3427
   P < t =   0.0102          P > |t| =   0.0205          P > t =   0.9898

->  ttest b_h = b_2_h

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
     b_h |      22    53.65441    1.720172     8.06832    50.07712     57.2317
   b_2_h |      22    57.18123    1.751244    8.214063    53.53932    60.82314
---------+--------------------------------------------------------------------
    diff |      22   -3.526819    .6473241    3.036219   -4.873003   -2.180634
------------------------------------------------------------------------------

                    Ho: mean(b_h - b_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -5.4483                 t =  -5.4483              t =  -5.4483
   P < t =   0.0000          P > |t| =   0.0000          P > t =   1.0000

->  ttest b_v=b_r_v

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
     b_v |      15    104.6263     1.91651    7.422612    100.5158    108.7368
   b_r_v |      15     104.983    1.848273    7.158332    101.0188    108.9472
---------+--------------------------------------------------------------------
    diff |      15   -.3566661    .2330252    .9025026   -.8564553    .1431232
------------------------------------------------------------------------------

                    Ho: mean(b_v - b_r_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -1.5306                 t =  -1.5306              t =  -1.5306
   P < t =   0.0741          P > |t| =   0.1481          P > t =   0.9259

->  gen b_v_d2 = b_v - b_2_v
```

```
->  ttest b_v_d2, by( surgery )

Two-sample t test with equal variances

------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       1 |      16    5.039501    .9206007    3.682403    3.077287    7.001715
       2 |       6    7.345666    1.817693    4.452421    2.673137     12.0182
---------+--------------------------------------------------------------------
combined |      22    5.668455    .8396675     3.93839    3.922271    7.414639
---------+--------------------------------------------------------------------
    diff |           -2.306165    1.861825               -6.189865    1.577535
------------------------------------------------------------------------------
Degrees of freedom: 20

                     Ho: mean(1) - mean(2) = diff = 0

     Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
       t =  -1.2387                 t =  -1.2387                 t =  -1.2387
   P < t =   0.1149           P > |t| =   0.2298           P > t =   0.8851

->  ttest b_v = b_2_v if surgery == 1

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
     b_v |      16    104.0018    2.484988    9.939951    98.70519    109.2984
   b_2_v |      16    98.96231    1.974974    7.899897    94.75275    103.1719
---------+--------------------------------------------------------------------
    diff |      16    5.039501    .9206007    3.682403    3.077287    7.001715
------------------------------------------------------------------------------

                   Ho: mean(b_v - b_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0           Ha: mean(diff) != 0           Ha: mean(diff) > 0
       t =   5.4741                 t =   5.4741                 t =   5.4741
   P < t =   1.0000           P > |t| =   0.0001           P > t =   0.0000

->  ttest b_v = b_2_v if surgery == 2

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
     b_v |       6     105.733    3.210044     7.86297    97.48132    113.9847
   b_2_v |       6    98.38733    2.804557    6.869733    91.17799    105.5967
---------+--------------------------------------------------------------------
    diff |       6    7.345666    1.817693    4.452421    2.673137     12.0182
------------------------------------------------------------------------------

                   Ho: mean(b_v - b_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0           Ha: mean(diff) != 0           Ha: mean(diff) > 0
       t =   4.0412                 t =   4.0412                 t =   4.0412
   P < t =   0.9950           P > |t| =   0.0099           P > t =   0.0050
```

```
->  ttest b_v = b_2_v

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
     b_v |      22     104.474    1.976183    9.269121    100.3643    108.5837
   b_2_v |      22     98.8055    1.593775    7.475466    95.49106    102.1199
---------+--------------------------------------------------------------------
    diff |      22    5.668455    .8396675     3.93839    3.922271    7.414639
------------------------------------------------------------------------------

                  Ho: mean(b_v - b_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   6.7508               t =   6.7508             t =   6.7508
   P < t =   1.0000          P > |t| =   0.0000          P > t =   0.0000

->  ttest pog_h=pog_r_h

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   pog_h |      15    51.59613    2.323125    8.997424    46.61353    56.57874
 pog_r_h |      15    51.71447    2.317526    8.975738    46.74387    56.68506
---------+--------------------------------------------------------------------
    diff |      15   -.1183327    .1361835    .5274363   -.4104172    .1737518
------------------------------------------------------------------------------

                Ho: mean(pog_h - pog_r_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -0.8689               t =  -0.8689             t =  -0.8689
   P < t =   0.1998          P > |t| =   0.3995          P > t =   0.8002

->  gen pog_h_d2 = pog_h - pog_2_h

->  ttest pog_h_d2, by( surgery )

Two-sample t test with equal variances

------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       1 |      16   -3.877125    .7988451     3.19538   -5.579823   -2.174427
       2 |       6   -9.153334    1.535577    3.761379   -13.10066   -5.206009
---------+--------------------------------------------------------------------
combined |      22   -5.316091    .8646162    4.055409   -7.114159   -3.518024
---------+--------------------------------------------------------------------
    diff |            5.276209    1.601713                1.935095    8.617323
------------------------------------------------------------------------------
Degrees of freedom: 20

                     Ho: mean(1) - mean(2) = diff = 0

     Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
       t =   3.2941                 t =   3.2941                 t =   3.2941
   P < t =   0.9982          P > |t| =   0.0036          P > t =   0.0018
```

```
->  ttest pog_h = pog_2_h if surgery == 1

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   pog_h |      16    55.74194     1.87779    7.511161    51.73952    59.74435
 pog_2_h |      16    59.61906      1.7862      7.1448    55.81187    63.42626
---------+--------------------------------------------------------------------
    diff |      16   -3.877125    .7988451     3.19538   -5.579823   -2.174427
------------------------------------------------------------------------------

                Ho: mean(pog_h - pog_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -4.8534               t =  -4.8534             t =  -4.8534
   P < t =   0.0001          P > |t| =   0.0002          P > t =   0.9999

->  ttest pog_h = pog_2_h if surgery == 2

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   pog_h |       6    49.60067    4.403863    10.78722    38.28018    60.92116
 pog_2_h |       6      58.754    5.649939    13.83947    44.23037    73.27763
---------+--------------------------------------------------------------------
    diff |       6   -9.153334    1.535577    3.761379   -13.10066   -5.206009
------------------------------------------------------------------------------

                Ho: mean(pog_h - pog_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -5.9608               t =  -5.9608             t =  -5.9608
   P < t =   0.0010          P > |t| =   0.0019          P > t =   0.9990

->  ttest pog_h = pog_2_h

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   pog_h |      22    54.06705    1.856694    8.708668    50.20584    57.92825
 pog_2_h |      22    59.38314    1.933215    9.067583     55.3628    63.40348
---------+--------------------------------------------------------------------
    diff |      22   -5.316091    .8646162    4.055409   -7.114159   -3.518024
------------------------------------------------------------------------------

                Ho: mean(pog_h - pog_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -6.1485               t =  -6.1485             t =  -6.1485
   P < t =   0.0000          P > |t| =   0.0000          P > t =   1.0000
```

```
->  ttest pog_v=pog_r_v

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   pog_v |      15    112.8501    1.804774     6.98986    108.9792    116.7209
 pog_r_v |      15    112.7856    1.798645     6.96612    108.9279    116.6433
---------+--------------------------------------------------------------------
    diff |      15    .0644658    .1225621     .474681   -.1984037    .3273354
------------------------------------------------------------------------------

                Ho: mean(pog_v - pog_r_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   0.5260               t =   0.5260             t =   0.5260
   P < t =   0.6964          P > |t| =   0.6071          P > t =   0.3036

->  gen pog_v_d2 = pog_v - pog_2_v

->  ttest pog_v_d2, by( surgery )

Two-sample t test with equal variances

------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       1 |      16    2.703124     .495527    1.982108    1.646933    3.759315
       2 |       6       1.598    1.999246    4.897131   -3.541225    6.737224
---------+--------------------------------------------------------------------
combined |      22    2.401726    .6313767    2.961419    1.088707    3.714746
---------+--------------------------------------------------------------------
    diff |            1.105124    1.431509               -1.88095    4.091199
------------------------------------------------------------------------------
Degrees of freedom: 20

                    Ho: mean(1) - mean(2) = diff = 0

     Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
       t =   0.7720                 t =   0.7720                 t =   0.7720
   P < t =   0.7754          P > |t| =   0.4491          P > t =   0.2246

->  ttest pog_v = pog_2_v if surgery == 1

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   pog_v |      16    113.3303     2.50806    10.03224    107.9845    118.6761
 pog_2_v |      16    110.6272    2.409137    9.636546    105.4922    115.7621
---------+--------------------------------------------------------------------
    diff |      16    2.703124     .495527    1.982108    1.646933    3.759315
------------------------------------------------------------------------------

                Ho: mean(pog_v - pog_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   5.4550               t =   5.4550             t =   5.4550
   P < t =   1.0000          P > |t| =   0.0001          P > t =   0.0000
```

```
->  ttest pog_v = pog_2_v if surgery == 2

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   pog_v |       6    114.2728    3.328426    8.152946    105.7168    122.8288
 pog_2_v |       6    112.6748    2.868444    7.026224    105.3013    120.0484
---------+--------------------------------------------------------------------
    diff |       6       1.598    1.999246    4.897131   -3.541225    6.737224
------------------------------------------------------------------------------

                Ho: mean(pog_v - pog_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   0.7993               t =   0.7993             t =   0.7993
   P < t =   0.7698          P > |t| =   0.4604          P > t =   0.2302

->  ttest pog_v = pog_2_v

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   pog_v |      22    113.5874    1.998872    9.375542    109.4305    117.7442
 pog_2_v |      22    111.1856    1.894444    8.885731    107.2459    115.1253
---------+--------------------------------------------------------------------
    diff |      22    2.401726    .6313767    2.961419    1.088707    3.714746
------------------------------------------------------------------------------

                Ho: mean(pog_v - pog_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   3.8040               t =   3.8040             t =   3.8040
   P < t =   0.9995          P > |t| =   0.0010          P > t =   0.0005

->  ttest gn_h=gn_r_h

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    gn_h |      15    49.31767    2.314273    8.963141    44.35404    54.28129
  gn_r_h |      15    49.37327     2.33822    9.055888    44.35828    54.38825
---------+--------------------------------------------------------------------
    diff |      15   -.0556005    .1437832    .5568701   -.3639849    .2527839
------------------------------------------------------------------------------

                 Ho: mean(gn_h - gn_r_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -0.3867               t =  -0.3867             t =  -0.3867
   P < t =   0.3524          P > |t| =   0.7048          P > t =   0.6476

->  gen gn_h_d2 = gn_h - gn_2_h
```

```
->  ttest gn_h_d2, by( surgery )

Two-sample t test with equal variances

------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       1 |      16   -3.831063    .8323458    3.329383   -5.605166    -2.05696
       2 |       6   -9.377333    1.570875    3.847841   -13.41539   -5.339272
---------+--------------------------------------------------------------------
combined |      22   -5.343682    .9003746    4.223131   -7.216114    -3.47125
---------+--------------------------------------------------------------------
    diff |            5.546271    1.659353                2.084921     9.00762
------------------------------------------------------------------------------
Degrees of freedom: 20

                     Ho: mean(1) - mean(2) = diff = 0

     Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
       t =   3.3424                 t =   3.3424                  t =   3.3424
   P < t =   0.9984           P > |t| =   0.0032           P > t =   0.0016

->  ttest gn_h = gn_2_h if surgery == 1

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    gn_h |      16    53.59381    1.860152    7.440608    49.62899    57.55863
  gn_2_h |      16    57.42488    1.739573    6.958293    53.71706    61.13269
---------+--------------------------------------------------------------------
    diff |      16   -3.831063    .8323458    3.329383   -5.605166    -2.05696
------------------------------------------------------------------------------

                  Ho: mean(gn_h - gn_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0           Ha: mean(diff) != 0           Ha: mean(diff) > 0
       t =  -4.6027                 t =  -4.6027                  t =  -4.6027
   P < t =   0.0002           P > |t| =   0.0003           P > t =   0.9998

->  ttest gn_h = gn_2_h if surgery == 2

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    gn_h |       6      47.335    4.516673    11.06354    35.72452    58.94548
  gn_2_h |       6    56.71233    5.734835    14.04742    41.97047    71.45419
---------+--------------------------------------------------------------------
    diff |       6   -9.377333    1.570875    3.847841   -13.41539   -5.339272
------------------------------------------------------------------------------

                  Ho: mean(gn_h - gn_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0           Ha: mean(diff) != 0           Ha: mean(diff) > 0
       t =  -5.9695                 t =  -5.9695                  t =  -5.9695
   P < t =   0.0009           P > |t| =   0.0019           P > t =   0.9991
```

```
->  ttest gn_h = gn_2_h

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    gn_h |      22    51.88686    1.868737    8.765151    48.00061    55.77311
  gn_2_h |      22    57.23055    1.926761    9.037312    53.22363    61.23746
---------+--------------------------------------------------------------------
    diff |      22   -5.343682    .9003746    4.223131   -7.216114    -3.47125
------------------------------------------------------------------------------

                Ho: mean(gn_h - gn_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -5.9350               t =  -5.9350             t =  -5.9350
   P < t =   0.0000          P > |t| =   0.0000          P > t =   1.0000

->  ttest gn_v=gn_r_v

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    gn_v |      15    121.2357    1.929356    7.472363    117.0976    125.3737
  gn_r_v |      15    121.3167    1.897117    7.347501    117.2478    125.3856
---------+--------------------------------------------------------------------
    diff |      15   -.0810644    .0760671    .2946066    -.244212    .0820833
------------------------------------------------------------------------------

                Ho: mean(gn_v - gn_r_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -1.0657               t =  -1.0657             t =  -1.0657
   P < t =   0.1523          P > |t| =   0.3046          P > t =   0.8477

->  gen gn_v_d2 = gn_v - gn_2_v

->  ttest gn_v_d2, by( surgery )

Two-sample t test with equal variances

------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       1 |      16       3.078    .4826417    1.930567    2.049273    4.106726
       2 |       6    5.281002    .9590871    2.349274     2.81559    7.746414
---------+--------------------------------------------------------------------
combined |      22    3.678818     .476003    2.232652    2.688916    4.668721
---------+--------------------------------------------------------------------
    diff |           -2.203002    .9781569               -4.243402   -.1626028
------------------------------------------------------------------------------
Degrees of freedom: 20

                    Ho: mean(1) - mean(2) = diff = 0

     Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
       t =  -2.2522                 t =  -2.2522                 t =  -2.2522
   P < t =   0.0179          P > |t| =   0.0357          P > t =   0.9821
```

```
-> ttest gn_v = gn_2_v if surgery == 1

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    gn_v |      16    120.5961    2.612357    10.44943     115.028    126.1642
  gn_2_v |      16    117.5181    2.519492    10.07797     112.148    122.8883
---------+--------------------------------------------------------------------
    diff |      16       3.078    .4826417    1.930567    2.049273    4.106726
------------------------------------------------------------------------------

                  Ho: mean(gn_v - gn_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   6.3774               t =   6.3774             t =   6.3774
   P < t =   1.0000          P > |t| =   0.0000          P > t =   0.0000

-> ttest gn_v = gn_2_v if surgery == 2

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    gn_v |       6    122.9655    3.617767    8.861683    113.6657    132.2653
  gn_2_v |       6    117.6845    3.048026    7.466108    109.8493    125.5197
---------+--------------------------------------------------------------------
    diff |       6    5.281002    .9590871    2.349274     2.81559    7.746414
------------------------------------------------------------------------------

                  Ho: mean(gn_v - gn_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   5.5063               t =   5.5063             t =   5.5063
   P < t =   0.9986          P > |t| =   0.0027          P > t =   0.0014

-> ttest gn_v = gn_2_v

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    gn_v |      22    121.2423    2.109042    9.892282    116.8563    125.6283
  gn_2_v |      22    117.5635    1.975125    9.264156     113.456     121.671
---------+--------------------------------------------------------------------
    diff |      22    3.678818     .476003    2.232652    2.688916    4.668721
------------------------------------------------------------------------------

                  Ho: mean(gn_v - gn_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   7.7286               t =   7.7286             t =   7.7286
   P < t =   1.0000          P > |t| =   0.0000          P > t =   0.0000
```

```
->  ttest me_h=me_r_h

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    me_h |      15    45.57773     2.31881    8.980714    40.60438    50.55109
  me_r_h |      15    45.58507    2.320867    8.988679     40.6073    50.56283
---------+--------------------------------------------------------------------
    diff |      15   -.0073329     .132867    .5145918   -.2923043    .2776386
------------------------------------------------------------------------------

                  Ho: mean(me_h - me_r_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -0.0552               t =  -0.0552             t =  -0.0552
   P < t =   0.4784          P > |t| =   0.9568          P > t =   0.5216

->  gen me_h_d2 = me_h - me_2_h

->  ttest me_h_d2, by( surgery )

Two-sample t test with equal variances

------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       1 |      16   -3.620249    .8773191    3.509276   -5.490211   -1.750288
       2 |       6   -9.406333    1.540326    3.773012   -13.36587     -5.4468
---------+--------------------------------------------------------------------
combined |      22   -5.198272    .9327989    4.375215   -7.138134   -3.258411
---------+--------------------------------------------------------------------
    diff |            5.786084    1.712375                2.214133    9.358035
------------------------------------------------------------------------------
Degrees of freedom: 20

                     Ho: mean(1) - mean(2) = diff = 0

     Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
       t =   3.3790               t =   3.3790                  t =   3.3790
   P < t =   0.9985          P > |t| =   0.0030          P > t =   0.0015

->  ttest me_h = me_2_h if surgery == 1

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    me_h |      16    49.85719    1.850906    7.403626    45.91207     53.8023
  me_2_h |      16    53.47744    1.618836    6.475345    50.02697     56.9279
---------+--------------------------------------------------------------------
    diff |      16   -3.620249    .8773191    3.509276   -5.490211   -1.750288
------------------------------------------------------------------------------

                  Ho: mean(me_h - me_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -4.1265               t =  -4.1265             t =  -4.1265
   P < t =   0.0004          P > |t| =   0.0009          P > t =   0.9996
```

```
->  ttest me_h = me_2_h if surgery == 2

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    me_h |       6    43.65283    4.625268    11.32955     31.7632    55.54246
  me_2_h |       6    53.05917     5.72833    14.03149    38.33402    67.78431
---------+--------------------------------------------------------------------
    diff |       6   -9.406333    1.540326    3.773012   -13.36587     -5.4468
------------------------------------------------------------------------------

                Ho: mean(me_h - me_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -6.1067               t =  -6.1067             t =  -6.1067
   P < t =   0.0009          P > |t| =   0.0017          P > t =   0.9991

->  ttest me_h = me_2_h

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    me_h |      22    48.16509     1.87947    8.815496    44.25652    52.07366
  me_2_h |      22    53.36336    1.869166    8.767168    49.47622    57.25051
---------+--------------------------------------------------------------------
    diff |      22   -5.198272    .9327989    4.375215   -7.138134   -3.258411
------------------------------------------------------------------------------

                Ho: mean(me_h - me_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -5.5728               t =  -5.5728             t =  -5.5728
   P < t =   0.0000          P > |t| =   0.0000          P > t =   1.0000

->  ttest me_v=me_r_v

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    me_v |      15    123.1308    1.960081     7.59136    118.9268    127.3348
  me_r_v |      15    123.2965    1.941156    7.518064    119.1332    127.4599
---------+--------------------------------------------------------------------
    diff |      15   -.1657338    .0778119    .3013641   -.3326237    .0011561
------------------------------------------------------------------------------

                Ho: mean(me_v - me_r_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -2.1299               t =  -2.1299             t =  -2.1299
   P < t =   0.0257          P > |t| =   0.0514          P > t =   0.9743

->  gen me_v_d2 = me_v - me_2_v
```

```
->  ttest me_v_d2, by( surgery )

Two-sample t test with equal variances

------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       1 |      16    3.252625    .4816444    1.926578    2.226025    4.279226
       2 |       6    5.507666    1.041065    2.550078    2.831524    8.183809
---------+--------------------------------------------------------------------
combined |      22    3.867637    .4887922    2.292638    2.851138    4.884136
---------+--------------------------------------------------------------------
    diff |           -2.255041    1.005242               -4.351938   -.1581437
------------------------------------------------------------------------------
Degrees of freedom: 20

                     Ho: mean(1) - mean(2) = diff = 0

     Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
       t =  -2.2433                 t =  -2.2433                 t =  -2.2433
   P < t =   0.0182           P > |t| =   0.0364           P > t =   0.9818

->  ttest me_v = me_2_v if surgery == 1

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    me_v |      16    122.4114    2.642637    10.57055    116.7788    128.0441
  me_2_v |      16    119.1588    2.573378    10.29351    113.6738    124.6438
---------+--------------------------------------------------------------------
    diff |      16    3.252625    .4816444    1.926578    2.226025    4.279226
------------------------------------------------------------------------------

                  Ho: mean(me_v - me_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0           Ha: mean(diff) != 0           Ha: mean(diff) > 0
       t =   6.7532                 t =   6.7532                 t =   6.7532
   P < t =   1.0000           P > |t| =   0.0000           P > t =   0.0000

->  ttest me_v = me_2_v if surgery == 2

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    me_v |       6     124.763    3.597874    8.812954    115.5144    134.0116
  me_2_v |       6    119.2553    2.917061    7.145311    111.7568    126.7539
---------+--------------------------------------------------------------------
    diff |       6    5.507666    1.041065    2.550078    2.831524    8.183809
------------------------------------------------------------------------------

                  Ho: mean(me_v - me_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0           Ha: mean(diff) != 0           Ha: mean(diff) > 0
       t =   5.2904                 t =   5.2904                 t =   5.2904
   P < t =   0.9984           P > |t| =   0.0032           P > t =   0.0016
```

```
->  ttest me_v = me_2_v

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    me_v |      22    123.0528    2.126171    9.972626    118.6312    127.4744
  me_2_v |      22    119.1851    1.998194    9.372361    115.0297    123.3406
---------+--------------------------------------------------------------------
    diff |      22    3.867637    .4887922    2.292638    2.851138    4.884136
------------------------------------------------------------------------------

                  Ho: mean(me_v - me_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   7.9126               t =   7.9126             t =   7.9126
   P < t =   1.0000          P > |t| =   0.0000          P > t =   0.0000

->  ttest stms_h=stms_r_h

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
  stms_h |      15    74.57033    2.264277    8.769507    69.71394    79.42672
stms_r_h |      15    74.60087    2.291777    8.876016    69.68549    79.51624
---------+--------------------------------------------------------------------
    diff |      15   -.0305333    .1009959    .3911553   -.2471479    .1860812
------------------------------------------------------------------------------

                Ho: mean(stms_h - stms_r_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -0.3023               t =  -0.3023             t =  -0.3023
   P < t =   0.3834          P > |t| =   0.7669          P > t =   0.6166

->  gen stms_h_d2 = stms_h - stms_2_h

->  ttest stms_h_d2, by( surgery )

Two-sample t test with equal variances

------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       1 |      16    .2593746    .7173082    2.869233   -1.269532    1.788281
       2 |       6    .0383339    .8341746    2.043302    -2.10598    2.182648
---------+--------------------------------------------------------------------
combined |      22    .1990908    .5594061    2.623847   -.9642579    1.362439
---------+--------------------------------------------------------------------
    diff |            .2210407    1.286141               -2.461802    2.903883
------------------------------------------------------------------------------
Degrees of freedom: 20

                     Ho: mean(1) - mean(2) = diff = 0

     Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
       t =   0.1719                 t =   0.1719                  t =   0.1719
   P < t =   0.5674          P > |t| =   0.8653          P > t =   0.4326
```

```
->  ttest stms_h = stms_2_h if surgery == 1

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
  stms_h |      16     76.1105    2.029975    8.119898    71.78371    80.43729
stms_2_h |      16    75.85113    1.737723    6.950891    72.14726    79.55499
---------+--------------------------------------------------------------------
    diff |      16    .2593746    .7173082    2.869233   -1.269532    1.788281
------------------------------------------------------------------------------

               Ho: mean(stms_h - stms_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   0.3616               t =   0.3616             t =   0.3616
   P < t =   0.6387          P > |t| =   0.7227          P > t =   0.3613

->  ttest stms_h = stms_2_h if surgery == 2

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
  stms_h |       6    75.43317    4.196386      10.279    64.64601    86.22032
stms_2_h |       6    75.39483    4.185008    10.25113    64.63693    86.15274
---------+--------------------------------------------------------------------
    diff |       6    .0383339    .8341746    2.043302    -2.10598    2.182648
------------------------------------------------------------------------------

               Ho: mean(stms_h - stms_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   0.0460               t =   0.0460             t =   0.0460
   P < t =   0.5174          P > |t| =   0.9651          P > t =   0.4826

->  ttest stms_h = stms_2_h

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
  stms_h |      22    75.92577     1.81342    8.505692    72.15456    79.69699
stms_2_h |      22    75.72668    1.645577     7.71844    72.30452    79.14885
---------+--------------------------------------------------------------------
    diff |      22    .1990908    .5594061    2.623847   -.9642579    1.362439
------------------------------------------------------------------------------

               Ho: mean(stms_h - stms_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   0.3559               t =   0.3559             t =   0.3559
   P < t =   0.6373          P > |t| =   0.7255          P > t =   0.3627
```

```
->  ttest stms_v=stms_r_v

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
  stms_v |      15    76.29073    1.308536    5.067938     73.4842    79.09726
stms_r_v |      15      76.433    1.298237    5.028052    73.64856    79.21744
---------+--------------------------------------------------------------------
    diff |      15   -.1422653    .1050149    .4067211   -.3674999    .0829693
------------------------------------------------------------------------------

               Ho: mean(stms_v - stms_r_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -1.3547               t =  -1.3547             t =  -1.3547
   P < t =   0.0985          P > |t| =   0.1970          P > t =   0.9015

->  gen stms_v_d2 = stms_v - stms_2_v

->  ttest stms_v_d2, by( surgery )

Two-sample t test with equal variances

------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       1 |      16    .6700637    .6600747    2.640299   -.7368522     2.07698
       2 |       6   -.6856664    1.030839     2.52503   -3.335523     1.96419
---------+--------------------------------------------------------------------
combined |      22    .3003192    .5591949    2.622857   -.8625904    1.463229
---------+--------------------------------------------------------------------
    diff |            1.35573     1.25038               -1.252517    3.963977
------------------------------------------------------------------------------
Degrees of freedom: 20

                     Ho: mean(1) - mean(2) = diff = 0

     Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
       t =   1.0843               t =   1.0843                  t =   1.0843
   P < t =   0.8544          P > |t| =   0.2911          P > t =   0.1456

->  ttest stms_v = stms_2_v if surgery == 1

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
  stms_v |      16    75.86475    1.547268    6.189073    72.56683    79.16267
stms_2_v |      16    75.19469    1.604641    6.418563    71.77448     78.6149
---------+--------------------------------------------------------------------
    diff |      16    .6700637    .6600747    2.640299   -.7368522     2.07698
------------------------------------------------------------------------------

               Ho: mean(stms_v - stms_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   1.0151               t =   1.0151             t =   1.0151
   P < t =   0.8369          P > |t| =   0.3261          P > t =   0.1631
```

```
->  ttest stms_v = stms_2_v if surgery == 2

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
  stms_v |       6    74.63383    1.801818    4.413535    70.00211    79.26556
stms_2_v |       6     75.3195    1.176265    2.881249    72.29582    78.34319
---------+--------------------------------------------------------------------
    diff |       6   -.6856664    1.030839     2.52503   -3.335523     1.96419
------------------------------------------------------------------------------

               Ho: mean(stms_v - stms_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -0.6652               t =  -0.6652             t =  -0.6652
   P < t =   0.2677          P > |t| =   0.5354          P > t =   0.7323

->  ttest stms_v = stms_2_v

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
  stms_v |      22    75.52905    1.211933    5.684471    73.00869     78.0494
stms_2_v |      22    75.22873    1.194817    5.604187    72.74397    77.71348
---------+--------------------------------------------------------------------
    diff |      22    .3003192    .5591949    2.622857   -.8625904    1.463229
------------------------------------------------------------------------------

               Ho: mean(stms_v - stms_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   0.5371               t =   0.5371             t =   0.5371
   P < t =   0.7016          P > |t| =   0.5969          P > t =   0.2984

->  ttest stmi_h=stmi_r_h

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
  stmi_h |      15    70.08973    2.210213    8.560117     65.3493    74.83017
stmi_r_h |      15     70.1888    2.177719     8.43427    65.51806    74.85954
---------+--------------------------------------------------------------------
    diff |      15   -.0990662    .1113466    .4312435   -.3378809    .1397485
------------------------------------------------------------------------------

               Ho: mean(stmi_h - stmi_r_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -0.8897               t =  -0.8897             t =  -0.8897
   P < t =   0.1943          P > |t| =   0.3887          P > t =   0.8057

->  gen stmi_h_d2 = stmi_h - stmi_2_h
```

```
->  ttest stmi_h_d2, by( surgery )

Two-sample t test with equal variances

------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       1 |      16   -1.608124    .6753307    2.701323   -3.047558   -.1686909
       2 |       6   -1.330334     .974262    2.386445   -3.834754    1.174086
---------+--------------------------------------------------------------------
combined |      22   -1.532363    .5470691    2.565982   -2.670056   -.3946707
---------+--------------------------------------------------------------------
    diff |           -.2777905    1.257171               -2.900204    2.344623
------------------------------------------------------------------------------
Degrees of freedom: 20

                     Ho: mean(1) - mean(2) = diff = 0

     Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
       t =  -0.2210                 t =  -0.2210                 t =  -0.2210
   P < t =   0.4137           P > |t| =   0.8274           P > t =   0.5863

->  ttest stmi_h = stmi_2_h if surgery == 1

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
  stmi_h |      16    72.26969    1.812933    7.251733    68.40551    76.13386
stmi_2_h |      16    73.87781    1.642615    6.570458    70.37666    77.37896
---------+--------------------------------------------------------------------
    diff |      16   -1.608124    .6753307    2.701323   -3.047558   -.1686909
------------------------------------------------------------------------------

                Ho: mean(stmi_h - stmi_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0           Ha: mean(diff) != 0           Ha: mean(diff) > 0
       t =  -2.3812                 t =  -2.3812                 t =  -2.3812
   P < t =   0.0155           P > |t| =   0.0309           P > t =   0.9845

->  ttest stmi_h = stmi_2_h if surgery == 2

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
  stmi_h |       6    70.08467    4.418292    10.82256    58.72708    81.44225
stmi_2_h |       6      71.415    4.611343    11.29544    59.56116    83.26884
---------+--------------------------------------------------------------------
    diff |       6   -1.330334     .974262    2.386445   -3.834754    1.174086
------------------------------------------------------------------------------

                Ho: mean(stmi_h - stmi_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0           Ha: mean(diff) != 0           Ha: mean(diff) > 0
       t =  -1.3655                 t =  -1.3655                 t =  -1.3655
   P < t =   0.1152           P > |t| =   0.2303           P > t =   0.8848
```

```
->  ttest stmi_h = stmi_2_h

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
  stmi_h |      22    71.67377    1.737844    8.151211    68.05973    75.28782
stmi_2_h |      22    73.20614    1.685157    7.904085    69.70166    76.71061
---------+--------------------------------------------------------------------
    diff |      22   -1.532363    .5470691    2.565982   -2.670056   -.3946707
------------------------------------------------------------------------------

               Ho: mean(stmi_h - stmi_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -2.8010               t =  -2.8010             t =  -2.8010
   P < t =   0.0054          P > |t| =   0.0107          P > t =   0.9946

->  ttest stmi_v=stmi_r_v

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
  stmi_v |      15    81.85933    1.202128    4.655822    79.28103    84.43764
stmi_r_v |      15    82.03493    1.213194    4.698682    79.43289    84.63698
---------+--------------------------------------------------------------------
    diff |      15   -.1755987    .0829838    .3213949   -.3535812    .0023839
------------------------------------------------------------------------------

               Ho: mean(stmi_v - stmi_r_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -2.1161               t =  -2.1161             t =  -2.1161
   P < t =   0.0264          P > |t| =   0.0527          P > t =   0.9736

->  gen stmi_v_d2 = stmi_v - stmi_2_v

->  ttest stmi_v_d2, by( surgery )

Two-sample t test with equal variances

------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       1 |      16     4.85125    1.020398    4.081592    2.676323    7.026177
       2 |       6    6.932669    1.690969    4.142012    2.585894    11.27944
---------+--------------------------------------------------------------------
combined |      22     5.41891    .8760607    4.109089    3.597042    7.240778
---------+--------------------------------------------------------------------
    diff |            -2.08142    1.961184               -6.172379    2.009539
------------------------------------------------------------------------------
Degrees of freedom: 20

                    Ho: mean(1) - mean(2) = diff = 0

     Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
       t =  -1.0613                 t =  -1.0613                 t =  -1.0613
   P < t =   0.1506          P > |t| =   0.3012          P > t =   0.8494
```

```
->  ttest stmi_v = stmi_2_v if surgery == 1

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
  stmi_v |      16     80.5035    1.839269    7.357075    76.58319    84.42381
stmi_2_v |      16    75.65225    1.470156    5.880625    72.51869    78.78581
---------+--------------------------------------------------------------------
    diff |      16     4.85125    1.020398    4.081592    2.676323    7.026177
------------------------------------------------------------------------------

               Ho: mean(stmi_v - stmi_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   4.7543               t =   4.7543             t =   4.7543
   P < t =   0.9999          P > |t| =   0.0003          P > t =   0.0001

->  ttest stmi_v = stmi_2_v if surgery == 2

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
  stmi_v |       6    83.03683    2.163167    5.298655    77.47624    88.59743
stmi_2_v |       6    76.10417     1.34217    3.287632    72.65401    79.55432
---------+--------------------------------------------------------------------
    diff |       6    6.932669    1.690969    4.142012    2.585894    11.27944
------------------------------------------------------------------------------

               Ho: mean(stmi_v - stmi_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   4.0998               t =   4.0998             t =   4.0998
   P < t =   0.9953          P > |t| =   0.0094          P > t =   0.0047

->  ttest stmi_v = stmi_2_v

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
  stmi_v |      22    81.19441    1.456648    6.832283    78.16514    84.22367
stmi_2_v |      22     75.7755    1.114311     5.22658    73.45816    78.09284
---------+--------------------------------------------------------------------
    diff |      22     5.41891    .8760607    4.109089    3.597042    7.240778
------------------------------------------------------------------------------

               Ho: mean(stmi_v - stmi_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   6.1855               t =   6.1855             t =   6.1855
   P < t =   1.0000          P > |t| =   0.0000          P > t =   0.0000
```

```
->  ttest li_h=li_r_h

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    li_h |      15    74.64187    2.390354    9.257802    69.51507    79.76867
  li_r_h |      15     74.7402    2.382766    9.228411    69.62968    79.85072
---------+--------------------------------------------------------------------
    diff |      15   -.0983317    .1057539    .4095831   -.3251513    .1284878
------------------------------------------------------------------------------

                 Ho: mean(li_h - li_r_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -0.9298               t =  -0.9298             t =  -0.9298
   P < t =   0.1841          P > |t| =   0.3682          P > t =   0.8159

->  gen li_h_d2 = li_h - li_2_h

->  ttest li_h_d2, by( surgery )

Two-sample t test with equal variances

------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       1 |      16   -1.672625    .5159789    2.063915   -2.772408   -.5728417
       2 |       6   -3.277667    1.198864    2.936605   -6.359445   -.1958896
---------+--------------------------------------------------------------------
combined |      22   -2.110364    .5059299    2.373022   -3.162502   -1.058225
---------+--------------------------------------------------------------------
    diff |            1.605043    1.107342               -.704833    3.914919
------------------------------------------------------------------------------
Degrees of freedom: 20

                     Ho: mean(1) - mean(2) = diff = 0

     Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
       t =   1.4495               t =   1.4495                  t =   1.4495
   P < t =   0.9186          P > |t| =   0.1627          P > t =   0.0814

->  ttest li_h = li_2_h if surgery == 1

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    li_h |      16    77.60931    1.971425      7.8857    73.40732    81.81131
  li_2_h |      16    79.28194     1.77305    7.092198    75.50277     83.0611
---------+--------------------------------------------------------------------
    diff |      16   -1.672625    .5159789    2.063915   -2.772408   -.5728417
------------------------------------------------------------------------------

                 Ho: mean(li_h - li_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -3.2417               t =  -3.2417             t =  -3.2417
   P < t =   0.0027          P > |t| =   0.0055          P > t =   0.9973
```

```
->  ttest li_h = li_2_h if surgery == 2

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    li_h |       6    73.43417    4.563508    11.17827     61.7033    85.16504
  li_2_h |       6    76.71184    4.696328    11.50361    64.63954    88.78413
---------+--------------------------------------------------------------------
    diff |       6   -3.277667    1.198864    2.936605   -6.359445   -.1958896
------------------------------------------------------------------------------

                 Ho: mean(li_h - li_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -2.7340               t =  -2.7340             t =  -2.7340
   P < t =   0.0205          P > |t| =   0.0411          P > t =   0.9795

->  ttest li_h = li_2_h

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    li_h |      22    76.47064    1.880406    8.819886    72.56012    80.38116
  li_2_h |      22      78.581    1.768518    8.295087    74.90317    82.25884
---------+--------------------------------------------------------------------
    diff |      22   -2.110364    .5059299    2.373022   -3.162502   -1.058225
------------------------------------------------------------------------------

                 Ho: mean(li_h - li_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -4.1713               t =  -4.1713             t =  -4.1713
   P < t =   0.0002          P > |t| =   0.0004          P > t =   0.9998

->  ttest li_v=li_r_v

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    li_v |      15    94.51307    1.509457    5.846102     91.2756    97.75053
  li_r_v |      15    94.67887    1.532816    5.936571     91.3913    97.96643
---------+--------------------------------------------------------------------
    diff |      15    -.165799    .1189759    .4607916   -.4209769    .0893789
------------------------------------------------------------------------------

                 Ho: mean(li_v - li_r_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -1.3936               t =  -1.3936             t =  -1.3936
   P < t =   0.0926          P > |t| =   0.1852          P > t =   0.9074

->  gen li_v_d2 = li_v - li_2_v
```

```
->  ttest li_v_d2, by( surgery )

Two-sample t test with equal variances

------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       1 |      16    5.520938    1.293972     5.17589    2.762901    8.278975
       2 |       6      8.2215    1.871696    4.584701    3.410152    13.03285
---------+--------------------------------------------------------------------
combined |      22    6.257455    1.079892    5.065143    4.011697    8.503214
---------+--------------------------------------------------------------------
    diff |           -2.700562    2.410134               -7.728012    2.326888
------------------------------------------------------------------------------
Degrees of freedom: 20

                     Ho: mean(1) - mean(2) = diff = 0

     Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
       t =  -1.1205                 t =  -1.1205                   t =  -1.1205
   P < t =   0.1379          P > |t| =   0.2758          P > t =   0.8621

->  ttest li_v = li_2_v if surgery == 1

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    li_v |      16    92.37406    2.409335    9.637338    87.23869    97.50944
  li_2_v |      16    86.85312    1.821719    7.286878    82.97022    90.73603
---------+--------------------------------------------------------------------
    diff |      16    5.520938    1.293972     5.17589    2.762901    8.278975
------------------------------------------------------------------------------

                 Ho: mean(li_v - li_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0           Ha: mean(diff) != 0           Ha: mean(diff) > 0
       t =   4.2667                 t =   4.2667                 t =   4.2667
   P < t =   0.9997          P > |t| =   0.0007          P > t =   0.0003

->  ttest li_v = li_2_v if surgery == 2

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    li_v |       6       95.88    2.392282    5.859871    89.73044    102.0296
  li_2_v |       6     87.6585    1.806628    4.425316    83.01441    92.30258
---------+--------------------------------------------------------------------
    diff |       6      8.2215    1.871696    4.584701    3.410152    13.03285
------------------------------------------------------------------------------

                 Ho: mean(li_v - li_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0           Ha: mean(diff) != 0           Ha: mean(diff) > 0
       t =   4.3925                 t =   4.3925                 t =   4.3925
   P < t =   0.9965          P > |t| =   0.0071          P > t =   0.0035
```

```
->  ttest li_v = li_2_v

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    li_v |      22    93.33023    1.871697    8.779036    89.43782    97.22263
  li_2_v |      22    87.07277    1.393574    6.536441    84.17468    89.97087
---------+--------------------------------------------------------------------
    diff |      22    6.257455    1.079892    5.065143    4.011697    8.503214
------------------------------------------------------------------------------

                  Ho: mean(li_v - li_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   5.7945               t =   5.7945             t =   5.7945
   P < t =   1.0000          P > |t| =   0.0000          P > t =   0.0000

->  ttest si_h=si_r_h

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    si_h |      15    64.76667     2.31843    8.979241    59.79413     69.7392
  si_r_h |      15     64.6798    2.343082    9.074717    59.65439    69.70521
---------+--------------------------------------------------------------------
    diff |      15     .086867    .1216873    .4712928   -.1741262    .3478603
------------------------------------------------------------------------------

                  Ho: mean(si_h - si_r_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   0.7139               t =   0.7139             t =   0.7139
   P < t =   0.7565          P > |t| =   0.4870          P > t =   0.2435

->  gen si_h_d2 = si_h - si_2_h

->  ttest si_h_d2, by( surgery )

Two-sample t test with equal variances

------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       1 |      16   -2.501938    .6418746    2.567498   -3.870061   -1.133815
       2 |       6     -5.7285     .900762    2.206407   -8.043983   -3.413018
---------+--------------------------------------------------------------------
combined |      22    -3.38191    .6041889    2.833897   -4.638389    -2.12543
---------+--------------------------------------------------------------------
    diff |            3.226562    1.188241                .7479343     5.70519
------------------------------------------------------------------------------
Degrees of freedom: 20

                     Ho: mean(1) - mean(2) = diff = 0

     Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
       t =   2.7154               t =   2.7154                  t =   2.7154
   P < t =   0.9933          P > |t| =   0.0133          P > t =   0.0067
```

```
-> ttest si_h = si_2_h if surgery == 1

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    si_h |      16    68.33981    1.959382    7.837527    64.16349    72.51614
  si_2_h |      16    70.84175    1.724401    6.897604    67.16628    74.51722
---------+--------------------------------------------------------------------
    diff |      16   -2.501938    .6418746    2.567498   -3.870061   -1.133815
------------------------------------------------------------------------------

                  Ho: mean(si_h - si_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -3.8979               t =  -3.8979             t =  -3.8979
   P < t =   0.0007          P > |t| =   0.0014          P > t =   0.9993

-> ttest si_h = si_2_h if surgery == 2

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    si_h |       6    63.54867    4.345842     10.6451    52.37732    74.72001
  si_2_h |       6    69.27717    4.778084    11.70387    56.99471    81.55962
---------+--------------------------------------------------------------------
    diff |       6     -5.7285     .900762    2.206407   -8.043983   -3.413018
------------------------------------------------------------------------------

                  Ho: mean(si_h - si_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -6.3596               t =  -6.3596             t =  -6.3596
   P < t =   0.0007          P > |t| =   0.0014          P > t =   0.9993

-> ttest si_h = si_2_h

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    si_h |      22    67.03314     1.85407     8.69636    63.17739    70.88889
  si_2_h |      22    70.41505    1.746511    8.191861    66.78298    74.04711
---------+--------------------------------------------------------------------
    diff |      22    -3.38191    .6041889    2.833897   -4.638389    -2.12543
------------------------------------------------------------------------------

                  Ho: mean(si_h - si_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -5.5974               t =  -5.5974             t =  -5.5974
   P < t =   0.0000          P > |t| =   0.0000          P > t =   1.0000
```

```
->  ttest si_v=si_r_v

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    si_v |      15     101.592     1.41871    5.494642    98.54917    104.6348
  si_r_v |      15    101.8228    1.450472    5.617655    98.71185    104.9338
---------+--------------------------------------------------------------------
    diff |      15   -.2308019     .209401    .8110065   -.6799223    .2183185
------------------------------------------------------------------------------

                  Ho: mean(si_v - si_r_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -1.1022                 t =  -1.1022             t =  -1.1022
   P < t =   0.1445          P > |t| =   0.2890          P > t =   0.8555

->  gen si_v_d2 = si_v - si_2_v

->  ttest si_v_d2, by( surgery )

Two-sample t test with equal variances

------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       1 |      16    4.291437    .8717606    3.487043    2.433323    6.149551
       2 |       6    6.685668    2.504253    6.134142    .2482801    13.12306
---------+--------------------------------------------------------------------
combined |      22    4.944409    .9252873    4.339982    3.020169    6.868649
---------+--------------------------------------------------------------------
    diff |           -2.394231      2.0605               -6.692359    1.903898
------------------------------------------------------------------------------
Degrees of freedom: 20

                     Ho: mean(1) - mean(2) = diff = 0

     Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
       t =  -1.1620                 t =  -1.1620                 t =  -1.1620
   P < t =   0.1295          P > |t| =   0.2589          P > t =   0.8705

->  ttest si_v = si_2_v if surgery == 1

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    si_v |      16    101.1433    2.317492    9.269969    96.20369    106.0829
  si_2_v |      16    96.85187    1.907946    7.631786    92.78518    100.9186
---------+--------------------------------------------------------------------
    diff |      16    4.291437    .8717606    3.487043    2.433323    6.149551
------------------------------------------------------------------------------

                  Ho: mean(si_v - si_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   4.9227                 t =   4.9227             t =   4.9227
   P < t =   0.9999          P > |t| =   0.0002          P > t =   0.0001
```

```
->  ttest si_v = si_2_v if surgery == 2

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    si_v |       6    101.7347    2.481056    6.077322    95.35691    108.1124
  si_2_v |       6      95.049     1.67325    4.098608    90.74777    99.35023
---------+--------------------------------------------------------------------
    diff |       6    6.685668    2.504253    6.134142    .2482801    13.12306
------------------------------------------------------------------------------

                Ho: mean(si_v - si_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   2.6697               t =   2.6697             t =   2.6697
   P < t =   0.9778          P > |t| =   0.0444          P > t =   0.0222

->  ttest si_v = si_2_v

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
    si_v |      22    101.3046    1.786905    8.381328    97.58852    105.0207
  si_2_v |      22    96.36018    1.450361    6.802796    93.34399    99.37637
---------+--------------------------------------------------------------------
    diff |      22    4.944409    .9252873    4.339982    3.020169    6.868649
------------------------------------------------------------------------------

                Ho: mean(si_v - si_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   5.3436               t =   5.3436             t =   5.3436
   P < t =   1.0000          P > |t| =   0.0000          P > t =   0.0000

->  ttest pog1_h=pog1_r_h

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
  pog1_h |      15     65.4558    2.522163    9.768295     60.0463     70.8653
pog1_r_h |      15    65.55167     2.52449    9.777309    60.13717    70.96616
---------+--------------------------------------------------------------------
    diff |      15   -.0958659    .1419743    .5498642   -.4003706    .2086388
------------------------------------------------------------------------------

               Ho: mean(pog1_h - pog1_r_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -0.6752               t =  -0.6752             t =  -0.6752
   P < t =   0.2553          P > |t| =   0.5105          P > t =   0.7447

->  gen pog1_h_d2 = pog1_h - pog1_2_h
```

```
->  ttest pog1_h_d2, by( surgery )

Two-sample t test with equal variances

------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       1 |      16   -3.430126    .7051682    2.820673   -4.933156   -1.927096
       2 |       6   -7.885666    1.442102    3.532414   -11.59271   -4.178625
---------+--------------------------------------------------------------------
combined |      22   -4.645273    .7621439    3.574772   -6.230238   -3.060308
---------+--------------------------------------------------------------------
    diff |             4.45554    1.443036                1.445419    7.465661
------------------------------------------------------------------------------
Degrees of freedom: 20

                     Ho: mean(1) - mean(2) = diff = 0

     Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
       t =   3.0876               t =   3.0876                  t =   3.0876
   P < t =   0.9971           P > |t| =   0.0058          P > t =   0.0029

->  ttest pog1_h = pog1_2_h if surgery == 1

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
  pog1_h |      16    69.52481     2.00433    8.017319    65.25268    73.79694
pog1_2_h |      16    72.95494    1.771411    7.085642    69.17927    76.73061
---------+--------------------------------------------------------------------
    diff |      16   -3.430126    .7051682    2.820673   -4.933156   -1.927096
------------------------------------------------------------------------------

                Ho: mean(pog1_h - pog1_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0           Ha: mean(diff) != 0           Ha: mean(diff) > 0
       t =  -4.8643                 t =  -4.8643                  t =  -4.8643
   P < t =   0.0001           P > |t| =   0.0002          P > t =   0.9999

->  ttest pog1_h = pog1_2_h if surgery == 2

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
  pog1_h |       6     63.2385    4.743369    11.61883    51.04528    75.43172
pog1_2_h |       6    71.12417    5.757345    14.10256    56.32444    85.92389
---------+--------------------------------------------------------------------
    diff |       6   -7.885666    1.442102    3.532414   -11.59271   -4.178625
------------------------------------------------------------------------------

                Ho: mean(pog1_h - pog1_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0           Ha: mean(diff) != 0           Ha: mean(diff) > 0
       t =  -5.4682                 t =  -5.4682                  t =  -5.4682
   P < t =   0.0014           P > |t| =   0.0028          P > t =   0.9986
```

```
->  ttest pog1_h = pog1_2_h

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
  pog1_h |      22    67.81036    1.980199    9.287955    63.69231    71.92841
pog1_2_h |      22    72.45564    1.952982    9.160296    68.39419    76.51708
---------+--------------------------------------------------------------------
    diff |      22   -4.645273    .7621439    3.574772   -6.230238   -3.060308
------------------------------------------------------------------------------

               Ho: mean(pog1_h - pog1_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -6.0950               t =  -6.0950             t =  -6.0950
   P < t =   0.0000          P > |t| =   0.0000          P > t =   1.0000

->  ttest pog1_v=pog1_r_v

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
  pog1_v |      15    109.0933    1.803717    6.985765    105.2247    112.9619
pog1_r_v |      15    109.5048    1.809326    7.007488    105.6242    113.3854
---------+--------------------------------------------------------------------
    diff |      15    -.411466    .1626717    .6300249   -.7603621   -.0625698
------------------------------------------------------------------------------

               Ho: mean(pog1_v - pog1_r_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -2.5294               t =  -2.5294             t =  -2.5294
   P < t =   0.0120          P > |t| =   0.0241          P > t =   0.9880

->  gen pog1_v_d2 = pog1_v - pog1_2_v

->  ttest pog1_v_d2, by( surgery )

Two-sample t test with equal variances

------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       1 |      16    1.304751     .710293    2.841172   -.2092029    2.818705
       2 |       6    .3736661    1.232402    3.018755   -2.794323    3.541656
---------+--------------------------------------------------------------------
combined |      22    1.050819    .6073704     2.84882   -.2122771    2.313915
---------+--------------------------------------------------------------------
    diff |            .9310848    1.381851               -1.951406    3.813575
------------------------------------------------------------------------------
Degrees of freedom: 20

                    Ho: mean(1) - mean(2) = diff = 0

     Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
       t =   0.6738                 t =   0.6738                  t =   0.6738
   P < t =   0.7459          P > |t| =   0.5082          P > t =   0.2541
```

```
->  ttest pog1_v = pog1_2_v if surgery == 1

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
  pog1_v |      16    109.0204    2.377814    9.511256    103.9522    114.0886
pog1_2_v |      16    107.7157    2.317888    9.271551    102.7752    112.6561
---------+--------------------------------------------------------------------
    diff |      16    1.304751     .710293    2.841172   -.2092029    2.818705
------------------------------------------------------------------------------

               Ho: mean(pog1_v - pog1_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   1.8369               t =   1.8369             t =   1.8369
   P < t =   0.9569          P > |t| =   0.0861          P > t =   0.0431

->  ttest pog1_v = pog1_2_v if surgery == 2

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
  pog1_v |       6    107.8132    2.831626    6.936039    100.5342    115.0921
pog1_2_v |       6    107.4395    2.693073    6.596654    100.5167    114.3623
---------+--------------------------------------------------------------------
    diff |       6    .3736661    1.232402    3.018755   -2.794323    3.541656
------------------------------------------------------------------------------

               Ho: mean(pog1_v - pog1_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   0.3032               t =   0.3032             t =   0.3032
   P < t =   0.6130          P > |t| =   0.7739          P > t =   0.3870

->  ttest pog1_v = pog1_2_v

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
  pog1_v |      22    108.6912    1.863214    8.739247    104.8164    112.5659
pog1_2_v |      22    107.6404    1.806276    8.472187     103.884    111.3967
---------+--------------------------------------------------------------------
    diff |      22    1.050819    .6073704     2.84882   -.2122771    2.313915
------------------------------------------------------------------------------

               Ho: mean(pog1_v - pog1_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   1.7301               t =   1.7301             t =   1.7301
   P < t =   0.9509          P > |t| =   0.0983          P > t =   0.0491
```

```
->  ttest gn1_h=gn1_r_h

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   gn1_h |      15    59.00993    2.425472    9.393813    53.80781    64.21205
 gn1_r_h |      15     58.9794    2.443929    9.465298    53.73769    64.22111
---------+--------------------------------------------------------------------
    diff |      15    .0305331    .1389999    .5383443   -.2675921    .3286582
------------------------------------------------------------------------------

                Ho: mean(gn1_h - gn1_r_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   0.2197               t =   0.2197             t =   0.2197
   P < t =   0.5853          P > |t| =   0.8293          P > t =   0.4147

->  gen gn1_h_d2 = gn1_h - gn1_2_h

->  ttest gn1_h_d2, by( surgery )

Two-sample t test with equal variances

------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       1 |      16   -3.622437    .7503745    3.001498   -5.221822   -2.023052
       2 |       6      -9.313    1.349086    3.304572   -12.78094   -5.845065
---------+--------------------------------------------------------------------
combined |      22   -5.174409    .8464867    3.970374   -6.934774   -3.414043
---------+--------------------------------------------------------------------
    diff |            5.690563    1.474468                2.614877     8.76625
------------------------------------------------------------------------------
Degrees of freedom: 20

                    Ho: mean(1) - mean(2) = diff = 0

     Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
       t =   3.8594               t =   3.8594                  t =   3.8594
   P < t =   0.9995          P > |t| =   0.0010          P > t =   0.0005

->  ttest gn1_h = gn1_2_h if surgery == 1

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   gn1_h |      16    63.42519    1.880311    7.521244     59.4174    67.43298
 gn1_2_h |      16    67.04762    1.682405    6.729621    63.46166    70.63359
---------+--------------------------------------------------------------------
    diff |      16   -3.622437    .7503745    3.001498   -5.221822   -2.023052
------------------------------------------------------------------------------

                Ho: mean(gn1_h - gn1_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -4.8275               t =  -4.8275             t =  -4.8275
   P < t =   0.0001          P > |t| =   0.0002          P > t =   0.9999
```

```
->  ttest gn1_h = gn1_2_h if surgery == 2

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   gn1_h |       6    56.13617    4.563305    11.17777    44.40582    67.86652
 gn1_2_h |       6    65.44917    5.626871    13.78296    50.98483     79.9135
---------+--------------------------------------------------------------------
    diff |       6      -9.313    1.349086    3.304572   -12.78094   -5.845065
------------------------------------------------------------------------------

                Ho: mean(gn1_h - gn1_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -6.9032                t =  -6.9032             t =  -6.9032
   P < t =   0.0005          P > |t| =   0.0010          P > t =   0.9995

->  ttest gn1_h = gn1_2_h

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   gn1_h |      22    61.43727    1.921111     9.01081     57.4421    65.43244
 gn1_2_h |      22    66.61168    1.884269    8.838004    62.69313    70.53023
---------+--------------------------------------------------------------------
    diff |      22   -5.174409    .8464867    3.970374   -6.934774   -3.414043
------------------------------------------------------------------------------

                Ho: mean(gn1_h - gn1_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -6.1128                t =  -6.1128             t =  -6.1128
   P < t =   0.0000          P > |t| =   0.0000          P > t =   1.0000

->  ttest gn1_v=gn1_r_v

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   gn1_v |      15    124.5745    1.946135     7.53735    120.4005    128.7486
 gn1_r_v |      15    124.9297    1.950158     7.55293    120.7471    129.1124
---------+--------------------------------------------------------------------
    diff |      15   -.3551987    .1653375    .6403494   -.7098123    -.000585
------------------------------------------------------------------------------

                Ho: mean(gn1_v - gn1_r_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -2.1483                t =  -2.1483             t =  -2.1483
   P < t =   0.0248          P > |t| =   0.0497          P > t =   0.9752

->  gen gn1_v_d2 = gn1_v - gn1_2_v
```

```
->  ttest gn1_v_d2, by( surgery )

Two-sample t test with equal variances

------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       1 |      16      2.7125    .6043216    2.417286    1.424419    4.000581
       2 |       6    4.339335    1.424395    3.489041    .6778111    8.000859
---------+--------------------------------------------------------------------
combined |      22    3.156182    .5886092    2.760822    1.932102    4.380262
---------+--------------------------------------------------------------------
    diff |           -1.626835     1.30451               -4.347996    1.094326
------------------------------------------------------------------------------
Degrees of freedom: 20

                     Ho: mean(1) - mean(2) = diff = 0

     Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
       t =  -1.2471                 t =  -1.2471                   t =  -1.2471
   P < t =   0.1134          P > |t| =   0.2268          P > t =   0.8866

->  ttest gn1_v = gn1_2_v if surgery == 1

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   gn1_v |      16    124.3082    2.517747    10.07099    118.9417    129.6746
 gn1_2_v |      16    121.5957    2.527524     10.1101    116.2084     126.983
---------+--------------------------------------------------------------------
    diff |      16      2.7125    .6043216    2.417286    1.424419    4.000581
------------------------------------------------------------------------------

                Ho: mean(gn1_v - gn1_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0         Ha: mean(diff) > 0
       t =   4.4885                 t =   4.4885               t =   4.4885
   P < t =   0.9998          P > |t| =   0.0004          P > t =   0.0002

->  ttest gn1_v = gn1_2_v if surgery == 2

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   gn1_v |       6    124.3702    3.467808    8.494361    115.4559    133.2845
 gn1_2_v |       6    120.0308    2.445176    5.989432    113.7453    126.3164
---------+--------------------------------------------------------------------
    diff |       6    4.339335    1.424395    3.489041    .6778111    8.000859
------------------------------------------------------------------------------

                Ho: mean(gn1_v - gn1_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0         Ha: mean(diff) > 0
       t =   3.0464                 t =   3.0464               t =   3.0464
   P < t =   0.9857          P > |t| =   0.0285          P > t =   0.0143
```

```
->  ttest gn1_v = gn1_2_v

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   gn1_v |      22    124.3251      2.0184    9.467135    120.1276    128.5226
 gn1_2_v |      22    121.1689    1.931322    9.058705    117.1525    125.1853
---------+--------------------------------------------------------------------
    diff |      22    3.156182    .5886092    2.760822    1.932102    4.380262
------------------------------------------------------------------------------

                Ho: mean(gn1_v - gn1_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   5.3621               t =   5.3621             t =   5.3621
   P < t =   1.0000          P > |t| =   0.0000          P > t =   0.0000

->  ttest me1_h=me1_r_h

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   me1_h |      15    44.51707    2.415065    9.353505    39.33727    49.69687
 me1_r_h |      15    44.33807    2.376861    9.205542    39.24021    49.43593
---------+--------------------------------------------------------------------
    diff |      15    .1790001    .2185362    .8463869   -.2897134    .6477135
------------------------------------------------------------------------------

                Ho: mean(me1_h - me1_r_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   0.8191               t =   0.8191             t =   0.8191
   P < t =   0.7868          P > |t| =   0.4265          P > t =   0.2132

->  gen me1_h_d2 = me1_h - me1_2_h

->  ttest me1_h_d2, by( surgery )

Two-sample t test with equal variances

------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       1 |      16   -3.864437    1.003621    4.014482   -6.003604   -1.725271
       2 |       6   -10.71217    1.664678    4.077612   -14.99136   -6.432975
---------+--------------------------------------------------------------------
combined |      22      -5.732    1.070555    5.021348    -7.95834   -3.505659
---------+--------------------------------------------------------------------
    diff |            6.847728    1.929387                2.823098    10.87236
------------------------------------------------------------------------------
Degrees of freedom: 20

                    Ho: mean(1) - mean(2) = diff = 0

     Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
       t =   3.5492                 t =   3.5492                 t =   3.5492
   P < t =   0.9990          P > |t| =   0.0020          P > t =   0.0010
```

```
->  ttest me1_h = me1_2_h if surgery == 1

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   me1_h |      16    49.61231    1.709027    6.836108    45.96961    53.25502
 me1_2_h |      16    53.47675    1.514845    6.059378    50.24794    56.70556
---------+--------------------------------------------------------------------
    diff |      16   -3.864437    1.003621    4.014482   -6.003604   -1.725271
------------------------------------------------------------------------------

                Ho: mean(me1_h - me1_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -3.8505               t =  -3.8505             t =  -3.8505
   P < t =   0.0008          P > |t| =   0.0016          P > t =   0.9992

->  ttest me1_h = me1_2_h if surgery == 2

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   me1_h |       6    41.20767     5.11907    12.53911    28.04868    54.36666
 me1_2_h |       6    51.91983    6.618327    16.21152    34.90688    68.93278
---------+--------------------------------------------------------------------
    diff |       6   -10.71217    1.664678    4.077612   -14.99136   -6.432975
------------------------------------------------------------------------------

                Ho: mean(me1_h - me1_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -6.4350               t =  -6.4350             t =  -6.4350
   P < t =   0.0007          P > |t| =   0.0013          P > t =   0.9993

->  ttest me1_h = me1_2_h

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   me1_h |      22    47.32014    1.971315    9.246289    43.22056    51.41971
 me1_2_h |      22    53.05214    2.014765    9.450084     48.8622    57.24207
---------+--------------------------------------------------------------------
    diff |      22      -5.732    1.070555    5.021348    -7.95834   -3.505659
------------------------------------------------------------------------------

                Ho: mean(me1_h - me1_2_h) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -5.3542               t =  -5.3542             t =  -5.3542
   P < t =   0.0000          P > |t| =   0.0000          P > t =   1.0000
```

```
->  ttest me1_v=me1_r_v

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   me1_v |      15    130.7337    2.122061    8.218707    126.1823     135.285
 me1_r_v |      15    131.1155    2.124791    8.229278    126.5582    135.6727
---------+--------------------------------------------------------------------
    diff |      15   -.3817988    .1762196    .6824957   -.7597523   -.0038453
------------------------------------------------------------------------------

                Ho: mean(me1_v - me1_r_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =  -2.1666               t =  -2.1666             t =  -2.1666
   P < t =   0.0240          P > |t| =   0.0480          P > t =   0.9760

->  gen me1_v_d2 = me1_v - me1_2_v

->  ttest me1_v_d2, by( surgery )

Two-sample t test with equal variances

------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       1 |      16    3.288126    .4888967    1.955587    2.246067    4.330185
       2 |       6    5.826998       1.248    3.056964    2.618911    9.035085
---------+--------------------------------------------------------------------
combined |      22    3.980546    .5349625    2.509196     2.86803    5.093061
---------+--------------------------------------------------------------------
    diff |           -2.538872    1.092107               -4.816967   -.2607775
------------------------------------------------------------------------------
Degrees of freedom: 20

                    Ho: mean(1) - mean(2) = diff = 0

     Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
       t =  -2.3247                 t =  -2.3247                 t =  -2.3247
   P < t =   0.0154          P > |t| =   0.0307          P > t =   0.9846

->  ttest me1_v = me1_2_v if surgery == 1

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   me1_v |      16     130.176    2.643208    10.57283    124.5421    135.8099
 me1_2_v |      16    126.8879    2.594383    10.37753    121.3581    132.4177
---------+--------------------------------------------------------------------
    diff |      16    3.288126    .4888967    1.955587    2.246067    4.330185
------------------------------------------------------------------------------

                Ho: mean(me1_v - me1_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   6.7256               t =   6.7256             t =   6.7256
   P < t =   1.0000          P > |t| =   0.0000          P > t =   0.0000
```

```
->  ttest me1_v = me1_2_v if surgery == 2

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   me1_v |       6    131.1132    3.640142    8.916491    121.7559    140.4705
 me1_2_v |       6    125.2862    2.730971    6.689485     118.266    132.3064
---------+--------------------------------------------------------------------
    diff |       6    5.826998       1.248    3.056964    2.618911    9.035085
------------------------------------------------------------------------------

                Ho: mean(me1_v - me1_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   4.6691               t =   4.6691             t =   4.6691
   P < t =   0.9973          P > |t| =   0.0055          P > t =   0.0027

->  ttest me1_v = me1_2_v

Paired t test

------------------------------------------------------------------------------
Variable |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
   me1_v |      22    130.4316    2.120873    9.947777     126.021    134.8422
 me1_2_v |      22     126.451    2.001265    9.386765    122.2892    130.6129
---------+--------------------------------------------------------------------
    diff |      22    3.980546    .5349625    2.509196     2.86803    5.093061
------------------------------------------------------------------------------

                Ho: mean(me1_v - me1_2_v) = mean(diff) = 0

  Ha: mean(diff) < 0         Ha: mean(diff) != 0        Ha: mean(diff) > 0
       t =   7.4408               t =   7.4408             t =   7.4408
   P < t =   1.0000          P > |t| =   0.0000          P > t =   0.0000
```

Correlation matrix for onset, post-op and new variables(thickness, length, gap)

*** Behind correlation coefficient denotes significance at 0.05 level of significance**

```
. pwcorr n_h n_v  lit_h lit_v lia_h lia_v in_h in_v b_h b_v pog_h pog_v gn_h
> gn_v me_h me_v stms_h stms_v stmi_h stmi_v li_h li_v si_h si_v pog1_h pog1_v
>  gn1_h gn1_v me1_h me1_v n_h_d2 - me1_v_d2 me1_stmi_v -  li_me1_2_h, star(0.05)
> ;
```

	n_h	n_v	lit_h	lit_v	lia_h	lia_v	in_h
n_h	1.0000						
n_v	0.9403*	1.0000					
lit_h	0.7046*	0.7023*	1.0000				
lit_v	0.6884*	0.6960*	0.3356	1.0000			
lia_h	0.7028*	0.7014*	0.9996*	0.3281	1.0000		
lia_v	0.7348*	0.7314*	0.3951	0.9870*	0.3902	1.0000	
in_h	0.6296*	0.6054*	0.9387*	0.1367	0.9409*	0.2237	1.0000
in_v	0.6328*	0.6589*	0.3342	0.9679*	0.3295	0.9576*	0.0909
b_h	0.5569*	0.5588*	0.9563*	0.1142	0.9584*	0.1930	0.9673*
b_v	0.7506*	0.7632*	0.4148	0.9244*	0.4096	0.9379*	0.2730
pog_h	0.5166*	0.5314*	0.9330*	0.1087	0.9346*	0.1876	0.9483*
pog_v	0.7525*	0.7678*	0.4792*	0.9014*	0.4752*	0.9271*	0.3188
gn_h	0.4935*	0.5123*	0.9209*	0.0864	0.9231*	0.1653	0.9379*
gn_v	0.7994*	0.7896*	0.4734*	0.9224*	0.4714*	0.9572*	0.3253
me_h	0.4604*	0.4820*	0.9029*	0.0469	0.9067*	0.1257	0.9224*
me_v	0.8015*	0.7882*	0.4643*	0.9295*	0.4621*	0.9630*	0.3153
stms_h	0.8340*	0.7950*	0.9325*	0.5039*	0.9320*	0.5633*	0.8720*
stms_v	0.6778*	0.5971*	0.3464	0.8481*	0.3375	0.8561*	0.2230
stmi_h	0.6997*	0.7103*	0.9572*	0.3588	0.9582*	0.4267*	0.9097*
stmi_v	0.6532*	0.6036*	0.2575	0.9017*	0.2548	0.9040*	0.1082
li_h	0.6771*	0.6824*	0.9804*	0.3308	0.9812*	0.3987	0.9356*
li_v	0.6526*	0.6002*	0.1939	0.8828*	0.1879	0.8607*	0.0413
si_h	0.5636*	0.5752*	0.9461*	0.1454	0.9491*	0.2269	0.9412*
si_v	0.7309*	0.6831*	0.3833	0.9172*	0.3800	0.9296*	0.2172
pog1_h	0.5426*	0.5569*	0.9379*	0.1442	0.9400*	0.2228	0.9379*
pog1_v	0.7131*	0.6594*	0.4184	0.9117*	0.4126	0.9253*	0.2618
gn1_h	0.4785*	0.4851*	0.9200*	0.0688	0.9223*	0.1452	0.9282*
gn1_v	0.8071*	0.7810*	0.5098*	0.9374*	0.5070*	0.9651*	0.3561
me1_h	0.3211	0.2857	0.8279*	-0.0685	0.8322*	0.0009	0.8428*
me1_v	0.8230*	0.8002*	0.5177*	0.9369*	0.5148*	0.9661*	0.3688
n_h_d2	0.0102	-0.1402	-0.1766	0.0682	-0.1859	0.0445	-0.1541
n_v_d2	-0.1641	-0.0569	-0.1652	-0.0372	-0.1696	-0.0688	-0.1906
lit_h_d2	0.2288	0.2328	0.3154	0.0334	0.3049	0.0110	0.2806
lit_v_d2	0.1475	0.1423	0.0319	0.4813*	0.0289	0.4612*	-0.0516
lia_h_d2	0.2458	0.2595	0.3390	0.0527	0.3302	0.0288	0.2861
lia_v_d2	0.1991	0.1845	-0.0330	0.5033*	-0.0369	0.4851*	-0.1053
in_h_d2	0.1069	0.1450	0.1633	-0.2177	0.1549	-0.2349	0.2717
in_v_d2	0.1395	0.1084	-0.0540	0.4586*	-0.0498	0.4601*	-0.1841
b_h_d2	0.1011	0.1160	0.1009	-0.1440	0.0893	-0.1879	0.1264
b_v_d2	0.3573	0.3590	0.2740	0.4770*	0.2725	0.5167*	0.2508
pog_h_d2	-0.0371	-0.0533	0.0567	-0.2757	0.0453	-0.3270	0.0955
pog_v_d2	0.0877	0.1790	0.2693	0.1525	0.2702	0.1781	0.2573
gn_h_d2	-0.0437	-0.0476	0.0669	-0.2855	0.0563	-0.3352	0.1012
gn_v_d2	0.1091	0.1418	-0.0595	0.3230	-0.0550	0.3560	-0.0418
me_h_d2	0.0209	0.0297	0.1558	-0.2218	0.1463	-0.2686	0.1680
me_v_d2	0.0937	0.0983	-0.0788	0.3329	-0.0742	0.3616	-0.0752
stms_h_d2	0.6633*	0.5975*	0.2346	0.6372*	0.2240	0.5992*	0.1125
stms_v_d2	-0.1718	-0.2214	-0.0000	-0.0592	-0.0012	-0.0500	0.0390
stmi_h_d2	0.3354	0.3116	0.1510	0.0775	0.1513	0.0927	0.1569

stmi_v_d2	0.1062	0.0755	0.0413	0.3531	0.0450	0.3530	-0.0070
li_h_d2	0.2764	0.3029	0.3056	0.0364	0.3012	0.0545	0.2952
li_v_d2	0.1281	0.1063	-0.0122	0.4141	-0.0133	0.3960	-0.0506
si_h_d2	0.2021	0.2086	0.2794	-0.1009	0.2693	-0.1201	0.3040
si_v_d2	0.2481	0.2275	0.1859	0.3787	0.1936	0.4287*	0.1413
pog1_h_d2	0.0817	0.0945	0.1406	-0.1573	0.1286	-0.2011	0.1610
pog1_v_d2	-0.2102	-0.3038	-0.2044	0.0042	-0.2092	-0.0036	-0.1586
gn1_h_d2	-0.0326	-0.0362	0.1164	-0.2624	0.1051	-0.3077	0.1479
gn1_v_d2	0.0671	0.0352	0.0135	0.2522	0.0194	0.2771	0.0320
me1_h_d2	-0.1701	-0.2517	-0.0016	-0.3500	-0.0105	-0.4072	0.0300
me1_v_d2	0.1367	0.1018	-0.0277	0.3375	-0.0226	0.3623	-0.0277
me1_stmi_v	0.7050*	0.7263*	0.6419*	0.5981*	0.6399*	0.6501*	0.5546*
me1_stmi_2v	0.7625*	0.7772*	0.7249*	0.7517*	0.7233*	0.7939*	0.5932*
stmi_s_v	0.1377	0.1647	-0.0473	0.3025	-0.0402	0.2957	-0.1194
stmi_s_2_v	-0.1722	-0.1004	-0.2357	-0.1655	-0.2274	-0.1687	-0.2471
pog1_pog_h	0.3808	0.3838	0.4128	0.2763	0.4169	0.3070	0.3194
pog1_pog_2_h	0.0569	-0.0053	0.1821	-0.0951	0.1834	-0.0997	0.1541
me1_me_h	-0.3158	-0.4659*	-0.0883	-0.3036	-0.0864	-0.3188	-0.0981
me1_me_2_h	-0.0497	-0.0738	0.1331	-0.0899	0.1366	-0.0795	0.0850
gn1_gn_h	-0.0106	-0.0896	0.1645	-0.1036	0.1656	-0.1060	0.1074
gn1_gn_2_h	-0.0424	-0.1080	0.0236	-0.1849	0.0246	-0.2053	-0.0109
li_me1_h	0.5624*	0.6325*	0.1857	0.6651*	0.1796	0.6571*	0.0861
li_me1_2_h	0.3111	0.2906	0.0538	0.3557	0.0398	0.2780	-0.0188

	in_v	b_h	b_v	pog_h	pog_v	gn_h	gn_v
in_v	1.0000						
b_h	0.1152	1.0000					
b_v	0.8909*	0.2142	1.0000				
pog_h	0.1079	0.9904*	0.2156	1.0000			
pog_v	0.8907*	0.3002	0.9464*	0.3044	1.0000		
gn_h	0.0899	0.9844*	0.2006	0.9979*	0.2955	1.0000	
gn_v	0.9047*	0.2812	0.9540*	0.2740	0.9570*	0.2581	1.0000
me_h	0.0570	0.9747*	0.1643	0.9864*	0.2709	0.9935*	0.2263
me_v	0.9099*	0.2692	0.9523*	0.2602	0.9472*	0.2418	0.9986*
stms_h	0.4679*	0.8516*	0.5515*	0.8178*	0.5948*	0.7959*	0.6052*
stms_v	0.8042*	0.1965	0.7424*	0.1833	0.7186*	0.1523	0.7824*
stmi_h	0.3550	0.9338*	0.4228*	0.9157*	0.4805*	0.9024*	0.4756*
stmi_v	0.8670*	0.0435	0.8749*	0.0189	0.8646*	-0.0023	0.8810*
li_h	0.3309	0.9628*	0.4084	0.9506*	0.4663*	0.9420*	0.4660*
li_v	0.8254*	-0.0355	0.8499*	-0.0666	0.8039*	-0.0899	0.8090*
si_h	0.1601	0.9813*	0.2473	0.9801*	0.3227	0.9772*	0.3153
si_v	0.8998*	0.1701	0.9125*	0.1449	0.9228*	0.1266	0.9403*
pog1_h	0.1552	0.9837*	0.2469	0.9896*	0.3220	0.9877*	0.2984
pog1_v	0.8906*	0.2374	0.8947*	0.2244	0.9273*	0.2088	0.9061*
gn1_h	0.0847	0.9829*	0.1703	0.9888*	0.2609	0.9893*	0.2214
gn1_v	0.9179*	0.3221	0.9309*	0.3086	0.9403*	0.2896	0.9750*
me1_h	-0.0388	0.9073*	0.0310	0.9130*	0.1503	0.9202*	0.0717
me1_v	0.9135*	0.3312	0.9343*	0.3191	0.9325*	0.3000	0.9776*
n_h_d2	-0.0003	-0.2384	0.0585	-0.2695	0.0327	-0.2877	0.0036
n_v_d2	-0.0192	-0.1290	-0.1319	-0.1418	-0.1014	-0.1587	-0.1111
lit_h_d2	-0.0113	0.3309	0.0656	0.3815	0.1563	0.4029	0.0445
lit_v_d2	0.4335*	-0.0956	0.3630	-0.1405	0.4215	-0.1579	0.3941
lia_h_d2	0.0204	0.3392	0.0897	0.3862	0.1760	0.4099	0.0716
lia_v_d2	0.4526*	-0.1861	0.4283*	-0.2404	0.4473*	-0.2612	0.4369*
in_h_d2	-0.3293	0.2433	-0.1109	0.3032	-0.1202	0.3208	-0.2168
in_v_d2	0.5256*	-0.2098	0.4091	-0.2766	0.4252*	-0.2891	0.4716*
b_h_d2	-0.2174	0.1397	-0.0949	0.1855	-0.0802	0.2037	-0.1596
b_v_d2	0.4583*	0.1812	0.6238*	0.1724	0.6065*	0.1576	0.5618*
pog_h_d2	-0.3299	0.1165	-0.2489	0.1425	-0.2671	0.1539	-0.3222
pog_v_d2	0.1820	0.2808	0.2044	0.2633	0.3190	0.2512	0.1432
gn_h_d2	-0.3287	0.1317	-0.2471	0.1614	-0.2648	0.1755	-0.3217
gn_v_d2	0.3019	-0.1373	0.3646	-0.1510	0.3829	-0.1555	0.3853
me_h_d2	-0.2584	0.2054	-0.1701	0.2277	-0.1717	0.2456	-0.2345
me_v_d2	0.3169	-0.1708	0.3459	-0.1916	0.3521	-0.1986	0.3718
stms_h_d2	0.5944*	0.0952	0.5730*	0.0596	0.5202*	0.0300	0.5177*
stms_v_d2	-0.0624	0.0745	-0.2064	0.0621	-0.1691	0.0441	-0.1319
stmi_h_d2	0.0685	0.1870	0.1310	0.1979	0.1440	0.2121	0.1629

stmi_v_d2	0.3404	-0.0623	0.3924	-0.0878	0.3996	-0.0911	0.3345
li_h_d2	0.0167	0.3411	0.0682	0.3854	0.1502	0.4007	0.1303
li_v_d2	0.3645	-0.1180	0.4439*	-0.1364	0.4101	-0.1453	0.3351
si_h_d2	-0.1527	0.3296	-0.0375	0.3680	-0.0393	0.3804	-0.0846
si_v_d2	0.3909	0.0896	0.4301*	0.0733	0.5477*	0.0769	0.4898*
pog1_h_d2	-0.2141	0.1929	-0.1148	0.2333	-0.1431	0.2431	-0.1870
pog1_v_d2	-0.0373	-0.1975	0.0637	-0.1850	0.1371	-0.1756	-0.0157
gn1_h_d2	-0.3093	0.1869	-0.2173	0.2191	-0.2254	0.2299	-0.2915
gn1_v_d2	0.2271	-0.0633	0.2808	-0.0881	0.2913	-0.0925	0.2780
me1_h_d2	-0.3962	0.0491	-0.3483	0.0701	-0.4077	0.0743	-0.4264*
me1_v_d2	0.3138	-0.1312	0.3505	-0.1563	0.3482	-0.1615	0.3720
me1_stmi_v	0.5989*	0.5675*	0.6279*	0.5766*	0.6377*	0.5679*	0.7015*
me1_stmi_2v	0.7540*	0.6134*	0.8088*	0.6145*	0.8262*	0.6053*	0.8281*
stmi_s_v	0.3053	-0.1851	0.3968	-0.2062	0.4114	-0.1990	0.3548
stmi_s_2_v	-0.1307	-0.2291	-0.2461	-0.2421	-0.1636	-0.2434	-0.0925
pog1_pog_h	0.3538	0.3609	0.2926	0.3403	0.2393	0.3407	0.2717
pog1_pog_2_h	-0.0410	0.1715	-0.1068	0.1318	-0.1350	0.1385	-0.1470
me1_me_h	-0.2497	-0.0589	-0.3368	-0.0735	-0.2894	-0.0725	-0.3861
me1_me_2_h	-0.0008	0.1551	-0.0543	0.1351	0.1030	0.1560	-0.0749
gn1_gn_h	-0.0189	0.1718	-0.1691	0.1227	-0.1805	0.1122	-0.2016
gn1_gn_2_h	-0.1135	0.0258	-0.2484	-0.0156	-0.2839	-0.0141	-0.2873
li_me1_h	0.6139*	0.0192	0.6211*	-0.0109	0.5099*	-0.0374	0.6457*
li_me1_2_h	0.2602	-0.0960	0.2928	-0.1294	0.0664	-0.1620	0.2077

	me_h	me_v	stms_h	stms_v	stmi_h	stmi_v	li_h
me_h	1.0000						
me_v	0.2069	1.0000					
stms_h	0.7742*	0.6022*	1.0000				
stms_v	0.0971	0.8004*	0.4900*	1.0000			
stmi_h	0.8905*	0.4686*	0.9476*	0.3491	1.0000		
stmi_v	-0.0235	0.8834*	0.4787*	0.7644*	0.2728	1.0000	
li_h	0.9271*	0.4560*	0.9186*	0.3456	0.9785*	0.2221	1.0000
li_v	-0.1113	0.8141*	0.4430*	0.7259*	0.2104	0.9602*	0.1486
si_h	0.9636*	0.3042	0.8301*	0.1977	0.9332*	0.0249	0.9706*
si_v	0.0985	0.9393*	0.5297*	0.7998*	0.3501	0.9410*	0.3514
pog1_h	0.9745*	0.2868	0.8198*	0.2172	0.9263*	0.0243	0.9629*
pog1_v	0.1813	0.9038*	0.5443*	0.8633*	0.3958	0.8988*	0.3984
gn1_h	0.9817*	0.2082	0.7824*	0.1626	0.8950*	-0.0315	0.9384*
gn1_v	0.2532	0.9753*	0.6359*	0.8580*	0.5002*	0.8877*	0.5027*
me1_h	0.9281*	0.0554	0.6819*	0.0182	0.7809*	-0.0873	0.8264*
me1_v	0.2612	0.9787*	0.6453*	0.8530*	0.5189*	0.8661*	0.5195*
n_h_d2	-0.2888	0.0106	-0.0749	0.2019	-0.2168	0.3066	-0.2662
n_v_d2	-0.1536	-0.1114	-0.1606	0.0022	-0.1118	0.0048	-0.1785
lit_h_d2	0.4049	0.0242	0.2023	0.0618	0.2318	-0.1236	0.3250
lit_v_d2	-0.1475	0.3947	0.1967	0.3343	0.0610	0.6108*	0.0108
lia_h_d2	0.4169	0.0499	0.2218	0.0449	0.2498	-0.1015	0.3464
lia_v_d2	-0.2581	0.4384*	0.1633	0.3717	-0.0122	0.6813*	-0.0759
in_h_d2	0.3178	-0.2290	0.0922	-0.1693	0.1423	-0.3379	0.1872
in_v_d2	-0.2807	0.4716*	0.0456	0.3766	-0.0979	0.6462*	-0.1049
b_h_d2	0.2034	-0.1742	-0.0046	-0.0686	0.0121	-0.2806	0.0955
b_v_d2	0.1422	0.5554*	0.4053	0.3086	0.3351	0.6361*	0.2748
pog_h_d2	0.1485	-0.3238	-0.1086	-0.0552	-0.0800	-0.4133	0.0256
pog_v_d2	0.2509	0.1313	0.2951	0.0988	0.2853	0.3118	0.2222
gn_h_d2	0.1733	-0.3248	-0.1051	-0.0827	-0.0642	-0.4295*	0.0438
gn_v_d2	-0.1475	0.3770	0.0901	0.2116	0.0023	0.5564*	-0.0687
me_h_d2	0.2592	-0.2408	-0.0292	-0.0738	0.0338	-0.3743	0.1362
me_v_d2	-0.1917	0.3689	0.0797	0.2418	-0.0221	0.5615*	-0.0940
stms_h_d2	-0.0080	0.5301*	0.4404*	0.7053*	0.2705	0.5985*	0.2236
stms_v_d2	0.0470	-0.1113	0.0490	0.2611	0.0522	0.0455	0.0029
stmi_h_d2	0.2499	0.1509	0.2311	0.1172	0.2522	0.0427	0.2290
stmi_v_d2	-0.0606	0.3235	0.2241	0.1308	0.0968	0.6456*	0.0098
li_h_d2	0.4045	0.1157	0.2111	0.0974	0.2765	-0.1306	0.3491
li_v_d2	-0.1263	0.3272	0.2136	0.1894	0.0705	0.6577*	-0.0282
si_h_d2	0.3682	-0.0921	0.1150	0.0661	0.1748	-0.3105	0.2788
si_v_d2	0.0933	0.4712*	0.2867	0.1806	0.1816	0.6043*	0.1619
pog1_h_d2	0.2348	-0.1888	-0.0057	0.0125	0.0471	-0.3440	0.1334
pog1_v_d2	-0.1564	-0.0289	-0.1726	0.0293	-0.2806	0.2400	-0.2620

gn1_h_d2	0.2287	-0.2944	-0.0564	-0.0789	-0.0056	-0.4049	0.0930
gn1_v_d2	-0.0820	0.2708	0.1588	0.1708	0.0235	0.5368*	-0.0190
me1_h_d2	0.0673	-0.4169	-0.1381	-0.1399	-0.1524	-0.4141	-0.0629
me1_v_d2	-0.1546	0.3671	0.1430	0.2363	0.0178	0.5776*	-0.0388
me1_stmi_v	0.5223*	0.7004*	0.5960*	0.6178*	0.6243*	0.3377	0.6911*
me1_stmi_2v	0.5787*	0.8205*	0.7411*	0.6407*	0.7291*	0.5966*	0.7566*
stmi_s_v	-0.1609	0.3353	0.1095	-0.1043	-0.0271	0.5615*	-0.1010
stmi_s_2_v	-0.2115	-0.0844	-0.1909	-0.1957	-0.2366	-0.0285	-0.2983
pog1_pog_h	0.3244	0.2803	0.3469	0.2965	0.4434*	0.0434	0.4685*
pog1_pog_2_h	0.1296	-0.1397	0.0420	0.0885	0.0793	-0.2236	0.1696
me1_me_h	-0.0677	-0.3802	-0.1507	-0.1993	-0.1826	-0.1738	-0.1542
me1_me_2_h	0.1943	-0.0939	0.0158	-0.1065	0.0980	-0.0544	0.1313
gn1_gn_h	0.1039	-0.1836	0.0555	0.0982	0.1164	-0.1988	0.1504
gn1_gn_2_h	-0.0235	-0.2737	-0.0898	0.0577	-0.0580	-0.2885	0.0093
li_me1_h	-0.0758	0.6574*	0.3365	0.5394*	0.2640	0.5180*	0.2209
li_me1_2_h	-0.2140	0.2380	0.1255	0.4056	-0.0025	0.2076	0.0072

	li_v	si_h	si_v	pog1_h	pog1_v	gn1_h	gn1_v
li_v	1.0000						
si_h	-0.0626	1.0000					
si_v	0.8884*	0.1749	1.0000				
pog1_h	-0.0570	0.9926*	0.1625	1.0000			
pog1_v	0.8536*	0.2332	0.9556*	0.2489	1.0000		
gn1_h	-0.1109	0.9793*	0.1097	0.9922*	0.2071	1.0000	
gn1_v	0.8182*	0.3441	0.9578*	0.3372	0.9516*	0.2705	1.0000
me1_h	-0.1649	0.8842*	0.0238	0.9063*	0.1282	0.9444*	0.1358
me1_v	0.7987*	0.3643	0.9376*	0.3531	0.9286*	0.2784	0.9958*
n_h_d2	0.3520	-0.3393	0.1730	-0.3014	0.2223	-0.2619	0.0231
n_v_d2	-0.0118	-0.2120	-0.0874	-0.1869	-0.0616	-0.1757	-0.0950
lit_h_d2	-0.0576	0.3434	0.0651	0.3625	0.1355	0.3944	0.0757
lit_v_d2	0.5737*	-0.1568	0.5573*	-0.1808	0.4763*	-0.1864	0.4144
lia_h_d2	-0.0366	0.3588	0.0910	0.3717	0.1440	0.4009	0.0966
lia_v_d2	0.6637*	-0.2575	0.5950*	-0.2785	0.5030*	-0.2947	0.4375*
in_h_d2	-0.2214	0.2464	-0.2642	0.2801	-0.1815	0.3043	-0.2060
in_v_d2	0.5626*	-0.2461	0.6354*	-0.2774	0.5221*	-0.2895	0.4761*
b_h_d2	-0.1513	0.1340	-0.1521	0.1638	-0.0736	0.1968	-0.1375
b_v_d2	0.5486*	0.1636	0.5863*	0.1483	0.5091*	0.1113	0.5013*
pog_h_d2	-0.2825	0.0873	-0.2637	0.1342	-0.1509	0.1927	-0.2497
pog_v_d2	0.2511	0.1815	0.2446	0.2254	0.3091	0.2576	0.1967
gn_h_d2	-0.3007	0.1095	-0.2720	0.1536	-0.1665	0.2111	-0.2574
gn_v_d2	0.4389*	-0.1793	0.4068	-0.1896	0.3372	-0.2183	0.3449
me_h_d2	-0.2581	0.1897	-0.2026	0.2271	-0.0944	0.2820	-0.1877
me_v_d2	0.4540*	-0.2098	0.4041	-0.2198	0.3413	-0.2468	0.3430
stms_h_d2	0.7130*	0.0621	0.5995*	0.0812	0.6320*	0.0440	0.6020*
stms_v_d2	-0.0312	-0.0221	-0.0766	0.0193	0.0025	0.0517	-0.0652
stmi_h_d2	0.1213	0.1818	0.0870	0.1843	0.1127	0.1739	0.1268
stmi_v_d2	0.6018*	-0.1353	0.4677*	-0.1266	0.3998	-0.1258	0.3191
li_h_d2	-0.1097	0.3668	0.0712	0.3641	0.1057	0.3780	0.1314
li_v_d2	0.6747*	-0.1969	0.4670*	-0.1758	0.4249*	-0.1832	0.3305
si_h_d2	-0.2091	0.3358	-0.1204	0.3749	0.0074	0.4050	-0.0314
si_v_d2	0.4676*	0.0703	0.5884*	0.0382	0.4814*	0.0342	0.4657*
pog1_h_d2	-0.2170	0.1832	-0.1949	0.2279	-0.0805	0.2662	-0.1434
pog1_v_d2	0.2383	-0.2961	0.2003	-0.2446	0.2553	-0.1746	0.0108
gn1_h_d2	-0.2824	0.1550	-0.2456	0.2017	-0.1346	0.2634	-0.2337
gn1_v_d2	0.4465*	-0.1314	0.3975	-0.1316	0.3197	-0.1319	0.2906
me1_h_d2	-0.2805	0.0072	-0.3396	0.0564	-0.2579	0.1252	-0.3581
me1_v_d2	0.4800*	-0.1646	0.4334*	-0.1824	0.3500	-0.2081	0.3624
me1_stmi_v	0.2622	0.6537*	0.5485*	0.6336*	0.5863*	0.5649*	0.7270*
me1_stmi_2v	0.5299*	0.6612*	0.7453*	0.6560*	0.7713*	0.5970*	0.8472*
stmi_s_v	0.5495*	-0.2153	0.4251*	-0.2412	0.2784	-0.2573	0.2681
stmi_s_2_v	-0.0749	-0.2831	-0.1490	-0.3093	-0.2504	-0.3024	-0.1830
pog1_pog_h	0.0357	0.4817*	0.1741	0.4719*	0.2518	0.4263*	0.3128
pog1_pog_2_h	-0.1856	0.2225	-0.0730	0.2319	0.0193	0.2528	-0.0326
me1_me_h	-0.1576	-0.0925	-0.1878	-0.0610	-0.1196	0.0226	-0.2829
me1_me_2_h	-0.0914	0.1640	0.0591	0.1727	0.1621	0.2361	0.0003
gn1_gn_h	-0.1590	0.1954	-0.0915	0.2135	0.0269	0.2563	-0.0763
gn1_gn_2_h	-0.2205	0.0650	-0.1811	0.0802	-0.0818	0.1139	-0.1595

li_me1_h	0.5311*	0.0722	0.5392*	0.0211	0.4360*	-0.0852	0.5953*
li_me1_2_h	0.3516	-0.0936	0.2093	-0.0975	0.1630	-0.1508	0.2226

	me1_h	me1_v	n_h_d2	n_v_d2	lit_h_d2	lit_v_d2	lia_h_d2
me1_h	1.0000						
me1_v	0.1253	1.0000					
n_h_d2	-0.1653	-0.0225	1.0000				
n_v_d2	-0.2453	-0.1122	0.3399	1.0000			
lit_h_d2	0.3613	0.0704	-0.0614	-0.1894	1.0000		
lit_v_d2	-0.1675	0.3761	0.2243	0.0328	-0.1475	1.0000	
lia_h_d2	0.3681	0.0918	-0.0933	-0.2158	0.9933*	-0.1388	1.0000
lia_v_d2	-0.2962	0.4004	0.3535	0.0741	-0.2413	0.9535*	-0.2329
in_h_d2	0.2721	-0.1902	-0.0494	-0.2015	0.8005*	-0.3627	0.7750*
in_v_d2	-0.2786	0.4327*	0.2737	0.1080	-0.3933	0.7213*	-0.3540
b_h_d2	0.1495	-0.1345	0.0702	-0.0076	0.8911*	-0.3689	0.8773*
b_v_d2	0.0752	0.4893*	0.2324	-0.0305	-0.1646	0.6017*	-0.1587
pog_h_d2	0.1996	-0.2612	0.0852	-0.0822	0.7448*	-0.4118	0.7169*
pog_v_d2	0.3320	0.1445	0.2478	0.2823	-0.1587	0.4234*	-0.1790
gn_h_d2	0.2129	-0.2671	0.0340	-0.1015	0.7676*	-0.4203	0.7452*
gn_v_d2	-0.2239	0.3252	0.2326	0.0580	-0.4242*	0.6377*	-0.4164
me_h_d2	0.2761	-0.1965	0.0293	-0.1026	0.7818*	-0.3532	0.7708*
me_v_d2	-0.2310	0.3219	0.2397	-0.0245	-0.4849*	0.6432*	-0.4752*
stms_h_d2	-0.0616	0.5985*	0.1864	0.0922	0.2137	0.2273	0.2024
stms_v_d2	0.0872	-0.0959	0.2285	0.1746	-0.2662	0.3370	-0.3094
stmi_h_d2	0.0591	0.1433	-0.0953	0.0437	0.4897*	-0.0809	0.4992*
stmi_v_d2	-0.0030	0.2772	0.3894	0.0298	-0.3353	0.7008*	-0.3092
li_h_d2	0.2704	0.1353	-0.2026	-0.1095	0.8414*	-0.1343	0.8386*
li_v_d2	-0.0936	0.2951	0.3949	0.0675	-0.2764	0.6986*	-0.2637
si_h_d2	0.3359	-0.0250	-0.0575	-0.0978	0.8237*	-0.4959*	0.8037*
si_v_d2	0.1070	0.4272*	0.1346	-0.1959	-0.0963	0.7225*	-0.0675
pog1_h_d2	0.2142	-0.1425	0.0405	-0.0012	0.7940*	-0.4581*	0.7695*
pog1_v_d2	0.0237	-0.0601	0.5427*	-0.1053	0.1108	0.4684*	0.0780
gn1_h_d2	0.2709	-0.2481	0.0678	-0.0418	0.7703*	-0.3778	0.7432*
gn1_v_d2	-0.0362	0.2518	0.2344	-0.1629	-0.3738	0.6916*	-0.3588
me1_h_d2	0.2305	-0.3785	0.1667	-0.1730	0.4967*	-0.4311*	0.4769*
me1_v_d2	-0.1670	0.3434	0.1876	-0.1601	-0.4239*	0.6612*	-0.4059
me1_stmi_v	0.3488	0.7629*	-0.4389*	-0.2176	0.2923	-0.0818	0.3041
me1_stmi_2v	0.4492*	0.8603*	-0.2375	-0.1249	0.2456	0.1574	0.2705
stmi_s_v	-0.1580	0.2412	0.2138	0.0046	-0.2699	0.5131*	-0.2142
stmi_s_2_v	-0.2850	-0.2000	-0.0336	0.2211	-0.3206	0.1721	-0.3044
pog1_pog_h	0.3285	0.3529	-0.3193	-0.3531	0.0316	-0.3212	0.0627
pog1_pog_2_h	0.2963	-0.0287	-0.1468	-0.4825*	0.1317	-0.2837	0.1427
me1_me_h	0.3085	-0.3317	0.2951	-0.2648	-0.0662	-0.0721	-0.0787
me1_me_2_h	0.3852	-0.0358	0.1069	-0.1705	0.2412	0.1280	0.2441
gn1_gn_h	0.3351	-0.0913	0.1223	-0.1450	0.0169	-0.2229	0.0146
gn1_gn_2_h	0.1644	-0.1621	0.0223	-0.2791	0.1263	-0.3500	0.1321
li_me1_h	-0.3667	0.6413*	-0.1535	0.1299	-0.0889	0.3080	-0.0652
li_me1_2_h	-0.3005	0.2505	0.1038	0.0176	0.0048	-0.0419	0.0118

	lia_v_d2	in_h_d2	in_v_d2	b_h_d2	b_v_d2	pog_h_d2	pog_v_d2
lia_v_d2	1.0000						
in_h_d2	-0.4037	1.0000					
in_v_d2	0.7946*	-0.7248*	1.0000				
b_h_d2	-0.3926	0.8686*	-0.5367*	1.0000			
b_v_d2	0.6472*	-0.2296	0.5165*	-0.3615	1.0000		
pog_h_d2	-0.4423*	0.7501*	-0.5082*	0.8605*	-0.5162*	1.0000	
pog_v_d2	0.4280*	-0.1656	0.3182	-0.2895	0.5447*	-0.2532	1.0000
gn_h_d2	-0.4583*	0.7633*	-0.5124*	0.8736*	-0.4996*	0.9955*	-0.2647
gn_v_d2	0.7439*	-0.3752	0.6067*	-0.5326*	0.6405*	-0.6191*	0.4434*
me_h_d2	-0.4163	0.7345*	-0.4649*	0.8528*	-0.4278*	0.9557*	-0.2490
me_v_d2	0.7481*	-0.4370*	0.6269*	-0.5984*	0.5791*	-0.6245*	0.3942
stms_h_d2	0.2931	0.1048	0.1789	0.2064	0.1989	0.1506	0.1180
stms_v_d2	0.3045	-0.2645	0.2116	-0.3279	0.0954	-0.0760	0.2760
stmi_h_d2	-0.0800	0.4097	-0.1655	0.4926*	-0.0376	0.2879	-0.2892
stmi_v_d2	0.7365*	-0.3817	0.6134*	-0.4827*	0.7336*	-0.5668*	0.5753*
li_h_d2	-0.2100	0.6655*	-0.3174	0.7216*	-0.1908	0.5917*	-0.2630

li_v_d2	0.7449*	-0.2631	0.5214*	-0.3708	0.7142*	-0.4771*	0.5521*
si_h_d2	-0.5330*	0.8023*	-0.5836*	0.8928*	-0.4550*	0.9196*	-0.2802
si_v_d2	0.7158*	-0.3034	0.6547*	-0.4014	0.7114*	-0.5359*	0.4988*
pog1_h_d2	-0.4944*	0.8016*	-0.5796*	0.9089*	-0.4475*	0.9559*	-0.2952
pog1_v_d2	0.4774*	0.0006	0.3559	0.0058	0.3837	0.0986	0.4949*
gn1_h_d2	-0.4385*	0.7500*	-0.5145*	0.8561*	-0.4318*	0.9769*	-0.1985
gn1_v_d2	0.7562*	-0.3634	0.6311*	-0.5396*	0.5989*	-0.5164*	0.5024*
me1_h_d2	-0.4747*	0.5415*	-0.4837*	0.6299*	-0.5282*	0.8617*	-0.2796
me1_v_d2	0.7467*	-0.3970	0.6179*	-0.5699*	0.5756*	-0.6061*	0.3351
me1_stmi_v	-0.1272	0.0788	-0.0210	0.1098	0.0988	0.0425	-0.1311
me1_stmi_2v	0.0960	-0.0312	0.1717	0.0052	0.4177	-0.1166	0.1658
stmi_s_v	0.5739*	-0.3039	0.5135*	-0.3449	0.5852*	-0.5666*	0.3541
stmi_s_2_v	0.1952	-0.2928	0.1919	-0.2510	-0.1069	-0.2359	-0.0444
pog1_pog_h	-0.3477	-0.0275	-0.1178	-0.0665	-0.0869	0.0036	-0.1406
pog1_pog_2_h	-0.3021	0.0798	-0.0908	0.0849	-0.3586	0.3741	-0.0993
me1_me_h	-0.1343	-0.0828	-0.0295	-0.1192	-0.1619	0.1555	0.2487
me1_me_2_h	0.0341	0.0722	0.1013	0.0543	0.0768	0.1349	0.4053
gn1_gn_h	-0.2762	-0.0526	-0.0560	-0.0092	-0.2849	0.2927	0.0895
gn1_gn_2_h	-0.3440	0.1081	-0.1199	0.1707	-0.4744*	0.4378*	-0.1294
li_me1_h	0.3876	-0.1620	0.3092	-0.1011	0.3237	-0.3034	-0.2079
li_me1_2_h	0.0384	0.0574	-0.0051	0.1898	-0.0982	0.2716	-0.3938

	gn_h_d2	gn_v_d2	me_h_d2	me_v_d2	stms_h~2	stms_v~2	stmi_h~2
gn_h_d2	1.0000						
gn_v_d2	-0.6323*	1.0000					
me_h_d2	0.9662*	-0.6152*	1.0000				
me_v_d2	-0.6435*	0.9828*	-0.6308*	1.0000			
stms_h_d2	0.1396	-0.0128	0.1111	-0.0069	1.0000		
stms_v_d2	-0.0938	0.2793	-0.1180	0.3297	0.0123	1.0000	
stmi_h_d2	0.3324	-0.1593	0.3875	-0.2069	0.4260*	-0.0516	1.0000
stmi_v_d2	-0.5703*	0.7009*	-0.5137*	0.6959*	0.1233	0.2090	-0.1412
li_h_d2	0.6206*	-0.2593	0.6419*	-0.3103	0.1701	-0.1799	0.6619*
li_v_d2	-0.4823*	0.6394*	-0.4485*	0.6312*	0.2923	0.1719	-0.0392
si_h_d2	0.9231*	-0.6160*	0.9155*	-0.6430*	0.2095	-0.2510	0.4207
si_v_d2	-0.5315*	0.7597*	-0.4752*	0.7346*	-0.0170	0.0507	-0.1511
pog1_h_d2	0.9617*	-0.6413*	0.9503*	-0.6692*	0.2168	-0.1525	0.4389*
pog1_v_d2	0.0805	0.3245	0.0741	0.3231	-0.0240	0.2694	-0.1721
gn1_h_d2	0.9821*	-0.6452*	0.9698*	-0.6626*	0.1340	-0.0712	0.3440
gn1_v_d2	-0.5321*	0.8763*	-0.5495*	0.8970*	0.0079	0.3553	-0.2733
me1_h_d2	0.8510*	-0.6886*	0.7916*	-0.6426*	0.0316	0.0438	0.0598
me1_v_d2	-0.6224*	0.9425*	-0.6228*	0.9695*	0.0446	0.2708	-0.1899
me1_stmi_v	0.0525	-0.1073	0.1139	-0.1200	0.3529	-0.2394	0.2146
me1_stmi_2v	-0.1007	-0.0103	0.0108	-0.0413	0.4512*	-0.2168	0.2057
stmi_s_v	-0.5563*	0.5866*	-0.4825*	0.5557*	0.0181	-0.2649	-0.0845
stmi_s_2_v	-0.2281	0.2802	-0.2090	0.2900	-0.2450	0.3670	0.0438
pog1_pog_h	0.0148	-0.3149	0.0886	-0.2630	0.1654	-0.2544	-0.0083
pog1_pog_2_h	0.3606	-0.3864	0.3511	-0.2984	0.0411	-0.0720	-0.2400
me1_me_h	0.1279	-0.2232	0.0777	-0.1293	-0.1447	0.1137	-0.4801*
me1_me_2_h	0.1367	-0.0015	0.2309	0.0071	-0.0593	-0.1189	-0.0902
gn1_gn_h	0.2750	-0.4553*	0.2924	-0.3640	0.1007	0.0602	-0.2204
gn1_gn_2_h	0.4225	-0.4369*	0.3790	-0.3494	0.1174	-0.0206	-0.1559
li_me1_h	-0.2964	0.2743	-0.2531	0.2449	0.4760*	-0.1462	0.2759
li_me1_2_h	0.2538	-0.2871	0.2294	-0.2465	0.4785*	-0.0279	0.0423

	stmi_v~2	li_h_d2	li_v_d2	si_h_d2	si_v_d2	pog1_h~2	pog1_v~2
stmi_v_d2	1.0000						
li_h_d2	-0.4312*	1.0000					
li_v_d2	0.9532*	-0.3856	1.0000				
si_h_d2	-0.6350*	0.7461*	-0.5393*	1.0000			
si_v_d2	0.7513*	-0.0615	0.6223*	-0.5038*	1.0000		
pog1_h_d2	-0.5920*	0.6926*	-0.4789*	0.9634*	-0.5731*	1.0000	
pog1_v_d2	0.5535*	-0.1093	0.5428*	-0.0995	0.4841*	-0.0386	1.0000
gn1_h_d2	-0.5234*	0.6328*	-0.4319*	0.9165*	-0.5099*	0.9676*	0.1246
gn1_v_d2	0.8207*	-0.3390	0.7456*	-0.6064*	0.8103*	-0.6260*	0.5143*
me1_h_d2	-0.4132	0.2768	-0.3597	0.6963*	-0.5608*	0.7818*	0.1675
me1_v_d2	0.7318*	-0.2945	0.6684*	-0.6305*	0.7768*	-0.6715*	0.3244

me1_stmi_v	-0.3129	0.4237*	-0.2948	0.3545	0.0229	0.1766	-0.4237*
me1_stmi_2v	0.1238	0.2408	0.1363	0.1688	0.2514	0.0370	-0.1553
stmi_s_v	0.8278*	-0.3265	0.7713*	-0.5638*	0.7002*	-0.5465*	0.3327
stmi_s_2_v	0.0659	-0.0912	-0.0306	-0.3394	0.0916	-0.2414	-0.0586
pog1_pog_h	-0.2893	0.0180	-0.3136	0.1954	-0.1997	0.0597	-0.4658*
pog1_pog_2_h	-0.3448	-0.0296	-0.3883	0.3271	-0.2371	0.2246	-0.0715
me1_me_h	0.1469	-0.3089	0.0719	-0.0405	0.0484	-0.0261	0.4633*
me1_me_2_h	0.1155	0.1219	0.0318	0.1275	0.3123	0.0491	0.3737
gn1_gn_h	-0.2532	-0.0802	-0.2845	0.2379	-0.2759	0.2017	-0.0262
gn1_gn_2_h	-0.4087	0.0012	-0.4290*	0.3529	-0.3595	0.2990	-0.1163
li_me1_h	0.0214	0.1084	0.1156	-0.1211	0.0821	-0.1506	-0.4738*
li_me1_2_h	-0.1954	-0.0843	-0.0571	0.2250	-0.4651*	0.3080	-0.2979

	gn1_h_d2	gn1_v_d2	me1_h_d2	me1_v_d2	me1_s~_v	me1_s~2v	stmi_s_v
gn1_h_d2	1.0000						
gn1_v_d2	-0.5490*	1.0000					
me1_h_d2	0.8540*	-0.4368*	1.0000				
me1_v_d2	-0.6543*	0.9395*	-0.5945*	1.0000			
me1_stmi_v	0.0564	-0.2202	-0.1772	-0.1004	1.0000		
me1_stmi_2v	-0.0421	-0.0296	-0.2281	-0.0065	0.8485*	1.0000	
stmi_s_v	-0.5232*	0.6089*	-0.4592*	0.5876*	-0.2720	0.0979	1.0000
stmi_s_2_v	-0.2198	0.1595	-0.1376	0.1905	-0.3398	-0.3998	0.2071
pog1_pog_h	-0.0238	-0.3204	-0.0609	-0.2350	0.6083*	0.5221*	-0.3136
pog1_pog_2_h	0.2726	-0.1808	0.3566	-0.2272	0.2351	0.0789	-0.4585*
me1_me_h	0.1418	0.1125	0.4458*	-0.0527	-0.3999	-0.2749	-0.0122
me1_me_2_h	0.1535	0.0613	-0.0069	0.0270	0.0030	0.0844	0.0527
gn1_gn_h	0.2704	-0.2852	0.3594	-0.3465	0.0852	0.0558	-0.4327*
gn1_gn_2_h	0.3286	-0.2733	0.4169	-0.3008	0.0679	-0.1130	-0.5190*
li_me1_h	-0.3155	0.0312	-0.5032*	0.2251	0.5377*	0.4719*	0.1067
li_me1_2_h	0.2297	-0.2547	0.3497	-0.2259	0.2032	0.1673	-0.2003

	s~_s_2_v	pog1~g_h	pog1_p..	me1_me_h	me~e_2_h	gn1_gn_h	gn~n_2_h
stmi_s_2_v	1.0000						
pog1_pog_h	-0.5390*	1.0000					
pog1_pog_2_h	-0.4989*	0.7092*	1.0000				
me1_me_h	-0.2235	0.0515	0.4630*	1.0000			
me1_me_2_h	-0.3436	0.3010	0.4642*	0.5360*	1.0000		
gn1_gn_h	-0.4464*	0.6446*	0.8025*	0.6328*	0.5728*	1.0000	
gn1_gn_2_h	-0.4188	0.6209*	0.9229*	0.5008*	0.4465*	0.8674*	1.0000
li_me1_h	0.0008	0.2051	-0.2330	-0.7891*	-0.4502*	-0.3319	-0.2694
li_me1_2_h	-0.0980	0.1555	0.1286	-0.2587	-0.5684*	0.0466	0.1360

	li_me1_h	li_m~2_h
li_me1_h	1.0000	
li_me1_2_h	0.5324*	1.0000

Note: The two shaded variables are the same variable, names are abbreviated in abbreviated in the horizontal.