

















. summarize ageyears BMIkgm_n sbpmmhg dbpmmhg ugcragg_n uacrmgg_n upcrmgg_n usg_> n gfr_n creatugl_n bunmgdl_n creatmgdl_n glycemiasi_n hbgdl_n, detail

AGE (years)

Percentiles	Smallest			
1%	5	4		
5%	8	4		
10%	10	4	Obs	312
25%	17	5	Sum of Wgt.	312
50%	24		Mean	26.68269
Largest	Std. Dev.	14.44844		
75%	32	69		
90%	49	70	Variance	208.7575
95%	58	71	Skewness	.9439906
99%	69	77	Kurtosis	3.740819

BMI (kg/m²)

Percentiles	Smallest			
1%	10.56285	0		
5%	13.20018	0		
10%	14.1146	10.56285	Obs	290
25%	16.89624	11.2367	Sum of Wgt.	290
50%	19.93319		Mean	21.23138
Largest	Std. Dev.	7.0038		
75%	24.22145	39.54523		
90%	28.89664	49.60938	Variance	49.05322
95%	33.33333	61.22449	Skewness	1.753236
99%	49.60938	63.26531	Kurtosis	11.0602

SBP (mmHg)

Percentiles		Smallest		
1%	9	8		
5%	9	9		
10%	10	9	Obs	201
25%	11	9	Sum of Wgt.	201
50%	11		Mean	11.42786
Largest			Std. Dev.	1.336421
75%	12	14		
90%	13	15	Variance	1.78602
95%	14	15	Skewness	.3186903
99%	15	16	Kurtosis	3.250151

DBP (mmHg)

Percentiles		Smallest		
1%	5	4		
5%	6	5		
10%	6	5	Obs	201
25%	6	5	Sum of Wgt.	201
50%	7		Mean	7.094527
Largest			Std. Dev.	.9929853
75%	8	9		
90%	8	10	Variance	.9860199
95%	8	10	Skewness	.1787037
99%	10	11	Kurtosis	4.130733

UGCR (g/g)

Percentiles	Smallest			
1%	0	0		
5%	0	0		
10%	0	0	Obs	327
25%	0	0	Sum of Wgt.	327
50%	0		Mean	.0530973
Largest	Std. Dev.	.4555013		
75%	.0111732	.9345794		
90%	.0265306	1.315789	Variance	.2074814
95%	.045977	3.184713	Skewness	13.85904
99%	.9345794	7.373272	Kurtosis	212.3613

UACR (mg/g)

Percentiles	Smallest			
1%	2.264541	1.284553		
5%	2.902857	2.212634		
10%	3.74145	2.217795	Obs	324
25%	5.977987	2.264541	Sum of Wgt.	324
50%	13.28253		Mean	24.73155
Largest	Std. Dev.	35.67064		
75%	27.94813	208.2902		
90%	56.64122	209.7872	Variance	1272.394
95%	77.70492	233.7209	Skewness	4.133535
99%	208.2902	328.6486	Kurtosis	26.68751

UPCR (mg/g)

Percentiles Smallest

1%	11.22941	9.212985		
5%	17.01247	10.35513		
10%	21.30393	10.88977	Obs	323
25%	37.23641	11.22941	Sum of Wgt.	323
50%	69.10204		Mean	184.96
Largest	Std. Dev.	365.3178		
75%	167.3077	1920.784		
90%	401.6279	2716.279	Variance	133457.1
95%	656.5217	2804.145	Skewness	4.856734
99%	1920.784	2957.838	Kurtosis	30.84439

USG

Percentiles	Smallest			
1%	1.005	1.001		
5%	1.008	1.004		
10%	1.01	1.005	Obs	307
25%	1.011	1.005	Sum of Wgt.	307
50%	1.015		Mean	1.016274
Largest	Std. Dev.	.0059009		
75%	1.02	1.03		
90%	1.025	1.03	Variance	.0000348
95%	1.026	1.03	Skewness	.3383956
99%	1.03	1.035	Kurtosis	2.559198

GFR

Percentiles Smallest

1%	31.65795	10.85409		
5%	64.76591	20.45519		
10%	73.62174	31.65795	Obs	286
25%	94.91754	34.89279	Sum of Wgt.	286

50%	123.0369		Mean	122.7038
-----	----------	--	------	----------

Largest	Std. Dev.	44.23484		
---------	-----------	----------	--	--

75%	146.0028	241.192		
90%	170.6647	265.972	Variance	1956.721
95%	186.2326	358.9923	Skewness	1.505499
99%	265.972	407.8375	Kurtosis	10.89663

Creat U (g/l)

Percentiles Smallest

1%	.235	.155		
5%	.49	.185		
10%	.58	.221	Obs	326
25%	.835	.235	Sum of Wgt.	326

50%	1.359		Mean	1.84592
-----	-------	--	------	---------

Largest	Std. Dev.	1.376243		
---------	-----------	----------	--	--

75%	2.585	6.4535		
90%	3.8505	6.785	Variance	1.894044
95%	4.383	8.54	Skewness	1.61467
99%	6.4535	8.86	Kurtosis	6.572314

BUN (mg/dl)

Percentiles		Smallest		
1%	.03	.025		
5%	.04	.025		
10%	.05	.03	Obs	305
25%	.06	.03	Sum of Wgt.	305
50%	.075		Mean	.080541
Largest			Std. Dev.	.0417399
75%	.095	.21		
90%	.12	.25	Variance	.0017422
95%	.135	.315	Skewness	5.559692
99%	.21	.545	Kurtosis	55.60227

Creat (mg/dl)

Percentiles		Smallest		
1%	.23	.13		
5%	.31	.16		
10%	.362	.22	Obs	317
25%	.52	.23	Sum of Wgt.	317
50%	.67		Mean	.7333312
Largest			Std. Dev.	.4822367
75%	.86	1.945		
90%	1.09	2.11	Variance	.2325522
95%	1.27	2.12	Skewness	8.512614
99%	1.945	7.36	Kurtosis	114.1765

Glycemia (g/l)

Percentiles Smallest

1% .7 .6

5% .72 .62

10% .75 .66 Obs 322

25% .8 .7 Sum of Wgt. 322

50% .85 Mean .8533416

Largest Std. Dev. .0834919

75% .91 1.06

90% .96 1.08 Variance .0069709

95% .99 1.09 Skewness .1530377

99% 1.06 1.1 Kurtosis 3.020297

Hb (g/dl)

Percentiles Smallest

1% 5.9 5.1

5% 7 5.5

10% 7.5 5.7 Obs 318

25% 8.5 5.9 Sum of Wgt. 318

50% 11.2 Mean 11.12673

Largest Std. Dev. 2.914731

75% 13.5 16.9

90% 15.2 17 Variance 8.495656

95% 15.8 17.9 Skewness .1203603

99% 16.9 18.2 Kurtosis 1.913712

```
. by phenotypes, sort : summarize ageyears BMIkgm_n sbpmmhg dbpmmhg ugcragg_n ua
> crmagg_n upcrmagg_n usg_n gfr_n creatugl_n bunmgdl_n creatmgdl_n glyceciagl_n
> hbhdl_n, detail
```

-> phenotypes = AA non DT

AGE (years)

Percentiles	Smallest		
1%	5	4	
5%	10	5	
10%	15	5	Obs 168
25%	22	8	Sum of Wgt. 168
50%	29		Mean 32.08929
Largest	Std. Dev.	15.34546	
75%	40	69	
90%	57	70	Variance 235.483
95%	61	71	Skewness .7224162
99%	71	77	Kurtosis 3.001759

BMI (kg/m²)

Percentiles	Smallest		
1%	0	0	
5%	13.51644	0	
10%	15.427	10.56285	Obs 162
25%	18.87755	12.04411	Sum of Wgt. 162
50%	22.3847		Mean 22.92112
Largest	Std. Dev.	6.754727	
75%	26.72993	37.87755	
90%	31.2213	38.30317	Variance 45.62634

95%	34.02035	39.54523	Skewness	.1915183
99%	39.54523	49.60938	Kurtosis	4.875264

SBP (mmHg)

Percentiles	Smallest			
1%	9	9		
5%	10	9		
10%	10	9	Obs	100
25%	11	10	Sum of Wgt.	100
50%	12		Mean	11.7
Largest	Std. Dev.	1.32954		
75%	12.5	14		
90%	13	15	Variance	1.767677
95%	14	15	Skewness	.4069058
99%	15.5	16	Kurtosis	3.401567

DBP (mmHg)

Percentiles	Smallest			
1%	5	5		
5%	6	5		
10%	6	6	Obs	100
25%	7	6	Sum of Wgt.	100
50%	7		Mean	7.25
Largest	Std. Dev.	.8211227		
75%	8	9		
90%	8	9	Variance	.6742424
95%	8	9	Skewness	-.2681754
99%	9	9	Kurtosis	3.012036

UGCR (g/g)

Percentiles	Smallest			
1%	0	0		
5%	0	0		
10%	0	0	Obs	176
25%	0	0	Sum of Wgt.	176
50%	0		Mean	.0043793
Largest	Std. Dev.	.0081416		
75%	.0067975	.0363636		
90%	.0128205	.0365059	Variance	.0000663
95%	.0200501	.0442804	Skewness	2.944001
99%	.0442804	.0519481	Kurtosis	13.89307

UACR (mg/g)

Percentiles	Smallest			
1%	2.212634	1.284553		
5%	2.619808	2.212634		
10%	2.996755	2.217795	Obs	173
25%	4.194122	2.264541	Sum of Wgt.	173
50%	6.521739		Mean	10.58006
Largest	Std. Dev.	13.87203		
75%	12.16179	48.48485		
90%	20.23468	48.67188	Variance	192.4332
95%	32.42604	69.20924	Skewness	5.578316
99%	69.20924	139.0698	Kurtosis	46.22677

UPCR (mg/g)

Percentiles Smallest

1%	10.35513	9.212985		
5%	15.07112	10.35513		
10%	17.44239	10.88977	Obs	173
25%	25.54288	11.22941	Sum of Wgt.	173
50%	44.74194		Mean	64.79121
Largest	Std. Dev.	68.94344		
75%	73.72668	297.485		
90%	126.7181	309.2105	Variance	4753.198
95%	181.4847	401.6279	Skewness	3.399907
99%	401.6279	530.2738	Kurtosis	18.43167

USG

Percentiles Smallest

1%	1.007	1.004		
5%	1.01	1.007		
10%	1.012	1.009	Obs	154
25%	1.017	1.009	Sum of Wgt.	154
50%	1.02		Mean	1.020006
Largest	Std. Dev.	.0053192		
75%	1.024	1.03		
90%	1.026	1.03	Variance	.0000283
95%	1.028	1.03	Skewness	-.2985073
99%	1.03	1.035	Kurtosis	3.124557

GFR

Percentiles Smallest

1%	20.45519	10.85409		
5%	68.27573	20.45519		
10%	73.94323	31.65795	Obs	157
25%	88.91493	34.89279	Sum of Wgt.	157

50%	114.4124		Mean	111.7363
-----	----------	--	------	----------

Largest	Std. Dev.	32.06331		
---------	-----------	----------	--	--

75%	134.0415	168.7913		
90%	149.0465	186.2326	Variance	1028.056
95%	160.5992	198.4262	Skewness	-.2215852
99%	198.4262	200.3695	Kurtosis	3.578274

Creat U (g/l)

Percentiles Smallest

1%	.495	.221		
5%	.76	.495		
10%	.895	.526	Obs	174
25%	1.3795	.535	Sum of Wgt.	174

50%	2.271		Mean	2.51379
-----	-------	--	------	---------

Largest	Std. Dev.	1.446276		
---------	-----------	----------	--	--

75%	3.44	5.8885		
90%	4.33	6.4535	Variance	2.091714
95%	4.856	8.54	Skewness	1.18674
99%	8.54	8.86	Kurtosis	5.529523

BUN (mg/dl)

Percentiles		Smallest		
1%	.03	.025		
5%	.05	.03		
10%	.055	.04	Obs	162
25%	.065	.04	Sum of Wgt.	162
50%	.08		Mean	.0880864
Largest	Std. Dev.	.0344574		
75%	.105	.165		
90%	.125	.17	Variance	.0011873
95%	.14	.21	Skewness	2.24408
99%	.21	.315	Kurtosis	13.98454

Creat (mg/dl)

Percentiles		Smallest		
1%	.24	.23		
5%	.383	.24		
10%	.497	.247	Obs	166
25%	.62	.25	Sum of Wgt.	166
50%	.777		Mean	.8609157
Largest	Std. Dev.	.6013865		
75%	.98	1.945		
90%	1.23	2.11	Variance	.3616657
95%	1.4	2.12	Skewness	7.824569
99%	2.12	7.36	Kurtosis	83.63363

Glycemia (g/l)

Percentiles Smallest

1% .7 .7

5% .73 .7

10% .76 .7 Obs 170

25% .8 .7 Sum of Wgt. 170

50% .84 Mean .8556471

Largest Std. Dev. .0775352

75% .91 1.02

90% .95 1.02 Variance .0060117

95% .98 1.09 Skewness .3215538

99% 1.09 1.1 Kurtosis 2.968592

Hb (g/dl)

Percentiles Smallest

1% 8 7.4

5% 10.2 8

10% 11.2 8.8 Obs 170

25% 12.4 9.1 Sum of Wgt. 170

50% 13.3 Mean 13.38294

Largest Std. Dev. 1.821763

75% 14.5 16.9

90% 15.8 17 Variance 3.31882

95% 16.2 17.9 Skewness -.2397847

99% 17.9 18.2 Kurtosis 3.551123

-> phenotypes = SS

AGE (years)

Percentiles	Smallest		
1%	4	4	
5%	6	4	
10%	8	5	Obs 144
25%	12	6	Sum of Wgt. 144
50%	20		Mean 20.375
Largest	Std. Dev.	10.2274	
75%	26	43	
90%	34	45	Variance 104.5997
95%	38	49	Skewness .683576
99%	49	57	Kurtosis 3.408119

BMI (kg/m²)

Percentiles	Smallest		
1%	11.96775	11.2367	
5%	13.15193	11.96775	
10%	13.55529	11.96775	Obs 128
25%	15.74317	12.3452	Sum of Wgt. 128
50%	18.00952		Mean 19.09281
Largest	Std. Dev.	6.747755	
75%	20.9527	33.33333	
90%	24.00549	33.71488	Variance 45.53219
95%	26.03749	61.22449	Skewness 4.235867
99%	61.22449	63.26531	Kurtosis 27.16522

SBP (mmHg)

Percentiles		Smallest		
1%	9	8		
5%	9	9		
10%	10	9	Obs	101
25%	10	9	Sum of Wgt.	101
50%	11		Mean	11.15842
Largest			Std. Dev.	1.294084
75%	12	14		
90%	13	14	Variance	1.674653
95%	14	14	Skewness	.2319202
99%	14	14	Kurtosis	2.95686

DBP (mmHg)

Percentiles		Smallest		
1%	5	4		
5%	5	5		
10%	6	5	Obs	101
25%	6	5	Sum of Wgt.	101
50%	7		Mean	6.940594
Largest			Std. Dev.	1.120908
75%	8	9		
90%	8	10	Variance	1.256436
95%	8	10	Skewness	.5452782
99%	10	11	Kurtosis	4.436952

UGCR (g/g)

Percentiles	Smallest		
1%	0	0	
5%	0	0	
10%	0	0	Obs 151
25%	0	0	Sum of Wgt. 151
50%	.0051813	Mean	.1098812
Largest	Std. Dev.	.666947	
75%	.017094	.9345794	
90%	.045977	1.315789	Variance .4448183
95%	.1935484	3.184713	Skewness 9.356007
99%	3.184713	7.373272	Kurtosis 97.53371

UACR (mg/g)

Percentiles	Smallest		
1%	4.465733	2.635659	
5%	6.857143	4.465733	
10%	9.325018	4.697987	Obs 151
25%	16.25468	4.958184	Sum of Wgt. 151
50%	25.66845	Mean	40.94486
Largest	Std. Dev.	44.98485	
75%	48.57143	208.2902	
90%	77.70492	209.7872	Variance 2023.637
95%	122.6316	233.7209	Skewness 3.265169
99%	233.7209	328.6486	Kurtosis 16.9563

UPCR (mg/g)

Percentiles Smallest

1%	19.72973	17.24138		
5%	29.40767	19.72973		
10%	45.18859	20.42194	Obs	150
25%	70.74334	21.70213	Sum of Wgt.	150

50%	156.6704		Mean	323.5547
-----	----------	--	------	----------

Largest	Std. Dev.	496.8096		
---------	-----------	----------	--	--

75%	303.5294	1920.784		
90%	707.2093	2716.279	Variance	246819.8
95%	1388.767	2804.145	Skewness	3.341108
99%	2804.145	2957.838	Kurtosis	15.3316

USG

Percentiles Smallest

1%	1.005	1.001		
5%	1.007	1.005		
10%	1.009	1.005	Obs	153
25%	1.01	1.005	Sum of Wgt.	153

50%	1.012		Mean	1.012516
-----	-------	--	------	----------

Largest	Std. Dev.	.0036457		
---------	-----------	----------	--	--

75%	1.015	1.02		
90%	1.015	1.021	Variance	.0000133
95%	1.02	1.024	Skewness	.3392769
99%	1.024	1.025	Kurtosis	4.216059

GFR

Percentiles	Smallest			
1%	47.36239	38.30725		
5%	58.50642	47.36239		
10%	69.3	51.625	Obs	129
25%	102.8286	55.70698	Sum of Wgt.	129
50%	136.9561		Mean	136.0517
Largest	Std. Dev.	52.69461		
75%	163.924	241.192		
90%	184.0071	265.972	Variance	2776.722
95%	196.7909	358.9923	Skewness	1.562687
99%	358.9923	407.8375	Kurtosis	9.34806

Creat U (g/l)

Percentiles	Smallest			
1%	.185	.155		
5%	.37	.185		
10%	.49	.235	Obs	152
25%	.684	.25	Sum of Wgt.	152
50%	.875		Mean	1.081385
Largest	Std. Dev.	.760092		
75%	1.23225	3.26		
90%	1.815	3.415	Variance	.5777399
95%	2.33	3.565	Skewness	3.595538
99%	3.565	6.785	Kurtosis	23.74932

BUN (mg/dl)

Percentiles		Smallest		
1%	.03	.025		
5%	.04	.03		
10%	.045	.035	Obs	143
25%	.055	.04	Sum of Wgt.	143
50%	.065		Mean	.071993
Largest	Std. Dev.	.0473827		
75%	.08	.135		
90%	.1	.14	Variance	.0022451
95%	.105	.25	Skewness	7.42966
99%	.25	.545	Kurtosis	71.97552

Creat (mg/dl)

Percentiles		Smallest		
1%	.16	.13		
5%	.269	.16		
10%	.323	.22	Obs	151
25%	.426	.25	Sum of Wgt.	151
50%	.57		Mean	.5930728
Largest	Std. Dev.	.232938		
75%	.73	1.14		
90%	.87	1.29	Variance	.0542601
95%	.99	1.38	Skewness	1.00046
99%	1.38	1.58	Kurtosis	5.055942

Glycemia (g/l)

Percentiles		Smallest		
1%	.62	.6		
5%	.71	.62		
10%	.73	.66	Obs	152
25%	.79	.7	Sum of Wgt.	152
50%	.85		Mean	.8507632
Largest			Std. Dev.	.0898773
75%	.91	1.05		
90%	.97	1.05	Variance	.0080779
95%	1.01	1.06	Skewness	.0521707
99%	1.06	1.08	Kurtosis	2.930605

Hb (g/dl)

Percentiles		Smallest		
1%	5.5	5.1		
5%	6.6	5.5		
10%	7	5.7	Obs	148
25%	7.6	5.9	Sum of Wgt.	148
50%	8.4		Mean	8.535135
Largest			Std. Dev.	1.362364
75%	9.3	11.6		
90%	10.7	11.6	Variance	1.856036
95%	11	11.6	Skewness	.3673008
99%	11.6	12	Kurtosis	2.951026

```
. by phenotypes, sort : summarize ageyears BMIkgm_n sbpmmhg dbpmmhg creatugl_n
> bunmgdl_n creatmgdl_n glyceciagl_n hbgdl_n
```

```
-> phenotypes = AA non DT
```

Variable	Obs	Mean	Std. Dev.	Min	Max
ageyears	168	32.08929	15.34546	4	77
BMIkgm_n	162	22.92112	6.754727	0	49.60938
sbpmmhg	100	11.7	1.32954	9	16
dbpmmhg	100	7.25	.8211227	5	9
creatugl_n	174	2.51379	1.446276	.221	8.86
bunmgdl_n	162	.0880864	.0344574	.025	.315
creatmgdl_n	166	.8609157	.6013865	.23	7.36
glyceciagl_n	170	.8556471	.0775352	.7	1.1
hbgdl_n	170	13.38294	1.821763	7.4	18.2

```
-> phenotypes = SS
```

Variable	Obs	Mean	Std. Dev.	Min	Max
ageyears	144	20.375	10.2274	4	57
BMIkgm_n	128	19.09281	6.747755	11.2367	63.26531
sbpmmhg	101	11.15842	1.294084	8	14
dbpmmhg	101	6.940594	1.120908	4	11
creatugl_n	152	1.081385	.760092	.155	6.785
bunmgdl_n	143	.071993	.0473827	.025	.545
creatmgdl_n	151	.5930728	.232938	.13	1.58
glyceciagl_n	152	.8507632	.0898773	.6	1.08
hbgdl_n	148	8.535135	1.362364	5.1	12

```
.
```

```
ranksum ageyears, by(phenotypes)
```

Two-sample Wilcoxon rank-sum (Mann-Whitney) test

```
. ranksum ageyears, by(phenotypes)
```

Two-sample Wilcoxon rank-sum (Mann-Whitney) test

```
phenotypes  obs  rank sum  expected
```

```
AA non DT   168   32047   26292
```

```
SS    144   16781   22536
```

```
combined   312   48828   48828
```

```
unadjusted variance  631008.00
```

```
adjustment for ties  -549.25
```

```
adjusted variance   630458.75
```

```
Ho: ageyears(phenot~s==AA non DT) = ageyears(phenot~s==SS)
```

```
z = 7.248
```

```
Prob > z = 0.0000
```

```
. ranksum BMIkgm_n, by(phenotypes)
```

Two-sample Wilcoxon rank-sum (Mann-Whitney) test

phenotypes	obs	rank sum	expected
------------	-----	----------	----------

AA non DT	162	28218	23571
-----------	-----	-------	-------

SS	128	13977	18624
----	-----	-------	-------

combined	290	42195	42195
----------	-----	-------	-------

unadjusted variance 502848.00

adjustment for ties -3.83

adjusted variance 502844.17

Ho: BMIkgm_n(phenot~s==AA non DT) = BMIkgm_n(phenot~s==SS)

z = 6.553

Prob > z = 0.0000

```
. ranksum sbpmmhg, by(phenotypes)
```

Two-sample Wilcoxon rank-sum (Mann-Whitney) test

phenotypes	obs	rank sum	expected
------------	-----	----------	----------

AA non DT	100	11250	10100
-----------	-----	-------	-------

SS	101	9051	10201
----	-----	------	-------

combined	201	20301	20301
----------	-----	-------	-------

unadjusted variance 170016.67

adjustment for ties -9423.15

adjusted variance 160593.52

Ho: sbpmmhg(phenot~s==AA non DT) = sbpmmhg(phenot~s==SS)

z = 2.870

Prob > z = 0.0041

. ranksum sbpmmhg, by(phenotypes)

Two-sample Wilcoxon rank-sum (Mann-Whitney) test

phenotypes	obs	rank sum	expected
------------	-----	----------	----------

AA non DT	100	11250	10100
-----------	-----	-------	-------

SS	101	9051	10201
----	-----	------	-------

combined	201	20301	20301
----------	-----	-------	-------

unadjusted variance 170016.67

adjustment for ties -9423.15

adjusted variance 160593.52

Ho: sbpmmhg(phenot~s==AA non DT) = sbpmmhg(phenot~s==SS)

z = 2.870

Prob > z = 0.0041

```
. ranksum dbpmmhg, by(phenotypes)
```

Two-sample Wilcoxon rank-sum (Mann-Whitney) test

phenotypes	obs	rank sum	expected
------------	-----	----------	----------

AA non DT	100	11127.5	10100
-----------	-----	---------	-------

SS	101	9173.5	10201
----	-----	--------	-------

combined	201	20301	20301
----------	-----	-------	-------

unadjusted variance 170016.67

adjustment for ties -17618.97

adjusted variance 152397.69

Ho: dbpmmhg(phenot~s==AA non DT) = dbpmmhg(phenot~s==SS)

z = 2.632

Prob > z = 0.0085

```
. ranksum ugcrgg_n, by(phenotypes)
```

Two-sample Wilcoxon rank-sum (Mann-Whitney) test

phenotypes	obs	rank sum	expected
------------	-----	----------	----------

AA non DT	176	25399.5	28864
-----------	-----	---------	-------

SS	151	28228.5	24764
----	-----	---------	-------

combined	327	53628	53628
----------	-----	-------	-------

unadjusted variance 726410.67

adjustment for ties -117163.68

adjusted variance 609246.98

Ho: ugcrgg_n(phenot~s==AA non DT) = ugcrgg_n(phenot~s==SS)

z = -4.439

Prob > z = 0.0000

. ranksum uacrmgg_n, by(phenotypes)

Two-sample Wilcoxon rank-sum (Mann-Whitney) test

phenotypes	obs	rank sum	expected
------------	-----	----------	----------

AA non DT	173	18266	28112.5
-----------	-----	-------	---------

SS	151	34384	24537.5
----	-----	-------	---------

combined	324	52650	52650
----------	-----	-------	-------

unadjusted variance 707497.92

adjustment for ties -0.12

adjusted variance 707497.79

Ho: uacrmg~n(phenot~s==AA non DT) = uacrmg~n(phenot~s==SS)

z = -11.706

Prob > z = 0.0000

```
. ranksum upcrmgg_n, by(phenotypes)
```

Two-sample Wilcoxon rank-sum (Mann-Whitney) test

phenotypes	obs	rank sum	expected
------------	-----	----------	----------

AA non DT	173	19447	28026
-----------	-----	-------	-------

SS	150	32879	24300
----	-----	-------	-------

combined	323	52326	52326
----------	-----	-------	-------

unadjusted variance 700650.00

adjustment for ties 0.00

adjusted variance 700650.00

Ho: upcrmg~n(phenot~s==AA non DT) = upcrmg~n(phenot~s==SS)

z = -10.249

Prob > z = 0.0000

```
. ranksum usg_n, by(phenotypes)
```

Two-sample Wilcoxon rank-sum (Mann-Whitney) test

phenotypes	obs	rank sum	expected
------------	-----	----------	----------

AA non DT	154	32480	23716
-----------	-----	-------	-------

SS	153	14798	23562
----	-----	-------	-------

combined	307	47278	47278
----------	-----	-------	-------

unadjusted variance 604758.00

adjustment for ties -4756.94

adjusted variance 600001.06

Ho: usg_n(phenot~s==AA non DT) = usg_n(phenot~s==SS)

z = 11.314

Prob > z = 0.0000

. ranksum gfr_n, by(phenotypes)

Two-sample Wilcoxon rank-sum (Mann-Whitney) test

phenotypes	obs	rank sum	expected
------------	-----	----------	----------

AA non DT	157	19370.5	22529.5
-----------	-----	---------	---------

SS	129	21670.5	18511.5
----	-----	---------	---------

combined	286	41041	41041
----------	-----	-------	-------

unadjusted variance 484384.25

adjustment for ties -0.62

adjusted variance 484383.63

Ho: gfr_n(phenot~s==AA non DT) = gfr_n(phenot~s==SS)

z = -4.539

Prob > z = 0.0000

```
. ranksum creatugl_n, by(phenotypes)
```

Two-sample Wilcoxon rank-sum (Mann-Whitney) test

phenotypes	obs	rank sum	expected
------------	-----	----------	----------

AA non DT	174	37568.5	28449
-----------	-----	---------	-------

SS	152	15732.5	24852
----	-----	---------	-------

combined	326	53301	53301
----------	-----	-------	-------

unadjusted variance 720708.00

adjustment for ties -9.49

adjusted variance 720698.51

Ho: $\text{creatu} \sim \text{n}(\text{phenot} \sim \text{s} == \text{AA non DT}) = \text{creatu} \sim \text{n}(\text{phenot} \sim \text{s} == \text{SS})$

z = 10.742

Prob > z = 0.0000

```
. ranksum bunmgdl_n, by(phenotypes)
```

Two-sample Wilcoxon rank-sum (Mann-Whitney) test

phenotypes	obs	rank sum	expected
------------	-----	----------	----------

AA non DT	162	29446.5	24786
-----------	-----	---------	-------

SS	143	17218.5	21879
----	-----	---------	-------

combined	305	46665	46665
----------	-----	-------	-------

unadjusted variance 590733.00

adjustment for ties -2732.22

adjusted variance 588000.78

Ho: bunmgd~n(phenot~s==AA non DT) = bunmgd~n(phenot~s==SS)

z = 6.078

Prob > z = 0.0000

. ranksum creatmgdl_n, by(phenotypes)

Two-sample Wilcoxon rank-sum (Mann-Whitney) test

phenotypes	obs	rank sum	expected
------------	-----	----------	----------

AA non DT	166	32277	26394
-----------	-----	-------	-------

SS	151	18126	24009
----	-----	-------	-------

combined	317	50403	50403
----------	-----	-------	-------

unadjusted variance 664249.00

adjustment for ties -85.70

adjusted variance 664163.30

Ho: creatm~n(phenot~s==AA non DT) = creatm~n(phenot~s==SS)

z = 7.219

Prob > z = 0.0000

```
. ranksum glycehiagl_n, by(phenotypes)
```

Two-sample Wilcoxon rank-sum (Mann-Whitney) test

phenotypes	obs	rank sum	expected
------------	-----	----------	----------

AA non DT	170	27766	27455
-----------	-----	-------	-------

SS	152	24237	24548
----	-----	-------	-------

combined	322	52003	52003
----------	-----	-------	-------

unadjusted variance 695526.67

adjustment for ties -1138.73

adjusted variance 694387.94

Ho: glycem~n(phenot~s==AA non DT) = glycem~n(phenot~s==SS)

z = 0.373

Prob > z = 0.7090

```
. ranksum hbgdl_n, by(phenotypes)
```

Two-sample Wilcoxon rank-sum (Mann-Whitney) test

phenotypes	obs	rank sum	expected
------------	-----	----------	----------

AA non DT	170	39132	27115
-----------	-----	-------	-------

SS	148	11589	23606
----	-----	-------	-------

combined	318	50721	50721
----------	-----	-------	-------

unadjusted variance 668836.67

adjustment for ties -151.13

adjusted variance 668685.54

Ho: hbgdl_n(phenot~s==AA non DT) = hbgdl_n(phenot~s==SS)

z = 14.696

Prob > z = 0.0000

```
. tabulate sex phenotypes, chi2 column row
```

Key
<i>frequency</i>
<i>row percentage</i>
<i>column percentage</i>

SEX	PHENOTYPES		Total
	AA non DT	SS	
F	115	83	198
	58.08	41.92	100.00
	66.09	53.21	60.00
M	59	73	132
	44.70	55.30	100.00
	33.91	46.79	40.00
Total	174	156	330
	52.73	47.27	100.00
	100.00	100.00	100.00

Pearson chi2(1) = 5.6917 Pr = 0.017

.

. tabulate ugcrmvg2g phenotypes, chi2 column row

Key
<i>frequency</i>
<i>row percentage</i>
<i>column percentage</i>

UGCR(mg/g) 2G	PHENOTYPES		Total
	AA non DT	SS	
UGCR<0,020	167	117	284
	58.80	41.20	100.00
	94.89	77.48	86.85
UGCR≥0,020	9	34	43
	20.93	79.07	100.00
	5.11	22.52	13.15
Total	176	151	327
	53.82	46.18	100.00
	100.00	100.00	100.00

Pearson chi2(1) = 21.5524 Pr = 0.000

. tabulate UACRmgg03030 2G phenotypes, chi2 column row

Key
<i>frequency</i>
<i>row percentage</i>
<i>column percentage</i>

UACR (mg/g)	PHENOTYPES		Total
	AA non DT	SS	
UACR < 30	163 65.20 94.22	87 34.80 57.62	250 100.00 77.16
UACR ≥ 30	10 13.51 5.78	64 86.49 42.38	74 100.00 22.84
Total	173 53.40 100.00	151 46.60 100.00	324 100.00 100.00

Pearson chi2(1) = 61.2982 Pr = 0.000

. tabulate upcrmvg200mgg2g phenotypes, chi2 column row

Key
<i>frequency</i>
<i>row percentage</i>
<i>column percentage</i>

UPCR (mg/g) 200mg/g 2G	PHENOTYPES		Total
	AA non DT	SS	
UPCR > 200	8	59	67
	11.94	88.06	100.00
	4.62	39.33	20.74
UPCR ≤ 200	165	91	256
	64.45	35.55	100.00
	95.38	60.67	79.26
Total	173	150	323
	53.56	46.44	100.00
	100.00	100.00	100.00

Pearson chi2(1) = 58.8723 Pr = 0.000

. tabulate glomerularproteinuriauacrupcrou5 phenotypes, chi2 column row

Key
<i>frequency</i>
<i>row percentage</i>
<i>column percentage</i>

Glomerular proteinuria (UACR/UPCR > ou = 59 %); physio ou patho (UPCR <, = ou >	PHENOTYPES		Total
	AA non DT	SS	
PHYSIOLOGICAL	4 40.00 100.00	6 60.00 100.00	10 100.00 100.00
Total	4 40.00 100.00	6 60.00 100.00	10 100.00 100.00

. tabulate tubularproteinuriauacrupcr59phys phenotypes, chi2 column row

Key
<i>frequency</i>
<i>row percentage</i>
<i>column percentage</i>

Tubular proteinuria (UACR/UPCR < 59%; physio ou patho (UPCR <, = ou > 200 mg/g)	PHENOTYPES		Total
	AA non DT	SS	
PATHOLOGICAL	8 11.94 4.73	59 88.06 40.97	67 100.00 21.41
PHYSIOLOGICAL	161 65.45 95.27	85 34.55 59.03	246 100.00 78.59
Total	169 53.99 100.00	144 46.01 100.00	313 100.00 100.00

Pearson chi2(1) = 60.6909 Pr = 0.000

. tabulate usg10102g phenotypes, chi2 column row

Key
<i>frequency</i>
<i>row percentage</i>
<i>column percentage</i>

USG 1,010 2G	PHENOTYPES		Total
	AA non DT	SS	
USG > 1,010	146	99	245
	59.59	40.41	100.00
	94.81	64.71	79.80
USG ≤ 1,010	8	54	62
	12.90	87.10	100.00
	5.19	35.29	20.20
Total	154	153	307
	50.16	49.84	100.00
	100.00	100.00	100.00

Pearson chi2(1) = 43.1426 Pr = 0.000

. tabulate gfr4g phenotypes, chi2 column row

Key
<i>frequency</i>
<i>row percentage</i>
<i>column percentage</i>

GFR 4G	PHENOTYPES		Total
	AA non DT	SS	
GFR < 60	6	7	13
	46.15	53.85	100.00
	3.82	5.47	4.56
GFR > 140	31	61	92
	33.70	66.30	100.00
	19.75	47.66	32.28
GFR [60; 90[35	14	49
	71.43	28.57	100.00
	22.29	10.94	17.19
GFR [90; 140]	85	46	131
	64.89	35.11	100.00
	54.14	35.94	45.96
Total	157	128	285
	55.09	44.91	100.00
	100.00	100.00	100.00

Pearson chi2(3) = 27.8073 Pr = 0.000

Odds ratio

UGCR

. cci 34 9 117 167

	Exposed	Unexposed	Total	Proportion Exposed
Cases	34	9	43	0.7907
Controls	117	167	284	0.4120
Total	151	176	327	0.4618
	Point estimate		[95% Conf. Interval]	
Odds ratio	5.392213		2.407055	13.2154 (exact)
Attr. frac. ex.	.8145474		.5845546	.9243307 (exact)
Attr. frac. pop	.6440607			

chi2(1) = 21.55 Pr>chi2 = 0.0000

UACR

. cci 64 10 87 163

	Exposed	Unexposed	Total	Proportion Exposed
Cases	64	10	74	0.8649
Controls	87	163	250	0.3480
Total	151	173	324	0.4660
	Point estimate		[95% Conf. Interval]	
Odds ratio	11.9908		5.707243	27.32816 (exact)
Attr. frac. ex.	.9166028		.824784	.9634077 (exact)
Attr. frac. pop	.7927375			

chi2(1) = 61.30 Pr>chi2 = 0.0000

UPCR

. cci 59 8 91 165

	Exposed	Unexposed	Total	Proportion Exposed
Cases	59	8	67	0.8806
Controls	91	165	256	0.3555
Total	150	173	323	0.4644
	Point estimate		[95% Conf. Interval]	
Odds ratio	13.37225		5.971085	33.58871 (exact)
Attr. frac. ex.	.9252183		.8325262	.9702281 (exact)
Attr. frac. pop	.8147445			

chi2(1) = 58.87 Pr>chi2 = 0.0000

Tubular proteinuria

. cci 59 8 85 161

	Exposed	Unexposed	Total	Proportion Exposed
Cases	59	8	67	0.8806
Controls	85	161	246	0.3455
Total	144	169	313	0.4601
	Point estimate		[95% Conf. Interval]	
Odds ratio	13.96912		6.216634	35.15126 (exact)
Attr. frac. ex.	.9284135		.8391412	.9715515 (exact)
Attr. frac. pop	.8175582			

chi2(1) = 60.69 Pr>chi2 = 0.0000

USG

. cci 54 8 99 146

	Exposed	Unexposed	Total	Proportion Exposed
Cases	54	8	62	0.8710
Controls	99	146	245	0.4041
Total	153	154	307	0.4984
	Point estimate		[95% Conf. Interval]	
Odds ratio	9.954545		4.425615	25.11649 (exact)
Attr. frac. ex.	.8995434		.7740427	.9601855 (exact)
Attr. frac. pop	.7834733			

chi2(1) = 43.14 Pr>chi2 = 0.0000

.

GFR < 60 ml/min/1.73m²

. cci 7 6 46 85

	Exposed	Unexposed	Total	Proportion Exposed
Cases	7	6	13	0.5385
Controls	46	85	131	0.3511
Total	53	91	144	0.3681
	Point estimate		[95% Conf. Interval]	
Odds ratio	2.155797		.5787823	8.217766 (exact)
Attr. frac. ex.	.5361345		-.7277654	.8783124 (exact)
Attr. frac. pop	.2886878			

chi2(1) = 1.78 Pr>chi2 = 0.1817

60 ≤ GFR < 90 ml/min/1.73m²

. cci 14 35 46 85

	Exposed	Unexposed	Total	Proportion Exposed
Cases	14	35	49	0.2857
Controls	46	85	131	0.3511
Total	60	120	180	0.3333
	Point estimate		[95% Conf. Interval]	
Odds ratio	.7391304		.3325266	1.58498 (exact)
Prev. frac. ex.	.2608696		-.5849803	.6674734 (exact)
Prev. frac. pop	.0916031			

chi2(1) = 0.69 Pr>chi2 = 0.4072

GFR ≥ 140 ml/min/1.73m²

. cci 61 31 46 85

	Exposed	Unexposed	Total	Proportion Exposed
Cases	61	31	92	0.6630
Controls	46	85	131	0.3511
Total	107	116	223	0.4798
	Point estimate		[95% Conf. Interval]	
Odds ratio	3.636045		1.998956	6.640535 (exact)
Attr. frac. ex.	.7249759		.4997388	.8494097 (exact)
Attr. frac. pop	.4806905			

chi2(1) = 21.06 Pr>chi2 = 0.0000

SS (n = 163)

Variables	Median (min - max) or % (n)	5 – 95eme percentiles	observations
Anthropometric			
Age (years)	20 (4 - 57)	6 - 38	144
Female sex	53.21% (83)		156
BMI (kg/m ²)	18 (11.24 – 33.71)	13.15 – 26.04	128
SBP (mmHg)	11 (8 - 14)	9 - 14	101
DBP (mmHg)	7 (4 - 11)	5 - 8	101
Biochemical			
Hb (g/dl)	8.4 (5.1 – 13.6)	6.6 - 11	148
Glucose Se, g/dl	85 (60 - 108)	71 - 101	152
BUN, mg/dl	6.5 (2.5 – 54.5)	4 – 10.5	143
Creatinin Se, mg/dl	0.57 (0.13 – 1.58)	0.27 – 0.99	151
Creatinine U, mg/dl	88 (16 - 679)	37 - 233	152
GFR, ml/min/1.73m ²	136.96 (38.31 – 407.84)	58.51 -196.80	129
UACR, mg/g	25.67 (2.64 – 328.65)	6.86 – 122.63	151
UPCR, mg/g	156.67 (17.24 – 2957.84)	29.41 – 1388.76	150
UGCR, g/g	0.005 (0 – 7.37)	0 – 0.193	151
USG	1.012 (1.001 – 1.025)	1.007 - 1.020	153

AA non DT (n = 177)

Variables	Median (min – max)or % (n)	5 - 95eme percentiles	observations
Anthropometric			
Age (years)	29 (4 - 77)	10 - 61	168
Female sex	66.09% (115)		174
BMI (kg/m ²)	22,38 (10.56 – 49.61)	13.52 – 34.02	162
SBP (mmHg)	12 (9 -16)	10 - 14	100
DBP (mmHg)	7 (5 - 9)	6 - 8	100
Biochemical			
Hb, g/dl	13.3 (7.4 – 18.2)	10.2 – 16.2	170
Glucose Se, g/dl	84 (70 - 110)	73 - 98	170
BUN, mg/dl	8 (2.5 – 31.5)	5 - 14	162
Créatinine Se, mg/dl	0.78 (0.23 – 7.36)	0.38 – 1.4	166
Créatinine U, mg/dl	227 (22 - 886)	76 - 486	174
GFR, ml/min/1.73m ²	114.41 (10.85 – 200.37)	68.28 – 160.60	157
UACR, mg/g	6.52 (1.28 - 139.07)	2.62 – 32.43	173
UPCR, mg/g	44.74 (9.21 – 530.27)	15.07 - 181.48	173
UGCR, g/g	0 (0 – 0.052)	0 – 0.020	176
USG	1.02 (1.004 – 1.035)	1.010 – 1.028	154

	SS (163)	AA non DT (177)		SS (n = 45)	AA non DT (n = 45)	
Variables	M±SD ou %(n)	M±SD ou %(n)	p-value	M±SD ou %(n)	M±SD ou %(n)	p-value
Anthropometric						
Age (years)	20.375±10.227	32.089±15.345	< 0.001	21.38±10.36	21.38±10.36	1
Female sex	53.21%(83)	66.09%(115)		64.44%(29)	64.44%(29)	
Male sex	46.79%(73)	33.91% (59)	0.017	35.56%(16)	35.56%(16)	1
BMI (kg/m ²)	19.09± 6.75	22.92±6.75	< 0.001	19,63±7,48	21.50±6,76	0.079
SBP (mmHg)	11.16±1,29	11.7±1.33	0.0041	11,23±1,16	11.82±1.01	0.076
DBP (mmHg)	6.94±1.12	7.25±0.82	0.0085	7,23±1,06	7,35±0,79	0.396
Biochemical						
Hb (g/dl)	8.57±1.47	13.38±1.82	< 0.001	8,69±1,43	13.05±1.87	< 0.001
Glucose Se, g/dl	85±9	86±8	0.709	85±7	86±10	0.447
BUN, mg/dl	7±4.5	9±3.5	< 0.001	6.5±2	8.5±2.5	0.0003
Créatinine Se, mg/dl	0.59±0.23	0.86±0.60	< 0.001	0.58±0.21	0.75±0.32	0.0095

	SS (n = 163)	AA non DT (n = 177)		
Variables	% (n)	% (n)	p-value	Odds ratio
USG ≤ 1.010	35.29% (54)	5.19% (8)		
USG > 1.010	64.71% (99)	94.81% (146)	< 0.001	9.95 [4.43 – 25.12]
GFR ≥ 140 ml/min/1.73m ²	47.66% (61)	19.75% (31)	< 0.001	3.64 [2 – 6.64]
GFR < 60 ml/min/1.73m ²	5.47% (7)	3.82% (6)	0.182	
GFR 60; 90[ml/min/1.73m ²	10.94 (14)	22.29% (35)		
GFR 90; 140[ml/min/1.73m ²	35.66% (46)	54.14% (85)		
UACR ≥ 30 (mg/g)	42.38% (64)	5.78% (10)		
UACR < 30 (mg/g)	57.62% (87)	94.22% (163)		11.99 [5.71; 27.33]
UPCR > 200 (mg/g)	39.33% (59)	4.62% (8)		
UPCR ≤ 200 (mg/g)	60.67% (91)	95.38% (165)	< 0.001	13.37 [5.97; 33.59]
Presence glomerular PU	0	0		
Absence glomrular PU	6	4	NA	NA
Presence tubular PU	40.97% (59)	4.73% (8)		
Absence tubular PU	59.03% (85)	95.27% (161)	< 0.001	13.97 [6.22; 35.15]
UGCR ≥ 20 (mg/g)	22.52% (34)	5.11% (9)		
UGCR < 20 (g/g)	77.48% (117)	94.89% (167)	< 0.001	5.39 [2.41 – 13.21]

	SS (n = 45)	AA non DT (n = 45)		
Variables	% (n)	% (n)	p-value	Odds ratio
USG ≤ 1.010	35.71% (15)	2.44 % (1)		
USG > 1.010	64.29% (27)	97.56% (40)	< 0.001	22.22 [2.98 - 958.10]
GFR ≥ 140 ml/min/1.73m ²	45.24% (19)	21.43% (9)	0.049	2.73 [0.89 – 8.61]
GFR < 60 ml/min/1.73m ²	2,38% (1)	2,38% (1)	0,859	
GFR [60; 90[ml/min/1.73m ²	11.90% (5)	23.81% (10)		
GFR [90; 140[ml/min/1.73m ²	40.48% (17)	52.38% (22)	0.118	
UACR ≥ 30 (mg/g)	47.73% (21)	8.89% (4)		
UACR < 30 (mg/g)	52.27% (23)	91.11% (41)	< 0.001	9.36 [2.64 – 41.02]
UPCR > 200 (mg/g)	37.21% (16)	2.22% (1)		
UPCR ≤ 200 (mg/g)	62.79% (27)	97.78% (44)	<0.001	26.07 [3.54 – 1117.37]
Presence glomerular PU	2	0		
Absence glomerular PU	0	0	NA	NA
Presence tubular PU	39.02% (16)	2.22% (1)		
Absence tubular PU	60.98% (25)	97.78% (44)	< 0.001	28.16 [3.80 – 1206.73]
UGCR ≥ 20 (mg/g)	25% (11)	6.67% (3)		
UGCR < 20 (mg/g)	75% (33)	93.33% (42)	0.018	4.67 [1.09 – 27.69]