

Drug Purchase: SSRI R6

Juha highly suggests adding a filter of ≥ 35 because of the registry starting in 1994
#[1] 226950 from 256404 (29454 removed)

Item	with VNR all antidepressants and Lithium (N06A and N05AN01) R5	without AGE filter	with 35 years old filter
Number of data points	84,477,978	115,740,625	
Number of drug purchases points	42,776,151	59,605,493	
Number of SSRI purchases	1,849,497 (1,849,422 with VNR) only 75 missing	2,523,793 (with Lithium) 2,452,329 (only SSRI) 2,523,692 (with Lithium and VNR) 2,452,228 (only SSRI with VNR, 101 missing)	226950 (with Lithium)
Number of purchases (unique)	81,096 (81,096 with VNR)	103,619 (with VNR, with Lithium)	88428 (with VNR and Lithium)
EVENT_AGE Mean (SD)	50.90	51.28 (16.00)	52.75 (14.69)

Freq purchase median		9.00	11
Freq purchase mean		24.36	23.19
summary(dat a.purchases. drug.bursts\$ daysPassed. diff)	Min. 1st Qu. Median Mean 3rd Qu. Max. 0.0 28.0 63.0 125.4 103.0 8582.0	Min. 1st Qu. Median Mean 3rd Qu. Max. 0.0 28.0 62.0 123.4 102.0 9119.0	Min. 1st Qu. Median Mean 3rd Qu. Max. 0.0 54.0 92.0 102.3 108.0 8484.0

VNR codes: 751

Unique drug names: 146

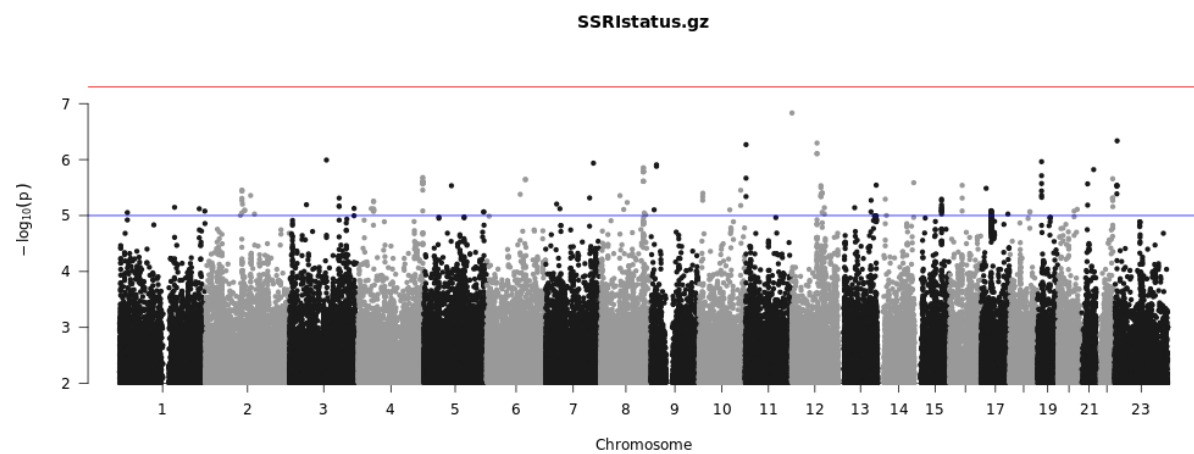
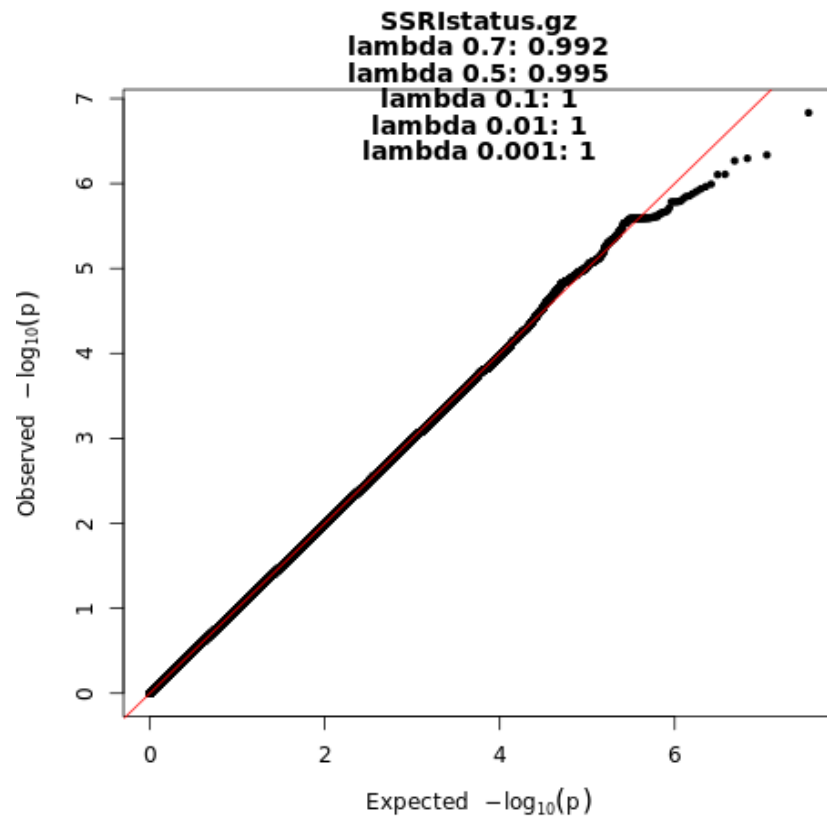
Binary: SSRI vs non-SSRI

```
table(phenos.cov$SSRIstatus)
#0      1
#197060 63345
```



20201004_R6_SSRIstatus.pdf

4 kB

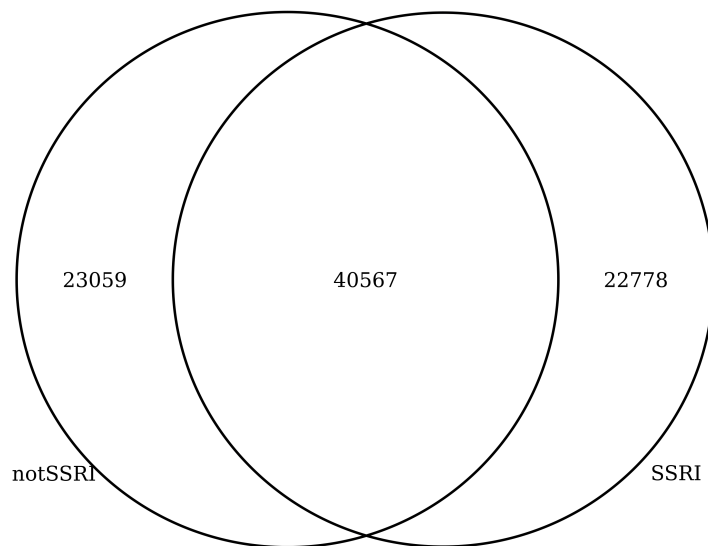


Binary: SSRI Switch Status -- switching from SSRI to any other antidepressant

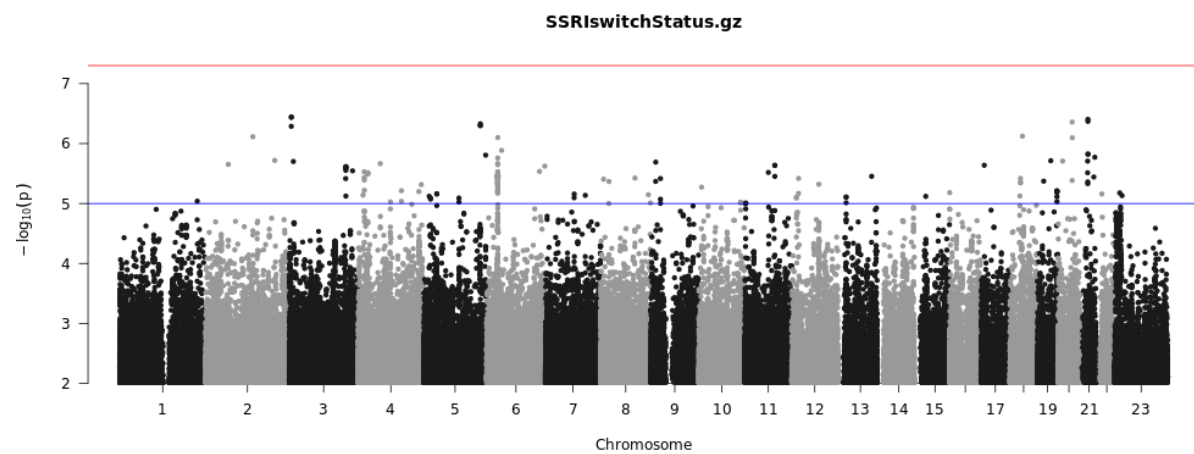
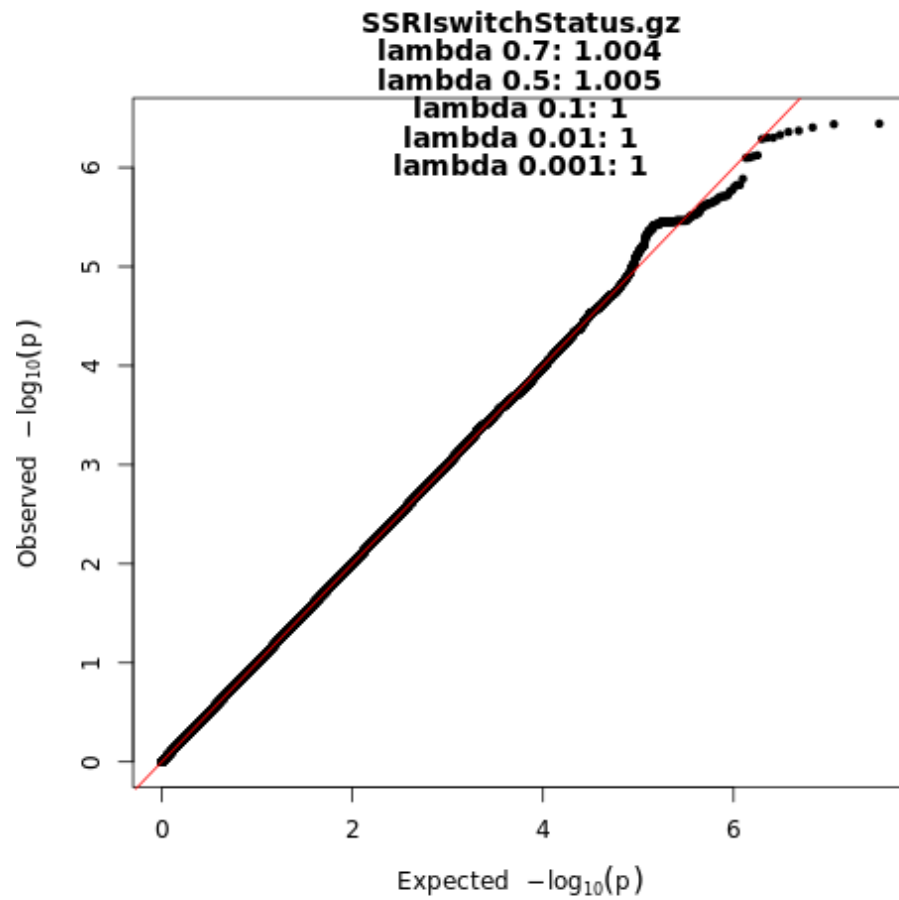
```
length(ssriAlone)
#[1] 18691
```

```
#R6 22778  
length(ssriSwitch)  
#[1] 30986  
#R6 40567  
length(othersAlone)  
#[1] 17784  
#R6 23059
```

 20200924_R6_purchaseDist.SSRI.... 5 kB



 20201004_purchaseDist.SSRI.pdf 6 kB



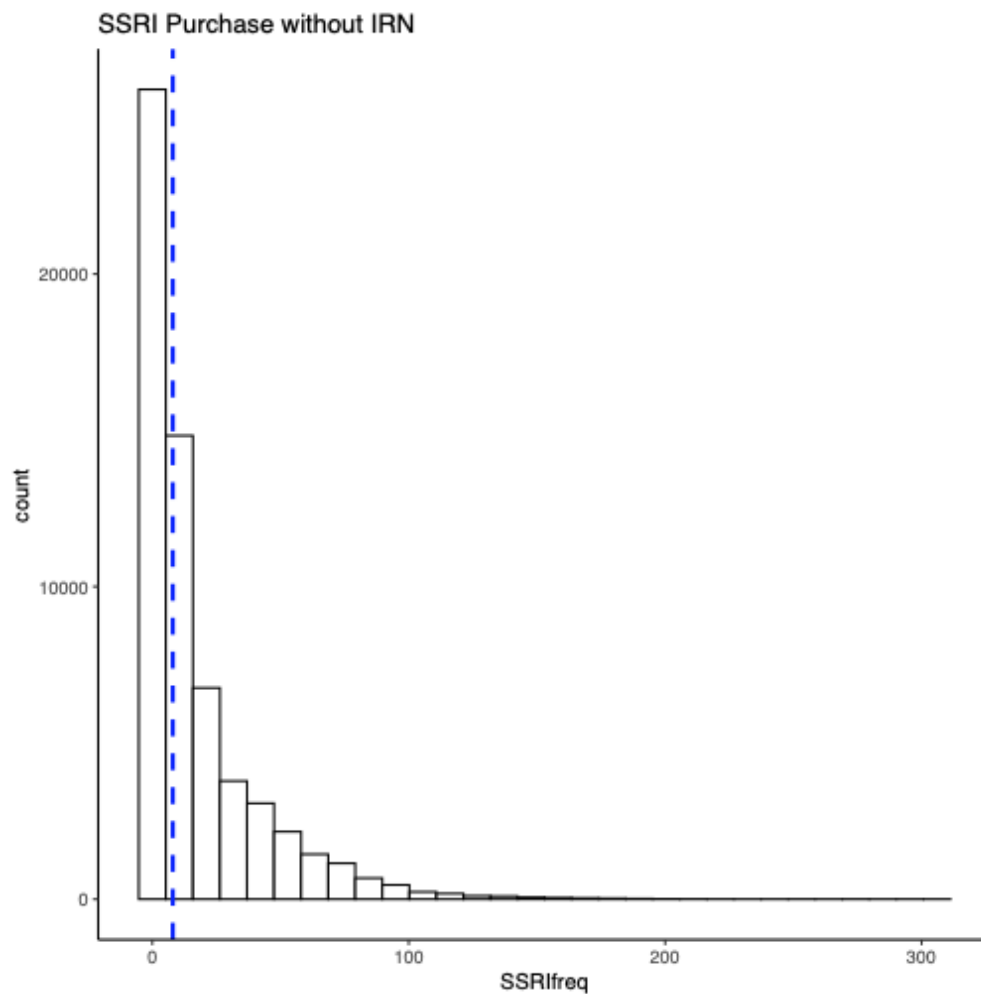
Quantitative: SSRI frequency

Purchased at least 1 = 61042

Purchased 0 SSRI = 195362 (may need to repeat this analysis by including this into the analysis instead of ignoring it)

```
summary(ssriFreq$SSRIfreq)
```

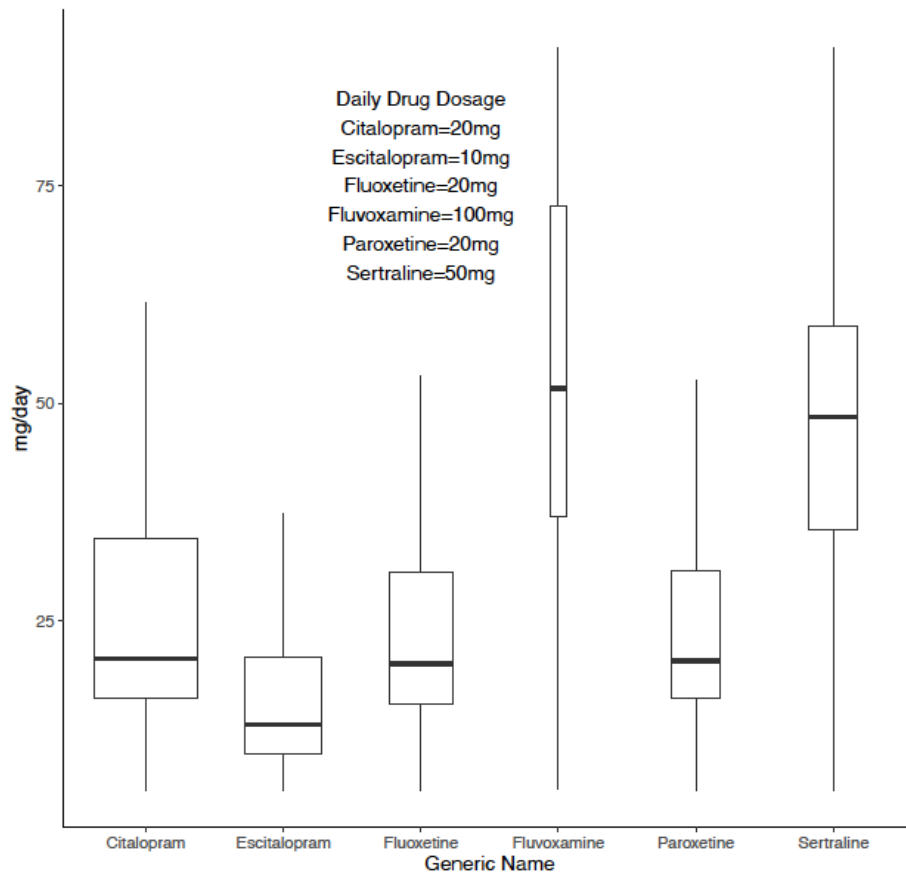
Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
1.00	2.00	8.00	17.78	23.00	307.00



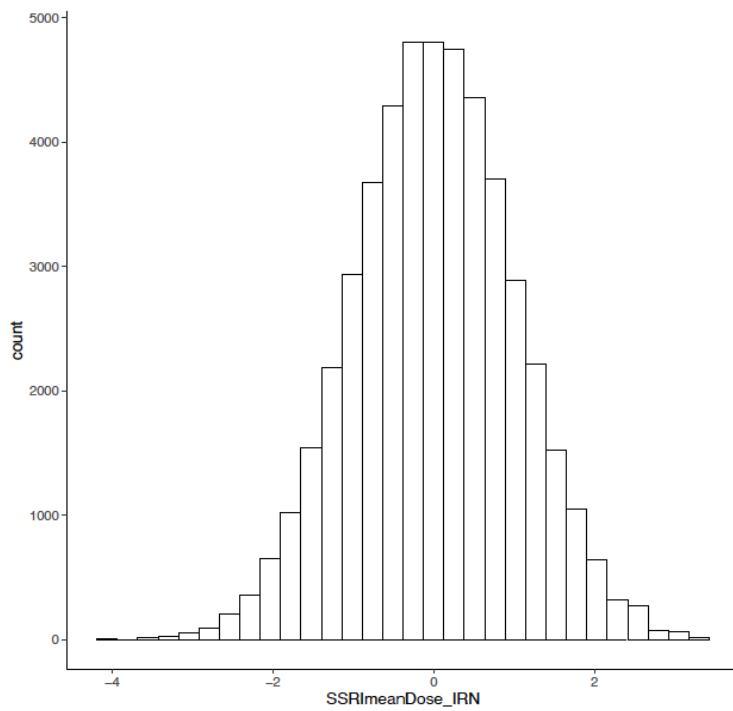
Quantitative: SSRI median absolute

after cleaning for >10% and <90%

SSRI Generic Drug per day dose

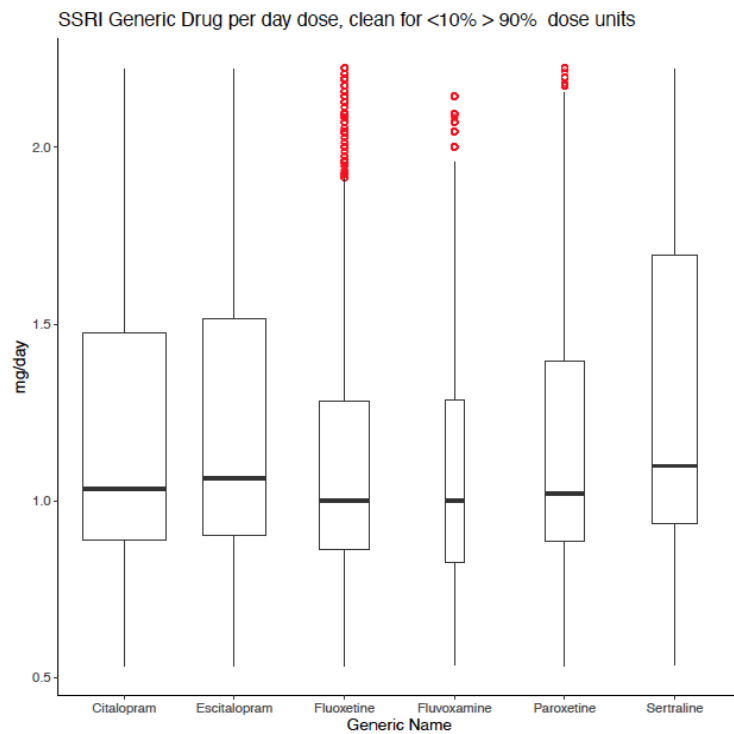


SSRI Dose careful IRN

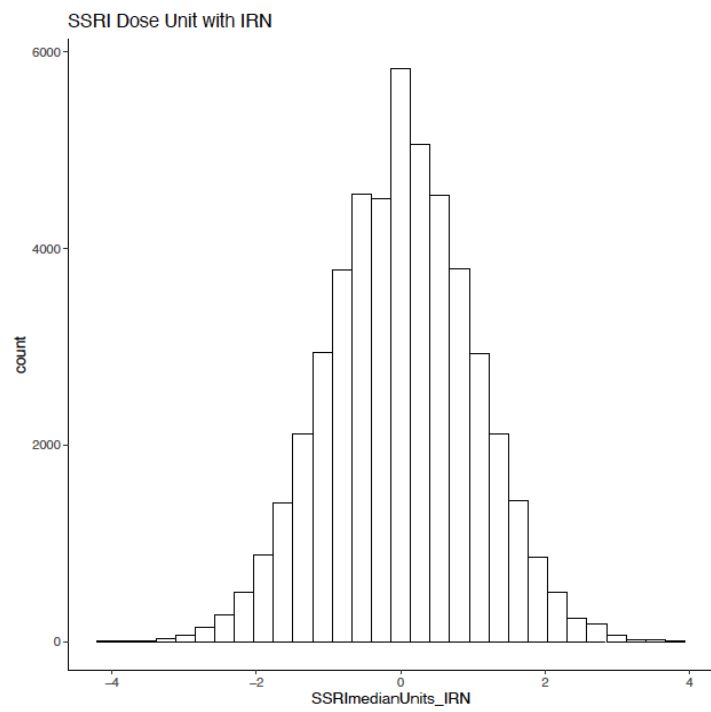
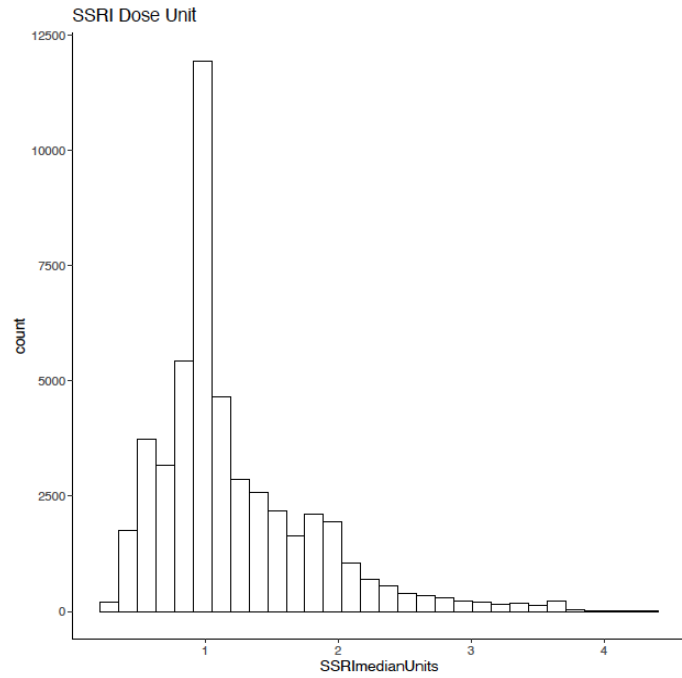


Quantitative: SSRI per unit measurement

post cleaning >10% <90%



20201009 SSRIunits.perDrug.preN... 10 kB



SSRI Generic Name	Number of Purchases
Citalopram	330,138
Escitalopram	235,856
Fluoxetine	134,748
Fluvoxamine	16,216
Paroxetine	66,154
Sertraline	114,733

Phenotypic Correlations

Number of Antidepressants

```
table(phenos.cov$ANTIDEPRESSANTS)
```

```

0      1
64831 73628
```

Number of SSRI

```
table(phenos.cov$SSRI)
```

```

#0      1
#182776 51360
```

Number of MDD

```
table(phenos.cov$F5_DEPRESSIO)
```

```

#0      1
#225094 27855
```

Example

```

#(SSRI=1 n MDD=1) / (SSRI=1 u MDD=1)
19916 / 59301
#0.335
```

Phenotype	Intersect	Union	Overlap	Correlation
SSRI and MDD	19916	59301	0.335	0.5183565
SSRI switch and MDD	1813	42910	0.042	0.003472462
SSRI increase and MDD	10689	48762	0.219	0.007031051
Antidepressants and MDD	24278	77207	0.314	0.4438992

Genetic Correlations

How to run: `/Users/kumar/Dropbox (Partners`

`HealthCare)/Daly_Lab/drugResponseAnalysis/rg/scripts_rg`

Phenotype	Phenotype Correlation	Genetic Correlation
SSRI and MDD	0.5183565	0.7312
SSRI switch and MDD	0.003472462	0.4431
SSRI increase and MDD	0.007031051	0.270
Antidepressants and MDD	0.4438992	0.9969

SSRImedianUnits_IRN.gz

SSRImedianUnits_IRN.gz.tbi

SSRIswitchStatus.gz

SSRIswitchStatus.gz.tbi

finngen_R5_F5_DEPRESSIO.gz

finngen_R5_F5_DEPRESSIO.gz.tbi