20181116a Lists of drugs

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### Getting the lists of ‘L-type Calcium channel antagonists’

From the paper: ‘Targeting the schizophrenia genome: a fast track strategy from GWAS to clinic’, the gene of interest would be CACNA1C and CACNB2 (grouped together as they encode component subunits of the same channel)

CACNA1C: Voltage-dependent L-type calcium channel subunit alpha-1C  
CACNB2: Voltage-dependent L-type calcium channel subunit beta-2

We extracted the data table from the drug bank.

For CACNA1C:  
There are 25 entries in total  
8 removed because of unknown / no pharmacological actions  
‘Ibutilide’ removed as it is known to be an activator  
‘Calcium’ removed as it is known to be a ligand  
15 drugs left

For CACNB2:  
There are 13 entries in total  
2 removed because of unknown / no pharmacological actions  
11 drugs left

### Combining the two tables (for overlaps)

library(readxl)  
L\_type\_calcium\_channel\_combined\_pre <- read\_excel("L-type calcium channel combined pre.xlsx")  
pre = L\_type\_calcium\_channel\_combined\_pre

post = unique(pre)  
dim(post)

## [1] 15 5

head(post)

## # A tibble: 6 x 5  
## DB00622 Nicardipine `approved, investigational` yes inhibitor  
## <chr> <chr> <chr> <chr> <chr>   
## 1 DB01388 Mibefradil investigational, withdrawn yes inhibitor  
## 2 DB00270 Isradipine approved, investigational yes inhibitor  
## 3 DB00661 Verapamil approved yes inhibitor  
## 4 DB00381 Amlodipine approved yes inhibitor  
## 5 DB01023 Felodipine approved, investigational yes inhibitor  
## 6 DB01115 Nifedipine approved yes inhibitor

colnames(post) = c('DBID','Name','Status','Known\_action', 'Mechanism')

library(readr)

write\_csv(post, 'L-type calcium channel combined post.csv')