ARYAMAN MISHRA

19BCE1027_LAB 09

Implementation:

Install and import the library(arulesViz) and Show the Visual output of Association Rules for your data. Assume your own dataset (may be downloaded) unsing below link wherever necessary.

```
library(arules)
library(arulesViz)
library(knitr)
library(magrittr)
library(dplyr)
library(plotly)
med=read.csv("https://umich.instructure.com/files/1678540/download?downl
oad_frd=1", stringsAsFactors = FALSE)
med=med[, -1]
write.csv(med, "medication.csv", row.names=F)
kable(med[1:5,])
med<-read.transactions("medication.csv", sep = ",", skip = 1,
rm.duplicates=TRUE)
summary(med)
inspect(med[1:5,])
apriori(med)
med_rule=apriori(med, parameter=list(support=0.01, confidence=0.25,
minlen=2))
print(med_rule)
summary(med rule)
plot(sort(med_rule))
sortedRule = sort(med rule)
```

```
x1 = sortedRule@quality$support
y1 = sortedRule@quality$confidence
z1 = sortedRule@quality$lift
col1 = sortedRule@quality$count
ruleNames <- paste0("Rule", c(1:length(sortedRule@quality$support)))
plot ly(x = x_1, y = y_1, z = z_1, color = z_1, name=ruleNames) %>%
    add markers() %>%
    layout(title=paste0("Arule Support-Confidence-Lift Plot (for all ",
length(sortedRule@quality$support), "rules)"),
                    scene = list(xaxis = list(title = 'Support'),
                                                  yaxis = list(title = 'Confidence'),
                                                  zaxis = list(title = 'Lift'))) %>%
    hide_colorbar()
inspect(med_rule[1:29])
inspect(sort(med_rule, by="lift")[1:29])
 MEDICATION_DESC.1
                                                           |MEDICATION_DESC.2
                                                                                                                    |MEDICATION_DESC.3 |MEDICATION_DESC.4
                                                                                                                                                                                           |MEDICATION_DESC
  acetaminophen uh
                                                            cefazolin ivpb uh
 |docusate | filor
|hydrocodone acetaminophen 5mg 325mg |NA
|fentanyl injection uh | NA
|cefazolin ivpb uh | hydr
                                                                                                                    |heparin injection |ondansetron injection uh
                                                                                                                                                                                           simvastatin
                                                          |hydrocodone acetaminophen 5mg 325mg |NA
                                                                                                                                                                                           NA
 | Injury output | Injury outpu
 items
1 2 3
79 166 248
 > summary(med)
transactions as itemMatrix in sparse format with
  528 rows (elements/itemsets/transactions) and
88 columns (items) and a density of 0.02085486
                        fentanyl injection uh hydrocodone acetaminophen 5mg 325mg
                                                                                                                                                  cefazolin ivpb uh
                              211 165
heparin injection hydrocodone acetamin 75mg 500mg 15ml
                                                                                                                                                                 (Other)
 element (itemset/transaction) length distribution:
 248 166 79 23 12
  Min. 1st Qu. Median Mean 3rd Qu. Max.
1.000 1.000 2.000 1.835 2.000 5.000
 includes extended item information - examples:
                                          labels
                                         09 nacl
                                09 nacl bolus
3 acetaminophen multiroute uh
> inspect(med[1:5,])
items
trems
[1] {acetaminophen uh,cefazolin ivpb uh}
[2] {docusate,fioricet,heparin injection,ondansetron injection uh,simvastatin}
[3] {hydrocodone acetaminophen Smg 325mg}
[4] {fentamyl injection uh]
[5] {cefazolin ivpb uh,hydrocodone acetaminophen Smg 325mg}
```

```
> inspect(med[1:5,])
     items
[1] {acetaminophen uh,cefazolin ivpb uh}
[2] {docusate,fioricet,heparin injection,ondansetron injection uh,simvastatin}
[3] {hydrocodone acetaminophen 5mg 325mg}
[4] {fentanyl injection uh}
[5] {cefazolin ivpb uh,hydrocodone acetaminophen 5mg 325mg}
> apriori(med)
Apriori
Parameter specification:
 confidence minval smax arem aval original Support maxtime support minlen maxlen target ext
               0.1 1 none FALSE
                                                      TRUE
                                                                         0.1
         0.8
                                                                 5
                                                                                  1
Algorithmic control:
 filter tree heap memopt load sort verbose
    0.1 TRUE TRUE FALSE TRUE 2
Absolute minimum support count: 52
set item appearances ...[0 item(s)] done [0.00s].
set transactions ...[88 item(s), 528 transaction(s)] done [0.00s].
sorting and recoding items ... [5 item(s)] done [0.00s].
creating transaction tree ... done [0.00s].
checking subsets of size 1 2 done [0.00s].
writing [0.00s]
writing ... [0 rule(s)] done [0.00s].
creating S4 object ... done [0.00s].
set of 0 rules
> med_rule=apriori(med, parameter=list(support=0.01, confidence=0.25, minlen=2))
Apriori
Parameter specification:
 confidence minval smax arem aval original Support maxtime support minlen maxlen target ext
        0.25 0.1 1 none FALSE
                                                                        0.01 2 10 rules TRUE
                                                     TRUE 5
Algorithmic control:
 filter tree heap memopt load sort verbose
    0.1 TRUE TRUE FALSE TRUE 2
Absolute minimum support count: 5
set item appearances ...[0 item(s)] done [0.00s].
set transactions ...[88 item(s), 528 transaction(s)] done [0.00s].
sorting and recoding items ... [16 item(s)] done [0.00s].
creating transaction tree ... done [0.00s]. checking subsets of size 1 2 3 4 done [0.00s].
writing ... [29 rule(s)] done [0.00s].
creating S4 object ... done [0.00s].
> print(med_rule)
> summary(med_rule)
set of 29 rules
rule length distribution (lhs + rhs):sizes
 2 3 4
13 12 4
    Min. 1st Qu. Median
                                Mean 3rd Qu.
    2.00
              2.00
                                  2.69 3.00
                      3.00
                                                     4.00
summary of quality measures:
                confidence
L136 Min. :0.2500
                                              coverage
                                                                     lift
Min. :0.7583
                                                                                                count
   support
 Min. :0.01136 Min. :0.2500 Min. :0.01894
1st Qu.:0.01705 1st Qu.:0.3390 1st Qu.:0.03788
                                                                                           Min. : 6.00
                                                                     1st Qu.:1.3333 1st Qu.: 9.00
 Median :0.01894 Median :0.4444
                                            Median :0.06250
                                                                     Median :1.7481
                                                                                           Median :10.00
 Mean :0.03448 Mean :0.4491
3rd Qu.:0.03788 3rd Qu.:0.5000
                                            Mean :0.08392
3rd Qu.:0.08902
                                                                     Mean :1.8636 Mean :18.21
3rd Qu.:2.2564 3rd Qu.:20.00
 Max. :0.11174 Max. :0.8000 Max. :0.31250 Max. :3.9111 Max. :59.00
mining info:
data ntransactions support confidence
  med
                   528 0.01
                                        0.25
```

سام دا										
	spect(med_rule[1:29]) lhs				rhs			coverage		count
[1]	{acetaminophen uh} {ampicillin sulbactam ivpb	uh}				0.01136364 0.01893939				
[3] [4]	{ondansetron injection uh} {ondansetron injection uh}				flackanda dafa andani	0 01704545	0 0707070	0.05350000	1 3714306	
[5]	{ondansetron injection uh}			=>	{fentanyl injection; {fydrocodone acetaminophen 5mg 325mg} {bydrocodone acetamin 75mg 500mg 15ml}	0.03030303	0.4848485	0.06250000	1.5515152	16
[6] [7]	{clindamycin ivpb uh} {clindamycin ivpb uh}				{hydrocodone acetamin 75mg 500mg 15ml} {heparin injection}	0.02462121	0.2/0333/	0.08901515	2.4340420	10
	{clindamycin ivpb uh} {cefazolin ivpb uh}				{hydrocodone acetaminophen 5mg 325mg} {heparin injection}			0.08901515		
[10]	{heparin injection}			=>	{cefazolin ivpb uh}	0.09090909	0.4571429	0.19886364	2.2349206	48
	{cefazolin ivpb uh} {hydrocodone acetaminophen	5mg			{hydrocodone acetaminophen 5mg 325mg} {cefazolin ivpb uh}			0.20454545		59 59
[13]	{heparin injection} {fentanyl injection uh,	-	-		{hydrocodone acetaminophen 5mg 325mg}	0.06060606	0.3047619	0.19886364	0.9752381	32
	ondansetron injection uh}		225		{hydrocodone acetaminophen 5mg 325mg}	0.01136364	0.6000000	0.01893939	1.9200000	6
[15]	{hydrocodone acetaminophen ondansetron injection uh}		325mg,		{fentanyl injection uh}	0.01136364	0.3750000	0.03030303	0.9383886	6
[16]	{cefazolin ivpb uh, fentanyl injection uh}			=>	{heparin injection}	0.01893939	0.5000000	0.03787879	2.5142857	10
[17]	{fentanyl injection uh,				•					
[18]	heparin injection} {cefazolin ivpb uh,				{cefazolin ivpb uh}			0.03977273		10
[19]	heparin injection} {cefazolin ivpb uh,			=>	{hydrocodone acetaminophen 5mg 325mg}	0.03787879	0.4166667	0.09090909	1.3333333	20
	hydrocodone acetaminophen	5mg	325mg}	=>	{heparin injection}	0.03787879	0.3389831	0.11174242	1.7046005	20
	{heparin injection, hydrocodone acetaminophen	5mg	325mg}	=>	{cefazolin ivpb uh}	0.03787879	0.6250000	0.06060606	3.055556	20
[21]	{cefazolin ivpb uh, fentanyl injection uh}			=>	{hydrocodone acetaminophen 5mg 325mg}	0.02462121	0.6500000	0.03787879	2.0800000	13
[22]	{fentanyl injection uh, hydrocodone acetaminophen	5ma	225mal							13
[23]	{fentanyl injection uh,	Jilig	32 Jilly J					0.07575758		
[24]	heparin injection} {heparin injection,			=>	{hydrocodone acetaminophen 5mg 325mg}	0.01893939	0.4761905	0.03977273	1.5238095	10
F251	hydrocodone acetaminophen {fentanyl injection uh,	5mg	325mg}	=>	{fentanyl injection uh}	0.01893939	0.3125000	0.06060606	0.7819905	10
	hydrocodone acetaminophen	5mg	325mg}	=>	{heparin injection}	0.01893939	0.2500000	0.07575758	1.2571429	10
[26]	{cefazolin ivpb uh, fentanyl injection uh,									
[27]	heparin injection} {cefazolin ivpb uh,			=>	{hydrocodone acetaminophen 5mg 325mg}	0.01515152	0.8000000	0.01893939	2.5600000	8
[2/]	heparin injection,									_
[28]	hydrocodone acetaminophen {cefazolin ivpb uh,	5mg	325mg}	=>	{fentanyl injection uh}	0.01515152	0.4000000	0.03787879	1.0009479	8
	fentanyl injection uh, hydrocodone acetaminophen	5ma	325ma}	=>	{heparin injection}	0.01515152	0.6153846	0.02462121	3.0945055	8
[29]	{fentanyl injection uh,	Jg	323mg)		(nepa. iii iiijeeeroiij	0.01313131	0.02330.0	0.02.02222	3,03,3033	ŭ
	heparin injection, hydrocodone acetaminophen	5mg	325mg}	=>	{cefazolin ivpb uh}	0.01515152	0.8000000	0.01893939	3.9111111	8
\ inc			3 33							
/ 11113	spect(sort(med_rule, by="lif	ft")	[1:29])		nhe	support.	confidence	501/08300	146+	count
	lhs {fentanyl injection uh,	ft")	[1:29])		rhs	support	confidence	coverage	lift	count
	Ths {fentanyl injection uh, heparin injection,					support 0.01515152				count 8
[1]	lhs {fentanyl injection uh, heparin injection, hydrocodone acetaminophen {cefazolin ivpb uh,									
[2]	lhs {fentanyl injection uh, heparin injection, hydrocodone acetaminophen {cefazolin ivpb uh, fentanyl injection uh, hydrocodone acetaminophen	5mg	325mg}	=>	{cefazolin ivpb uh}		0.8000000	0.01893939	3.9111111	
[2]	lhs {fentanyl injection uh, heparin injection, hydrocodone acetaminophen {cefazolin ivpb uh, fentanyl injection uh,	5mg 5mg	325mg} 325mg}	=>	{cefazolin ivpb uh} {heparin injection}	0.01515152	0.8000000 0.6153846	0.01893939	3.9111111 3.0945055	8
[1] [2] [3]	lhs {fentanyl injection uh, heparin injection, hydrocodone acetaminophen {cefazolin ivpb uh, fentanyl injection uh, hydrocodone acetaminophen {heparin injection, hydrocodone acetaminophen {cefazolin ivpb uh,	5mg 5mg	325mg} 325mg}	=>	{cefazolin ivpb uh} {heparin injection}	0.01515152	0.8000000 0.6153846	0.01893939	3.9111111 3.0945055	8
[1] [2] [3] [4]	lhs {fentanyl injection uh, heparin injection, hydrocodone acetaminophen {cefazolin ivpb uh, fentanyl injection uh, hydrocodone acetaminophen {hydrocodone acetaminophen {cefazolin ivpb uh, fentanyl injection uh, heparin injection}	5mg 5mg	325mg} 325mg}	=> => =>	{cefazolin ivpb uh} {heparin injection}	0.01515152 0.01515152 0.03787879	0.8000000 0.6153846 0.6250000	0.01893939 0.02462121 0.06060606	3.9111111 3.0945055 3.055556	8
[1] [2] [3] [4]	lhs {fentanyl injection uh, heparin injection, hydrocodone acetaminophen {cefazolin ivpb uh, fentanyl injection uh, hydrocodone acetaminophen {heparin injection, hydrocodone acetaminophen {cefazolin ivpb uh, fentanyl injection uh,	5mg 5mg	325mg} 325mg} 325mg}	=> => =>	{cefazolin ivpb uh} {heparin injection} {cefazolin ivpb uh}	0.01515152 0.01515152 0.03787879	0.8000000 0.6153846 0.6250000 0.8000000	0.01893939 0.02462121 0.06060606 0.01893939	3.911111 3.0945055 3.0555556 2.5600000	8 8 20
[1] [2] [3] [4] [5] [6]	lhs {fentanyl injection uh, heparin injection, hydrocodone acetaminophen {cefazolin ivpb uh, fentanyl injection uh, hydrocodone acetaminophen {heparin injection, hydrocodone acetaminophen {cefazolin ivpb uh, fentanyl injection uh, heparin injection {cefazolin ivpb uh, fentanyl injection uh, fentanyl injection uh, {cefazolin ivpb uh, fentanyl injection uh} {clindamycin ivpb uh}	5mg 5mg	325mg} 325mg} 325mg}	=> => => =>	{cefazolin ivpb uh} {heparin injection} {cefazolin ivpb uh} {hydrocodone acetaminophen 5mg 325mg}	0.01515152 0.01515152 0.03787879 0.01515152 0.01893939	0.8000000 0.6153846 0.6250000 0.8000000 0.5000000	0.01893939 0.02462121 0.06060606 0.01893939 0.03787879	3.911111 3.0945055 3.0555556 2.5600000 2.5142857	8 8 20 8
[1] [2] [3] [4] [5] [6] [7]	lhs {fentanyl injection uh, heparin injection, hydrocodone acetaminophen {cefazolin ivpb uh, fentanyl injection uh, hydrocodone acetaminophen {heparin injection, hydrocodone acetaminophen {cefazolin ivpb uh, fentanyl injection uh, heparin injection} {cefazolin ivpb uh, fentanyl injection uh} {clindamycin ivpb uh} {fentanyl injection uh} {clindamycin ivpb uh} {fentanyl injection uh, heparin injection}	5mg 5mg	325mg} 325mg} 325mg}	=> => => => => =>	{cefazolin ivpb uh} {heparin injection} {cefazolin ivpb uh} {hydrocodone acetaminophen 5mg 325mg} {heparin injection} {hydrocodone acetamin 75mg 500mg 15ml} {cefazolin ivpb uh}	0.01515152 0.01515152 0.03787879 0.01515152 0.01893939 0.02462121 0.01893939	0.8000000 0.6153846 0.6250000 0.8000000 0.5000000 0.2765957 0.4761905	0.01893939 0.02462121 0.06060606 0.01893939 0.03787879 0.08901515 0.03977273	3.9111111 3.0945055 3.0555556 2.5600000 2.5142857 2.4340426 2.3280423	8 20 8 10 13
[1] [2] [3] [4] [5] [6] [7] [8] [9]	lhs {fentanyl injection uh, heparin injection, hydrocodone acetaminophen {cefazolin ivpb uh, fentanyl injection uh, hydrocodone acetaminophen {heparin injection, hydrocodone acetaminophen {cefazolin ivpb uh, fentanyl injection uh, heparin injection} {cefazolin ivpb uh, fentanyl injection uh} {clindamycin ivpb uh} {fentanyl injection uh, heparin injection uh, heparin injection uh, {catacaminophen uh} {acetaminophen uh} {clindamycin ivpb uh}	5mg 5mg	325mg} 325mg} 325mg}	=> => => => => => =>	{cefazolin ivpb uh} {heparin injection} {cefazolin ivpb uh} {hydrocodone acetaminophen 5mg 325mg} {heparin injection} {hydrocodone acetamin 75mg 500mg 15ml} {cefazolin ivpb uh} {cefazolin ivpb uh} {heparin injection}	0.01515152 0.01515152 0.03787879 0.01515152 0.01893939 0.02462121 0.01893939 0.01136364 0.03977273	0.8000000 0.6153846 0.6250000 0.8000000 0.2765957 0.4761905 0.44615385 0.4468085	0.01893939 0.02462121 0.06060606 0.01893939 0.03787879 0.08901515 0.03977273 0.02462121 0.08901515	3.9111111 3.0945055 3.0555556 2.5600000 2.5142857 2.4340426 2.3280423 2.2564103 2.2468085	8 20 8 10 13
[1] [2] [3] [4] [5] [6] [7] [8] [9] [10]	lhs {fentanyl injection uh, heparin injection, hydrocodone acetaminophen {cefazolin ivpb uh, fentanyl injection uh, hydrocodone acetaminophen {heparin injection, hydrocodone acetaminophen {cefazolin ivpb uh, fentanyl injection uh, heparin injection uh, heparin injection uh, fentanyl injection uh} {clindamycin ivpb uh} {fentanyl injection uh, heparin injection uh, heparin injection uh, heparin injection uh, heparin injection {acetaminophen uh} {clindamycin ivpb uh} {cefazolin ivpb uh} {cefazolin ivpb uh}	5mg 5mg	325mg} 325mg} 325mg}	=> => => => => => =>	{cefazolin ivpb uh} {heparin injection} {cefazolin ivpb uh} {hydrocodone acetaminophen 5mg 325mg} {heparin injection} {hydrocodone acetamin 75mg 500mg 15ml} {cefazolin ivpb uh} {cefazolin ivpb uh} {heparin injection} {heparin injection}	0.01515152 0.01515152 0.03787879 0.01515152 0.01893939 0.02462121 0.01893939 0.01136364 0.03977273 0.09090909	0.8000000 0.6153846 0.6250000 0.8000000 0.2765957 0.4761905 0.4615385 0.4448085	0.01893939 0.02462121 0.06060606 0.01893939 0.03787879 0.08901515 0.03977273 0.02462121 0.08901515	3.9111111 3.0945055 3.0555556 2.5600000 2.5142857 2.4340426 2.3280423 2.2564103 2.2468085 2.2349206	8 20 8 10 13 10 6 21 48
[1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11]	lhs {fentanyl injection uh, heparin injection, hydrocodone acetaminophen {cefazolin ivpb uh, fentanyl injection uh, hydrocodone acetaminophen {heparin injection, hydrocodone acetaminophen {cefazolin ivpb uh, fentanyl injection uh, heparin injection uh, fentanyl injection uh, {cindamycin ivpb uh, fentanyl injection uh, {cefazolin ivpb uh, fectanyl injection uh, heparin injection {cetazolin ivpb uh, fertanyl injection uh, heparin injection} {cefazolin ivpb uh} {cefazolin ivpb uh} {cefazolin ivpb uh, heparin injection} {cefazolin ivpb uh, } {cefazolin ivpb uh, } {cefazolin ivpb uh, }	5mg 5mg	325mg} 325mg} 325mg}	=> => => => => => => => =>	{cefazolin ivpb uh} {heparin injection} {cefazolin ivpb uh} {hydrocodone acetaminophen 5mg 325mg} {heparin injection} {hydrocodone acetamin 75mg 500mg 15ml} {cefazolin ivpb uh} {cefazolin ivpb uh} {heparin injection} {heparin injection} {cefazolin ivpb uh} {cefazolin ivpb uh} {cefazolin ivpb uh}	0.01515152 0.01515152 0.03787879 0.01515152 0.01893939 0.02462121 0.01893939 0.01136364 0.03977273 0.09090909 0.09090909	0.8000000 0.6153846 0.6250000 0.8000000 0.5000000 0.2765957 0.4761905 0.4615385 0.4468085 0.4444444 0.4571429	0.01893939 0.02462121 0.06060606 0.01893939 0.03787879 0.08901515 0.03977273 0.02462121 0.0890155 0.0890155 0.089045454 0.19886364	3.9111111 3.0945055 3.0555556 2.5600000 2.5142857 2.4340426 2.3280423 2.2564103 2.2468085 2.2349206 2.2349206	8 20 8 10 13 10 6 21 48 48
[1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12]	lhs {fentanyl injection uh, heparin injection, hydrocodone acetaminophen {cefazolin ivpb uh, fentanyl injection uh, hydrocodone acetaminophen {heparin injection, hydrocodone acetaminophen {cefazolin ivpb uh, fentanyl injection uh, heparin injection} {cefazolin ivpb uh, fentanyl injection uh} {clindamycin ivpb uh} {fentanyl injection uh, heparin injection} {acetaminophen uh} {clindamycin ivpb uh} {cefazolin ivpb uh} {fentanyl injection} {cefazolin ivpb uh} {fentanyl injection uh}	5mg 5mg 5mg	325mg} 325mg} 325mg}	=> => => => => => => =>	{cefazolin ivpb uh} {heparin injection} {cefazolin ivpb uh} {hydrocodone acetaminophen 5mg 325mg} {heparin injection} {hydrocodone acetamin 75mg 500mg 15ml} {cefazolin ivpb uh} {cefazolin ivpb uh} {heparin injection} {heparin injection} {cefazolin ivpb uh} {heparin injection} {cefazolin ivpb uh} {hydrocodone acetaminophen 5mg 325mg}	0.01515152 0.01515152 0.03787879 0.01515152 0.01893939 0.02462121 0.01893939 0.01136364 0.03977273 0.09090909 0.090909090	0.8000000 0.6153846 0.6250000 0.8000000 0.5000000 0.2765957 0.4761905 0.44615385 0.4468085 0.4444444 0.4571429 0.6500000	0.01893939 0.02462121 0.06060606 0.01893939 0.03787879 0.08901515 0.03977273 0.02462121 0.08901515 0.20454545 0.19886364 0.03787879	3.9111111 3.0945055 3.0555556 2.5600000 2.5142857 2.4340426 2.3280423 2.2564103 2.2468085 2.2349206 2.2349206 2.0800000	8 20 8 10 13 10 6 21 48 48 13
[1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12] [13]	Ihs {fentanyl injection uh, heparin injection, hydrocodone acetaminophen {cefazolin ivpb uh, fentanyl injection uh, hydrocodone acetaminophen {heparin injection, hydrocodone acetaminophen {cefazolin ivpb uh, fentanyl injection uh, heparin injection uh, heparin injection uh, fentanyl injection uh, fentanyl injection uh {clindamycin ivpb uh, fentanyl injection uh, heparin injection {acetaminophen uh} {clindamycin ivpb uh} {cefazolin ivpb uh} {cefazolin ivpb uh} {heparin injection {cefazolin ivpb uh} {cefazolin ivpb uh} {cefazolin ivpb uh} {fentanyl injection {cefazolin ivpb uh}	5mg 5mg 5mg	325mg} 325mg} 325mg}	=> => => => => => => => =>	{cefazolin ivpb uh} {heparin injection} {cefazolin ivpb uh} {hydrocodone acetaminophen 5mg 325mg} {heparin injection} {hydrocodone acetamin 75mg 500mg 15ml} {cefazolin ivpb uh} {cefazolin ivpb uh} {heparin injection} {heparin injection} {cefazolin ivpb uh} {cefazolin ivpb uh} {cefazolin ivpb uh}	0.01515152 0.01515152 0.03787879 0.01515152 0.01893939 0.02462121 0.01136364 0.03977273 0.0909009 0.09090909 0.02462121 0.01136364 0.11174242	0.8000000 0.6153846 0.6250000 0.8000000 0.2765957 0.4761905 0.4615385 0.4444444 0.4571429 0.6500000 0.5000000 0.5462963	0.01893939 0.02462121 0.06060606 0.01893939 0.03787879 0.08901515 0.03977273 0.02962121 0.08901515 0.20454545 0.03787879 0.01893939 0.20454545	3.9111111 3.0945055 3.0555556 2.5600000 2.5142857 2.4340426 2.3280423 2.2564103 2.2468085 2.2349206 2.0800000 1.9200000 1.7481481	8 20 8 10 13 10 6 21 48 48
[1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12] [13] [14]	lhs {fentanyl injection uh, heparin injection, hydrocodone acetaminophen {cefazolin ivpb uh, fentanyl injection uh, hydrocodone acetaminophen {heparin injection, hydrocodone acetaminophen {cefazolin ivpb uh, fentanyl injection uh, heparin injection uh, fentanyl injection uh, {cefazolin ivpb uh, fentanyl injection uh, {clindamycin ivpb uh} {fentanyl injection uh, heparin injection} {acetaminophen uh} {clindamycin ivpb uh} {cefazolin ivpb uh} {cefazolin ivpb uh, fentanyl injection uh, heparin injection } {cefazolin ivpb uh, fentanyl injection uh, ondansetron injection uh} {cefazolin ivpb uh} {fentanyl injection uh, ondansetron injection uh} {cefazolin ivpb uh}	5mg 5mg 5mg	325mg} 325mg} 325mg}	=> => => => => => => => => => =>	{cefazolin ivpb uh} {heparin injection} {cefazolin ivpb uh} {hydrocodone acetaminophen 5mg 325mg} {heparin injection} {hydrocodone acetamin 75mg 500mg 15ml} {cefazolin ivpb uh} {cefazolin ivpb uh} {heparin injection} {heparin injection} {cefazolin ivpb uh} {hydrocodone acetaminophen 5mg 325mg} {hydrocodone acetaminophen 5mg 325mg} {hydrocodone acetaminophen 5mg 325mg} {cefazolin ivpb uh}	0.01515152 0.01515152 0.03787879 0.01515152 0.01893939 0.02462121 0.01893939 0.01136364 0.03977273 0.09090909 0.02462121 0.01136364 0.11174242	0.8000000 0.6153846 0.6250000 0.8000000 0.2765957 0.4761905 0.44613385 0.4448444 0.4571429 0.6500000 0.5462963 0.3575758	0.01893939 0.02462121 0.06060606 0.01893939 0.03787879 0.08901515 0.03977273 0.02462121 0.0890155 0.0890155 0.0890155 0.04624621 0.03787879 0.01893939 0.20454545 0.1893939 0.20454545 0.31250000	3.9111111 3.0945055 3.0555556 2.5600000 2.5142857 2.4340426 2.3280423 2.2564103 2.2468085 2.2349206 2.2349206 2.0800000 1.92000000 1.7481481 1.7481481	8 20 8 10 13 10 6 21 48 48 13 6 59 59
[1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12] [13] [14] [15]	lhs {fentanyl injection uh, heparin injection, hydrocodone acetaminophen {cefazolin ivpb uh, fentanyl injection uh, hydrocodone acetaminophen {heparin injection, hydrocodone acetaminophen {cefazolin ivpb uh, fentanyl injection uh, heparin injection uh, fentanyl injection uh} {cefazolin ivpb uh, fentanyl injection uh} {clindamycin ivpb uh} {fentanyl injection uh} {acetaminophen uh} {clindamycin ivpb uh} {cefazolin ivpb uh} {cefazolin ivpb uh} {heparin injection} {acetaminophen uh} {cefazolin ivpb uh, fentanyl injection uh} {cefazolin ivpb uh, fentanyl injection uh} {fentanyl injection uh} {fentanyl injection uh} {cefazolin ivpb uh} {hydrocodone acetaminophen {ampicillin subbactam inplected {ampicillin subbactam inplected {cefazolin ivpb uh, } {cefazolin ivpb uh, } {cefazolin ivpb uh, } {mydrocodone acetaminophen {mydrocodone in subactam ipb {cefazolin ivpb uh, } {cefazolin ivpb uh, }	5mg 5mg 5mg uh}	325mg} 325mg} 325mg}	=> => => => => => => => => =>	{cefazolin ivpb uh} {heparin injection} {cefazolin ivpb uh} {hydrocodone acetaminophen 5mg 325mg} {heparin injection} {hydrocodone acetamin 75mg 500mg 15ml} {cefazolin ivpb uh} {cefazolin ivpb uh} {heparin injection} {heparin injection} {cefazolin ivpb uh} {hydrocodone acetaminophen 5mg 325mg} {hydrocodone acetaminophen 5mg 325mg} {cefazolin ivpb uh} {hydrocodone acetaminophen 5mg 325mg} {cefazolin ivpb uh} {heparin injection}	0.01515152 0.01515152 0.03787879 0.01515152 0.01893939 0.02462121 0.01893939 0.01136364 0.03977273 0.09090909 0.09090909 0.02462121 0.01136364 0.11174242 0.11174242 0.11174242	0.8000000 0.6153846 0.6250000 0.8000000 0.5000000 0.2765957 0.4761905 0.4615385 0.4468085 0.4444444 0.4571429 0.6500000 0.6000000 0.5462963 0.3575758 0.3448276	0.01893939 0.02462121 0.06060606 0.01893939 0.03787879 0.08901515 0.03977273 0.02462121 0.08901515 0.20454545 0.19886364 0.03787879 0.01893939 0.01893939 0.20454545 0.31250000 0.05492424	3.9111111 3.0945055 3.0555556 2.5600000 2.5142857 2.4340426 2.3280423 2.2564103 2.2468085 2.2349206 2.0800000 1.9200000 1.7481481 1.7481481 1.74339901	8 20 8 10 13 10 6 21 48 48 13 6 59 59 10
[1] [2] [3] [4] [5] [6] [7] [10] [11] [12] [13] [14] [15] [16] [17]	Ihs {fentanyl injection uh, heparin injection, hydrocodone acetaminophen {cefazolin ivpb uh, fentanyl injection uh, hydrocodone acetaminophen {heparin injection, hydrocodone acetaminophen {cefazolin ivpb uh, fentanyl injection uh, heparin injection uh, heparin injection uh, fentanyl injection uh, fentanyl injection uh, fentanyl injection uh, fentanyl injection uh, heparin injection uh, heparin injection {cefazolin ivpb uh} {cefazolin ivpb uh} {heparin injection} {cefazolin ivpb uh} {fentanyl injection uh, fentanyl injection uh, cefazolin ivpb uh {fentanyl injection uh, cefazolin ivpb uh} {cefazolin ivpb uh} {fentanyl injection uh, andansetron injection uh, cefazolin ivpb uh} {ndansetron injection uh} {modansetron injection uh}	5mg 5mg 5mg uh}	325mg} 325mg} 325mg}	=> => => => => => => => => =>	{cefazolin ivpb uh} {heparin injection} {cefazolin ivpb uh} {hydrocodone acetaminophen 5mg 325mg} {heparin injection} {hydrocodone acetamin 75mg 500mg 15ml} {cefazolin ivpb uh} {cefazolin ivpb uh} {heparin injection} {heparin injection} {cefazolin ivpb uh} {hydrocodone acetaminophen 5mg 325mg} {hydrocodone acetaminophen 5mg 325mg} {cefazolin ivpb uh} {hydrocodone acetaminophen 5mg 325mg} {cefazolin ivpb uh} {heparin injection}	0.01515152 0.01515152 0.03787879 0.01515152 0.01893939 0.02462121 0.01893939 0.01136364 0.03977273 0.09090909 0.02462121 0.01136364 0.11174242	0.8000000 0.6153846 0.6250000 0.8000000 0.5000000 0.2765957 0.4761905 0.4615385 0.4468085 0.4444444 0.4571429 0.6500000 0.6000000 0.5462963 0.3575758 0.3448276	0.01893939 0.02462121 0.06060606 0.01893939 0.03787879 0.08901515 0.03977273 0.02462121 0.08901515 0.20454545 0.19886364 0.03787879 0.01893939 0.01893939 0.20454545 0.31250000 0.05492424	3.9111111 3.0945055 3.0555556 2.5600000 2.5142857 2.4340426 2.3280423 2.2564103 2.2468085 2.2349206 2.0800000 1.9200000 1.7481481 1.7481481 1.74339901	8 20 8 10 13 10 6 21 48 48 13 6 59 59
[1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12] [13] [14] [15] [16] [17] [18]	lhs {fentanyl injection uh, heparin injection uh, heparin injection, hydrocodone acetaminophen {cefazolin ivpb uh, fentanyl injection uh, hydrocodone acetaminophen {heparin injection, hydrocodone acetaminophen {cefazolin ivpb uh, fentanyl injection uh, heparin injection uh, fentanyl injection uh, fentanyl injection uh, fentanyl injection uh, fentanyl injection uh, feazolin ivpb uh {cefazolin ivpb uh} {cefazolin ivpb uh, fentanyl injection uh, ondansetron injection uh, ondansetron injection uh {cefazolin ivpb uh} {cefazolin ivpb uh} {cefazolin ivpb uh} {cefazolin ivpb uh, ondansetron injection uh, hydrocodone acetaminophen {fentanyl injection uh, hydrocodone acetaminophen {fentanyl injection uh, hydrocodone acetaminophen {fentanyl injection hydrocodone acetaminophen	5mg 5mg 5mg 5mg uh} 5mg 5mg	325mg} 325mg} 325mg} 325mg} 325mg}	=> => => => => => => => => => => => => =	{cefazolin ivpb uh} {heparin injection} {cefazolin ivpb uh} {hydrocodone acetaminophen 5mg 325mg} {heparin injection} {hydrocodone acetamin 75mg 500mg 15ml} {cefazolin ivpb uh} {cefazolin ivpb uh} {heparin injection} {heparin injection} {cefazolin ivpb uh} {hydrocodone acetaminophen 5mg 325mg} {hydrocodone acetaminophen 5mg 325mg} {hydrocodone acetaminophen 5mg 325mg} {hydrocodone acetaminophen 5mg 325mg} {hydrocodone ivpb uh} {heparin injection} {heparin injection} {heparin injection} {cefazolin ivpb uh}	0.01515152 0.01515152 0.03787879 0.01515152 0.01893939 0.02462121 0.01893939 0.01136364 0.03977273 0.09090909 0.02462121 0.01136364 0.11174242 0.11174242 0.11174242 0.01893939 0.03787879 0.02462121	0.8000000 0.6153846 0.6250000 0.8000000 0.5000000 0.2765957 0.4761905 0.446885 0.4448444 0.4571429 0.6500000 0.5000000 0.5462963 0.3575758 0.3448276 0.3389831 0.3250000	0.01893939 0.02462121 0.06060606 0.01893939 0.03787879 0.08901515 0.03977273 0.02462121 0.0890155 0.0454545 0.19886364 0.03787879 0.01839399 0.20454545 0.31250000 0.05492424 0.11174242	3.9111111 3.0945055 3.0555556 2.5600000 2.5142857 2.4340426 2.3280423 2.2564103 2.2468085 2.2349206 2.2349206 2.0800000 1.9200000 1.7481481 1.7481481 1.77339901 1.7046005 1.5888889	8 20 8 10 13 10 6 21 48 48 13 6 59 59 10 20 13
[1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12] [13] [14] [15] [16] [17] [18]	Ihs {fentanyl injection uh, heparin injection, hydrocodone acetaminophen {cefazolin ivpb uh, fentanyl injection uh, hydrocodone acetaminophen {heparin injection uh, hydrocodone acetaminophen {heparin injection uh, heparin injection uh, heparin injection uh, fentanyl injection uh, {cefazolin ivpb uh, fentanyl injection uh, fentanyl injection uh, keparin injection uh, heparin injection} {cefazolin ivpb uh} {fentanyl injection uh, heparin injection} {cefazolin ivpb uh} {cefazolin ivpb uh, fentanyl injection uh, fentanyl injection uh, nondansetron injection uh, ondansetron injection uh, hydrocodone acetaminophen {ampicillin sulbactam ivpb {cefazolin ivpb uh, hydrocodone acetaminophen {mpicillin sulbactam ivpb {cefazolin ivpb uh, hydrocodone acetaminophen {modansetron injection uh, fentanyl injection uh,	5mg 5mg 5mg 5mg uh} 5mg 5mg	325mg} 325mg} 325mg} 325mg} 325mg}	=> => => => => => => => => => => =>	{cefazolin ivpb uh} {heparin injection} {cefazolin ivpb uh} {hydrocodone acetaminophen 5mg 325mg} {heparin injection} {hydrocodone acetamin 75mg 500mg 15ml} {cefazolin ivpb uh} {cefazolin ivpb uh} {heparin injection} {cefazolin ivpb uh} {hydrocodone acetaminophen 5mg 325mg} {hydrocodone acetaminophen 5mg 325mg} {cefazolin ivpb uh} {heparin injection} {cefazolin ivpb uh} {hydrocodone acetaminophen 5mg 325mg} {cefazolin ivpb uh} {heparin injection} {heparin injection} {cefazolin ivpb uh} {hoparin injection} {cefazolin ivpb uh} {cefazolin ivpb uh} {hoparin injection} {cefazolin ivpb uh} {hoparin injection} {cefazolin ivpb uh} {hoparin injection} {cefazolin ivpb uh} {hydrocodone acetaminophen 5mg 325mg}	0.01515152 0.01515152 0.03787879 0.01515152 0.01893939 0.02462121 0.01893939 0.01136364 0.03977273 0.09090909 0.09090909 0.02462121 0.01136364 0.11174242 0.11174242 0.11174242 0.11174242 0.01893939 0.03787879 0.02462121 0.03030303	0.8000000 0.6153846 0.6250000 0.8000000 0.5000000 0.2765957 0.4761905 0.4615385 0.4468085 0.4444444 0.4571429 0.6500000 0.50600000 0.5462963 0.3575758 0.3448276 0.3389831 0.3250000 0.4848485	0.01893939 0.02462121 0.06060606 0.01893939 0.03787879 0.08901515 0.03977273 0.02462121 0.08901515 0.20454545 0.19886364 0.03787879 0.0189393 0.20454545 0.31250000 0.5492424 0.11174242 0.07575758 0.06250000	3.9111111 3.0945055 3.0555556 2.5600000 2.5142857 2.4340426 2.3280423 2.2564103 2.2468085 2.2349206 2.349206 2.0800000 1.9200000 1.7481481 1.7481481 1.7339901 1.7046005 1.5888889 1.5515152	8 20 8 10 13 10 6 21 48 48 13 6 59 59 10 20 13 16
[1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12] [13] [14] [15] [16] [17] [18] [19] [20] [21]	lhs {fentanyl injection uh, heparin injection, hydrocodone acetaminophen {cefazolin ivpb uh, fentanyl injection uh, hydrocodone acetaminophen {heparin injection, hydrocodone acetaminophen {cefazolin ivpb uh, fentanyl injection uh, heparin injection uh, heparin injection uh, fentanyl injection uh, fentanyl injection uh, fentanyl injection uh, fentanyl injection uh, heparin injection {cefazolin ivpb uh} {clindamycin ivpb uh} {cefazolin ivpb uh} {cefazolin ivpb uh} {cefazolin ivpb uh} {fentanyl injection uh, heparin injection {cefazolin ivpb uh} {fentanyl injection uh, ondansetron injection uh} {fentanyl injection uh, hydrocodone acetaminophen {ampicillin sulbactam ivpb cefazolin ivpb uh, hydrocodone acetaminophen {fentanyl injection uh, fentanyl injection uh, heparin injection uh,	5mg 5mg 5mg 5mg uh} 5mg	325mg} 325mg} 325mg} 325mg} 325mg}	=> => => => => => => => => => => => => =	{cefazolin ivpb uh} {heparin injection} {cefazolin ivpb uh} {hydrocodone acetaminophen 5mg 325mg} {heparin injection} {hydrocodone acetamin 75mg 500mg 15ml} {cefazolin ivpb uh} {cefazolin ivpb uh} {heparin injection} {heparin injection} {cefazolin ivpb uh} {hydrocodone acetaminophen 5mg 325mg} {hydrocodone acetaminophen 5mg 325mg} {hydrocodone acetaminophen 5mg 325mg} {hydrocodone acetaminophen 5mg 325mg} {hydrocodone ivpb uh} {heparin injection} {heparin injection} {heparin injection} {cefazolin ivpb uh}	0.01515152 0.01515152 0.03787879 0.01515152 0.01893939 0.02462121 0.01893939 0.01136364 0.03977273 0.09090909 0.09090909 0.02462121 0.01136364 0.11174242 0.11174242 0.11174242 0.11174242 0.01893939 0.03787879 0.02462121 0.03030303	0.8000000 0.6153846 0.6250000 0.8000000 0.5000000 0.2765957 0.4761905 0.44613385 0.4468085 0.4464444 0.4571429 0.6500000 0.5462963 0.3575758 0.3448276 0.3389831 0.3250000 0.4848485 0.4761905	0.01893939 0.02462121 0.06060606 0.01893939 0.03787879 0.08901515 0.03977273 0.02462121 0.0890155 0.20454545 0.19886364 0.03787879 0.01893939 0.20454545 0.31250000 0.05492424 0.11174242 0.07575758 0.06250000 0.03977273	3.9111111 3.0945055 3.0555556 2.5600000 2.5142857 2.4340426 2.3280423 2.2564103 2.2468085 2.2349206 2.2349206 2.0800000 1.7481481 1.7481481 1.7481481 1.77339901 1.7046005 1.5888889 1.5515152 1.5238095	8 20 8 10 13 10 6 21 48 48 13 6 59 59 10 20 13
[1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12] [13] [14] [15] [16] [17] [18] [19] [20] [21]	lhs {fentanyl injection uh, heparin injection, hydrocodone acetaminophen {cefazolin ivpb uh, fentanyl injection uh, hydrocodone acetaminophen {heparin injection, hydrocodone acetaminophen {cefazolin ivpb uh, fentanyl injection uh, heparin injection uh, fentanyl injection uh, feazolin ivpb uh] {cefazolin ivpb uh} {cefazolin ivpb uh, fentanyl injection uh, nodansetron injection uh} {cefazolin ivpb uh, hydrocodone acetaminophen {mydrocodone	5mg 5mg 5mg 5mg uh} 5mg	325mg} 325mg} 325mg} 325mg} 325mg}	=> => => => => => => => => => => => =>	{cefazolin ivpb uh} {heparin injection} {cefazolin ivpb uh} {hydrocodone acetaminophen 5mg 325mg} {heparin injection} {hydrocodone acetamin 75mg 500mg 15ml} {cefazolin ivpb uh} {heparin injection} {heparin injection} {cefazolin ivpb uh} {hydrocodone acetaminophen 5mg 325mg} {hydrocodone acetaminophen 5mg 325mg} {hydrocodone acetaminophen 5mg 325mg} {cefazolin ivpb uh} {heparin injection} {cefazolin ivpb uh} {heparin injection} {heparin injection} {heparin injection} {heparin injection} {heparin injection} {cefazolin ivpb uh} {hydrocodone acetaminophen 5mg 325mg}	0.01515152 0.01515152 0.03787879 0.01515152 0.01893939 0.02462121 0.01893939 0.01136364 0.03977273 0.09090909 0.02462121 0.01136364 0.11174242 0.11174242 0.11174242 0.01893939 0.03787879 0.02462121 0.03030303 0.01893939 0.01893939 0.01704545	0.8000000 0.6153846 0.6250000 0.8000000 0.5000000 0.2765957 0.4761905 0.4468085 0.4468085 0.4444444 0.4571429 0.6500000 0.50402006 0.3575758 0.3448276 0.3389831 0.3250000 0.4848485 0.4761905 0.2727273	0.01893939 0.02462121 0.06060606 0.01893939 0.03787879 0.08901515 0.03977273 0.02462121 0.08901515 0.0454545 0.03787879 0.018939 0.20454545 0.31250000 0.05492424 0.11174242 0.07575758 0.06250000 0.03977273 0.06250000	3.9111111 3.0945055 3.0555556 2.5600000 2.5142857 2.4340426 2.3280423 2.2364103 2.2468085 2.2349206 2.349206 2.349206 2.349206 1.7481481 1.7481481 1.77339901 1.7046005 1.5888889 1.5515152 1.5238095 1.3714286	8 20 8 10 13 10 6 21 48 48 13 6 59 59 10 20 13 16 10 9
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[1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12] [13] [14] [15] [16] [17] [18] [19] [20] [21] [22] [23] [24]	Ihs {fentanyl injection uh, heparin injection, hydrocodone acetaminophen {cefazolin ivpb uh, fentanyl injection uh, hydrocodone acetaminophen {heparin injection, hydrocodone acetaminophen {cefazolin ivpb uh, fentanyl injection uh, heparin injection uh, heparin injection uh, fentanyl injection uh, fentanyl injection uh, fentanyl injection uh, fentanyl injection uh, heparin injection {cefazolin ivpb uh} {clindamycin ivpb uh} {clindamycin ivpb uh} {cefazolin ivpb uh} {cefazolin ivpb uh} {cefazolin ivpb uh} {fentanyl injection uh, heparin injection uh, fentanyl injection uh, fentanyl injection uh, feazolin ivpb uh {refazolin ivpb uh {cefazolin ivpb uh} {fentanyl injection uh, hydrocodone acetaminophen {mapicillin sulbactam ivpb cefazolin ivpb uh, hydrocodone acetaminophen {modansetron injection uh, fentanyl injection uh, heparin injection {fentanyl injection uh, heparin injection {fentanyl injection uh, heparin injection {fentanyl injection uh, heparin injection {condansetron injection uh, heparin injection {condansetron injection uh, heparin injection uh, heparin injection {condansetron injection uh, heparin injection uh,	5mg 5mg 5mg 5mg 4 5mg 5mg	325mg} 325mg} 325mg} 325mg} 325mg}	=> => => => => => => => => => => => => =	{cefazolin ivpb uh} {heparin injection} {cefazolin ivpb uh} {hydrocodone acetaminophen 5mg 325mg} {heparin injection} {hydrocodone acetamin 75mg 500mg 15ml} {cefazolin ivpb uh} {cefazolin ivpb uh} {heparin injection} {cefazolin ivpb uh} {heparin injection} {cefazolin ivpb uh} {hydrocodone acetaminophen 5mg 325mg} {hydrocodone acetaminophen 5mg 325mg} {cefazolin ivpb uh} {heparin injection} {cefazolin ivpb uh} {heparin injection} {cefazolin ivpb uh} {hoparin injection} {cefazolin ivpb uh} {hydrocodone acetaminophen 5mg 325mg}	0.01515152 0.01515152 0.03787879 0.01515152 0.01893939 0.02462121 0.01939393 0.01136364 0.03977273 0.09090909 0.02462121 0.01136364 0.11174242 0.11174242 0.11174242 0.11893939 0.03787879 0.02462121 0.03030303 0.01893939 0.01704545 0.03787879 0.01893939	0.8000000 0.6153846 0.6250000 0.8000000 0.5000000 0.2765957 0.4761905 0.4615385 0.4444444 0.4571429 0.6500000 0.5462963 0.3575758 0.3448276 0.3389831 0.3250000 0.48484857 0.4761905 0.2727273 0.4166667 0.2500000	0.01893939 0.02462121 0.06060606 0.01893939 0.03787879 0.08901515 0.03977273 0.02462121 0.8901515 0.03977273 0.01893939 0.0454545 0.11893939 0.005492424 0.11174242 0.07575758 0.06250000 0.03977273 0.06250000 0.099090909	3.9111111 3.0945055 3.0555556 2.5600000 2.5142857 2.4340426 2.3280423 2.2564103 2.2468085 2.2349206 2.2349206 2.2349206 1.7481481 1.7481481 1.7481481 1.7339901 1.7046005 1.5888889 1.5515155 1.5238095 1.3714286 1.3333333	8 20 8 10 13 10 6 21 48 48 13 6 59 59 10 20 13 16 10 9
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[1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12] [13] [14] [15] [16] [17] [18] [20] [21] [22] [23] [24] [25]	Ihs {fentanyl injection uh, heparin injection, hydrocodone acetaminophen {cefazolin ivpb uh, fentanyl injection uh, hydrocodone acetaminophen {heparin injection, hydrocodone acetaminophen {cefazolin ivpb uh, fentanyl injection uh, heparin injection uh, heparin injection uh, fentanyl injection uh, heparin injection uh, heparin injection uh, fentanyl injection uh, {cefazolin ivpb uh} {cefazolin ivpb uh} {heparin injection uh, fentanyl injection uh, fcefazolin ivpb uh hydrocodone acetaminophen {mapicillin sulbactam ivpb {cefazolin ivpb uh, hydrocodone acetaminophen {fentanyl injection uh, heparin injection, hydrocodone acetaminophen {clindamycin ivpb uh} {cefazolin ivpb uh, heparin injection, hydrocodone acetaminophen {clindamycin ivpb uh} {cefazolin ivpb uh, heparin injection, hydrocodone acetaminophen {clindamycin ivpb uh} {cefazolin ivpb uh, heparin injection, hydrocodone acetaminophen {clindamycin injection uh, heparin injection injection uh, heparin injection, hydrocodone acetaminophen {clindamycin injection uh, heparin injection, hydrocodone acetaminophen ondansetron injection uh, heparin injection, hydrocodone acetaminophen ondansetron injection uh, heparin injection, hydrocodone acetaminophen ondansetron injection uh,	5mg 5mg 5mg 5mg 5mg 5mg 5mg	325mg} 325mg} 325mg} 325mg} 325mg} 325mg} 325mg}	=> => => => => => => => => => => => => =	{cefazolin ivpb uh} {heparin injection} {cefazolin ivpb uh} {hydrocodone acetaminophen 5mg 325mg} {heparin injection} {hydrocodone acetamin 75mg 500mg 15ml} {cefazolin ivpb uh} {cefazolin ivpb uh} {heparin injection} {heparin injection} {cefazolin ivpb ub} {hydrocodone acetaminophen 5mg 325mg} {hydrocodone acetaminophen 5mg 325mg} {cefazolin ivpb ub} {hydrocodone acetaminophen 5mg 325mg} {cefazolin ivpb uh} {heparin injection} {cefazolin ivpb uh} {heparin injection} {heparin injection} {cefazolin ivpb uh} {hydrocodone acetaminophen 5mg 325mg} {hydrocodone acetaminophen 5mg 325mg} {hydrocodone acetaminophen 5mg 325mg} {hydrocodone acetaminophen 5mg 325mg} {heparin injection} {hydrocodone acetaminophen 5mg 325mg} {fentanyl injection uh} {hydrocodone acetaminophen 5mg 325mg} {fentanyl injection uh} {hydrocodone acetaminophen 5mg 325mg} {fentanyl injection uh}	0.01515152 0.03787879 0.01515152 0.01893939 0.02462121 0.01893939 0.01136364 0.03977273 0.09090909 0.09090909 0.02462121 0.01136364 0.11174242 0.11174242 0.11174242 0.11174242 0.11174242 0.01893939 0.03787879 0.02462121 0.03030303 0.01893939 0.01704545 0.03787879 0.03787879 0.01893939 0.01704545 0.03787879 0.01893939 0.03787879	0.8000000 0.6153846 0.6250000 0.8000000 0.5000000 0.2765957 0.4761905 0.4615385 0.4444444 0.4571429 0.6500000 0.5462963 0.3575758 0.3448276 0.3389831 0.3250000 0.4848485 0.4761905 0.2727273 0.4166667 0.2500000 0.3617021	0.01893939 0.02462121 0.06060606 0.01893939 0.03787879 0.08901515 0.03977273 0.08901515 0.20454545 0.19886364 0.03787879 0.01893939 0.20454545 0.31250000 0.054575758 0.06250000 0.093977273 0.06250000 0.09990909 0.07575758 0.06250000 0.09990909 0.07575758 0.06250000	3.9111111 3.0945055 3.0555556 2.5600000 2.5142857 2.4340426 2.3280423 2.2564103 2.2468085 2.2349206 2.0800000 1.7481481 1.7481481 1.7339901 1.7046005 1.5888889 1.5515152 1.3714286 1.3333333 1.2571429 1.1574468 1.0009479 0.9752381	8 20 8 10 13 10 6 21 48 48 13 6 59 59 10 20 13 16 10 9 20 10 17 8
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