

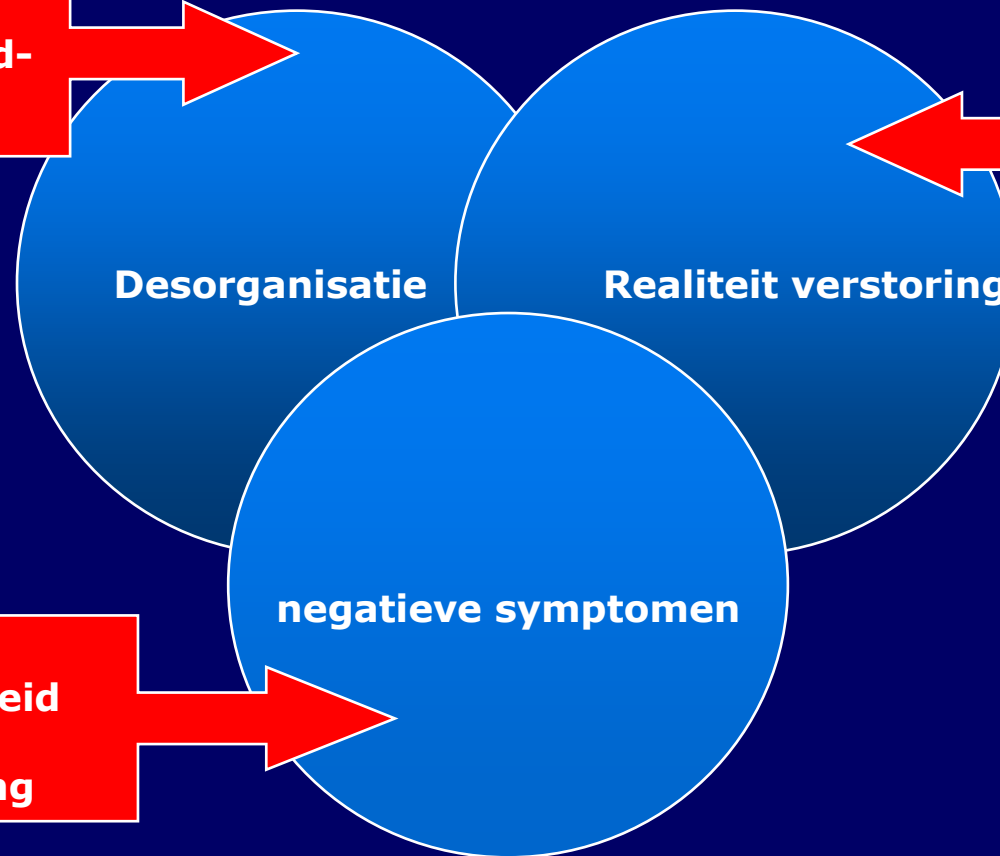
Switching Antipsychotica (AP)

**Het
hoe & wat**



Syndroom Schizofrenie

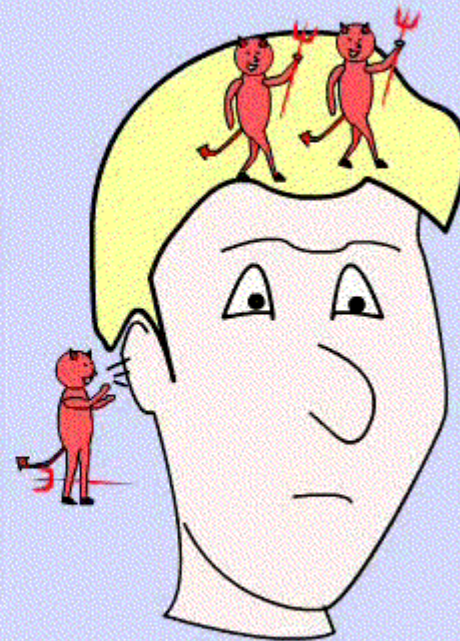
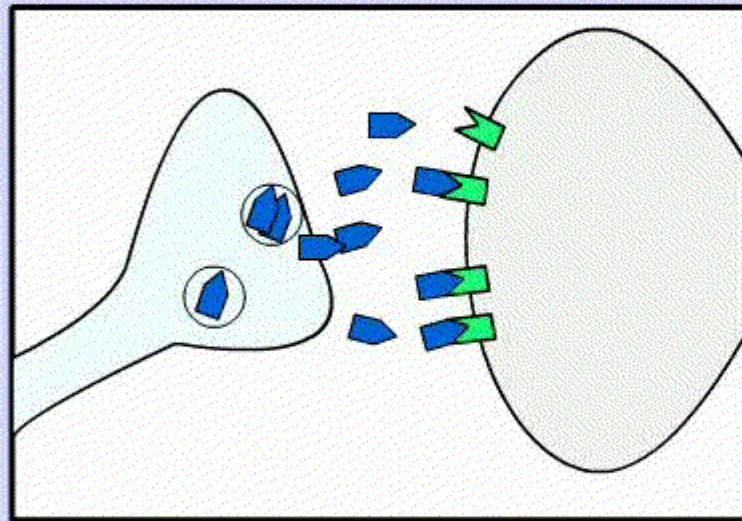
**Incoherentie
Onsamenhangend-
heid**



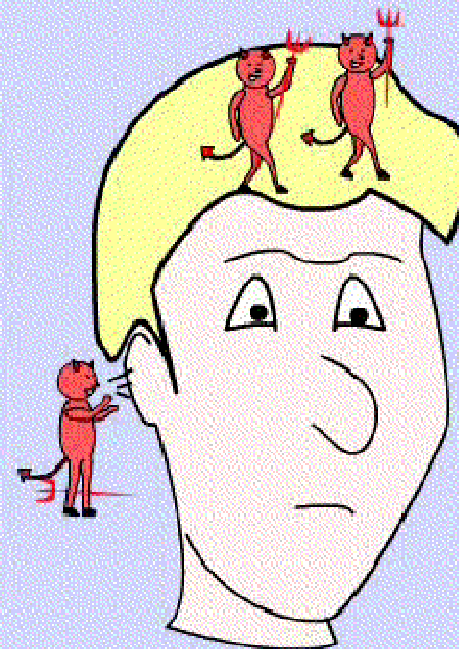
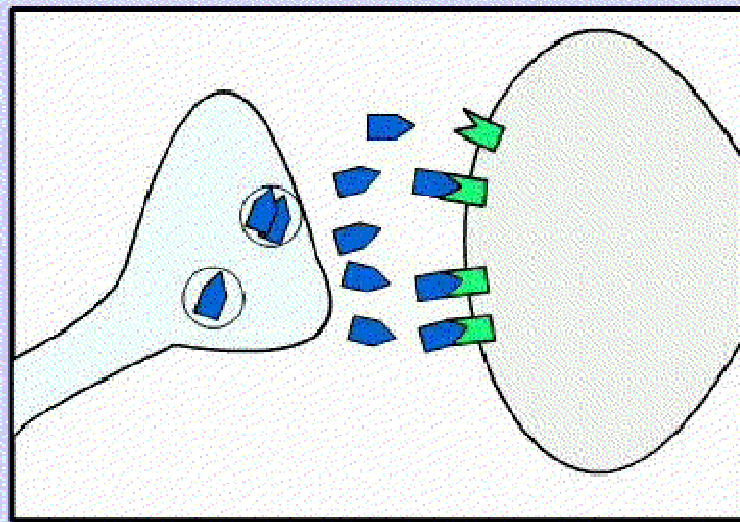
**Wanen
Hallucinaties**

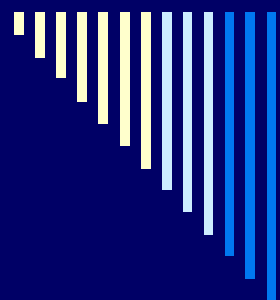
**Sociale
teruggetrokkenheid
Apathie
Zelf verwaarlozing**

Schizophrenie (receptor hypothese)



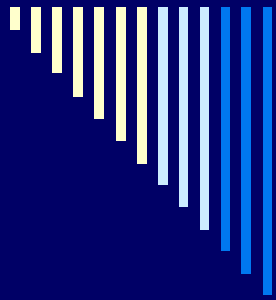
Schizophrenie (receptor hypothese & de behandeling)





Indeling AP

- Chemisch
- Farmacodynamisch
- Farmacokinetisch
- Therapeutische indicaties



“Chemische”

Klassiek of typisch

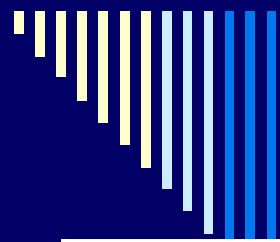
- Butyrofenonen
 - Haloperidol**
- Difenylbutylaminen
 - Pimozide**
- Fenothiazinen
 - Chloorpromazine**
 - Flufenazine**
 - Perfenazine**
- Thioxanthenen
 - Flupentixol**
 - Zuclopentixol**
- Benzamiden
 - Sulperide**

2^{de} generatie of atypisch

- chloro-methyl-piperazin-dibenzodiazepine
 - Clozapine**
- methyl-piperaziny-thieno-benzodiazepine
 - Olanzapine**
- Fluorobenzo-oxazol-piperidyl-methyl-diazabicyclo
 - (9H)Risperidon**
- Dibenzo-thiazepine-piperaziny-ethoxy-ethanol
 - Quetiapine**

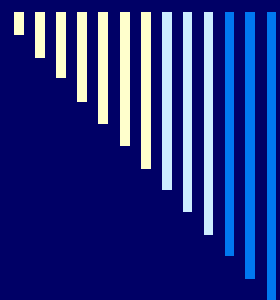
3^{de} generatie

- Dichlorophenyl-piperazin-butoxy-dihydroquinolin
 - Aripiprazol**



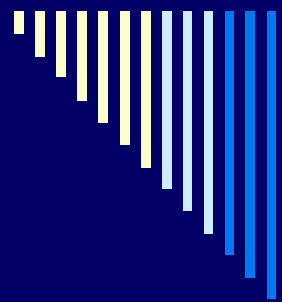
(Klassiek)typisch/atypisch

Klassiek	Atypisch
Haloperidol (Haldol)	Clozapine (Leponex)
Penfluridol (Semap)	Olanzapine (Zyprexa)
Bromperidol (Impromen) - -	Risperidol (Risperdal)
Flufenazine (Anatensol) - - -	Sertindol (Serdolect)
Flupentixol (Fluanxol)	Quetiapine (Seroquel)
Perfenazine (Trilafen)	
Zuclopentixol (Cisordinol)	
Thioridazine (Melleril)	
Sulperide (Dogmatil)	



Indeling AP

- Chemisch
- Farmacodynamisch
- Farmacokinetisch
- Therapeutische indicaties



Belang van receptorbinding (blokkade)

De meest belangrijke

- Dopamine D2
- Serotonine 5-HT_{2a}
- Histamine H1
- Muscarine M1

- α 1 Norepinefrine

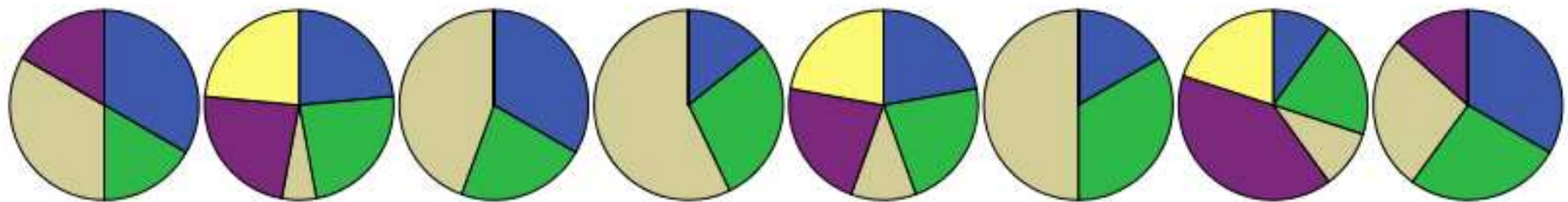
Het effect door blokkade

- EPS, prolactine st., anti-psychotisch
- Anti-EPS ??, antipsychotisch, gewicht $\hat{=}$, slaap
- Sedatie, gewicht $\hat{=}$, duizeligheid
- Geheugen probl., droge mond, obst. Tachycardie, wazig zien, urine retentie
- hypotensie

Receptorbinding affiniteit

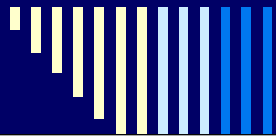
Antipsychoticum

aripiprasol clozapine flupentixol haloperidol olanzapine penfluridol quetiapine risperidon

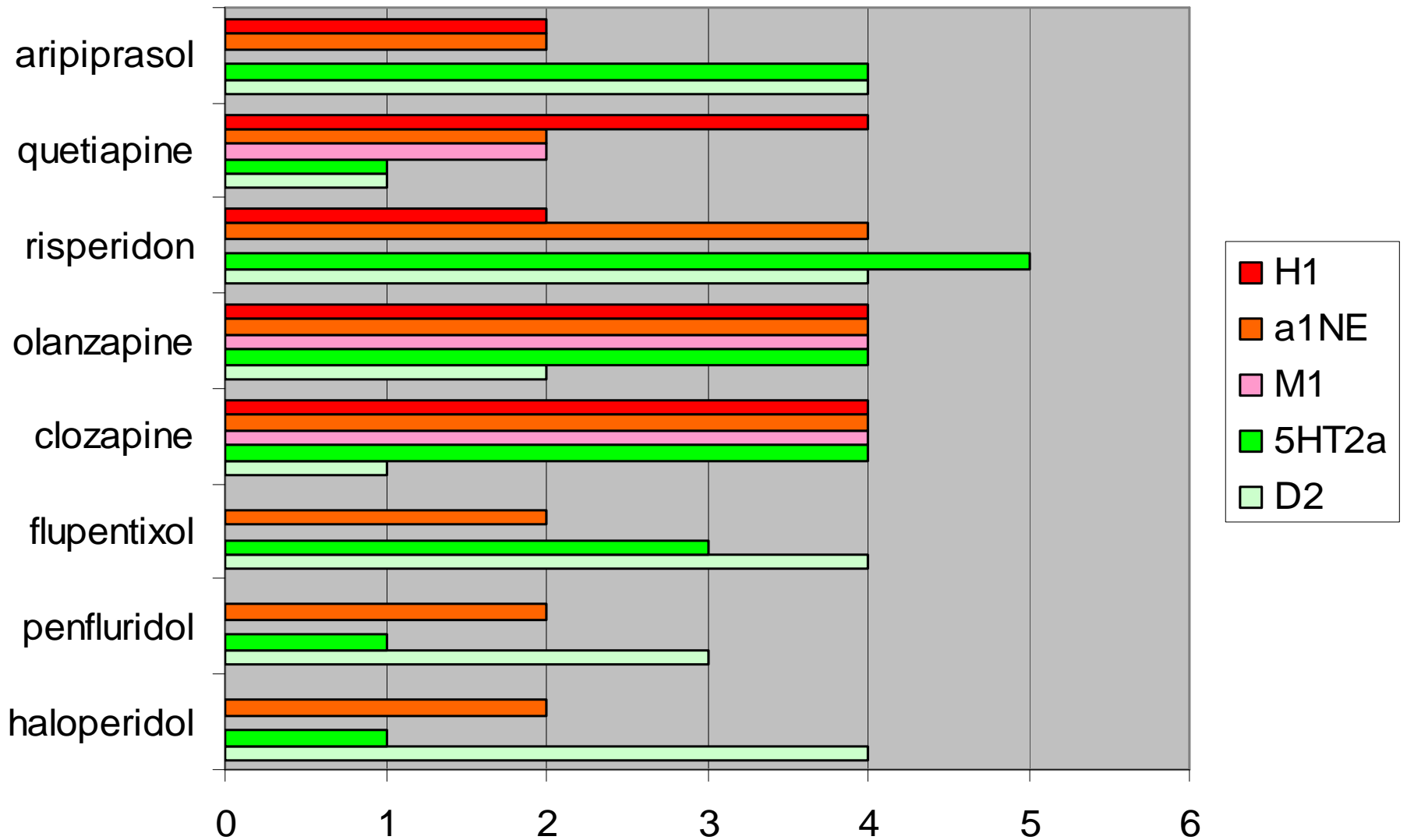


legenda

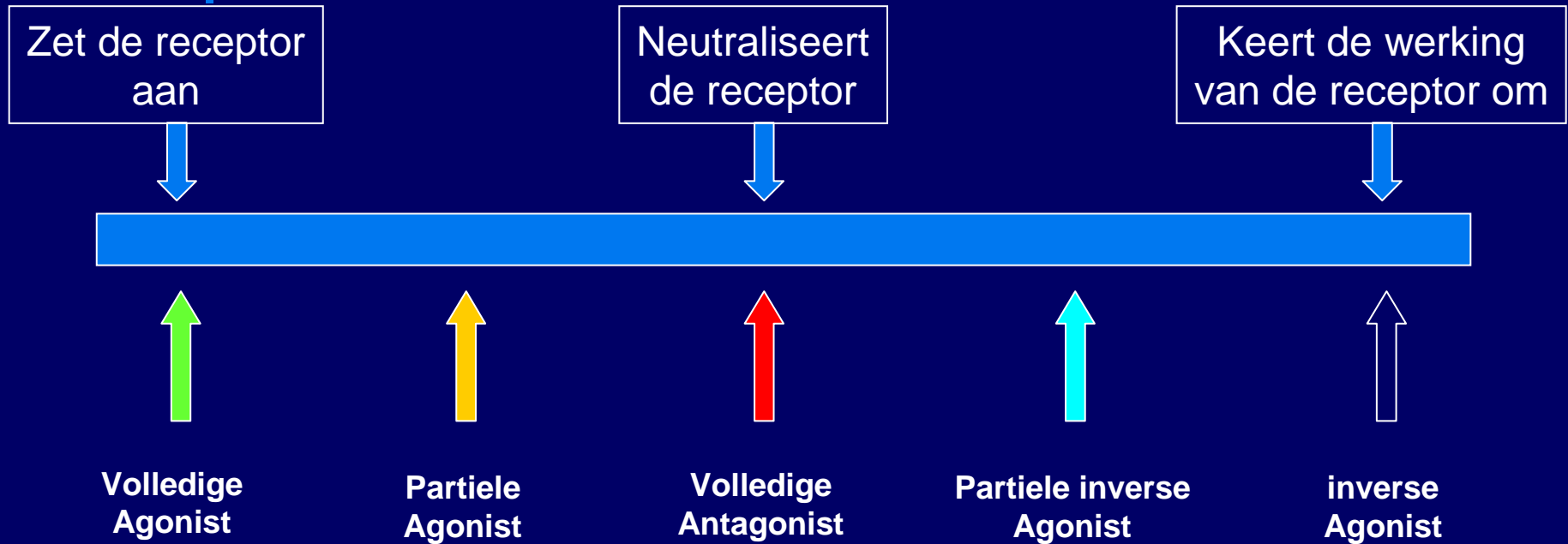
- 5HT2a
- alpha1NE
- D2
- H1
- M1

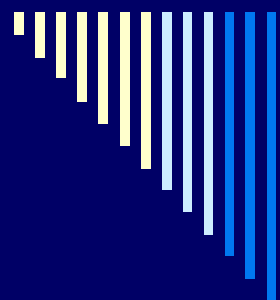


Affiniteit / invloed op receptor



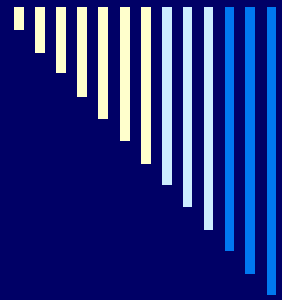
Functionele receptor invloed





Indeling AP

- Chemisch
- Farmacodynamisch
- Farmacokinetisch
- Therapeutische indicaties



Farmacokinetiek

- absorptie,
- distributie,
- metabolisme en
- excretie



Farmacokinetiek

□ toedieningswijze

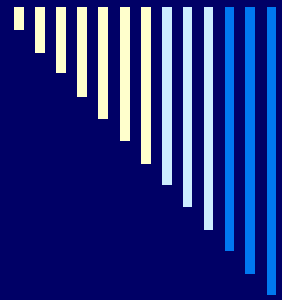
- topisch: lokaal, op of nabij de plaats waar het werkzaam moet zijn.
- systemisch; andere plaats, waar werkzaam, verspreiding via bloed.
 - enteraal: opname via het maag-darmstelsel.(oraal)
 - parenteraal: buiten het maag-darmstelsel om (via injectie).
 - transcutaan: door de huid.

□ opname

□ verdeling of distributie,

□ eliminatie of klaring:

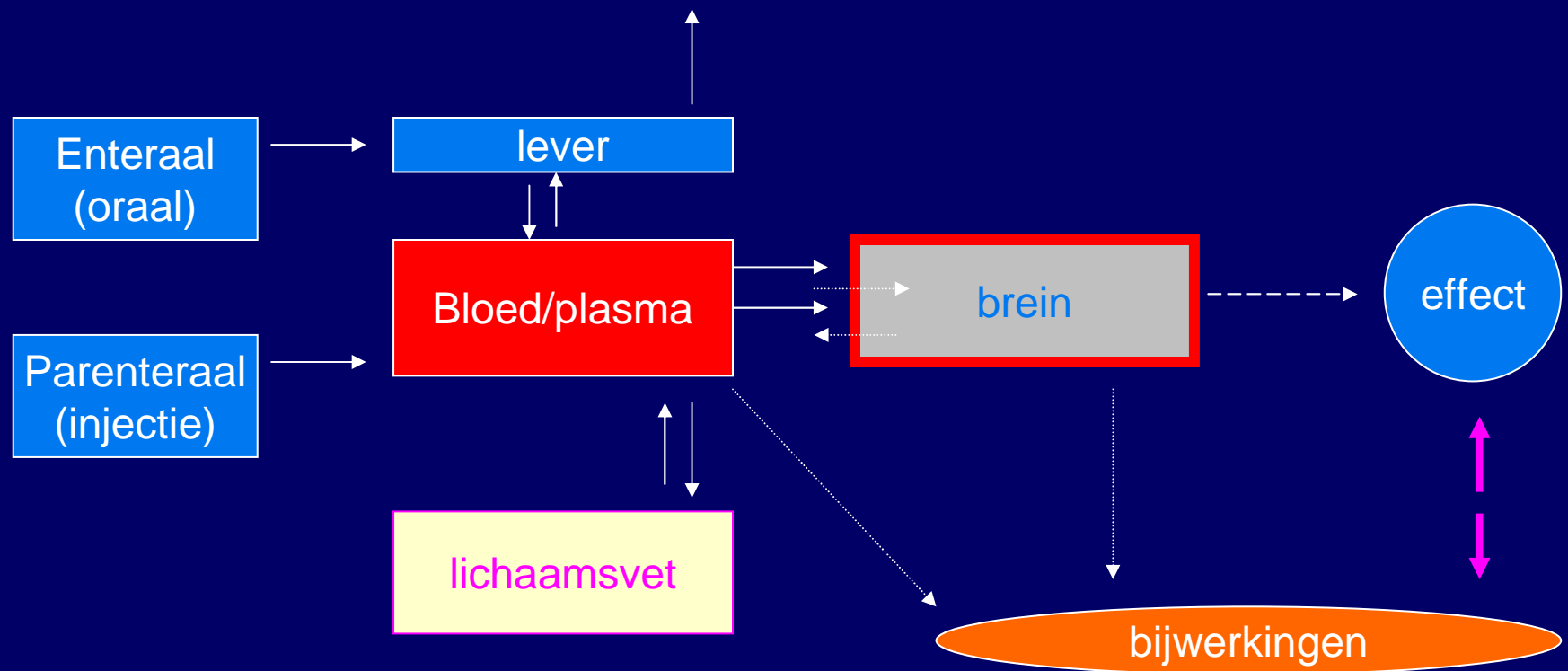
- excretie of uitscheiding, via huid, longen, nieren, lever
 - eliminatie door afbraak, metabolisme
-

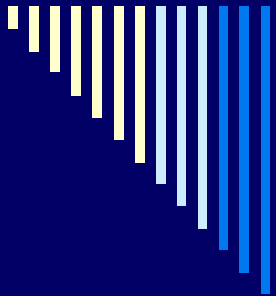


Opname:

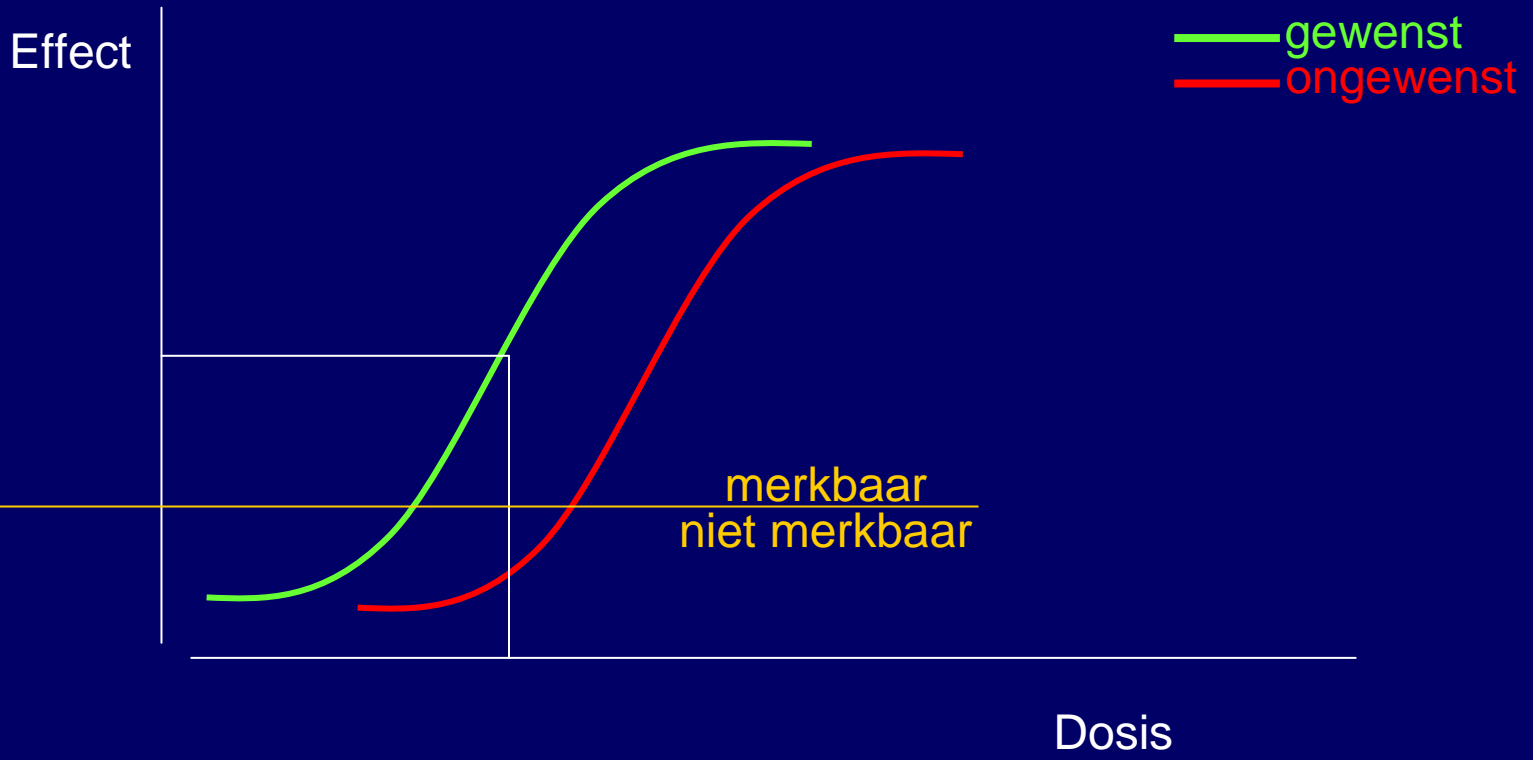
- Snel , dagelijks doseren nodig
- Traag, depot, wekelijks tot maandelijks

Distributie

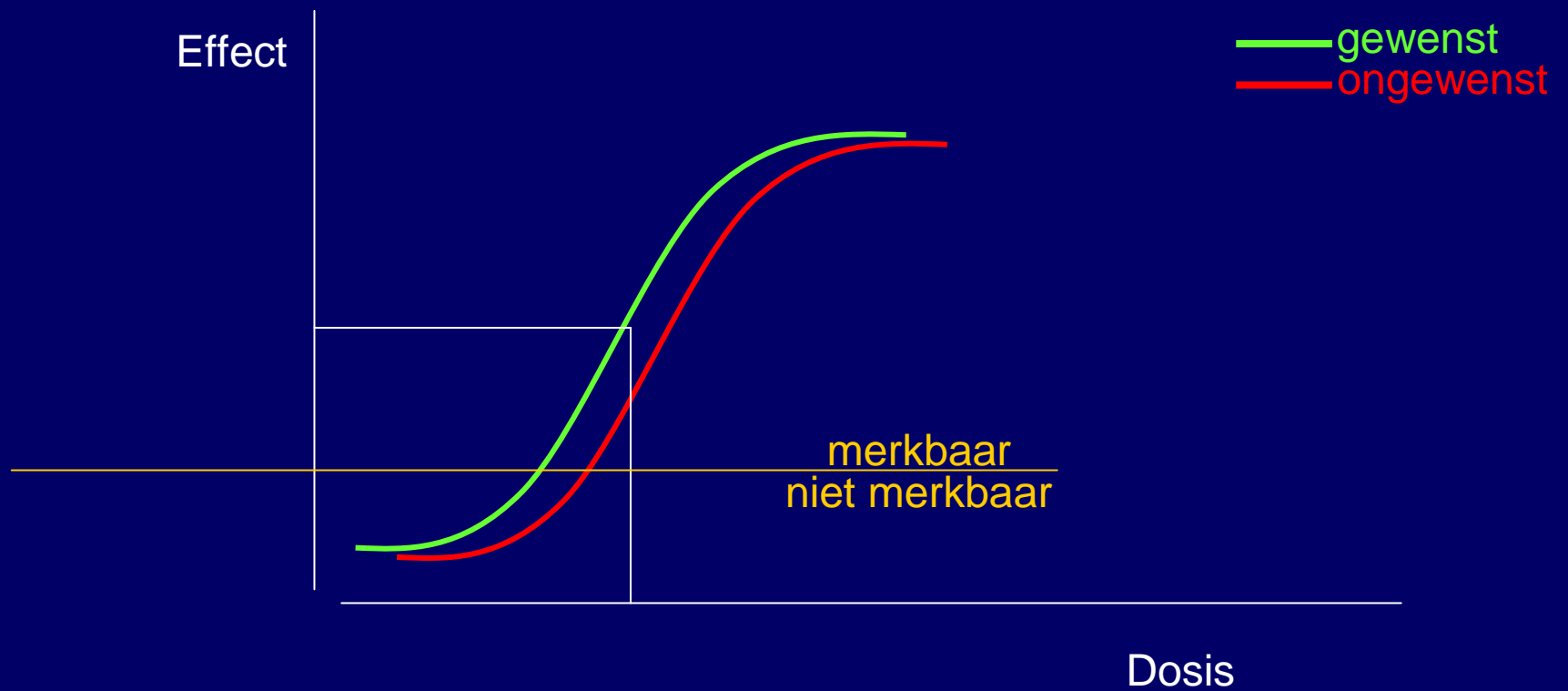


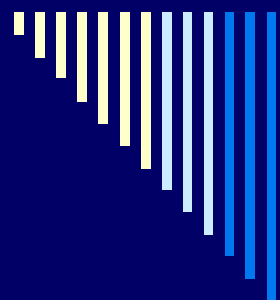


Dosis bepaling



Dosis bepaling





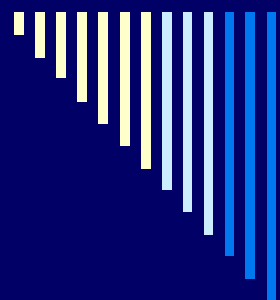
The Big Switch





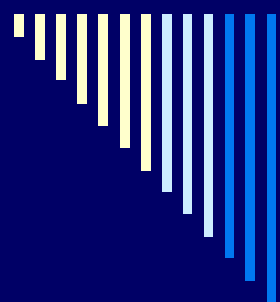
Reden van wisselen AP

- Vanuit de patiënt
 - Niet meer nodig
 - Bijwerkingen (slaperig, stijfheid, gewichttoename, enz)
 - Vanuit de behandelaar
 - Ineffectief
 - Bijwerkingen (DM, gewicht, stijfheid/TD, cardiovasc. redenen)
 - Wissel van vehikel (bijv. oraal<->parenteraal of oraal vorm1<->oraal vorm2)
-



Nadelen AP wissel

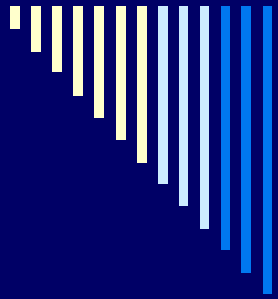
- Andere bijwerkingen (of juist tijdelijk meer)
- Onbekende effectiviteit (kans op terugval)
- Toename zorgintensiteit
- Meer bezoeken door patiënt
- Meer kosten. (bijv. door toename zorg)



Voordelen AP wissel

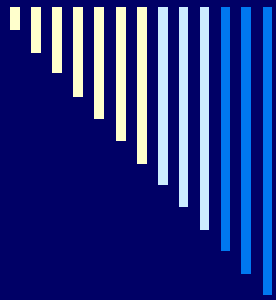
- Minder bijwerkingen (ook op langer termijn)
- Effectiever
- Tevreden over het vehiculum
- Minder terugval

- Tevreden patient

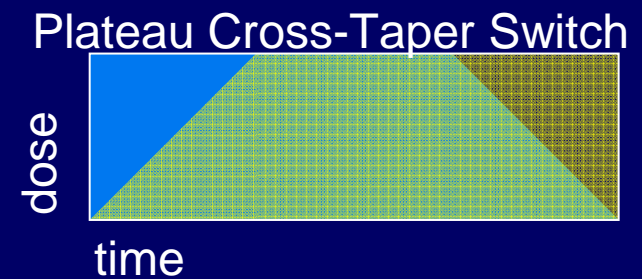
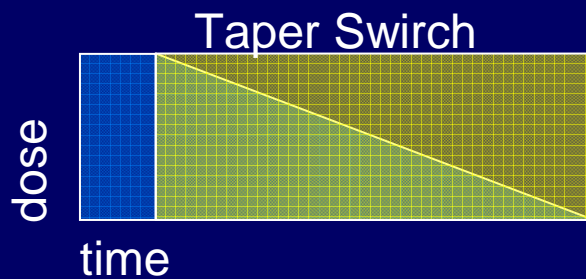
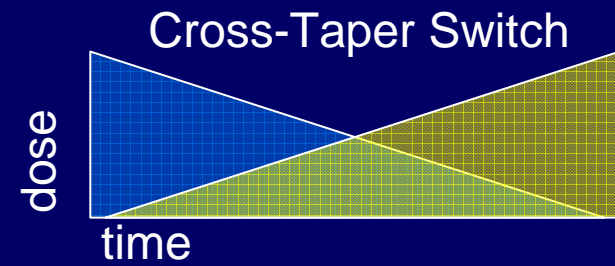
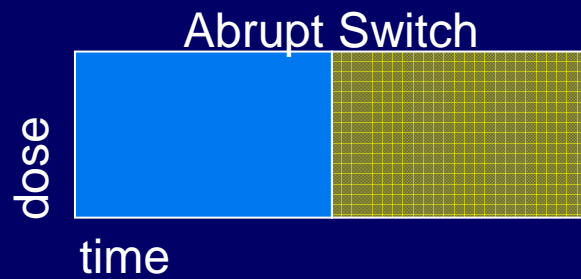


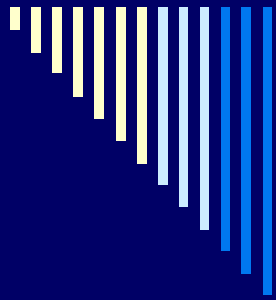
Switchen van AP

- Hoe wordt geswitched
- Abrupt of met tijsoverlap (taperen)
- Hoe lang wordt getaperd
- Naar welk middel wordt geswitched



Switch methodes



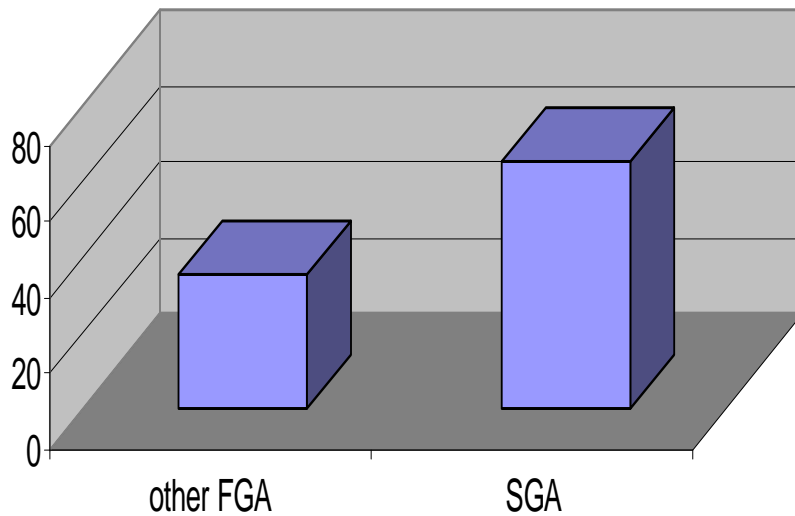


Real life situatie in Haaglanden

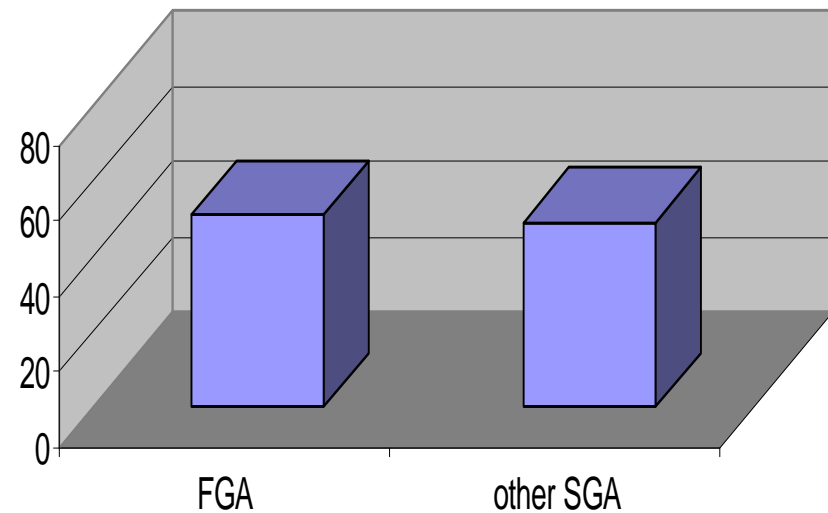
- Onderzoek over 2007
- 5432 x AP recepten
- Totaal 1465 ptn kregen AP
- 158 ptn (11%) -> 180x switch
 - Bij sommigen ptn dus meerder x geswitched

Naar welke klasse gewitched

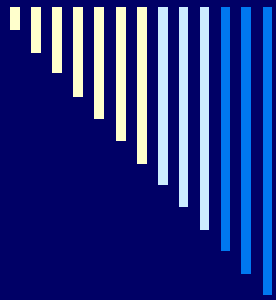
Switch, First agent is FGA



Switch, First agent is SGA



Overall beweging is van FGA -> SGA



Switch AP

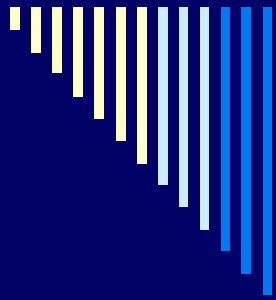
hoogD2
Haloperidol
Penfluridol
Pimozide
Flufenazine
Flupentixol
Risperidon

Hoog D2 -> Laag D2

- Altijd met cross tapering
Let op: te snelle taper down

Onttrekking D2, met kans op

1. carryover TD,
2. relapse,



Switch AP

Laag D2
Olanzapine
Quetiapine
Clozapine

Aripiprasol

Laag D2 -> Hoog D2

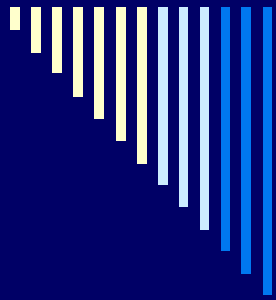
- Altijd met cross tapering

Let op: te snelle taper up

D2 bezetting, met kans op

1. EPS,
2. Motivatie verlies,

Binding aff.



Switch AP

Ach = muscarine 1

Hoog M1
Clozapine
Olanzapine
Quetiapine

Hoog Ach -> Laag Ach

- Altijd met cross tapering

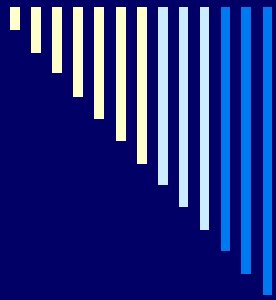
Let op: te snelle taper down

Onttrekking Ach, met kans op

1. Rebound anti-cholinerg effect (griepachtige)
2. Soms agitatie, en onrust.

Neem hier de tijd voor (afbouw 1^{ste} middel)

Binding aff.



Switch AP

Ach = muscarine 1

Laag M1
Risperdon
Aripiprasol
Haloperidol

Laag Ach -> Hoog Ach

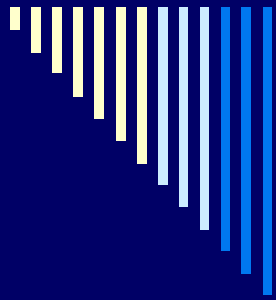
- Altijd met cross tapering

Let op: te snelle taper up

Ach bezetting, met kans op bijwerkingen;

1. Bloeddruk daling, hartkloppingen, ECG?
2. Obstipatie,
3. Visusklachten
4. Droge mond, (bij clozapine van droge mond -> speekselvloed)

Binding aff.



Switch AP

Histamine

Hoog M1
Clozapine
Olanzapine
Quetiapine
Risperdal

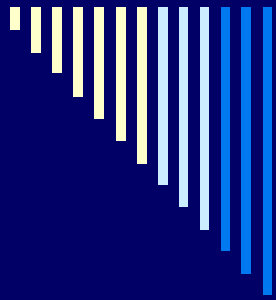
Hoog H1 -> Laag H1

- Altijd met cross tapering
Let op: te snelle taper down

Onttrekking H1, met kans.

1. Slapeloosheid

Binding aff.



Switch AP

Histamine

Laag H1
Halopridol
Flupentixol

Laag H1 -> Hoog H1

- Altijd met cross tapering

Let op: te snelle taper up

Bezetting H1, met kans.

1. Slaperigheid

Binding aff.

Voorbeelden

(<http://wiki.psychiatrienet.nl/index.php/SwitchAntipsychotics>)

Feedback welcome

Switching Antipsychotics (part of www.switchwiki.eu)

To see the consequences of a switch between antipsychotics click in the crosstable below: the switch is made "from" (vertical) "to" (horizontal).
During switching: don't reduce anticholinergics; consider adding oxazepam. Read: [General considerations concerning switching antipsychotics](#).

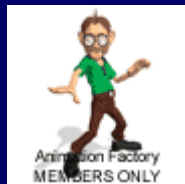
↓ from	to →	Am	Ar	Ch	Cp	Hp	Ol	Pi	Qu	Rd	Sd	Sr	Zi	RA	Df	Di	Dh	Do	Dp	Dr	Dz	Mz
Amisulpride	Am	—	AmAr	AmCh	AmCp	AmHp	AmOl	AmPi	AmQu	AmRd	AmSd	AmSr	AmZi	AmRA	AmDf	AmDi	AmDh	AmDo	AmDp	AmDr	AmDz	AmMz
Aripiprazole	Ar	ArAm	—	ArCh	ArCp	ArHp	ArOl	ArPi	ArQu	ArRd	ArSd	ArSr	ArZi	ArRA	ArDf	ArDi	ArDh	ArDo	ArDp	ArDr	ArDz	ArMz
Chlorpromazine	Ch	ChAm	ChAr	—	ChCp	ChHp	ChOl	ChPi	ChQu	ChRd	ChSd	ChSr	ChZi	ChRA	ChDf	ChDi	ChDh	ChDo	ChDp	ChDr	ChDz	ChMz
Clozapine	Cp	CpAm	CpAr	CpCh	—	CpHp	CpOl	CpPi	CpQu	CpRd	CpSd	CpSr	CpZi	CpRA	CpDf	CpDi	CpDh	CpDo	CpDp	CpDr	CpDz	CpMz
Haloperidol	Hp	HpAm	HpAr	HpCh	HpCp	—	HpOl	HpPi	HpQu	HpRd	HpSd	HpSr	HpZi	HpRA	HpDf	HpDi	HpDh	HpDo	HpDp	HpDr	HpDz	HpMz
Olanzapine	Ol	OlAm	OlAr	OlCh	OlCp	OlHp	—	OlPi	OlQu	OlRd	OlSd	OlSr	OlZi	OlRA	OlDf	OlDi	OlDh	OlDo	OlDp	OlDr	OlDz	OlMz
Pimozide	Pi	PiAm	PiAr	PiCh	PiCp	PiHp	PiOl	—	PiQu	PiRd	PiSd	PiSr	PiZi	PiRA	PiDf	PiDi	PiDh	PiDo	PiDp	PiDr	PiDz	PiMz
Quetiapine	Qu	QuAm	QuAr	QuCh	QuCp	QuHp	QuOl	QuPi	—	QuRd	QuSd	QuSr	QuZi	QuRA	QuDf	QuDi	QuDh	QuDo	QuDp	QuDr	QuDz	QuMz
Risperidone	Rd	RdAm	RdAr	RdCh	RdCp	RdHp	RdOl	RdPi	RdQu	—	RdSd	RdSr	RdZi	RdRA	RdDf	RdDi	RdDh	RdDo	RdDp	RdDr	RdDz	RdMz
Sertindole	Sd	SdAm	SdAr	SdCh	SdCp	SdHp	SdOl	SdPi	SdQu	SdRd	—	SdSr	SdZi	SdRA	SdDf	SdDi	SdDh	SdDo	SdDp	SdDr	SdDz	SdMz
Sulpiride	Sr	SrAm	SrAr	SrCh	SrCp	SrHp	SrOl	SrPi	SrQu	SrRd	SrSd	—	SrZi	SrRA	SrDf	SrDi	SrDh	SrDo	SrDp	SrDr	SrDz	SrMz
Ziprasidone	Zi	ZiAm	ZiAr	ZiCh	ZiCp	ZiHp	ZiOl	ZiPi	ZiQu	ZiRd	ZiSd	ZiSr	—	ZiRA	ZiDf	ZiDi	ZiDh	ZiDo	ZiDp	ZiDr	ZiDz	ZiMz
Rest AP	RA	RAAm	RAAr	RACH	RACp	RAHp	RAOl	RAPi	RAQu	RARd	RASd	RASr	RAZi	—	RADf	RADi	RADh	RADo	RADp	RADr	RADz	RAMz
Fluphenazine_LA	Df	DfAm	DfAr	DfCh	DfCp	DfHp	DfOl	DfPi	DfQu	DfRd	DfSd	DfSr	DfZi	DfRA	—	DfDi	DfDh	DfDo	DfDp	DfDr	DfDz	DfMz
Flupenthixol_LA	Di	DiAm	DiAr	DiCh	DiCp	DiHp	DiOl	DiPi	DiQu	DiRd	DiSd	DiSr	DiZi	DiRA	DiDf	—	DiDh	DiDo	DiDp	DiDr	DiDz	DiMz
Haloperidol_LA	Dh	DhAm	DhAr	DhCh	DhCp	DhHp	DhOl	DhPi	DhQu	DhRd	DhSd	DhSr	DhZi	DhRA	DhDf	DhDi	—	DhDo	DhDp	DhDr	DhDz	DhMz
Olanzapine_LA	Do	DoAm	DoAr	DoCh	DoCp	DoHp	DoOl	DoPi	DoQu	DoRd	DoSd	DoSr	DoZi	DoRA	DoDf	DoDi	DoDh	—	DoDp	DoDr	DoDz	DoMz
Paliperidone_LA	Dp	DpAm	DpAr	DpCh	DpCp	DpHp	DpOl	DpPi	DpQu	DpRd	DpSd	DpSr	DpZi	DpRA	DpDf	DpDi	DpDh	DpDo	—	DpDr	DpDz	DpMz
Risperidone_LA	Dr	DrAm	DrAr	DrCh	DrCp	DrHp	DrOl	DrPi	DrQu	DrRd	DrSd	DrSr	DrZi	DrRA	DrDf	DrDi	DrDh	DrDo	DrDp	—	DrDz	DrMz
Zuclopenthixol_LA	Dz	DzAm	DzAr	DzCh	DzCp	DzHp	DzOl	DzPi	DzQu	DzRd	DzSd	DzSr	DzZi	DzRA	DzDf	DzDi	DzDh	DzDo	DzDp	DzDr	—	DzMz
Zuclopenthixol_MA	Mz	MzAm	MzAr	MzCh	MzCp	MzHp	MzOl	MzPi	MzQu	MzRd	MzSd	MzSr	MzZi	MzRA	MzDf	MzDi	MzDh	MzDo	MzDp	MzDr	MzDz	—

LA = long acting, MA = medium acting

Rest AP = Chlorprothixene, Flupenthixol, Loxapine, Paliperidone, Pericyazine, Perphenazine, Promazine, Trifluoperazine, Zuclopentixol.

Samenvatting van keuze AP

1^{ste} generatie (klassiek)



trillen



loopdrang



gevangen gevoel

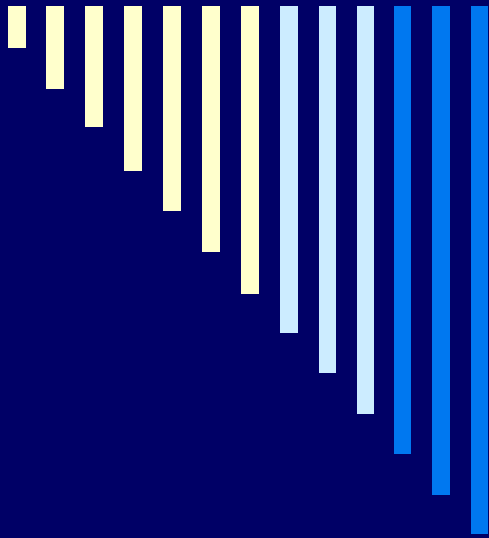
2^{de} generatie (atypisch)

toename eetlust



toename gewicht





Einde

Go save and slow
