

# SUBSTRATEN

[www.erasmusmc.nl/farmacogenetica](http://www.erasmusmc.nl/farmacogenetica)

2023

CYP1A2	CYP2C9	CYP2C19	CYP2D6		
acenocoumarol	acenocoumarol	amitriptyline	amfetamine	gefitinib	
amitriptyline	amitriptyline	aprepitant	amitriptyline	haloperidol	
aprepitant	carvedilol	atomoxetine	ariPIPrazol	imipramine	
caffiene	celecoxib	chlooramfenicol	atomoxetine	methadon	
clomipramine	dapsone	citalopram	bisoprolol	metoclopramide	
clozapine	diclofenac	claritromycine	brexpiprazol	metoprolol	
domperidon	fenprocoumon	clobazam	carvedilol	mirtazepine	
doxepine **	fenytoïne **	clomipramine	clomipramine	moclobemide	
duloxetine	fluoxetine	clopidogrel (a) **	chlorpromazine	nebivolol	
estradiol	flavastatine	clozapine	citalopram	nortriptyline	
flufenazine	glibenclamide	cyclofosfamide (a)	clozapine	olanzapine	
fluvoxamine	glimepiride	diazepam	cocaïne	ondansetron	
haloperidol	ibuprofen	doxepine	codeïne (a)	oxycodon	
imipramine	indometacine	escitalopram	dextromethorfan	pantoprazol	
lidocaïne	irbesartan	esomeprazol	donepezil	paroxetine	
melatonine	losartan	fenobarbital	doxepine	perphenazine	
naproxen	meloxicam	fenytoïne	duloxetine	pimozië	
nifedipine	naproxen	fluoxetine	escitalopram	promethazine	
olanzapine	pantoprazol	flavastatine	eliglustat **	propafenon	
ondansetron	piroxicam	hexobarbital	fecainide	propranolol	
paracetamol	prasugrel (a)	ibuprofen	flufenazine	risperidon	
paroxetine	sertraline	imipramine	fluoxetine	tamoxifen (a)	
pimozië	sildenafil	indometacine	flupentixol	tramadol (a)	
propafenon	siponimod **	lansoprazol	flavastatine	trazodon	
propranolol	tamoxifen	moclobemide	fluvoxamine	venlafaxine	
riluzol	tolbutamide	melatonine		zuclopentixol	
ropivacaïne	valproïnezuur	nilutamide			
theofylline	verapamil	omeprazol			
tizanidine	voriconazol	pantoprazol			
verapamil	vortioxetine	paroxetine			
warfarine	warfarine	prasugrel (a)			
zolmitriptan		primidon			
		proguanil			
<b>CYP2B6</b>		propranolol			
		rabeprazol			
bupropion	chloroquine	sertraline			
cyclofosfamide (a)	flavastatine	tamoxifen			
efavirenz	ibuprofen	teniposide			
ifosfamide	nilotinib	timolol			
methadon	pacitaxel	valproïnezuur			
prasugrel (a)	repaglinide	verlafaxine			
sertraline	sorafenib	voriconazol			
tramadol	verapamil	warfarine			
			<b>Afdeling Klinische Chemie</b>		
			r.vanschaik@erasmusmc.nl	010-70 33119	
			r.matic@erasmusmc.nl	010-70 35284	
			<b>Afdeling Ziekenhuisapotheek</b>		
			b.koch@erasmusmc.nl	010-70 33202	

# SUBSTRATEN

[www.erasmusmc.nl/farmacogenetica](http://www.erasmusmc.nl/farmacogenetica)

2023

CYP3A4			Overige	
alfentanil	gefitinib	sildenafil	ABCG2	MT-RNR1
alprazolam	guanfacine	simvastatine (a)	allopurinol	gentamicine
amlodipine	haloperidol	siponimod	rosuvastatine	
apixaban	hydrocortison	sirolimus		
aprepitant	ibuprofen	sorafenib	BCHE	POLG
ariPIPrazol	ifosfamide (a)	sunitinib	mivacurium	valproïnezuur
atazanavir	imatinib	tacrolimus	suxamethonium	
atorvastatine	imipramine	tamoxifen (a)	articaïne	
bisoprolol	indinavir	temsirolimus	cocaïne	
brexpiprazol	irbesartan	theophylline		
buspiron	irinotecan	ticagrelor	DYPD	SLCO1B1
caffiene	kinidin	tramadol	5-FU **	simvastatine
carbamazepine	lansoprazol	trazodon	capecitabine **	atorvastatine
celecoxib	lercanidipine	venlafaxine	tegafur **	lovastatine
chloorpromazine	lidocaïne	verapamil		methotrexaat
cisapride	losartan	vincristine		rosuvastatine
citalopram	lovastatine (a)	voriconazol		
claritromycine	meloxicam	vortioxetine	GADL	TPMT / NUDT15
clobazam	methadon	zolpidem	lithium	azathioprine **
clomipramine	midazolam			mercaptopurine **
clopidogrel	mirtazapine		HLA-A*3101	tioguanine **
cocaïne	nifedipine		carbamazepine	
ciclosporine	nilotonib	apixaban	HLA-B*44	UGT1A1
cyclofosfamide	ondansetron	guanfacine	ribavirine	irinotecan
dapson	oxycodon	midazolam	nilotinib	
		paroxetine	HLA-B*1502	atazanavir
dexamethason	paclitaxel	tacrolimus	carbamazepine	
dextromethorfan	pantoprazol	vincristine	fenytoïne	UGT1A4
diazepam	paroxetine	vortioxetine	lamotrigine	
diltiazem	pimozië		oxcarbazepine	olanzapine
docetaxel	prasugrel (a)			
domperidon	progesteron		HLA-B*1511	UGT1A9
donepezil	proguanil		carbamazepine	
doxepine	propafenon			mycofenolzuur
escitalopram	propranolol			olanzapine
esomeprazol	quetiapine			
efavirenz	rabeprazol		HLA-B*5701	VKORC1
ifosfamide	repaglinide		abacavir **	acenocoumarol
methadon	risperidon		flucloxacilline	fenprocoumon
prasugrel (a)	ritonavir			warfarine
sertraline	rivaroxaban		HLA-B*5801	
tramadol	ropivacaine			
	fluoxetine	salmeterol	MTHFR	
	flavastatine	saquinavir		methotrexaat
	finasteride	sertraline		foliumzuur

**INHIBTOREN**

www.erasmusmc.nl/farmacogenetica

CYP1A2	CYP2B6	CYP2C8	CYP2C9	CYP2C19
ciprofloxacin	ticlopidine	gemfibrozil	sulfafenazol	fluvoxamine
fluvoxamine	voriconazol	clopidogrel	amiodaron	ticlopidine
vemurafenib	clopidogrel	deferasirox	fenylobutazon	esomeprazol
cimetidine	thiothepa	teriflunomide	fluconazol	fluconazol
citalopram		trimethoprim	metronidazol	fluoxetin
efavirenz		abirateron	capecitabine	ketoconazol
querbetine		efavirenz	ceritinib	omeprazol
ribocicilib		lapatinib	efavirenz	voriconazol
simeprevir		tucatinib	isoniazide	armodafinil
amiodaron		glitazonen	querctine	cimetidine
furaflylline		letermovir	sulfametoxazol	citalopram
methoxsleen		montelukast	voriconazol	felbamaat
rucaparib		perampanel	zaflrukast	isoniazide
ticlopidine		querctine	fenofibraat	luliconazol
			fluvastatine	orale contraceptie
			fluvoxamine	modafinil
				chlooramfenicol
				oritavancine
				querctine
				topiramaat

rood: sterk (AUC &gt;5x hoger of klaring &gt;80% lager); bruin: matig (AUC&gt;2x hoger of klaring 50-80% lager);

**INHIBTOREN**

www.erasmusmc.nl/farmacogenetica

CYP2D6		CYP2E1	CYP3A4 / CYP3A5	
bupropion	escitalopram	disulfiram	ceritinib	verapamil
fluoxetine	levomepromazine	quercetine	claritromycine	atomoxetine
paroxetine	ritonavir		idelalisib	cimetidine
kinidine	sertraline		indinavir	esomeprazol
abirateron	vemurafenib		itraconazol	entrectinib
cinacalcet	chlopropazine		ketoconazol	omeprazol
doxepine	clemastine		nefazodon	pantoprazol
duloxetine	cocaïne		nelfinavir	amiodaron
halofantrine	haloperidol		ribocicilib	boceprevir
lorcaserine	hydroxyzine		ritonavir	chlooramfenicol
moclobemide	methadon		sanquinavir	ciprofloxacine
rolapitant	metoclopramide		tucatinib	delavirdine
terbinafine	middrodrine		telitromycine	fluvoxamine
amiodaron	panobinostat		voriconazol	imatinib
celecoxib	perfenazine		aprepitant	mifepriston
cimetidine	promethazine		crizotinib	norfloxacine
citalopram	ticlopidine		diltiazim	regorafenib
clobazam	tripelenamine		erytromycine	sterfruit
clomipramine			fluconazol	telaprevir
difenhydramine			grapefruitsap	

groen: zwak (AUC 1.25-2x hoger of klaring 20-50% lager)

zwart: sterkte wordt onderzocht

**INDUCERS**

CYP1A2	CYP2B6	CYP2C8	CYP2C9	CYP2C19
carbamazepine	carbamazepine	rifampicine	carbamazepine	carbamazepine
insuline	dabrafenib		dabrafenib	efavirenz
modafinil	efavirenz		enzalutamide	enzalutamide
omeprazol	fenobarbital		fenobarbital	letermovir
rifampicine	fentyoïne		letermovir	prednison
rucaparib	letermovir		nevrapine	rifampicine
teriflunomide	nevirapine		rifampicine	ritonavir
	perampanel		secobarbital	
	rifampicine			
	roflumilast			
broccoli				
spruitjes				
roken			Sint-janskruid	Sint-janskruid

**INDUCERS**

CYP2D6		CYP2E1	CYP3A4 / CYP3A5	
		ethanol	barbituraten	nevirapine
		isoniazide	brigatinib	oxcarbazepine
			carbamazepine	perampanel
			clobazam	pioglitzaton
			dabrafenib	rifabutine
			elagolix	rifampicine
			efavirenz	telotristat
			eslicarbazepine	troglitzaton
			enzalutamide	vemurafenib
			glucocorticoïden	
			fenobarbital	
			fentyoïne	
			letermovir	
			lorlatinib	
			modafinil	Sint-janskruid