

# Cannabinoid (PRECIPITANT) Medication Affecting the Metabolism of Another (OBJECT) Medication

Pennsylvania State University, College of Medicine, Dept of Pharmacology (Hershey, PA)

<https://sites.psu.edu/cannabinoid>

Generic Name Medication (OBJECT)	Drug Effect (OBJECT)	Cannabinoid Class (PRECIPITANT)	Cannabinoid as the (PRECIPITANT)	Enzyme Inhibitor	Enzyme Inducer	Enzyme/Metabolism	CYP1A2	CYP2B6	CYP2C8	CYP2C9	CYP2C19	CYP2E1	CYP3A4	UGT1A9	UGT2B7	Source	Source Date
acenocoumarol (VKA)	↑↓	CBD	Cannabidiolol	v	v	CYP1A2 Substrate w/NTI	v									DrugBank.ca	1/2/2020
acenocoumarol (VKA)	↑	CBD	Cannabidiolol	v		CYP2C19 Substrate w/NTI				v						DrugBank.ca	12/4/2019
acenocoumarol (VKA)	↑	CBD	Cannabidiolol	v		CYP2C9 Substrate w/NTI				v						DrugBank.ca	12/4/2019
acenocoumarol (VKA)	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP2C9 Substrate w/NTI				v						DrugBank.ca	12/4/2019
acenocoumarol (VKA)	↑	THC	Nabilone	v (Mod)		CYP2C9 Substrate w/NTI				v						DrugBank.ca	12/4/2019
acenocoumarol (VKA)	↓	THC/CBD	Nabiximols	v	v	CYP1A2 Substrate w/NTI	v									DrugBank.ca	1/2/2020
acenocoumarol (VKA)	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
alfentanil	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
alfentanil	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
alfentanil	↑↓	THC/CBD	Nabiximols	v	v	CYP3A Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
alfentanil	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
alosetron	↑↓	CBD	Cannabidiolol	v	v	CYP1A2 Sensitive Substrate (Table 3-1)	v									FDA.gov	12/3/2019
alosetron	↓	THC/CBD	Nabiximols	v	v	CYP1A2 Sensitive Substrate (Table 3-1)	v									FDA.gov	12/3/2019
alprazolam	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A Moderate Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
alprazolam	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
alprazolam	↑↓	THC/CBD	Nabiximols	v	v	CYP3A Moderate Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
alprazolam	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
aminophylline	↑↓	CBD	Cannabidiolol	v	v	CYP1A2 Substrate w/NTI	v									DrugBank.ca	1/2/2020
aminophylline	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
aminophylline	↓	THC/CBD	Nabiximols	v	v	CYP1A2 Substrate w/NTI	v									DrugBank.ca	1/2/2020
aminophylline	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
amiodarone	↑↓	CBD	Cannabidiolol	v	v	CYP1A2 Substrate w/NTI	v									DrugBank.ca	1/2/2020
amiodarone	↑	CBD	Cannabidiolol	v		CYP2C19 Substrate w/NTI					v					DrugBank.ca	12/4/2019
amiodarone	↑	CBD	Cannabidiolol	v		CYP2C8 Substrate w/NTI			v							DrugBank.ca	1/2/2020
amiodarone	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
amiodarone	↑	THC	Nabilone	v (Mod)		CYP2C8 Substrate w/NTI			v							DrugBank.ca	1/2/2020
amiodarone	↓	THC/CBD	Nabiximols	v	v	CYP1A2 Substrate w/NTI	v									DrugBank.ca	1/2/2020
amiodarone	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
amitriptyline	↑↓	CBD	Cannabidiolol	v	v	CYP1A2 Substrate w/NTI	v									DrugBank.ca	1/2/2020
amitriptyline	↑↓	CBD	Cannabidiolol	v	v	CYP2B6 Substrate w/NTI		v								DrugBank.ca	1/2/2020
amitriptyline	↑	CBD	Cannabidiolol	v		CYP2C19 Substrate w/NTI					v					DrugBank.ca	12/4/2019
amitriptyline	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
amitriptyline	↓	THC/CBD	Nabiximols	v	v	CYP1A2 Substrate w/NTI	v									DrugBank.ca	1/2/2020
amitriptyline	↓	THC/CBD	Nabiximols	v	v	CYP2B6 Substrate w/NTI		v								DrugBank.ca	1/2/2020
amitriptyline	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
amphotericin B	↑	THC	Dronabinol			Protein Binding (LexiComp® Clinical Drug Info)										online.lexi.com	2/10/2020
aprepitant	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A Moderate Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
aprepitant	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
aprepitant	↑↓	THC/CBD	Nabiximols	v	v	CYP3A Moderate Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
aprepitant	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
argatroban	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
argatroban	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
astemizole	↑↓	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
astemizole	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
atorvastatin	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A Moderate Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
atorvastatin	↑↓	THC/CBD	Nabiximols	v	v	CYP3A Moderate Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
avanafil	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
avanafil	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
avanafil	↑↓	THC/CBD	Nabiximols	v	v	CYP3A Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
avanafil	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
bromocriptine	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
bromocriptine	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
budesonide	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
budesonide	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
budesonide	↑↓	THC/CBD	Nabiximols	v	v	CYP3A Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
budesonide	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
bupropion	↑↓	CBD	Cannabidiolol	v	v	CYP2B6 Sensitive Substrate (Table 3-1)		v								FDA.gov	12/3/2019
bupirone	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
bupirone	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
bupirone	↑↓	THC/CBD	Nabiximols	v	v	CYP3A Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
bupirone	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
busulfan	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
busulfan	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
caffeine	↑↓	CBD	Cannabidiolol	v	v	CYP1A2 Sensitive Index Substrate (Table 2-1)	v									FDA.gov	9/26/2016
caffeine	↑↓	CBD	Cannabidiolol	v	v	CYP1A2 Sensitive Substrate (Table 3-1)	v									FDA.gov	12/3/2019
caffeine	↓	THC/CBD	Nabiximols	v	v	CYP1A2 Sensitive Index Substrate (Table 2-1)	v									FDA.gov	9/26/2016
caffeine	↓	THC/CBD	Nabiximols	v	v	CYP1A2 Sensitive Substrate (Table 3-1)	v									FDA.gov	12/3/2019
carbamazepine	↑↓	CBD	Cannabidiolol	v	v	CYP1A2 Substrate w/NTI	v									DrugBank.ca	1/2/2020
carbamazepine	↑	CBD	Cannabidiolol	v		UGT2B7 Substrate w/NTI									v	DrugBank.ca	1/2/2020
carbamazepine	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019

List Updated April 13, 2020

While every attempt has been made to provide the most comprehensive list of potential drug-drug interactions, there may be OTC, herbal, and prescription medications not included within this list.

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Generic Name Medication (OBJECT)	Drug Effect (OBJECT)	Cannabinoid Class (PRECIPITANT)	Cannabinoid as the (PRECIPITANT)	Enzyme Inhibitor	Enzyme Inducer	Enzyme/Metabolism	CYP1A2	CYP2B6	CYP2C8	CYP2C9	CYP2C19	CYP2E1	CYP3A4	UGT1A9	UGT2B7	Source	Source Date
carbamazepine	↓	THC/CBD	Nabiximols		✓	CYP1A2 Substrate w/NTI	✓									DrugBank.ca	1/2/2020
carbamazepine	↑↓	THC/CBD	Nabiximols	✓	✓	CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
carbamazepine	↑	THC/CBD	Nabiximols	✓		UGT2B7 Substrate w/NTI									✓	DrugBank.ca	1/2/2020
celecoxib	↑	CBD	Cannabidiolol	✓		CYP2C9 Sensitive Substrate (Table 3-1)				✓						FDA.gov	12/3/2019
celecoxib	↑	THC	Dronabinol	✓		CYP2C9 Sensitive Substrate (Table 3-1)				✓						FDA.gov	12/3/2019
celecoxib	↑	THC	Nabilone	✓ (Mod)		CYP2C9 Sensitive Substrate (Table 3-1)				✓						FDA.gov	12/3/2019
cisapride	↑	THC	Dronabinol or Nabilone	✓ (Weak)		CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
cisapride	↑↓	THC/CBD	Nabiximols	✓	✓	CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
clindamycin	↑	THC	Dronabinol or Nabilone	✓ (Weak)		CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
clindamycin	↑↓	THC/CBD	Nabiximols	✓	✓	CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
clobazam (N-desmethyloclobazam)	↑	CBD	Cannabidiolol	✓		CYP2C19 Substrate (Epidiolex®) Prescribing Information, 7.2					✓					Prescribing Info	6/2018
clomipramine	↑↓	CBD	Cannabidiolol	✓	✓	CYP1A2 Substrate w/NTI	✓									DrugBank.ca	1/2/2020
clomipramine	↑↓	CBD	Cannabidiolol	✓	✓	CYP2B6 Substrate w/NTI		✓								DrugBank.ca	1/2/2020
clomipramine	↑	CBD	Cannabidiolol	✓		CYP2C19 Substrate w/NTI					✓					DrugBank.ca	12/4/2019
clomipramine	↑	THC	Dronabinol or Nabilone	✓ (Weak)		CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
clomipramine	↓	THC/CBD	Nabiximols		✓	CYP1A2 Substrate w/NTI	✓									DrugBank.ca	1/2/2020
clomipramine	↓	THC/CBD	Nabiximols		✓	CYP2B6 Substrate w/NTI		✓								DrugBank.ca	1/2/2020
clomipramine	↑↓	THC/CBD	Nabiximols	✓	✓	CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
clonidine	↑↓	CBD	Cannabidiolol	✓	✓	CYP1A2 Substrate w/NTI	✓									DrugBank.ca	1/2/2020
clonidine	↑	THC	Dronabinol or Nabilone	✓ (Weak)		CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
clonidine	↓	THC/CBD	Nabiximols		✓	CYP1A2 Substrate w/NTI	✓									DrugBank.ca	1/2/2020
clonidine	↑↓	THC/CBD	Nabiximols	✓	✓	CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
clorindione (VKA)	↑	THC	Dronabinol or Nabilone	✓ (Weak)		CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
clorindione (VKA)	↑↓	THC/CBD	Nabiximols	✓	✓	CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
clozapine	↑↓	CBD	Cannabidiolol	✓	✓	CYP1A2 Moderate Sensitive Substrate (Table 3-1)	✓									FDA.gov	12/3/2019
clozapine	↓	THC/CBD	Nabiximols		✓	CYP1A2 Moderate Sensitive Substrate (Table 3-1)	✓									FDA.gov	12/3/2019
colchicine	↑	THC	Dronabinol or Nabilone	✓ (Weak)		CYP3A Moderate Sensitive Substrate (Table 3-1)							✓			FDA.gov	12/3/2019
colchicine	↑	THC	Dronabinol or Nabilone	✓ (Weak)		CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
colchicine	↑↓	THC/CBD	Nabiximols	✓	✓	CYP3A Moderate Sensitive Substrate (Table 3-1)							✓			FDA.gov	12/3/2019
colchicine	↑↓	THC/CBD	Nabiximols	✓	✓	CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
convaptan	↑	THC	Dronabinol or Nabilone	✓ (Weak)		CYP3A Sensitive Substrate (Table 3-1)							✓			FDA.gov	12/3/2019
convaptan	↑	THC	Dronabinol or Nabilone	✓ (Weak)		CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
convaptan	↑↓	THC/CBD	Nabiximols	✓	✓	CYP3A Sensitive Substrate (Table 3-1)							✓			FDA.gov	12/3/2019
convaptan	↑↓	THC/CBD	Nabiximols	✓	✓	CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
cyclobenzaprine	↑↓	CBD	Cannabidiolol	✓	✓	CYP1A2 Substrate w/NTI	✓									DrugBank.ca	1/2/2020
cyclobenzaprine	↑	THC	Dronabinol or Nabilone	✓ (Weak)		CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
cyclobenzaprine	↓	THC/CBD	Nabiximols		✓	CYP1A2 Substrate w/NTI	✓									DrugBank.ca	1/2/2020
cyclobenzaprine	↑↓	THC/CBD	Nabiximols	✓	✓	CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
cyclosporine	↑	THC	Dronabinol or Nabilone	✓ (Weak)		CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
cyclosporine	↑↓	THC/CBD	Nabiximols	✓	✓	CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
dabigatran etexilate	↑	CBD	Cannabidiolol	✓		UGT1A9 Substrate w/NTI								✓		DrugBank.ca	1/2/2020
dabigatran etexilate	↑	CBD	Cannabidiolol	✓		UGT2B7 Substrate w/NTI								✓		DrugBank.ca	1/2/2020
dabigatran etexilate	↑	THC/CBD	Nabiximols	✓		UGT1A9 Substrate w/NTI								✓		DrugBank.ca	1/2/2020
dabigatran etexilate	↑	THC/CBD	Nabiximols	✓		UGT2B7 Substrate w/NTI								✓		DrugBank.ca	1/2/2020
darifenacin	↑	THC	Dronabinol or Nabilone	✓ (Weak)		CYP3A Sensitive Substrate (Table 3-1)							✓			FDA.gov	12/3/2019
darifenacin	↑	THC	Dronabinol or Nabilone	✓ (Weak)		CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
darifenacin	↑↓	THC/CBD	Nabiximols	✓	✓	CYP3A Sensitive Substrate (Table 3-1)							✓			FDA.gov	12/3/2019
darifenacin	↑↓	THC/CBD	Nabiximols	✓	✓	CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
darunavir	↑	THC	Dronabinol or Nabilone	✓ (Weak)		CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
darunavir	↑↓	THC/CBD	Nabiximols	✓	✓	CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
darunavir	↑	THC	Dronabinol or Nabilone	✓ (Weak)		CYP3A Sensitive Substrate (Table 3-1)							✓			FDA.gov	12/3/2019
darunavir	↑↓	THC/CBD	Nabiximols	✓	✓	CYP3A Sensitive Substrate (Table 3-1)							✓			FDA.gov	12/3/2019
dasatinib	↑	THC	Dronabinol or Nabilone	✓ (Weak)		CYP3A Sensitive Substrate (Table 3-1)							✓			FDA.gov	12/3/2019
dasatinib	↑	THC	Dronabinol or Nabilone	✓ (Weak)		CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
dasatinib	↑↓	THC/CBD	Nabiximols	✓	✓	CYP3A Sensitive Substrate (Table 3-1)							✓			FDA.gov	12/3/2019
dasatinib	↑↓	THC/CBD	Nabiximols	✓	✓	CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
desipramine	↑↓	CBD	Cannabidiolol	✓	✓	CYP1A2 Substrate w/NTI	✓									DrugBank.ca	1/2/2020
desipramine	↑↓	CBD	Cannabidiolol	✓	✓	CYP2B6 Substrate w/NTI		✓								DrugBank.ca	1/2/2020
desipramine	↓	THC/CBD	Nabiximols		✓	CYP1A2 Substrate w/NTI	✓									DrugBank.ca	1/2/2020
desipramine	↓	THC/CBD	Nabiximols		✓	CYP2B6 Substrate w/NTI		✓								DrugBank.ca	1/2/2020
diazepam	↑	CBD	Cannabidiolol	✓		CYP2C19 Moderate Sensitive Substrate (Table 3-1)					✓					FDA.gov	12/3/2019
diclofenac (VKA)	↑	CBD	Cannabidiolol	✓		CYP2C9 Substrate w/NTI					✓					DrugBank.ca	12/4/2019
diclofenac (VKA)	↑	THC	Dronabinol	✓		CYP2C9 Substrate w/NTI					✓					DrugBank.ca	12/4/2019
diclofenac (VKA)	↑	THC	Nabilone	✓ (Mod)		CYP2C9 Substrate w/NTI					✓					DrugBank.ca	12/4/2019
diflunisal	↑	CBD	Cannabidiolol	✓		UGT1A9 Substrate (Epidiolex®) Prescribing Information, 7.2								✓		Prescribing Info	6/2018
digoxin	↑	THC	Dronabinol or Nabilone	✓ (Weak)		CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
digoxin	↑↓	THC/CBD	Nabiximols	✓	✓	CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
dihydroergotamine	↑	THC	Dronabinol or Nabilone	✓ (Weak)		CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
dihydroergotamine	↑↓	THC/CBD	Nabiximols	✓	✓	CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
diphenadione (VKA)	↑	THC	Dronabinol or Nabilone	✓ (Weak)		CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
diphenadione (VKA)	↑↓	THC/CBD	Nabiximols	✓	✓	CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019

# Cannabinoid (PRECIPITANT) Medication Affecting the Metabolism of Another (OBJECT) Medication

Pennsylvania State University, College of Medicine, Dept of Pharmacology (Hershey, PA)

<https://sites.psu.edu/cannabinoid>

Generic Name Medication (OBJECT)	Drug Effect (OBJECT)	Cannabinoid Class (PRECIPITANT)	Cannabinoid as the (PRECIPITANT)	Enzyme Inhibitor	Enzyme Inducer	Enzyme/Metabolism	CYP1A2	CYP2B6	CYP2C8	CYP2C9	CYP2C19	CYP2E1	CYP3A4	UGT1A9	UGT2B7	Source	Source Date
dofetilide	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
dofetilide	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
dosulepin	↑↓	CBD	Cannabidiolol	v	v	CYP2B6 Substrate w/NTI		v								DrugBank.ca	1/2/2020
dosulepin	↓	THC/CBD	Nabiximols	v	v	CYP2B6 Substrate w/NTI		v								DrugBank.ca	1/2/2020
doxepin	↑↓	CBD	Cannabidiolol	v	v	CYP1A2 Substrate w/NTI	v									DrugBank.ca	1/2/2020
doxepin	↑	CBD	Cannabidiolol	v		CYP2C19 Substrate w/NTI					v					DrugBank.ca	12/4/2019
doxepin	↑	CBD	Cannabidiolol	v		CYP2C9 Substrate w/NTI				v						DrugBank.ca	12/4/2019
doxepin	↑	THC	Dronabinol	v		CYP2C9 Substrate w/NTI				v						DrugBank.ca	12/4/2019
doxepin	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
doxepin	↑	THC	Nabilone	v (Mod)		CYP2C9 Substrate w/NTI				v						DrugBank.ca	12/4/2019
doxepin	↓	THC/CBD	Nabiximols	v	v	CYP1A2 Substrate w/NTI	v									DrugBank.ca	1/2/2020
doxepin	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
dronedaron	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
dronedaron	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
dronedaron	↑↓	THC/CBD	Nabiximols	v	v	CYP3A Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
dronedaron	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
duloxetine	↑↓	CBD	Cannabidiolol	v	v	CYP1A2 Sensitive Substrate (Table 3-1)	v									FDA.gov	12/3/2019
duloxetine	↓	THC/CBD	Nabiximols	v	v	CYP1A2 Sensitive Substrate (Table 3-1)	v									FDA.gov	12/3/2019
ebastine	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
ebastine	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
ebastine	↑↓	THC/CBD	Nabiximols	v	v	CYP3A Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
ebastine	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
efavirenz	↑↓	CBD	Cannabidiolol	v	v	CYP2B6 Moderate Sensitive Substrate (Table 3-1)		v								FDA.gov	12/3/2019
eletriptan	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
eletriptan	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
eletriptan	↑↓	THC/CBD	Nabiximols	v	v	CYP3A Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
eletriptan	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
eliglustat	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A Moderate Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
eliglustat	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
eliglustat	↑↓	THC/CBD	Nabiximols	v	v	CYP3A Moderate Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
eliglustat	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
eperenone	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
eperenone	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
eperenone	↑↓	THC/CBD	Nabiximols	v	v	CYP3A Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
eperenone	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
ergotamine	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
ergotamine	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
esketamine	↑↓	CBD	Cannabidiolol	v	v	CYP2B6 Substrate w/NTI		v								DrugBank.ca	1/2/2020
esketamine	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
esketamine	↓	THC/CBD	Nabiximols	v	v	CYP2B6 Substrate w/NTI		v								DrugBank.ca	1/2/2020
esketamine	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
ethiny estradiol (Oral Contraceptives)	↓	THC/CBD	Nabiximols	v	v	UGT1A9 Substrate								v		DrugBank.ca	1/2/2020
ethiny estradiol (Oral Contraceptives)	↓	THC/CBD	Nabiximols	v	v	UGT2B7 Substrate									v	DrugBank.ca	1/2/2020
ethosuximide	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
ethosuximide	↑	THC	Nabilone	v (Weak)		CYP2E1 Substrate w/NTI						v				DrugBank.ca	1/2/2020
ethosuximide	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
ethyl biscoumacetate (VKA)	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
ethyl biscoumacetate (VKA)	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
everolimus	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
everolimus	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
everolimus	↑↓	THC/CBD	Nabiximols	v	v	CYP3A Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
everolimus	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
felodipine	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
felodipine	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
felodipine	↑↓	THC/CBD	Nabiximols	v	v	CYP3A Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
felodipine	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
fenofibrate	↑	CBD	Cannabidiolol	v		UGT1A9 Substrate (Epidiolex®) Prescribing Information, 7.2								v		Prescribing Info	6/2018
fentanyl	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
fentanyl	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
fluidione (VKA)	↑	CBD	Cannabidiolol	v		CYP2C9 Substrate w/NTI				v						DrugBank.ca	12/4/2019
fluidione (VKA)	↑	THC	Dronabinol	v		CYP2C9 Substrate w/NTI				v						DrugBank.ca	12/4/2019
fluidione (VKA)	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
fluidione (VKA)	↑	THC	Nabilone	v (Mod)		CYP2C9 Substrate w/NTI				v						DrugBank.ca	12/4/2019
fluidione (VKA)	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
fosaprepitant	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
fosaprepitant	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
fosphenytoin	↑	CBD	Cannabidiolol	v		CYP2C19 Substrate w/NTI					v					DrugBank.ca	12/4/2019
fosphenytoin	↑	CBD	Cannabidiolol	v		CYP2C8 Substrate w/NTI			v							DrugBank.ca	1/2/2020
fosphenytoin	↑	CBD	Cannabidiolol	v		CYP2C9 Substrate w/NTI				v						DrugBank.ca	12/4/2019
fosphenytoin	↑	THC	Dronabinol	v		CYP2C9 Substrate w/NTI				v						DrugBank.ca	12/4/2019
fosphenytoin	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019

# Cannabinoid (PRECIPITANT) Medication Affecting the Metabolism of Another (OBJECT) Medication

Pennsylvania State University, College of Medicine, Dept of Pharmacology (Hershey, PA)

<https://sites.psu.edu/cannabinoid>

Generic Name Medication (OBJECT)	Drug Effect (OBJECT)	Cannabinoid Class (PRECIPITANT)	Cannabinoid as the (PRECIPITANT)	Enzyme Inhibitor	Enzyme Inducer	Enzyme/Metabolism	CYP1A2	CYP2B6	CYP2C8	CYP2C9	CYP2C19	CYP2E1	CYP3A4	UGT1A9	UGT2B7	Source	Source Date
fosphenytoin	↑	THC	Nabilone	v (Mod)		CYP2C8 Substrate w/NTI			v							DrugBank.ca	1/2/2020
fosphenytoin	↑↓	THC	Nabilone	v (Mod)		CYP2C9 Substrate w/NTI				v						DrugBank.ca	12/4/2019
fosphenytoin	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
gemfibrozil	↑	CBD	Cannabidiolol	v		UGT2B7 Substrate (Epidiolex®) Prescribing Information, 7.2									v	Prescribing Info	6/2018
glimiperide	↑	CBD	Cannabidiolol	v		CYP2C9 Moderate Sensitive Substrate (Table 3-1)				v						FDA.gov	12/3/2019
glimiperide	↑	THC	Dronabinol	v		CYP2C9 Moderate Sensitive Substrate (Table 3-1)				v						FDA.gov	12/3/2019
glimiperide	↑	THC	Nabilone	v (Mod)		CYP2C9 Moderate Sensitive Substrate (Table 3-1)				v						FDA.gov	12/3/2019
ibrutinib	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
ibrutinib	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
ibrutinib	↑↓	THC/CBD	Nabiximols	v	v	CYP3A Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
ibrutinib	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
imipramine	↑↓	CBD	Cannabidiolol	v	v	CYP1A2 Substrate w/NTI	v									DrugBank.ca	1/2/2020
imipramine	↑↓	CBD	Cannabidiolol	v	v	CYP2B6 Substrate w/NTI		v								DrugBank.ca	1/2/2020
imipramine	↑	CBD	Cannabidiolol	v		CYP2C19 Substrate w/NTI					v					DrugBank.ca	12/4/2019
imipramine	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
imipramine	↓	THC/CBD	Nabiximols		v	CYP1A2 Substrate w/NTI	v									DrugBank.ca	1/2/2020
imipramine	↓	THC/CBD	Nabiximols		v	CYP2B6 Substrate w/NTI		v								DrugBank.ca	1/2/2020
imipramine	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
indinavir	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
indinavir	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
indinavir	↑↓	THC/CBD	Nabiximols	v	v	CYP3A Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
indinavir	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
isavuconazole	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
isavuconazole	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
lamotrigine	↑	CBD	Cannabidiolol	v		UGT2B7 Substrate (Epidiolex®) Prescribing Information, 7.2									v	Prescribing Info	6/2018
lansoprazole	↑	CBD	Cannabidiolol	v		CYP2C19 Sensitive Index Substrate (Table 2-1)					v					FDA.gov	9/26/2016
lansoprazole	↑	CBD	Cannabidiolol	v		CYP2C19 Moderate Sensitive Substrate (Table 3-1)					v					FDA.gov	12/3/2019
levacetylmethadol	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
levacetylmethadol	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
levothyroxine	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
levothyroxine	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
lofepramine	↑↓	CBD	Cannabidiolol	v	v	CYP2B6 Substrate w/NTI		v								DrugBank.ca	1/2/2020
lofepramine	↓	THC/CBD	Nabiximols		v	CYP2B6 Substrate w/NTI		v								DrugBank.ca	1/2/2020
lomitapide	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
lomitapide	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
lomitapide	↑↓	THC/CBD	Nabiximols	v	v	CYP3A Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
lomitapide	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
lopinavir	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
lopinavir	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
lorazepam	↑	CBD	Cannabidiolol	v		UGT2B7 Substrate (Epidiolex®) Prescribing Information, 7.2									v	Prescribing Info	6/2018
lovastatin	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
lovastatin	↑↓	THC/CBD	Nabiximols	v	v	CYP3A Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
lovastatin	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
lovastatin	↓	THC	Dronabinol or Nabilone	v (Weak)		CYP3A Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
lurasidone	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
lurasidone	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
lurasidone	↑↓	THC/CBD	Nabiximols	v	v	CYP3A Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
lurasidone	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
maraviroc	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
maraviroc	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
maraviroc	↑↓	THC/CBD	Nabiximols	v	v	CYP3A Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
maraviroc	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
melatonin	↑↓	CBD	Cannabidiolol	v	v	CYP1A2 Sensitive Substrate (Table 3-1)	v									FDA.gov	12/3/2019
melatonin	↓	THC/CBD	Nabiximols		v	CYP1A2 Sensitive Substrate (Table 3-1)	v									FDA.gov	12/3/2019
mellitracen	↑↓	CBD	Cannabidiolol	v	v	CYP2B6 Substrate w/NTI				v						DrugBank.ca	1/2/2020
mellitracen	↓	THC/CBD	Nabiximols	v		CYP2B6 Substrate w/NTI				v						DrugBank.ca	1/2/2020
mepheridine	↑↓	CBD	Cannabidiolol	v	v	CYP2B6 Substrate w/NTI		v								DrugBank.ca	1/2/2020
mepheridine	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
mepheridine	↓	THC/CBD	Nabiximols	v	v	CYP2B6 Substrate w/NTI				v						DrugBank.ca	1/2/2020
mepheridine	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
mephenytoin	↑↓	CBD	Cannabidiolol	v	v	CYP1A2 Substrate w/NTI	v									DrugBank.ca	1/2/2020
mephenytoin	↓	THC/CBD	Nabiximols		v	CYP1A2 Substrate w/NTI	v									DrugBank.ca	1/2/2020
mephenytoin (S-Enantiomer)	↑	CBD	Cannabidiolol	v		CYP2C19 Sensitive Substrate (Table 3-1)					v					FDA.gov	12/3/2019
methysergide	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
methysergide	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
midazolam	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A Sensitive Index Substrate (Table 2-1)							v			FDA.gov	9/26/2016
midazolam	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
midazolam	↑	THC	Dronabinol or Nabilone	v (Weak)		CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019
midazolam	↑↓	THC/CBD	Nabiximols	v	v	CYP3A Sensitive Index Substrate (Table 2-1)							v			FDA.gov	9/26/2016
midazolam	↑↓	THC/CBD	Nabiximols	v	v	CYP3A Sensitive Substrate (Table 3-1)							v			FDA.gov	12/3/2019
midazolam	↑↓	THC/CBD	Nabiximols	v	v	CYP3A4 Substrate w/NTI							v			DrugBank.ca	12/5/2019

# Cannabinoid (PRECIPITANT) Medication Affecting the Metabolism of Another (OBJECT) Medication

Pennsylvania State University, College of Medicine, Dept of Pharmacology (Hershey, PA)

<https://sites.psu.edu/cannabinoid>

Generic Name Medication (OBJECT)	Drug Effect (OBJECT)	Cannabinoid Class (PRECIPITANT)	Cannabinoid as the (PRECIPITANT)	Enzyme Inhibitor	Enzyme Inducer	Enzyme/Metabolism	CYP1A2	CYP2B6	CYP2C8	CYP2C9	CYP2C19	CYP2E1	CYP3A4	UGT1A9	UGT2B7	Source	Source Date
montelukast	↑	CBD	Cannabidiolol	✓		CYP2C8 Moderate Sensitive Substrate (Table 3-1)			✓							FDA.gov	12/3/2019
montelukast	↑	THC	Nabilone	✓ (Mod)		CYP2C8 Moderate Sensitive Substrate (Table 3-1)			✓							FDA.gov	12/3/2019
morphine	↑	CBD	Cannabidiolol	✓		UGT2B7 Substrate (Epidiolex®) Prescribing Information, 7.2								✓	✓	Prescribing Info	6/2018
mycophenolic acid	↑	CBD	Cannabidiolol	✓		UGT1A9 Substrate w/NTI								✓		DrugBank.ca	1/2/2020
mycophenolic acid	↑	CBD	Cannabidiolol	✓		UGT2B7 Substrate w/NTI								✓		DrugBank.ca	1/2/2020
mycophenolic acid	↑	THC/CBD	Nabiximols	✓		UGT1A9 Substrate w/NTI								✓		DrugBank.ca	1/2/2020
mycophenolic acid	↑	THC/CBD	Nabiximols	✓		UGT2B7 Substrate w/NTI								✓		DrugBank.ca	1/2/2020
naloxegol	↑	THC	Dronabinol or Nabilone	✓ (Weak)		CYP3A Sensitive Substrate (Table 3-1)							✓			FDA.gov	12/3/2019
naloxegol	↑	THC	Dronabinol or Nabilone	✓ (Weak)		CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
naloxegol	↑↓	THC/CBD	Nabiximols	✓	✓	CYP3A Sensitive Substrate (Table 3-1)							✓			FDA.gov	12/3/2019
naloxegol	↑↓	THC/CBD	Nabiximols	✓	✓	CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
nisoldipine	↑	THC	Dronabinol or Nabilone	✓ (Weak)		CYP3A Sensitive Substrate (Table 3-1)							✓			FDA.gov	12/3/2019
nisoldipine	↑	THC	Dronabinol or Nabilone	✓ (Weak)		CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
nisoldipine	↑↓	THC/CBD	Nabiximols	✓	✓	CYP3A Sensitive Substrate (Table 3-1)							✓			FDA.gov	12/3/2019
nisoldipine	↑↓	THC/CBD	Nabiximols	✓	✓	CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
nortriptyline	↑↓	CBD	Cannabidiolol	✓	✓	CYP1A2 Substrate w/NTI	✓									DrugBank.ca	1/2/2020
nortriptyline	↑↓	CBD	Cannabidiolol	✓	✓	CYP2B6 Substrate w/NTI		✓								DrugBank.ca	1/2/2020
nortriptyline	↑	THC	Dronabinol or Nabilone	✓ (Weak)		CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
nortriptyline	↓	THC/CBD	Nabiximols	✓	✓	CYP1A2 Substrate w/NTI		✓								DrugBank.ca	1/2/2020
nortriptyline	↓	THC/CBD	Nabiximols	✓	✓	CYP2B6 Substrate w/NTI			✓							DrugBank.ca	1/2/2020
nortriptyline	↑↓	THC/CBD	Nabiximols	✓	✓	CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
omeprazole	↑	CBD	Cannabidiolol	✓		CYP2C19 Sensitive Index Substrate (Table 2-1)					✓					FDA.gov	9/26/2016
omeprazole	↑	CBD	Cannabidiolol	✓		CYP2C19 Sensitive Substrate (Table 3-1)					✓					FDA.gov	12/3/2019
paclitaxel	↑	CBD	Cannabidiolol	✓		CYP2C8 Substrate w/NTI			✓							DrugBank.ca	1/2/2020
paclitaxel	↑	THC	Dronabinol or Nabilone	✓ (Weak)		CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
paclitaxel	↑	THC	Nabilone	✓ (Mod)		CYP2C8 Substrate w/NTI			✓							DrugBank.ca	1/2/2020
paclitaxel	↑↓	THC/CBD	Nabiximols	✓	✓	CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
pentobarbital ( ↑ elim t½ by 4 hours)	↑	THC	Dronabinol	✓		Dronabinol (Syndros®) Prescribing Information, 12.3										Prescribing Info	9/2018
phenobarbital	↑	CBD	Cannabidiolol	✓		CYP2C19 Substrate w/NTI					✓					DrugBank.ca	12/4/2019
phenprocoumon (VKA)	↑	CBD	Cannabidiolol	✓		CYP2C8 Substrate w/NTI			✓							DrugBank.ca	1/2/2020
phenprocoumon (VKA)	↑	CBD	Cannabidiolol	✓		CYP2C9 Substrate w/NTI				✓						DrugBank.ca	12/4/2019
phenprocoumon (VKA)	↑	THC	Dronabinol	✓		CYP2C9 Substrate w/NTI				✓						DrugBank.ca	12/4/2019
phenprocoumon (VKA)	↑	THC	Dronabinol or Nabilone	✓ (Weak)		CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
phenprocoumon (VKA)	↑	THC	Nabilone	✓ (Mod)		CYP2C8 Substrate w/NTI			✓							DrugBank.ca	1/2/2020
phenprocoumon (VKA)	↑	THC	Nabilone	✓ (Mod)		CYP2C9 Substrate w/NTI				✓						DrugBank.ca	12/4/2019
phenprocoumon (VKA)	↑↓	THC/CBD	Nabiximols	✓	✓	CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
phenytoin	↑	CBD	Cannabidiolol	✓		CYP2C19 Substrate w/NTI					✓					DrugBank.ca	12/4/2019
phenytoin	↑	CBD	Cannabidiolol	✓		CYP2C8 Substrate w/NTI			✓							DrugBank.ca	1/2/2020
phenytoin	↑	CBD	Cannabidiolol	✓		CYP2C9 Moderate Sensitive Substrate (Table 3-1)				✓						FDA.gov	12/3/2019
phenytoin	↑	THC	Dronabinol	✓		CYP2C9 Moderate Sensitive Substrate (Table 3-1)				✓						FDA.gov	12/3/2019
phenytoin	↑	THC	Dronabinol	✓		CYP2C9 Substrate w/NTI				✓						DrugBank.ca	12/4/2019
phenytoin	↑	THC	Nabilone	✓ (Mod)		CYP2C8 Substrate w/NTI			✓							DrugBank.ca	1/2/2020
phenytoin	↑	THC	Nabilone	✓ (Mod)		CYP2C9 Moderate Sensitive Substrate (Table 3-1)				✓						FDA.gov	12/3/2019
phenytoin	↑	THC	Nabilone	✓ (Mod)		CYP2C9 Substrate w/NTI				✓						DrugBank.ca	12/4/2019
pimozide	↑↓	CBD	Cannabidiolol	✓	✓	CYP1A2 Substrate w/NTI	✓									DrugBank.ca	1/2/2020
pimozide	↑	THC	Dronabinol or Nabilone	✓ (Weak)		CYP3A Moderate Sensitive Substrate (Table 3-1)							✓			FDA.gov	12/3/2019
pimozide	↑	THC	Dronabinol or Nabilone	✓ (Weak)		CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
pimozide	↓	THC/CBD	Nabiximols	✓	✓	CYP1A2 Substrate w/NTI	✓									DrugBank.ca	1/2/2020
pimozide	↑↓	THC/CBD	Nabiximols	✓	✓	CYP3A Moderate Sensitive Substrate (Table 3-1)							✓			FDA.gov	12/3/2019
pimozide	↑↓	THC/CBD	Nabiximols	✓	✓	CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
pioglitazone	↑	CBD	Cannabidiolol	✓		CYP2C8 Moderate Sensitive Substrate (Table 3-1)			✓							FDA.gov	12/3/2019
pioglitazone	↑	THC	Nabilone	✓ (Mod)		CYP2C8 Moderate Sensitive Substrate (Table 3-1)			✓							FDA.gov	12/3/2019
pirfenidone	↑↓	CBD	Cannabidiolol	✓	✓	CYP1A2 Moderate Sensitive Substrate (Table 3-1)	✓									FDA.gov	12/3/2019
pirfenidone	↓	THC/CBD	Nabiximols	✓	✓	CYP1A2 Moderate Sensitive Substrate (Table 3-1)	✓									FDA.gov	12/3/2019
propofol	↑	CBD	Cannabidiolol	✓		UGT1A9 Substrate (Epidiolex®) Prescribing Information, 7.2								✓		Prescribing Info	6/2018
quetiapine	↑	THC	Dronabinol or Nabilone	✓ (Weak)		CYP3A Sensitive Substrate (Table 3-1)							✓			FDA.gov	12/3/2019
quetiapine	↑↓	THC/CBD	Nabiximols	✓	✓	CYP3A Sensitive Substrate (Table 3-1)							✓			FDA.gov	12/3/2019
quinidine	↑	CBD	Cannabidiolol	✓		CYP2C9 Substrate w/NTI				✓						DrugBank.ca	12/4/2019
quinidine	↑	THC	Dronabinol	✓		CYP2C9 Substrate w/NTI				✓						DrugBank.ca	12/4/2019
quinidine	↑	THC	Dronabinol or Nabilone	✓ (Weak)		CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
quinidine	↑	THC	Nabilone	✓ (Mod)		CYP2C9 Substrate w/NTI				✓						DrugBank.ca	12/4/2019
quinidine	↑	THC	Nabilone	✓ (Weak)		CYP2E1 Substrate w/NTI							✓			DrugBank.ca	1/2/2020
quinidine	↑↓	THC/CBD	Nabiximols	✓	✓	CYP3A4 Substrate w/NTI							✓			DrugBank.ca	12/5/2019
rabeprazole	↑	CBD	Cannabidiolol	✓		CYP2C19 Moderate Sensitive Substrate (Table 3-1)					✓					FDA.gov	12/3/2019
ramelteon	↑↓	CBD	Cannabidiolol	✓	✓	CYP1A2 Sensitive Substrate (Table 3-1)	✓									FDA.gov	12/3/2019
ramelteon	↓	THC/CBD	Nabiximols	✓	✓	CYP1A2 Sensitive Substrate (Table 3-1)	✓									FDA.gov	12/3/2019
ramosetron	↑↓	CBD	Cannabidiolol	✓	✓	CYP1A2 Moderate Sensitive Substrate (Table 3-1)	✓									FDA.gov	12/3/2019
ramosetron	↓	THC/CBD	Nabiximols	✓	✓	CYP1A2 Moderate Sensitive Substrate (Table 3-1)	✓									FDA.gov	12/3/2019
repaglinide	↓	CBD	Cannabidiolol	✓		CYP2C8 Sensitive Index Substrate (Table 2-1)				✓						FDA.gov	9/26/2016
repaglinide	↑	CBD	Cannabidiolol	✓		CYP2C8 Sensitive Substrate (Table 3-1)			✓							FDA.gov	12/3/2019
repaglinide	↑	THC	Nabilone	✓ (Mod)		CYP2C8 Sensitive Index Substrate (Table 2-1)			✓							FDA.gov	9/26/2016

# Cannabinoid (PRECIPITANT) Medication Affecting the Metabolism of Another (OBJECT) Medication

Pennsylvania State University, College of Medicine, Dept of Pharmacology (Hershey, PA)

<https://sites.psu.edu/cannabinoid>

Generic Name Medication (OBJECT)	Drug Effect (OBJECT)	Cannabinoid Class (PRECIPITANT)	Cannabinoid as the (PRECIPITANT)	Enzyme Inhibitor	Enzyme Inducer	Enzyme/Metabolism	CYP1A2	CYP2B6	CYP2C8	CYP2C9	CYP2C19	CYP2E1	CYP3A4	UGT1A9	UGT2B7	Source	Source Date
repaglinide	↑	THC	Nabilone	√ (Mod)		CYP2C8 Sensitive Substrate (Table 3-1)			√							FDA.gov	12/3/2019
rilpivirine	↑	THC	Dronabinol or Nabilone	√ (Weak)		CYP3A Moderate Sensitive Substrate (Table 3-1)							√			FDA.gov	12/3/2019
rilpivirine	↑	THC	Dronabinol or Nabilone	√ (Weak)		CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019
rilpivirine	↑↓	THC/CBD	Nabiximols	√	√	CYP3A Moderate Sensitive Substrate (Table 3-1)							√			FDA.gov	12/3/2019
rilpivirine	↑↓	THC/CBD	Nabiximols	√	√	CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019
rivaroxaban	↑	THC	Dronabinol or Nabilone	√ (Weak)		CYP3A Moderate Sensitive Substrate (Table 3-1)							√			FDA.gov	12/3/2019
rivaroxaban	↑	THC	Dronabinol or Nabilone	√ (Weak)		CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019
rivaroxaban	↑↓	THC/CBD	Nabiximols	√	√	CYP3A Moderate Sensitive Substrate (Table 3-1)							√			FDA.gov	12/3/2019
rivaroxaban	↑↓	THC/CBD	Nabiximols	√	√	CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019
rosiglitazone	↑	CBD	Cannabidiolol	√		CYP2C8 Moderate Sensitive Substrate (Table 3-1)			√							FDA.gov	12/3/2019
rosiglitazone	↑	THC	Nabilone	√ (Mod)		CYP2C8 Moderate Sensitive Substrate (Table 3-1)			√							FDA.gov	12/3/2019
saquinavir	↑	THC	Dronabinol or Nabilone	√ (Weak)		CYP3A Sensitive Substrate (Table 3-1)										FDA.gov	12/3/2019
saquinavir	↑	THC	Dronabinol or Nabilone	√ (Weak)		CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019
saquinavir	↑↓	THC/CBD	Nabiximols	√	√	CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019
saquinavir	↑↓	THC/CBD	Nabiximols	√	√	CYP3A Sensitive Substrate (Table 3-1)							√			FDA.gov	12/3/2019
sildenafil	↑	THC	Dronabinol or Nabilone	√ (Weak)		CYP3A Sensitive Substrate (Table 3-1)							√			FDA.gov	12/3/2019
sildenafil	↑	THC	Dronabinol or Nabilone	√ (Weak)		CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019
sildenafil	↑↓	THC/CBD	Nabiximols	√	√	CYP3A Sensitive Substrate (Table 3-1)							√			FDA.gov	12/3/2019
sildenafil	↑↓	THC/CBD	Nabiximols	√	√	CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019
simvastatin	↑	THC	Dronabinol or Nabilone	√ (Weak)		CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019
simvastatin	↑↓	THC/CBD	Nabiximols	√	√	CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019
simvastatin	↑	THC	Dronabinol or Nabilone	√ (Weak)		CYP3A Sensitive Substrate (Table 3-1)							√			FDA.gov	12/3/2019
simvastatin	↑↓	THC/CBD	Nabiximols	√	√	CYP3A Sensitive Substrate (Table 3-1)							√			FDA.gov	12/3/2019
siponimod	↑	CBD	Cannabidiolol	√		CYP2C9 Substrate w/NTI				√						DrugBank.ca	12/4/2019
siponimod	↑	THC	Dronabinol	√		CYP2C9 Substrate w/NTI				√						DrugBank.ca	12/4/2019
siponimod	↑	THC	Dronabinol or Nabilone	√ (Weak)		CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019
siponimod	↑	THC	Nabilone	√ (Mod)		CYP2C9 Substrate w/NTI				√						DrugBank.ca	12/4/2019
siponimod	↑↓	THC/CBD	Nabiximols	√	√	CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019
sirolimus	↑	THC	Dronabinol or Nabilone	√ (Weak)		CYP3A Sensitive Substrate (Table 3-1)							√			FDA.gov	12/3/2019
sirolimus	↑	THC	Dronabinol or Nabilone	√ (Weak)		CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019
sirolimus	↑↓	THC/CBD	Nabiximols	√	√	CYP3A Sensitive Substrate (Table 3-1)							√			FDA.gov	12/3/2019
sirolimus	↑↓	THC/CBD	Nabiximols	√	√	CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019
tacrolimus	↑	THC	Dronabinol or Nabilone	√ (Weak)		CYP3A Sensitive Substrate (Table 3-1)							√			FDA.gov	12/3/2019
tacrolimus	↑	THC	Dronabinol or Nabilone	√ (Weak)		CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019
tacrolimus	↑↓	THC/CBD	Nabiximols	√	√	CYP3A Sensitive Substrate (Table 3-1)							√			FDA.gov	12/3/2019
tacrolimus	↑↓	THC/CBD	Nabiximols	√	√	CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019
tadalafil	↑	THC	Dronabinol or Nabilone	√ (Weak)		CYP3A Moderate Sensitive Substrate (Table 3-1)							√			FDA.gov	12/3/2019
tadalafil	↑	THC	Dronabinol or Nabilone	√ (Weak)		CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019
tadalafil	↑↓	THC/CBD	Nabiximols	√	√	CYP3A Moderate Sensitive Substrate (Table 3-1)							√			FDA.gov	12/3/2019
tadalafil	↑↓	THC/CBD	Nabiximols	√	√	CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019
tasimelteon	↑↓	CBD	Cannabidiolol	√	√	CYP1A2 Sensitive Substrate (Table 3-1)		√								FDA.gov	12/3/2019
tasimelteon	↓	THC/CBD	Nabiximols	√	√	CYP1A2 Sensitive Substrate (Table 3-1)		√								FDA.gov	12/3/2019
temsirolimus	↑	THC	Dronabinol or Nabilone	√ (Weak)		CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019
temsirolimus	↑↓	THC/CBD	Nabiximols	√	√	CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019
terfenadine	↑	THC	Dronabinol or Nabilone	√ (Weak)		CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019
terfenadine	↑↓	THC/CBD	Nabiximols	√	√	CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019
theophylline	↑↓	CBD	Cannabidiolol	√	√	CYP1A2 Moderate Sensitive Substrate (Table 3-1)		√								FDA.gov	12/3/2019
theophylline	↑	THC	Dronabinol or Nabilone	√ (Weak)		CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019
theophylline	↓	THC/CBD	Nabiximols		√	CYP1A2 Moderate Sensitive Substrate (Table 3-1)		√								FDA.gov	12/3/2019
theophylline	↓	THC/CBD	Nabiximols		√	CYP1A2 Substrate w/NTI		√								DrugBank.ca	1/2/2020
theophylline	↑↓	THC/CBD	Nabiximols	√	√	CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019
thiopental	↑	CBD	Cannabidiolol	√		CYP2C19 Substrate w/NTI					√					DrugBank.ca	12/4/2019
tianeptine	↑	THC	Dronabinol or Nabilone	√ (Weak)		CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019
tianeptine	↑↓	THC/CBD	Nabiximols	√	√	CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019
ticagrelor	↑	THC	Dronabinol or Nabilone	√ (Weak)		CYP3A Sensitive Substrate (Table 3-1)							√			FDA.gov	12/3/2019
ticagrelor	↑	THC	Dronabinol or Nabilone	√ (Weak)		CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019
ticagrelor	↑↓	THC/CBD	Nabiximols	√	√	CYP3A Sensitive Substrate (Table 3-1)							√			FDA.gov	12/3/2019
ticagrelor	↑↓	THC/CBD	Nabiximols	√	√	CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019
tipranavir	↑	THC	Dronabinol or Nabilone	√ (Weak)		CYP3A Sensitive Substrate (Table 3-1)							√			FDA.gov	12/3/2019
tipranavir	↑	THC	Dronabinol or Nabilone	√ (Weak)		CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019
tipranavir	↑↓	THC/CBD	Nabiximols	√	√	CYP3A Sensitive Substrate (Table 3-1)							√			DrugBank.ca	12/5/2019
tipranavir	↑↓	THC/CBD	Nabiximols	√	√	CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019
tizanidine	↑↓	CBD	Cannabidiolol	√	√	CYP1A2 Sensitive Index Substrate (Table 2-1)		√								FDA.gov	9/26/2016
tizanidine	↑↓	CBD	Cannabidiolol	√	√	CYP1A2 Sensitive Substrate (Table 3-1)		√								FDA.gov	12/3/2019
tizanidine	↑↓	CBD	Cannabidiolol	√	√	CYP1A2 Substrate w/NTI		√								DrugBank.ca	1/2/2020
tizanidine	↓	THC/CBD	Nabiximols		√	CYP1A2 Sensitive Index Substrate (Table 2-1)		√								FDA.gov	9/26/2016
tizanidine	↓	THC/CBD	Nabiximols		√	CYP1A2 Sensitive Substrate (Table 3-1)		√								FDA.gov	12/3/2019
tizanidine	↓	THC/CBD	Nabiximols		√	CYP1A2 Substrate w/NTI		√								DrugBank.ca	1/2/2020
tolbutamide	↑	CBD	Cannabidiolol	√		CYP2C9 Moderate Sensitive Substrate (Table 3-1)				√						FDA.gov	12/3/2019
tolbutamide	↑	THC	Dronabinol	√		CYP2C9 Moderate Sensitive Substrate (Table 3-1)				√						FDA.gov	12/3/2019
tolbutamide	↑	THC	Nabilone	√ (Mod)		CYP2C9 Moderate Sensitive Substrate (Table 3-1)				√						FDA.gov	12/3/2019

# Cannabinoid (PRECIPITANT) Medication Affecting the Metabolism of Another (OBJECT) Medication

Pennsylvania State University, College of Medicine, Dept of Pharmacology (Hershey, PA)

<https://sites.psu.edu/cannabinoid>

Generic Name Medication (OBJECT)	Drug Effect (OBJECT)	Cannabinoid Class (PRECIPITANT)	Cannabinoid as the (PRECIPITANT)	Enzyme Inhibitor	Enzyme Inducer	Enzyme/Metabolism	CYP1A2	CYP2B6	CYP2C8	CYP2C9	CYP2C19	CYP2E1	CYP3A4	UGT1A9	UGT2B7	Source	Source Date
tolbutamide	↑	THC	Dronabinol	√		CYP2C9 Sensitive Index Substrate (Table 2-1)				√						FDA.gov	9/26/2016
tolvaptan	↑	THC	Dronabinol or Nabilone	√ (Weak)		CYP3A Sensitive Substrate (Table 3-1)							√			FDA.gov	12/3/2019
tolvaptan	↑	THC	Dronabinol or Nabilone	√ (Weak)		CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019
tolvaptan	↑↓	THC/CBD	Nabiximols	√	√	CYP3A Sensitive Substrate (Table 3-1)							√			FDA.gov	12/3/2019
tolvaptan	↑↓	THC/CBD	Nabiximols	√	√	CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019
triazolam	↑	THC	Dronabinol or Nabilone	√ (Weak)		CYP3A Sensitive Index Substrate (Table 2-1)							√			FDA.gov	9/26/2016
triazolam	↑	THC	Dronabinol or Nabilone	√ (Weak)		CYP3A Sensitive Substrate (Table 3-1)							√			FDA.gov	12/3/2019
triazolam	↑	THC	Dronabinol or Nabilone	√ (Weak)		CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019
triazolam	↑↓	THC/CBD	Nabiximols	√	√	CYP3A Sensitive Index Substrate (Table 2-1)							√			FDA.gov	9/26/2016
triazolam	↑↓	THC/CBD	Nabiximols	√	√	CYP3A Sensitive Substrate (Table 3-1)							√			FDA.gov	12/3/2019
triazolam	↑↓	THC/CBD	Nabiximols	√	√	CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019
trimipramine	↑↓	CBD	Cannabidiol	√	√	CYP2B6 Substrate w/NTI							√			DrugBank.ca	1/2/2020
trimipramine	↓	THC/CBD	Nabiximols		√	CYP2B6 Substrate w/NTI							√			DrugBank.ca	1/2/2020
valproate (Hepatic Enzyme Elevation)	~	CBD	Cannabidiol	~	~	Cannabidiol (Epidiolex®) Prescribing Information, 7.3										Prescribing Info	6/2018
valproic acid	↑	CBD	Cannabidiol	√		UGT1A9 Substrate w/NTI								√		DrugBank.ca	1/2/2020
valproic acid	↑	CBD	Cannabidiol	√		UGT2B7 Substrate w/NTI									√	DrugBank.ca	1/2/2020
valproic acid	↑	THC/CBD	Nabiximols	√		UGT1A9 Substrate w/NTI								√		DrugBank.ca	1/2/2020
valproic acid	↑	THC/CBD	Nabiximols	√		UGT2B7 Substrate w/NTI									√	DrugBank.ca	1/2/2020
valproic acid	↑	CBD	Cannabidiol	√		CYP2C9 Substrate w/NTI				√						DrugBank.ca	12/4/2019
valproic acid	↑	THC	Dronabinol	√		CYP2C9 Substrate w/NTI				√						DrugBank.ca	12/4/2019
valproic acid	↑	THC	Nabilone	√ (Mod)		CYP2C9 Substrate w/NTI				√						DrugBank.ca	12/4/2019
ardenafil	↑	THC	Dronabinol or Nabilone	√ (Weak)		CYP3A Sensitive Substrate (Table 3-1)							√			FDA.gov	12/3/2019
ardenafil	↑	THC	Dronabinol or Nabilone	√ (Weak)		CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019
ardenafil	↑↓	THC/CBD	Nabiximols	√	√	CYP3A Sensitive Substrate (Table 3-1)							√			FDA.gov	12/3/2019
ardenafil	↑↓	THC/CBD	Nabiximols	√	√	CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019
voriconazole	↑	CBD	Cannabidiol	√		CYP2C19 Moderate Sensitive Substrate (Table 3-1)					√					FDA.gov	12/3/2019
warfarin (VKA)	↑↓	CBD	Cannabidiol	√	√	CYP1A2 Substrate w/NTI	√									DrugBank.ca	1/2/2020
warfarin (VKA)	↑	CBD	Cannabidiol	√		CYP2C19 Substrate w/NTI					√					DrugBank.ca	12/4/2019
warfarin (VKA)	↑	CBD	Cannabidiol	√		CYP2C9 Moderate Sensitive Substrate (Table 3-1)				√						FDA.gov	12/3/2019
warfarin (VKA)	↑	THC	Dronabinol	√		CYP2C9 Moderate Sensitive Substrate (Table 3-1)				√						FDA.gov	12/3/2019
warfarin (VKA)	↑	THC	Dronabinol or Nabilone	√ (Weak)		CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019
warfarin (VKA)	↑	THC	Nabilone	√ (Mod)		CYP2C9 Moderate Sensitive Substrate (Table 3-1)				√						FDA.gov	12/3/2019
warfarin (VKA)	↓	THC/CBD	Nabiximols		√	CYP1A2 Substrate w/NTI	√									DrugBank.ca	1/2/2020
warfarin (VKA)	↑↓	THC/CBD	Nabiximols	√	√	CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019
warfarin (VKA) S-Enantiomer	↓	THC	Dronabinol	√		CYP2C9 Sensitive Index Substrate (Table 2-1)				√						FDA.gov	9/26/2016
zolpidem	↑	THC	Dronabinol or Nabilone	√ (Weak)		CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019
zolpidem	↑↓	THC/CBD	Nabiximols	√	√	CYP3A4 Substrate w/NTI							√			DrugBank.ca	12/5/2019

**Legend:**

The list of Cannabinoid (PRECIPITANT) medications are located in the 4<sup>th</sup> column from the left  
 OBJECT - The Medication Whose Metabolism is Potentially Disrupted by the Cannabinoid (PRECIPITANT) Medication  
 (VKA) Vitamin K Antagonist

(↑) Increase in Drug Effect of the OBJECT Medication

(↓) Decrease in Drug Effect of the OBJECT Medication

(↑↓) Increase and/or Decrease in Drug Effect of the OBJECT Medication

(THC) Δ<sup>9</sup>-tetrahydrocannabinol

(CBD) Cannabidiol

PRECIPITANT - The Cannabinoid Medication Potentially Disrupting the Metabolism of the OBJECT Medication

(PB) Protein Binding ≥85%