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### Oral adverse effects of drugs

*Taste disorders*

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## SUPPLEMENTARY DATA

Supplementary data: Table S1: Drug induced dysgeusia (PT) in all level 1 ATC categories

ATC level 1	ATC level 3	Generic name	ATC Code	LLT MedDRA	Frequency	Specific type of administration	Coinciding adverse effects
ALIMENTARY TRACT AND METABOLISM	Antiemetics And Antinauseants	Aprepitant	A04AD12	Taste disturbance	Frequency not known	-	D
		Rolapitant	A04AD14	Taste disturbance	Uncommon (0 1-1%)	-	-
	Antipropulsives	Loperamide	A07DA03	Taste disturbance	Frequency not known	-	D
	Blood Glucose Lowering Drugs Excl. Insulins	Exenatide	A10BJ01	Taste disturbance	Uncommon (0 1-1%)	-	-
		Glimepiride	A10BB12	Taste disturbance	Frequency not known	-	-
		Liraglutide	A10BJ02	Taste disturbance	Common (1-10%)	-	D
		Metformine	A10BA02	Taste disturbance	Common (1-10%)	-	-
	Drugs For Peptic Ulcer And Gastro-Oesophageal Reflux Disease (GORD)	Esomeprazol	A02BC05	Taste disturbance	Frequency not known	After intravenous administration	D
		Famotidine	A02BA03	Taste disturbance	Uncommon (0 1-1%)	-	D
		Lansoprazol	A02BC03	Taste disturbance	Frequency not known	-	D
		Rabeprazol	A02BC04	Taste disturbance	Frequency not known	-	D
	Intestinal Antiinfectives	Fidaxomicine	A07AA12	Taste disturbance	Uncommon (0 1-1%)	-	D
		Miconazol	A07AC01 D01AC02 G01AF04 S02AA13	Dysgeusia	Common (1-10%)	After oral administration	D

		Miconazol	A07AC01 D01AC02 G01AF04 S02AA13	Taste disturbance	Uncommon (0.1-1%)	After oral administration	D
Intestinal Antiinflammatory Agents		Budesonide	A07EA06 R01AD05 R03BA02	Taste disturbance	Uncommon (0.1-1%)	After rectal administration	D,P
		Budesonide	A07EA06 R01AD05 R03BA02	Taste disturbance	Common (1-10%)	After inhalation	D,P
		Budesonide	A07EA06 R01AD05 R03BA02	Taste disturbance	Frequency not known	After nasal administration	D,P
		Cromoglicic Acid	A07EB01 R01AC01 R03BC01 S01GX01	Dysgeusia	Uncommon (0.1-1%)		-
		Sulfasalazine	A07EC01	Taste disturbance	Common (1-10%)	-	A
Other Alimentary Tract And Metabolism Products		Agalsidase Alfa	A16AB03	Taste disturbance	Common (1-10%)	-	A
		Sodium Phenylbutyrate	A16AX03	Taste disturbance	Common (1-10%)	-	-

	Stomatological Preparations	Chlorhexidine	A01AB03 B05CA02 D08AC02 D09AA12 S01AX09	Taste disturbance	Rare or very rare (<0 1%)	-	-
		Triamcinolone	A01AC01 D07AB09 H02AB08 R01AD11 S01BA05 S02BA	Taste disturbance	Rare or very rare (<0 1%)	After nasal administration	-
		Hydrogen Peroxide	A01AB02	Dysgeusia	Frequency not known	-	-
ANTIINFECTIVES FOR SYSTEMIC USE	Aminoglycoside Antibacterials	Tobramycine	J01GB01 J01GB01 S01AA12	Taste disturbance	Common (1-10%)	After inhalation	-
		Tobramycine	J01GB01 J01GB01 S01AA12	Taste disturbance	Rare or very rare (<0 1%)	After nebulization	-
	Amphenicols	Chloramphenicol	J01BA01 S01AA01	Taste bitter	Frequency not known	After ocular administration	-
	Antimycotics For Systemic Use	Caspofungin	J02AX04	Taste disturbance	Uncommon (0 1-1%)	-	-
		Fluconazol	J02AC01	Taste disturbance	Uncommon (0 1-1%)	-	D
		Isavuconazol	J02AC05	Taste disturbance	Uncommon (0 1-1%)	-	-
		Itraconazol	J02AC02	Taste disturbance	Common (1-10%)	-	-

	Voriconazol	J02AC03 S01AX	Taste disturbance	Uncommon (0.1-1%)	-	-
Beta-Lactam Antibacterials Penicillins	Amoxicillin	J01CA04 V04CL	Taste disturbance	Common (1-10%)	-	-
Direct Acting Antivirals	Atazanavir	J05AE08	Taste disturbance	Uncommon (0.1-1%)	-	D
	Darunavir	J05AE10	Taste disturbance	Uncommon (0.1-1%)	-	D
	Ganciclovir	J05AB06	Taste disturbance	Common (1-10%)	-	-
	Indinavir	J05AE02	Taste disturbance	Very common (>10%)	-	D
	Lopinavir	J05AR10	Taste disturbance	Uncommon (0.1-1%)	-	D
	Raltegravir	J05AX08	Taste disturbance	Uncommon (0.1-1%)	-	D
	Ribavirine	J05AP01	Taste disturbance	Common (1-10%)	-	D
	Ritonavir	J05AE03	Taste disturbance	Very common (>10%)	-	D
	Saquinavir	J05AE01	Taste disturbance	Common (1-10%)	-	-
	Telbivudine	J05AF11	Taste disturbance	Uncommon (0.1-1%)	-	-
	Valganciclovir	J05AB14	Taste disturbance	Common (1-10%)	-	-
	Zidovudine	J05AF01	Taste disturbance	Frequency not known	-	D
Drugs For Treatment Of Lepa	Clofazimine	J04BA01	Taste disturbance	Frequency not known	-	-
Immunoglobulins	Immunoglobulins, Normal Human, For Intravascular Adm.	J05AF01 J06BA02	Taste disturbance	Uncommon (0.1-1%)	After intravenous administration	-
Macrolides Lincosamides And Streptogramins	Azitromycin	J01FA10 S01AA26	Taste disturbance	Rare or very rare (<0.1%)	After intravenous administration	A

	Clarithromycin	J01FA09	Taste disturbance	Common (1-10%)	-	-
	Roxitromycin	J01FA06	Taste disturbance	Rare or very rare (<0 1%)	-	-
Other Antibacterials	Dalbavancin	J01XA04	Taste disturbance	Uncommon (0 1-1%)	-	-
	Daptomycin	J01XX09	Taste disturbance	Uncommon (0 1-1%)	-	-
	Daptomycin	J01XX09	Taste metallic	Rare or very rare (<0 1%)	-	-
	Fosfomycin	J01XX01	Taste disturbance	Uncommon (0 1-1%)	After parenteral administration	-
	Linezolid	J01XX08	Taste metallic	Common (1-10%)	-	D
	Tedizolid	J01XX11	Taste disturbance	Uncommon (0 1-1%)	-	D
Other Beta-Lactam Antibacterials	Ceftazidim	J01DD02 S01AA	Dysgeusia	Rare or very rare (<0 1%)	-	-
	Ertapenem	J01DH03	Taste disturbance	Uncommon (0 1-1%)	-	D
	Imipenem	J01DH51	Taste disturbance	Frequency not known	-	-
Quinolone Antibacterials	Ciprofloxacin	J01MA02 V04CL	Taste disturbance	Uncommon (0 1-1%)	-	A
	Levofloxacin	J01MA12	Taste disturbance	Uncommon (0 1-1%)	After oral and intravenous administration	-
	Levofloxacin	J01MA12	Taste disturbance	Very common (>10%)	After inhalation	-
	Moxifloxacin	J01MA14 S01AE07	Taste disturbance	Uncommon (0 1-1%)	After oral and intravenous administration	-

		Moxifloxacin	J01MA14 S01AE07	Taste disturbance	Common (1-10%)	After ocular administration	-
		Ofloxacin	J01MA01 S01AE01 S02AA16	Taste disturbance	Common (1-10%)	After auricular administration	-
		Ofloxacin	J01MA01 S01AE01 S02AA16	Taste disturbance	Frequency not known	After oral administration	-
	Sulfonamides And Trimethoprim	Cotrimoxazol	J01EE01	Taste metallic	Frequency not known	-	-
	Viral Vaccines	Encephalitis, Japanese, Inactivated, Whole Virus	J07BA02	Taste disturbance	Frequency not known	-	-
ANTINEOPLASTIC AND IMMUNOMODULATING AGENTS	Alkylating Agents	Bendamustine	L01AA09	Taste disturbance	Frequency not known	-	-
		Chloormethine	L01AA05	Taste metallic	Rare or very rare (<0 1%)	After intravenous administration	-
		Temozolomide	L01AX03	Taste disturbance	Common (1-10%)	-	D
	Antimetabolites	Methotrexate	L01BA01 L04AX03 S01XA	Taste metallic	Frequency not known	-	-
		Nelarabine	L01BB07	Taste disturbance	Common (1-10%)	-	-
		Tegafur	L01BC03	Taste disturbance	Common (1-10%)	-	D
	Cytotoxic Antibiotics And Related Substances	Mitoxantron	L01DB07	Taste disturbance	Uncommon (0 1-1%)	-	-
		Pixantron	L01DB11	Taste disturbance	Common (1-10%)	-	D

	Hormone Antagonists And Related Agents	Anastrozol	L02BG03	Taste disturbance	Common (1-10%)	-	-
		Letrozol	L02BG04	Taste disturbance	Uncommon (0 1-1%)	-	D
	Hormones And Related Agents	Busereline	L02AE01	Taste disturbance	Frequency not known	After nasal administration	P
		Leuproreline	L02AE02	Taste disturbance	Common (1-10%)	-	D
		Triptoreline	L02AE04	Taste disturbance	Frequency not known	-	D
	Immunostimulants	Glatiramer Acetate	L03AX13	Taste disturbance	Common (1-10%)	-	-
		Histamin	L03AX14 V04CG03 V04CX	Taste metallic	Frequency not known	After nasal administration	-
		Interferon Alfa 2A	L03AB04	Taste disturbance	Common (1-10%)	-	D
		Interferon Alfa 2B	L03AB05	Taste disturbance	Common (1-10%)	-	D
		Peginterferon Alfa 2A	L03AB11	Taste disturbance	Common (1-10%)	-	D
		Peginterferon Alfa 2B	L03AB10	Taste disturbance	Common (1-10%)	-	D
	Immunosuppressants	Alemtuzumab	L04AA34	Taste disturbance	Common (1-10%)	-	D
		Eculizumab	L04AA25	Taste disturbance	Common (1-10%)	-	-
		Golimumab	L04AB06	Taste disturbance	Frequency not known	-	-
		Leflunomide	L04AA13	Taste disturbance	Uncommon (0 1-1%)	-	-
		Lenalidomide	L04AX04	Taste disturbance	Very common (>10%)	-	D
	Mycofenolzuur	L04AA06	Taste disturbance	Common (1-10%)	-	-	
	Pirfenidon	L04AX05	Taste disturbance	Common (1-10%)	-	-	



Other Antineoplastic Agents	Bevacizumab	L01XC07 S01LA	Taste disturbance	Very common (>10%)	-	-
	Bortezomib	L01XX32	Taste disturbance	Common (1-10%)	-	-
	Cabozantinib	L01XE26	Taste disturbance	Very common (>10%)	-	-
	Carboplatine	L01XA02	Taste disturbance	Common (1-10%)	-	-
	Eribuline	L01XX41	Taste disturbance	Common (1-10%)	-	D
	Everolimus	L01XE10 L04AA18	Taste disturbance	Very common (>10%)	In case of oncologic treatment	D
	Imatinib	L01XE01	Taste disturbance	Common (1-10%)	-	D
	Lenvatinib	L01XE29	Taste disturbance	Very common (>10%)	-	D
	Mitotaan	L01XX23	Taste disturbance	Rare or very rare (<0 1%)	-	-
	Olaparib	L01XX46	Taste disturbance	Very common (>10%)	-	-
	Oxaliplatine	L01XA03	Taste disturbance	Very common (>10%)	-	-
	Pazopanib	L01XE11	Taste disturbance	Very common (>10%)	-	D
	Pembrolizumab	L01XC18	Taste disturbance	Common (1-10%)	-	D
	Regorafenib	L01XE21	Taste disturbance	Common (1-10%)	-	D
	Ribociclib	L01XE42	Taste disturbance	Common (1-10%)	-	-
	Rituximab	L01XC02	Taste disturbance	Uncommon (0 1-1%)	When used to treat lymphoma's	-
	Sonidegib	L01XX48	Taste disturbance	Very common (>10%)	-	-
	Sunitinib	L01XE04	Taste disturbance	Very common (>10%)	-	D
	Trastuzumab	L01XC03	Taste disturbance	Common (1-10%)	-	D
	Vemurafenib	L01XE15	Taste disturbance	Very common (>10%)	-	-
Vismodegib	L01XX43	Taste disturbance	Very common (>10%)	-	-	
Plant Alkaloids And Other Natural Products	Cabazitaxel	L01CD04	Taste disturbance	Very common (>10%)	-	D

		Docetaxel	L01CD02	Taste disturbance	Very common (>10%)	During monotherapy	-
		Etoposide	L01CB01	Taste disturbance	Frequency not known	-	-
		Paclitaxel	L01CD01	Dysgeusia	Common (1-10%)	-	D
		Trabectedine	L01CX01	Taste disturbance	Common (1-10%)	During monotherapy	-
		Vinflunine	L01CA05	Taste disturbance	Common (1-10%)	-	-
ANTIPARASITIC PRODUCTS INSECTICIDES AND REPELLENTS	Agents Against Leishmaniasis And Trypanosomiasis	Benznidazol	P01CA02	Taste disturbance	Rare or very rare (<0 1%)	-	-
		Pentamidine	P01CX01	Taste disturbance	Common (1-10%)	After injection	-
	Antimalarials	Artesunaat	P01BE03	Taste bitter	Frequency not known	-	-
		Quinine	P01BC01	Taste bitter	Frequency not known	-	-
	Antinematodal Agents	Levamisol	P02CE01	Dysgeusia	Frequency not known	-	-
BLOOD AND BLOOD FORMING ORGANS	Antithrombotic Agents	Clopidogrel	B01AC04	Taste disturbance	Frequency not known	-	P
		Iloprost	B01AC11	Taste disturbance	Uncommon (0 1-1%)	After intravenous administration	-
	Blood And Related Products	Albumine	B05AA01 V07AB	Taste disturbance	Rare or very rare (<0 1%)	-	D
	I.V. Solutions	Fat Emulsions	B05BA02	Dysgeusia	Uncommon (0 1-1%)	-	-
		Iron, Parenteral Preparations	B03AC	Taste disturbance	Common (1-10%)	-	-
	Vitamin K And Other Hemostatics	Efmoroctocog Alfa	B02BD02	Taste disturbance	Uncommon (0 1-1%)	-	-
		Eftrenonacog Alfa	B02BD04	Taste disturbance	Uncommon (0 1-1%)	-	-
		Moroctocog Alfa	B02BD02	Taste disturbance	Uncommon (0 1-1%)	-	-
	Nonacog Alfa	B02BD04	Taste disturbance	Common (1-10%)	-	-	

		Nonacog Gamma	B02BD04	Taste disturbance	Common (1-10%)	-	-
		Octocog Alfa	B02BD02	Taste disturbance	Uncommon (0 1-1%)	-	-
		Factor Viii Inhibitor Bypassing Activity	B02BD03	Taste disturbance	Frequency not known	-	-
		Romiplostim	B02BX04	Taste disturbance	Uncommon (0 1-1%)	-	-
CARDIOVASCULAR SYSTEM	Ace Inhibitors Plain	Benazepril	C09AA07	Taste disturbance	Uncommon (0 1-1%)	-	-
		Enalapril	C09AA02	Taste disturbance	Common (1-10%)	-	-
		Fosinopril	C09AA09	Taste disturbance	Common (1-10%)	-	D
		Lisinopril	C09AA03	Taste disturbance	Uncommon (0 1-1%)	-	D
		Perindopril	C09AA04	Taste disturbance	Common (1-10%)	-	D,A
		Quinapril	C09AA06	Taste disturbance	Frequency not known	-	D
	Angiotensin li Antagonists Plain	Irbesartan	C09CA04	Taste disturbance	Rare or very rare (<0 1%)	-	D
		Losartan	C09CA01	Taste disturbance	Rare or very rare (<0 1%)	-	-
		Telmisartan	C09CA07	Taste disturbance	Frequency not known	-	-
	Antiarrhythmics Class I And Iii	Amiodaron	C01BD01	Taste disturbance	Very common (>10%)	-	D
		Procaïnamide	C01BA02	Taste disturbance	Rare or very rare (<0 1%)	-	D,A
		Propafenon	C01BC03	Taste disturbance	Common (1-10%)	-	-
		Vernakalant	C01BG11	Taste disturbance	Very common (>10%)	-	D
	Antivaricose Therapy	Lauromacrogol 400	C05BB02	Taste metallic	Frequency not known	-	D,A
	Arteriolar Smooth Muscle Agents Acting On	Minoxidil	C02DC01 D11AX01	Taste disturbance	Uncommon (0 1-1%)	After cutaneous administration	-
	Beta Blocking Agents	Metoprolol	C07AB02	Taste disturbance	Uncommon (0 1-1%)	-	-
	Sotalol	C07AA07	Taste disturbance	Common (1-10%)	-	D	

	Lipid Modifying Agents Plain	Colestyramine	C10AC01	Taste disturbance	Rare or very rare (<0 1%)	-	-
		Omega-3-Vetzuren	C10AX06	Taste disturbance	Uncommon (0 1-1%)	-	-
	Other Cardiac Preparations	Adenosine	C01EB10	Taste metallic	Uncommon (0 1-1%)	-	-
		Regadenoson	C01EB21	Taste disturbance	Common (1-10%)	-	-
	Potassium-Sparing Agents	Amiloride	C03DB01	Dysgeusia	Frequency not known	-	-
	Selective Calcium Channel Blockers With Mainly Vascular Effects	Amlodipine	C08CA01	Taste disturbance	Uncommon (0 1-1%)	-	D
DERMATOLOGICALS	Anti-Acne Preparations For Topical Use	Clindamycin	D10AF01 G01AA10 J01FF01	Dysgeusia	Rare or very rare (<0 1%)	After cutaneous administration	D
		Clindamycin	D10AF01 G01AA10 J01FF01	Taste disturbance	Uncommon (0 1-1%)	After intravenous administration	-
	Antifungals For Topical Use	Ketoconazol	D01AC08 J02AB02	Taste disturbance	Uncommon (0 1-1%)	When used as shampoo	-
		Ketoconazol	D01AC08 J02AB02	Taste disturbance	Frequency not known	-	D
		Terbinafine	D01AE15 D01BA02	Taste disturbance	Uncommon (0 1-1%)	-	D
	Antipsoriatics For Systemic Use	Acitretine	D05BB02	Taste disturbance	Rare or very rare (<0 1%)	-	-

	Chemotherapeutics For Topical Use	Metronidazol	D06BX01 G01AF01 J01XD01 P01AB01	Dysgeusia	Frequency not known	-	D
		Metronidazol	D06BX01 G01AF01 J01XD01 P01AB01	Taste disturbance	Uncommon (0 1-1%)	After cutaneous administration	-
	Corticosteroids Plain	Fluticason	D07AC17 R01AD08 R01AD12 R03BA05	Dysgeusia	Common (1-10%)	After nasal administration	-
		Mometason	D07AC13 R01AD09	Taste disturbance	Rare or very rare (<0 1%)	After nasal administration	-
	Enzymes	Collagenase	D03BA02 M09AB02	Taste disturbance	Uncommon (0 1-1%)	When used intralaesionally by Peyronie's disease	-
	Other Dermatological Preparations	Brimonidine	D11AX21 S01EA05	Taste disturbance	Common (1-10%)	-	-
	Protectives Against UV-Radiation	Afamelanotide	D02BB02	Taste disturbance	Uncommon (0 1-1%)	-	D
GENITO URINARY SYSTEM AND SEX	Hormonal Contraceptives For Systemic Use	Drospirenon	G03AC10	Taste disturbance	Uncommon (0 1-1%)	In combination with estradiol	-
	Other Urologicals Incl. Antispasmodics	Dapoxetine	G04BX14	Taste disturbance	Uncommon (0 1-1%)	-	D

		Darifenacine	G04BD10	Taste disturbance	Uncommon (0.1-1%)	-	D
		Fesoterodine	G04BD11	Taste disturbance	Uncommon (0.1-1%)	-	D
	Vasopressin Antagonists	Tolvaptan	G04BX	Taste disturbance	Uncommon (0.1-1%)	-	D
MUSCULO-SKELETAL SYSTEM	Antigout Preparations	Allopurinol	M04AA01	Taste disturbance	Frequency not known	-	D
		Febuxostat	M04AA03	Taste disturbance	Uncommon (0.1-1%)	-	-
	Antiinflammatory And Antirheumatic Products Non-Steroids	Aceclofenac	M01AB16	Taste disturbance	Frequency not known	-	D
		Celecoxib	M01AH01	Taste disturbance	Frequency not known	-	-
		Diclofenac	M01AB05 M02AA15 S01BC03	Taste disturbance	Frequency not known	After systemic administration	A
		Etoricoxib	M01AH05	Taste disturbance	Uncommon (0.1-1%)	-	-
		Ketoprofen	M01AE03 M02AA10	Taste disturbance	Rare or very rare (<0.1%)	-	D
	Drugs Affecting Bone Structure And Mineralization	Alendronic Acid	M05BA04	Taste disturbance	Uncommon (0.1-1%)	-	-
		Ibandronic Acid	M05BA06	Taste disturbance	Uncommon (0.1-1%)	After oral administration	-
		Zoledronic Acid	M05BA08	Taste disturbance	Uncommon (0.1-1%)	-	-
	Muscle Relaxants Directly Acting Agents	Dantrolene	M03CA01	Taste disturbance	Frequency not known	After oral administration	-
	Other Drugs For Disorders Of The Musculo-Skeletal System	Hydroquinine	M09AA01	Taste bitter	Very common (>10%)	-	-

NERVOUS SYSTEM

Anesthetics General	Fentanyl	N01AH01 N02AB03	Taste disturbance	Uncommon (0.1-1%)	After nasal administration	-
	Fentanyl	N01AH01 N02AB03	Taste disturbance	Common (1-10%)	After oral administration	D
	Fentanyl	N01AH01 N02AB03	Taste disturbance	Common (1-10%)	After sublingual administration	D
Anesthetics Local	Articaine	N01BB08	Taste metallic	Frequency not known	-	D
	Capsaicin	N01BX04 R01AX	Taste disturbance	Uncommon (0.1-1%)	When used as plaster	-
Anti-Dementia Drugs	Galantamine	N06DA04	Taste disturbance	Uncommon (0.1-1%)	-	-
Antidepressants	Amitriptyline	N06AA09	Taste disturbance	Common (1-10%)	-	-
	Bupropion	N06AX12	Taste disturbance	Common (1-10%)	-	D
	Citalopram	N06AB04	Taste disturbance	Frequency not known	-	D
	Clomipramine	N06AA04	Taste disturbance	Common (1-10%)	-	D
	Fluoxetine	N06AB03	Taste disturbance	Common (1-10%)	-	D
	Moclobemide	N06AG02	Taste disturbance	Uncommon (0.1-1%)	-	D
	Nortriptyline	N06AA10	Taste disturbance	Common (1-10%)	-	D
	Trazodon	N06AX05	Taste disturbance	Rare or very rare (<0.1%)	-	D
	Venlafaxine	N06AX16	Taste disturbance	Common (1-10%)	-	D
Antiepileptics	Carbamazepine	N03AF01	Taste disturbance	Frequency not known	-	D
	Phenytoin	N03AB02	Taste disturbance	Frequency not known	-	D
	Topiramaat	N03AX11	Taste disturbance	Common (1-10%)	-	-
Antimigraine Preparations	Eletriptan	N02CC06	Taste disturbance	Uncommon (0.1-1%)	-	D
	Frovatriptan	N02CC07	Taste disturbance	Uncommon (0.1-1%)	-	D

	Rizatriptan	N02CC04	Taste disturbance	Uncommon (0 1-1%)	-	D
Antipsychotics	Lithium	N05AN01	Taste disturbance	Rare or very rare (<0 1%)	-	D
	Risperidon	N05AX08	Taste disturbance	Uncommon (0 1-1%)	-	-
Dopaminergic Agents	Levodopa	N04BA01	Taste bitter	Rare or very rare (<0 1%)	-	D
	Safinamide	N04BD03	Taste disturbance	Frequency not known	-	D
Drugs Used In Addictive Disorders	Disulfiram	N07BB01	Taste garlic	Frequency not known	-	D
	Disulfiram	N07BB01	Taste metallic	Frequency not known	-	-
	Nicotine	N07BA01	Taste disturbance	Common (1-10%)	-	-
	Varenicline	N07BA03	Taste disturbance	Common (1-10%)	-	D
Hypnotics And Sedatives	Lormetazepam	N05CD06	Taste disturbance	Common (1-10%)	-	D
	Zopiclon	N05CF01	Taste bitter	Common (1-10%)	-	D
Opioids	Buprenorfine	N02AE01 N07BC01	Taste disturbance	Uncommon (0 1-1%)	After transdermal administration	D
	Hydromorfon	N02AA03	Taste disturbance	Uncommon (0 1-1%)	After intravenous and subcutaneous administration	D
	Morphine	N02AA01 V04CL	Taste disturbance	Uncommon (0 1-1%)	After oral administration	D



		Oxycodon	N02AA05	Taste disturbance	Uncommon (0 1-1%)	-	-
	Other Analgesics And Antipyretics	Ziconotide	N02BG08	Taste disturbance	Common (1-10%)	-	D
	Other Nervous System Drugs	Sodium Oxybate	N07XX04	Taste disturbance	Common (1-10%)	-	D,A
	Psychostimulants Agents Used For ADHD And Nootropics	Atomoxetine	N06BA09	Taste disturbance	Common (1-10%)	-	-
		Modafinil	N06BA07	Taste disturbance	Uncommon (0 1-1%)	-	D
RESPIRATORY SYSTEM	Adrenergics Inhalants	Formoterol	R03AC13	Taste disturbance	Uncommon (0 1-1%)	-	D
	Antihistamines For Systemic Use	Cetirizine	R06AE07	Taste disturbance	Frequency not known	-	D
		Ebastine	R06AX22	Taste disturbance	Frequency not known	-	D
		Levocetirizine	R06AE09	Taste disturbance	Rare or very rare (<0 1%)	-	D
	Decongestants And Other Nasal Preparations For Topical Use	Azelastine	R01AC03 S01GX07	Dysgeusia	Common (1-10%)	After nasal administration	D
		Azelastine	R01AC03 S01GX07	Taste bitter	Uncommon (0 1-1%)	After ocular administration	D
		Ipratropium	R01AX03 R03BB01	Taste disturbance	Uncommon (0 1-1%)	-	D
		Tramazoline	R01AA09	Taste disturbance	Frequency not known	-	D
	Expectorants Excl. Combinations With Cough Suppressants	Ambroxol	R05CB06	Taste disturbance	Common (1-10%)	-	-
	Other Drugs For Obstructive Airway Diseases Inhalants	Ciclesonide	R03BA08	Dysgeusia	Uncommon (0 1-1%)	-	D

		Nedocromil	R03BC03 S01GX04	Taste disturbance	Common (1-10%)		-
		Tiotropium	R03BB04	Taste disturbance	Uncommon (0 1-1%)	-	-
		Umeclidinium	R03BB07	Taste disturbance	Uncommon (0 1-1%)	-	-
	Other Systemic Drugs For Obstructive Airway Diseases	Roflumilast	R03DX07	Taste disturbance	Uncommon (0 1-1%)	-	D
	Mucolytics	Myrtus	R05CB	Taste disturbance	Rare or very rare (<0 1%)	-	D
	Throat Preparations	Flurbiprofen	R02AX01	Taste disturbance	Uncommon (0 1-1%)	-	-
SENSORY ORGANS	Antiglaucoma Preparations And Miotics	Acetazolamide	S01EC01	Taste disturbance	Rare or very rare (<0 1%)	-	-
		Apraclonidine	S01EA03	Taste disturbance	Common (1-10%)	-	D
		Brinzolamide	S01EC04	Taste bitter	Common (1-10%)	-	-
		Dorzolamide	S01EC03	Taste bitter	Common (1-10%)	-	D,A
		Travoprost	S01EE04	Taste disturbance	Frequency not known	-	D
	Antiinfectives	Trifluridine	S01AD02	Taste disturbance	Common (1-10%)	In combination with tipiracil	D
	Antiinflammatory Agents	Fluormetholon	S01BA07	Taste disturbance	Rare or very rare (<0 1%)	-	D
	Decongestants And Antiallergics	Emedastine	S01GX06	Taste disturbance	Uncommon (0 1-1%)	-	-
		Olopatadine	S01GX09	Taste disturbance	Common (1-10%)	-	-
	Diagnostic Agents	Fluorescein	S01JA01	Taste disturbance	Rare or very rare (<0 1%)	After intravenous administration	-
SYSTEMIC HORMONAL	Anterior Pituitary Lobe Hormones And Analogues	Pegvisomant	H01AX01	Taste disturbance	Uncommon (0 1-1%)	-	-

	Anti-Parathyroid Agents	Calcitonine	H05BA01	Taste disturbance	Common (1-10%)	-	-
		Paricalcitol	H05BX02	Taste disturbance	Uncommon (0 1-1%)	After oral administration	D
		Paricalcitol	H05BX02	Taste disturbance	Common (1-10%)	After intravenous administration	-
	Antithyroid Preparations	Thiamazol	H03BB02	Taste disturbance	Uncommon (0 1-1%)	-	D
	Corticosteroids For Systemic Use Plain	Methylprednisolone	H02AB04	Dysgeusia	Frequency not known	After intravenous administration	D
	Posterior Pituitary Lobe Hormones	Carbetocine	H01BB03	Taste metallic	Common (1-10%)	-	-
VARIOUS	All Other Therapeutic Products	Diazoxide	V03AH01	Taste disturbance	Rare or very rare (<0 1%)	-	-
		Sucroferric Oxyhydroxide	V03AE05	Dysgeusia	Common (1-10%)	-	-
		Lanthanum Carbonate	V03AE03	Taste disturbance	Uncommon (0 1-1%)	-	-
	Allergens	Grass Pollen	V01AA02 V01AA	Taste disturbance	Uncommon (0 1-1%)	After sublingual administration	-
	Cardiovascular System	Technetium (99Mtc) Tetrofosmin	V09GA02	Taste disturbance	Frequency not known	-	-

	Technetium (99Mtc) Tetrofosmin	V09GA02	Taste metallic	Frequency not known	-	-
Magnetic Resonance Imaging Contrast Media	Gadobenic Acid	V08CA08	Taste disturbance	Uncommon (0 1-1%)	-	-
	Gadobutrol	V08CA09	Taste disturbance	Uncommon (0 1-1%)	-	-
	Gadodiamide	V08CA03	Taste disturbance	Frequency not known	-	-
	Gadoteridol	V08CA04	Taste disturbance	Uncommon (0 1-1%)	-	D
	Gadoversetamide	V08CA06	Taste disturbance	Common (1-10%)	-	-
	Gadoxetic Acid	V08CA10	Taste disturbance	Uncommon (0 1-1%)	-	D
Other Diagnostic Agents	Corticoreslin	V04CD04	Taste disturbance	Common (1-10%)	-	D,A
	Somatostatin	V04CD05	Taste disturbance	Common (1-10%)	-	-
	Dimercaprol	V03AB09	Taste disturbance	Frequency not known	-	-
Ultrasound Contrast Media	Microspheres Of Human Albumin	V08DA01	Taste disturbance	Common (1-10%)	-	-
	Microspheres Of Phospholipids	V08DA04	Taste disturbance	Uncommon (0 1-1%)	-	-
	Sulfur Hexafluoride	V08DA05	Taste disturbance	Uncommon (0 1-1%)	After intravenous administration	-

ATC= Anatomic Therapeutic Chemical; LLT= lowest level term; D= dry mouth; A= Anosmia; P= Parosmia

Supplementary data: Table S2: Drugs documented with "bitter taste" as an adverse effect.

ATC level 1	ATC level 3	Generic name	ATC Code	LLT MedDRA	Frequency	Specific type of administration	Coinciding adverse effects
ANTIINFECTIVES FOR SYSTEMIC USE	Amphenicols	Chloramphenicol	J01BA01 S01AA01	Taste bitter	Frequency not known	After ocular administration	-
ANTIPARASITIC PRODUCTS INSECTICIDES AND REPELLENTS	Antimalarials	Artesunate	P01BE03	Taste bitter	Frequency not known	-	-
		Quinine	P01BC01	Taste bitter	Frequency not known	-	-
MUSCULO-SKELETAL SYSTEM	Other Drugs For Disorders Of The Musculo-Skeletal System	Hydroquinine	M09AA01	Taste bitter	Very common (>10%)	-	-
RESPIRATORY SYSTEM	Decongestants And Other Nasal Preparations For Topical Use	Azelastrine	R01AC03 S01GX07	Taste bitter	Uncommon (0 1-1%)	After ocular administration	D
NERVOUS SYSTEM	Dopaminergic Agents	Levodopa	N04BA01	Taste bitter	Rare or very rare (<0 1%)	-	D
		Zopiclon	N05CF01	Taste bitter	Common (1-10%)	-	D
SENSORY ORGANS	Carbonic Anhydrase Inhibitors	Brinzolamide	S01EC04	Taste bitter	Common (1-10%)	-	-
		Dorzolamide	S01EC03	Taste bitter	Common (1-10%)	-	D,A
ATC= Anatomic Therapeutical Chemical; LLT= lowest level term; D= dry mouth; A= Ansomia							

Supplementary data: Table S3: Drugs documented with “metallic taste” as an adverse effect.

ATC level 1	ATC level 3	Generic name	ATC Code	LLT MedDRA	Frequency	Specific type of administration	Coinciding adverse effects
ANTIINFECTIVES FOR SYSTEMIC USE	Antiinfectives For Systemic Use	Daptomycin	J01XX09	Taste metallic	Rare or very rare (<0 1%)	-	-
		Linezolid	J01XX08	Taste metallic	Common (1-10%)	-	D
		Cotrimoxazol	J01EE01	Taste metallic	Frequency not known	-	-
ANTINEOPLASTIC AND IMMUNOMODULATING AGENTS	Antineoplastic And Immunomodulating Agents	Chloormethine	L01AA05	Taste metallic	Rare or very rare (<0 1%)	After intravenous administration	-
		Methotrexate	L01BA01 L04AX03 S01XA	Taste metallic	Frequency not known	-	-
		Histamin	L03AX14 V04CG03 V04CX	Taste metallic	Frequency not known	After nasal administration	-
CARDIOVASCULAR SYSTEM	Cardiovascular System	Lauromacrogol 400	C05BB02	Taste metallic	Frequency not known	-	D,A
		Adenosine	C01EB10	Taste metallic	Uncommon (0 1-1%)	-	-
NERVOUS SYSTEM	Nervous System	Articaine	N01BB08	Taste metallic	Frequency not known	-	D
		Disulfiram	N07BB01	Taste metallic	Frequency not known	-	-
SYSTEMIC HORMONAL PREPARATIONS EXCL.	Systemic Hormonal Preparations Excl.	Carbetocine	H01BB03	Taste metallic	Common (1-10%)	-	-

VARIOUS	Various	Technetium (99mTc) tetrofosmin	V09GA02	Taste metallic	Frequency not known	-	-
ATC= Anatomic Therapeutical Chemical; LLT= lowest level term; D= dry mouth; A= Ansomia							

