

## **Emtree terms added and changed (January 2021)**

This is an overview of new terms added and changes made in the first Emtree release in 2021.

Overall, Emtree has grown by 1,617 preferred terms (457 drug terms and 1,198 non-drug terms) compared with the previous version released in September 2020. In total Emtree now counts 88,945 preferred terms.

Because the terms added include replacements for existing preferred terms (which become synonyms of the new terms) as well as completely new concepts, the number of terms added exceeds the net growth in Emtree. Other changes could include the merging of two or more existing preferred terms into a single concept.

The terms added and changed are summarized below and specified in detail on the following pages.

### **Emtree terms added in January 2021**

1,695 new terms (including 78 replacement terms and promoted synonyms) have been added to Emtree as preferred terms in version January 2021 (compared to September 2021):

- 457 drug terms (terms assigned to the Chemicals and Drugs facet).
- 1,238 non-drug terms (terms not assigned as Chemicals and Drugs).

The new terms (including the replacement terms and the promoted synonyms) are listed as *Terms added* on the following pages. Note that many of these terms will have been indexed prior to 2021 (typically as candidate terms), sometimes for several years, before they were added to Emtree.

### **Emtree terms changed in January 2021**

87 terms (38 drug terms and 40 non-drug terms) from Emtree September 2020 have been replaced by 78 different terms in January 2021 (38 drug terms and 40 non-drug terms).

Of these, 64 terms (28 drug terms and 36 non-drug terms) are new (e.g. new generic names for drug chemical names) and have been assigned creation date 2021; the remaining 14 replacement terms (10 drug terms and 4 non-drug terms) were already present in Emtree.

1 drug term was replaced by a non-drug term, no non-drug term was replaced by a drug term. No preferred terms were deleted.

Changes are presented in alphabetical order of the *new* terms.

## Drug terms

3C viral protease  
 abdavomeran  
 abrucomstat  
 acapatamab  
 ad26.cov2.s vaccine  
 ad5 ncov  
 adenovirus E1 protein  
 adenovirus E1A protein  
 adenovirus E1B protein  
 adenovirus E2 protein  
 adenovirus E3 protein  
 adenovirus E4 protein  
 adenovirus early protein  
 adp a2m4  
 ADP ribose 1" phosphate phosphatase  
 adrenomedullin pegol  
 aerogel  
 afimetoran  
 aldumastat  
 Alismatis extract  
 alnuctamab  
 alpha1a interferon  
 alpha1b interferon  
 aluminum oxide nanoparticle  
 alunacedase alfa  
 ancremonam  
 ansuvimab  
 aritox  
 artificial antigen presenting cell vaccine  
 asundexian  
 atibuclimab  
 atidarsagene autotemcel  
 avian encephalomyelitis fowlpox infectious  
 laryngotracheitis vaccine  
 avipendekin pegol  
 aviptadil  
 avotaciclib  
 azd1061  
 azd1656  
 azd7442  
 azd8895  
 azercabtagene zapreleucel  
 azvudine  
 bamlanivimab  
 bapotulimab  
 barecetamab  
 batiraxcept  
 bay 2599023  
 bbp 812  
 beclomethasone dipropionate  
 beforterinib  
 bepirovirsen  
 beta1b interferon  
 betamethasone dipropionate plus salicylic acid  
 bnt162  
 bnt162b1  
 bnt162b2  
 budesonide plus formoterol plus  
 glycopyrronium  
 bupivacaine plus meloxicam  
 cagrilintide  
 calcium oxybate plus magnesium oxybate plus  
 potassium oxybate plus sodium oxybate  
 carbon aerogel  
 carflloglitazar  
 casirivimab  
 cedirogant  
 cell-based vaccine  
 cellulose nanocrystal  
 cellulose nanofiber  
 ceramic nanoparticle  
 chadox1 ncov 19  
 chenpi  
 chitin nanoparticle  
 cholesterol plus phosphatidylcholine plus  
 phosphatidylethanolamine plus  
 phosphatidylinositol plus phosphatidylserine  
 plus sphingomyelin  
 cilgavimab  
 cipaglucosidase alfa plus miglustat  
 cirtuvivint  
 clesacostat  
 colloidal silica  
 colloidal silver  
 composite nanoparticle  
 conjugate vaccine  
 copper dotatate cu 64  
 copper sulfate plus manganese sulfate plus  
 selenious acid plus zinc sulfate  
 copper sulfide nanoparticle  
 coprelotamab  
 core shell nanoparticle  
 coronavac  
 coronavirus 3C protease  
 coronavirus envelope protein  
 coronavirus M protein  
 coronavirus nucleocapsid protein  
 coronavirus papain-like protease  
 coronavirus protein  
 coronavirus proteinase inhibitor  
 coronavirus receptor  
 coronavirus RNA dependent RNA polymerase

cotosudil  
 ct053  
 dafsolimab  
 dafsolimab setaritox  
 daleuton  
 dalosirvat  
 dalpiciclib  
 danavorexton  
 danuglipron  
 dapiglutide  
 daplusiran  
 darigabat  
 darovasertib  
 dazcapistat  
 dendrimer acetylcysteine  
 depemokimab  
 deudomperidone  
 deuruxolitinib  
 deutarserine  
 dexamethasone sodium phosphate plus  
 netilmicin  
 Dioscorea extract  
 docosapentaenoic acid plus  
 heneicosapentaenoic acid plus icosapentaenoic  
 acid  
 donidalorsen  
 dtx101  
 ebronucimab  
 eclitasertib  
 ect 001  
 edotreotide lutetium lu 177  
 edralbrutinib  
 efruxifermin  
 eganelisib  
 elimusertib  
 eluvixtamab  
 emerfetamab  
 emvododstat  
 enibarcimab  
 enomimeran  
 enpatoran  
 Env protein  
 epivaccorona  
 eprenetapopt  
 epsilon interferon  
 etesevimab  
 etevritamab  
 favezelimab  
 ferrofluid  
 firazolexton  
 flotufolostat f 18  
 flubentylosin  
 fluoromisonidazole f 18  
 Forsythia fruit

fuzheng huayu  
 Gag Onc protein  
 Gag Pol protein  
 galaczym  
 galgenprostucel L  
 galgenprostucel L plus litgenprostucel L  
 gallium gozetotide ga 68  
 gam-covid-vac  
 ganulameran  
 garivulimab  
 garveleucel  
 gavocabtagene autoleucel  
 gb1275  
 gen 1 (drug)  
 geptanolimab  
 gindameran  
 goflikicept  
 graphene aerogel  
 griffithsin  
 grisnilimab  
 grisnilimab setaritox  
 halloysite nanotube  
 hemagglutinin esterase  
 hematite nanoparticle  
 heneicosapentaenoic acid  
 hepatitis A virus cellular receptor 1  
 herbacetin  
 HIV receptor  
 hmi 202  
 HTLV I antibody  
 HTLV I antigen  
 HTLV II antibody  
 HTLV II antigen  
 huaier extract  
 Human immunodeficiency virus core protein  
 p24  
 Human immunodeficiency virus env protein  
 Human immunodeficiency virus gag protein  
 Human immunodeficiency virus integrase  
 Human immunodeficiency virus nef protein  
 Human immunodeficiency virus pol protein  
 Human immunodeficiency virus reverse  
 transcriptase  
 Human immunodeficiency virus ribonuclease H  
 Human immunodeficiency virus tat protein  
 Human immunodeficiency virus vif protein  
 Human immunodeficiency virus vpr protein  
 hyaluronidase plus pertuzumab plus  
 trastuzumab  
 hydroxyapatite nanocrystal  
 icapamespib  
 icapamespib i 124  
 idactamab  
 ilacirnon

iltamiocele  
 imdevimab  
 imgn632  
 immune checkpoint inhibitor  
 immune checkpoint protein  
 imsidolimab  
 infectious laryngotracheitis Marek disease  
 Newcastle disease vaccine  
 insulin icodec  
 interferon alfacon 1  
 inupadenant  
 invimestrocel  
 ipivivint  
 iron oxide nanoparticle  
 iron platinum nanoparticle  
 ispagula plus senna extract  
 izuralimab  
 laduviglusib  
 lambda interferon  
 lenrispodun  
 lerodalcibep  
 letaplimab  
 lianhua qingwen  
 lidocaine plus phenylephrine  
 lipid nanoparticle  
 lirametostat  
 lirentelimab  
 litgenprostucel L  
 ludaterone  
 lys 40 (nodaga ga 68)nh2 exendin 4  
 maghemite nanoparticle  
 magnetic iron oxide nanoparticle  
 MAS receptor  
 masked mycotoxin  
 metal alloy nanoparticle  
 metal oxide nanoparticle  
 metal sulfide nanoparticle  
 metallogel  
 methocarbamol plus paracetamol  
 mipasetamab  
 mipasetamab uzoptirine  
 miv 818  
 modoflaner  
 molnupiravir  
 mosliciguat  
 mouse double minute 2 homolog  
 mRNA-1273 vaccine  
 multilayered nanoparticle  
 n4 hydroxycytidine  
 nanobottle  
 nanobox  
 nanocellulose  
 nanochain  
 nanoclay  
 nanocolloid  
 nanocube  
 nanofiller  
 nanoflake  
 nanoflower  
 nanofluid  
 nanofoam  
 nanohydrogel  
 nanohydroxyapatite  
 nanolattice  
 nanoneedle  
 nanoplate  
 nanoplatelet  
 nanoporous material  
 nanoshape  
 nanostar  
 nanowhisker  
 naporafenib  
 nemvaleukin alfa  
 nezulcitinib  
 nickel oxide nanoparticle  
 nicotianamine  
 nucleic acid vaccine  
 nvx-cov2373 vaccine  
 obecabtagene autoleucl  
 obrindatamab  
 ocarocoxib  
 ociperlimab  
 oleylphosphocholine  
 omega interferon  
 onametostat  
 oncogene fusion protein  
 oncogene protein p55(v myc)  
 oncogene protein p65(gag jun)  
 oncogene protein v akt  
 oncogene protein v cbl  
 oncogene protein v crk  
 oncogene protein v erbA  
 oncogene protein v erbB  
 oncogene protein v mos  
 oncogene protein v myb  
 oncogene protein v raf  
 oncogene protein v rel  
 oncogene protein v sis  
 oncogenic retroviridae protein  
 ontasameran  
 oplunofusp  
 orexin receptor agonist  
 organogel  
 oxodotreotide lutetium lu 177  
 oxybate calcium  
 oxybate magnesium  
 oxybate potassium  
 pacanalotamab

pafolacianine  
 papain-like protease  
 parasite vaccine  
 pariglasgene breccaparvovec  
 pavunalimab  
 pavurutamab  
 pegtibatinase  
 peimine  
 pelabresib  
 pemrametostat  
 pemziviaptadil  
 penpulimab  
 perovskite nanocrystal  
 pic1 dpeg24  
 picovacc vaccine  
 pidacmeran  
 pidnarulex  
 pimivalimab  
 pirepemat  
 Pittsburgh coronavirus vaccine  
 pollen vaccine  
 polymer nanoparticle  
 polyomavirus tumor antigen  
 polytetrafluoroethylene  
 polytetrafluoroethylene nanoparticle  
 pomulmeran  
 ponegromab  
 pro 289  
 protein vaccine  
 proto oncogene protein  
 proto oncogene protein c crk  
 proto oncogene protein c mos  
 quaratusugene ozeplasmid  
 quellor  
 radgocitabine  
 rb 212  
 rebonuputemcel  
 recaticimab  
 recombinant alpha1 interferon  
 recombinant angiotensin converting enzyme 2  
 reduning  
 regdanvimab  
 regn-cov2  
 regn10933  
 regn10987  
 relmacabtagene autoleucel  
 reluscovtogene ralaplasmid  
 resistant starch  
 retroviridae protein  
 revakinagene taroretcel  
 rexin g  
 rezvilutamide  
 rhamnogalacturonan  
 ricin A derivative  
 rilsodotin  
 rineterkib  
 saikosaponin b2  
 sar 100842  
 SARS-CoV-2 convalescent plasma  
 satoreotide tetraxetan lutetium lu 177  
 self assembled nanomaterial  
 self assembled nanoparticle  
 self assembled protein nanoparticle  
 semiconductor nanoparticle  
 senaparib  
 sestrin  
 setaritox  
 shenfu  
 shengmai  
 shuang huang lian  
 silica aerogel  
 silicon nanoparticle  
 silicon nanowire  
 sivopixant  
 sizavaleucel  
 sotigalimab  
 sotorasib  
 sotrovimab  
 subasumstat  
 sulanemadlin  
 sunitinorexton  
 suratadenoturev  
 tak 418  
 taletrectinib  
 taniraleucel  
 tanreqing  
 tarlatamab  
 Tat protein  
 td139  
 telpegfilgrastim  
 tenofovir amibufenamide  
 tenvumestrocel  
 teplinovivint  
 terevalefim  
 tilpisertib  
 tirnovetmab  
 tixagevimab  
 tmc 310911  
 toxoid vaccine  
 tozinameran  
 Tpr Met protein  
 tranurocin  
 transmembrane protease serine 2  
 trv027  
 tungsten disulfide nanoparticle  
 tungsten disulfide nanosheet  
 tusamitamab  
 tusamitamab ravtansine

ub 312  
umifoxolaner  
unesbulin  
upifitamab rilsodotin  
uridylate specific endoribonuclease  
uzoptirine  
valiloxibic acid  
vamifeport  
vector vaccine  
venadaparib  
vevorisertib  
vibapapogene autoleucel  
vibosameran  
vidutolimod  
vimseltinib  
vipivotide tetraxetan lutetium lu 177  
viral core protein  
viral nonstructural protein  
viral oncoprotein  
viral papain-like protease  
viral protease  
viral proteinase inhibitor  
viral regulatory and accessory proteins

viral replicase complex protein  
viral structural protein  
viral tumor antigen  
viroporin  
virus like nanoparticle  
virus tail protein  
vtx 803  
vudalimab  
xingnaojing  
xiyanping  
xuebijing  
zalsenertant tetraxetan  
zanidatamab zovodotin  
zansecimab  
zatolmilast  
zelavespib  
zimberelimab  
zinc nanoparticle  
zinc sulfide nanoparticle  
zirconia nanoparticle  
zorecimeran  
zovodotin

## Non-drug terms

ABE fermentation  
 academic freedom  
 acetic acid fermentation  
 acetoclastic methanogen  
 acetoclastic methanogenesis  
 acetogen  
 acetogenesis  
 acidocalcisome  
 acidogenic fermentation  
 acroparesthesia  
 acrylamide-induced neurotoxicity  
 active surveillance  
 acute hemorrhagic leukoencephalitis  
 acute necrotizing encephalopathy  
 acute necrotizing encephalopathy of childhood  
 adipose tissue thickness  
 administrative health data  
 advanced sleep phase syndrome  
 aerosol transmission  
 affinity maturation  
 age-related clonal hematopoiesis  
 airborne transmission  
 alcoholic fermentation  
 alkaline diet  
 allocative efficiency  
 amalgam tattoo  
 ammunition  
 anadromous fish  
 anaerobic oxidation of methane  
 anal swab  
 analytic hierarchy process  
 animal allergy  
 animal reservoir  
 animal visual system  
 anorectal swab  
 antalgic gait  
 anterior chamber associated immune deviation  
 antigenic drift  
 antigenic shift  
 aorto-ventricular tunnel  
 applied ethics  
 aquitard  
 arrhenotoky  
 artificial pond  
 artificial stem cell  
 assembly line  
 assortativity  
 Astacidae  
 Astacus leptodactylus  
 aster yellows  
 asteroid body  
 asylum (legal)  
 asylum seeker center  
 asymptomatic transmission  
 atrial stretch receptor  
 atrial type A receptor  
 atrial type B receptor  
 attribution (psychology)  
 attrition bias  
 autochthonous transmission  
 autonomous sensory meridian response  
 available water capacity  
 avian evolution  
 axillary lymph node biopsy  
 axillary lymph node dissection  
 axiology  
 bacterial evolution  
 bacteriophage plaque  
 Bacteroidia  
 balanced scorecard  
 barking cough  
 baroreceptor  
 basilar papilla  
 basophilic stippling  
 bedtime  
 behavioral synchrony  
 Berkson's bias  
 betrayal  
 betweenness centrality  
 bicycle exercise test  
 bile acid diarrhea  
 biochemical pregnancy  
 biocontainment  
 biohazard containment  
 biomass valorization  
 biopiracy  
 biopsychosocial model  
 biosafety level 1  
 biosafety level 2  
 biosafety level 3  
 biosafety level 4  
 bisphosphonate related osteonecrosis of the jaw  
 blame (psychology)  
 blastocoel  
 blastomere biopsy  
 blood transmission  
 body adiposity index  
 body fat percentage  
 Boettcher cell  
 bond market  
 BR cell line (mastocytoma)  
 Brazilian traditional medicine  
 breastfeeding transmission  
 breathwork

brush biopsy  
 buccal swab  
 budded virus  
 bullosis diabeticorum  
 Bunina body  
 butyric acid fermentation  
 c Kit+ cardiac progenitor cell  
 callus distraction  
 Cambaridae  
 campaniform sensillum  
 canal neuromast  
 carbon tetrachloride-induced hepatotoxicity  
 cardiac lipoma  
 cardiac papillary fibroelastoma  
 cardiometabolic risk factor  
 cardiopulmonary bypass time  
 cardiosphere  
 cardiosphere derived cell  
 cardiovascular risk factor  
 cartilage thickness  
 cartilage volume  
 caseating granuloma  
 caseation  
 cat allergy  
 catadromous fish  
 catastrophic antiphospholipid syndrome  
 cause of death registry  
 cell competition  
 centrality index  
 certificate of need  
 CGG repeat  
 chemical pneumonitis  
 chemotherapy-related cognitive impairment  
 child passenger safety  
 child sexual exploitation  
 child to adult transmission  
 child to child transmission  
 child trafficking  
 chordotonal organ  
 chromatoid body  
 chronic disease registry  
 chronic inflammatory demyelinating polyradiculoneuropathy  
 circulating endothelial cell  
 Claudius cell  
 clinical trial registry  
 clonal deletion  
 clonal hematopoiesis  
 clonal hematopoiesis of indeterminate potential  
 closeness centrality  
 Clostridium perfringens A  
 coagulative necrosis  
 cochleotoxicity  
 cochleovestibular function  
 coercion  
 cognitive flexibility  
 cognitive reappraisal  
 cohort effect  
 cold ischemia time  
 cold knife conization  
 cold receptor  
 colitis-associated cancer  
 collective action problem  
 collider (variable)  
 combat stress  
 Commiphora gileadensis  
 Commiphora mukul  
 Commiphora myrrha  
 Commiphora wightii  
 community transmission  
 competition game  
 completion axillary lymph node dissection  
 computer literacy  
 condescension  
 confidential information  
 confounding bias  
 conjunctival swab  
 connective tissue parameters  
 consequentialism  
 consumer price index  
 consumer protection  
 contagious yawning  
 convenience store  
 cooperative hunting  
 coordination game  
 corneal scraping  
 corporate finance  
 correctional facility  
 correctional health care  
 cortical granule  
 cortical granule exocytosis  
 counterfeiting  
 COVID-19 nucleic acid testing  
 COVID-19 serological testing  
 COVID-19 testing  
 COVID-19-associated coagulopathy  
 Crabtree effect  
 crashworthiness  
 crassulacean acid metabolism  
 cross clamp time  
 cross training (sport)  
 cryobiopsy  
 cryptocurrency  
 cryptozoospermia  
 CT guided biopsy  
 cumulative incidence  
 curvilinear body  
 customer satisfaction



cybergrooming  
 death registry  
 degree distribution  
 degree of centrality  
 degree of conversion  
 degree of freedom  
 degree of polymerization  
 degree of substitution  
 degree of unsaturation  
 Deiters cell  
 delayed sleep phase syndrome  
 delicatessen  
 Deltacoronavirus  
 denosumab related osteonecrosis of the jaw  
 dental laboratory  
 dentist attitude  
 department store  
 deportation  
 deracemization  
 detention basin  
 detention center  
 development aid  
 device shortage  
 dextran sulfate sodium-induced chronic colitis  
 diabetic amyotrophy  
 diabetic dermopathy  
 diabetic skin disorder  
 diabetic ulcer  
 diabetic wound  
 diadromous fish  
 diagnostic reference level  
 diathesis stress model  
 Dickeya  
 Dickeya chrysanthemi  
 differential susceptibility hypothesis  
 diffuse alveolar damage  
 diffusion of responsibility  
 digital technology  
 digital twin  
 diplacuscis  
 direct contact transmission  
 dirty bomb  
 disease hotspot  
 disease reservoir  
 disincentive  
 displacement (people)  
 dispositional attribution  
 distal tubule cell  
 dobutamine stress echocardiography  
 dog allergy  
 droplet transmission  
 drug shortage  
 dry cough  
 dry eye syndrome  
 dry gangrene  
 Duck adenovirus 1  
 Duck atadenovirus A  
 duck egg drop syndrome  
 Duck Tembusu virus  
 dung beetle  
 ear swab  
 economic crisis  
 economic decision making  
 economic efficiency  
 economic incentive  
 economic parameters  
 economic security  
 edge betweenness  
 effort discounting  
 egg drop syndrome  
 egg drop syndrome 76  
 egg parameters  
 egg quality  
 egg shell thickness  
 egg weight  
 eggshell membrane  
 egocentric bias  
 ehealth literacy  
 eigenvector centrality  
 electrooptics  
 electrosensory system  
 elementary body  
 eligibility  
 eligibility criteria  
 embryo biopsy  
 emotional freedom technique  
 encouragement  
 end organ (sensory)  
 endogenous lipoid pneumonia  
 endotoxic shock  
 Enterobacterales  
 environmental reservoir (disease)  
 environmental surveillance  
 epidemiological surveillance  
 epidermal thickness  
 epigastric pain syndrome  
 epigenetic modification  
 escalation of care  
 ethanol-induced ataxia  
 ethanol-induced hypothermia  
 ethical dilemma  
 eukaryotic evolution  
 European hedgehog  
 evaporative dry eye disease  
 excessive daytime sleepiness  
 excisional biopsy  
 exercise stress echocardiography  
 exfoliated cervical cell

exocrine function  
 exogenous lipid pneumonia  
 Expectancy Value Theory  
 experimental hepatotoxicity  
 experimental mammary carcinogenesis  
 experimental thyrotoxicosis  
 experimental wound  
 exploration exploitation tradeoff  
 externality  
 externalization (behavior)  
 externalizing disorder  
 exteroceptor  
 extreme value theory  
 extrinsic motivation  
 eye swab  
 eye-tracking technology  
 face seal  
 factory  
 factory worker  
 fad diet  
 failure mode and effects analysis  
 failure to fail  
 failure to rescue rate  
 false consensus effect  
 false discovery rate  
 familial advanced sleep phase syndrome  
 familial predisposition  
 family-wise error rate  
 farmers market  
 fat load  
 father to child transmission  
 Faxonius  
 Faxonius limosus  
 fecal oral transmission  
 fermentative hydrogen production  
 festination  
 fetal bovine serum  
 fibrinoid necrosis  
 field capacity  
 financial abuse  
 financial crisis  
 financial distress  
 financial market  
 financial security  
 financial stress  
 fish hatchery  
 fish market  
 fish pond  
 focal oral route transmission  
 fomite transmission  
 food desert  
 food fads  
 food hoarding  
 food service worker  
 food shortage  
 foodborne transmission  
 forced migrant  
 forced migration  
 foreign aid  
 foreign body giant cell  
 forensic taphonomy  
 forest bathing  
 fossilization  
 Fowl aviadenovirus 1  
 free nerve endings  
 freedom of association  
 freedom of expression  
 fructose tolerance test  
 fundamental attribution error  
 GBM-2 cell line  
 gender equity  
 genome packaging  
 gentrification  
 Geotrupidae  
 geriatric ward  
 glucagon stimulation test  
 Golgi Mazzoni corpuscle  
 Good Samaritan law  
 graft harvesting  
 grocery store  
 ground glass opacity  
 groundwater depletion  
 group polarization  
 groupthink  
 GW body  
 H-1 cell line (ESC)  
 hacking cough  
 hair cell (inner ear)  
 hair cell (neuromast)  
 hair follicle receptor  
 Haller's organ  
 handmade cloning  
 hatchability  
 health care surveillance  
 health data  
 healthy worker effect  
 heart disease risk factor  
 heat receptor  
 heating time  
 hedonism  
 HEL cell line (erythroid leukemia)  
 hemoglobin H inclusion body  
 hemosiderin laden macrophage  
 Herbst corpuscle  
 heterogamy  
 high reliability organization  
 histone locus body  
 Hofbauer cell

holistic dentistry  
 homoacetogen  
 homoacetogenesis  
 homogamy  
 homoplasmy  
 horizontal disease transmission  
 host adaptation  
 hostile attribution  
 house arrest  
 Howell Jolly body  
 human-animal interaction  
 human-animal relation  
 humanitarian aid  
 humanitarian crisis  
 humanitarian intervention  
 hydrogenotrophic methanogen  
 hydrogenotrophic methanogenesis  
 hyperactive delirium  
 hypermutation  
 hyperthermia-induced seizure  
 hypoactive delirium  
 imaging genetics  
 imaging genomics  
 immigration detention  
 impostor phenomenon  
 imprisonment  
 improvised explosive device  
 inbreeding coefficient  
 incarceration  
 incentive  
 incidence density rate  
 incisional biopsy  
 income security  
 indegree  
 Indian traditional medicine  
 indirect contact transmission  
 infiltration basin  
 inflammaging  
 Influenza D virus  
 information asymmetry  
 information security  
 inner pillar cell  
 inner speech  
 insurance approval  
 insurance denial  
 interfamilial transmission  
 interferonopathy  
 interlocus gene conversion  
 internalization (behavior)  
 internalization (cell)  
 internalizing disorder  
 internally displaced person  
 internet literacy  
 internet security  
 internet use  
 interoceptor  
 interprofessional education  
 interspecies somatic cell nuclear transfer  
 interviewer effect  
 intimidation  
 intravenous fat tolerance test  
 intrinsic motivation  
 IPOD (insoluble protein deposit)  
 ischemia time  
 ischemic necrosis  
 Islamic medicine  
 isolated fallopian tube torsion  
 J receptor (lung)  
 joint replacement registry  
 JUNQ (juxtannuclear quality)  
 juvenile detention  
 juvenile detention center  
 kaolin clotting time  
 key performance indicator  
 kindness  
 Kneipp therapy  
 Krause endbulb  
 laboratory animal allergy  
 laboratory animal science  
 labyrinth supporting cell  
 lactic acid fermentation  
 lactose tolerance test  
 Lafora body  
 landmine  
 laryngeal swab  
 laser speckle contrast imaging  
 learning disability nursing  
 lifetime prevalence  
 lifetime risk  
 limited community transmission  
 limp (gait)  
 lipid body  
 lipid laden macrophage  
 lipoid pneumonia  
 liquefactive necrosis  
 livestock market  
 lockdown  
 loop electrosurgical excision  
 Lorenzini ampulla  
 loyalty program  
 LU cell line (cervical adenocarcinoma)  
 Lucanidae  
 lumbosacral plexopathy  
 lung consolidation  
 lung microbiota  
 Lytta  
 M1 macrophage  
 M1 tumor-associated macrophage

M2 macrophage  
 M2 tumor-associated macrophage  
 M2a macrophage  
 M2b macrophage  
 M2c macrophage  
 Macrobrachium amazonicum  
 macrophage count  
 magnetic resonance imaging ultrasound fusion  
 biopsy  
 maintenance of certification  
 mammalian evolution  
 mammary gland growth  
 mammary gland involution  
 marathon running  
 marginal utility  
 Marinesco body  
 marsupialization  
 marsupium  
 maternal fetal transmission  
 meat water holding capacity  
 MEC-1 cell line (leukemia)  
 mechanical test  
 media literacy  
 mediation analysis  
 medical care need  
 medical device registry  
 medical resource shortage  
 medication related osteonecrosis of the jaw  
 Mediterranea  
 meiotic gene conversion  
 Meissner corpuscle  
 Mendelian inheritance  
 Merkel cell neurite complex  
 metamyelocyte  
 methanotrophic archaeon  
 Michaelis Gutmann body  
 microaggression  
 microbiologist  
 microfauna  
 microfold cell  
 microphotonics  
 mid-turbinate swab  
 migratory fish  
 military medical personnel  
 Mimosa tenuiflora  
 mixed acid fermentation  
 MNU-induced mammary carcinogenesis  
 monetary reward  
 moral disengagement  
 moral hazard  
 moral reasoning  
 mother to child transmission  
 MPP+-induced neurotoxicity  
 MRI guided biopsy  
 multi-attribute utility  
 myelocyte  
 myeloid leukocyte  
 nail biopsy  
 nanophotonics  
 nasal epithelial cell  
 nasoalveolar molding  
 nasopharyngeal swab  
 national security  
 necrobiosis lipoidica diabetorum  
 negative externality  
 Neglecta  
 negotiation  
 Negri body  
 network analysis  
 network security  
 nodal betweenness  
 nonmaleficence  
 nosocomial transmission  
 nuclear stress test  
 nuclear weapon  
 Obesity Surgery Mortality Risk Score  
 obstetric antiphospholipid syndrome  
 occlusion derived virus  
 ocean acidification  
 ocellus  
 octavolateralis system  
 oil body  
 ommatidium  
 online shopping  
 oocyte activation  
 oocyte cryopreservation  
 oocyte function  
 oocyte number  
 oocyte parameters  
 oocyte preparation  
 oocyte quality  
 oocyte selection  
 oocyte size  
 oocyte viability  
 oocyte vitrification  
 open biopsy  
 opiate overdose  
 optimism bias  
 optomechanics  
 oral fat tolerance test  
 oral swab  
 oral transmission  
 Orconectes  
 Orconectes virilis  
 organizational citizenship  
 oropharyngeal swab  
 osteoporosis pseudoglioma syndrome  
 osteoradionecrosis

outdegree  
 outer pillar cell  
 overexploitation  
 overfishing  
 overgrazing  
 overharvesting  
 ovum pick-up  
 Pacifastacus  
 Pacifastacus leniusculus  
 packaging sequence  
 palliative chemotherapy  
 panic buying  
 paraduodenal hernia  
 pareidolia  
 pareto optimality  
 parietal eye  
 parish register  
 Parkinsonian gait  
 paroxysmal cough  
 parthenogenetic activation  
 parthenogenetic stem cell  
 passenger safety  
 passive surveillance  
 Pasteur effect  
 paternal stress  
 pathogen transmission  
 patient registry  
 patient-to-patient transmission  
 patient-to-professional transmission  
 pay equity  
 pay gap  
 payoff matrix  
 Pectobacteriaceae  
 pedestrian safety  
 pediatric multisystem inflammatory syndrome  
 percentage of REM sleep  
 percentage of slow wave sleep  
 performance indicator  
 period prevalence  
 periportal lymph node  
 perivascular cell  
 persecution  
 personal finance  
 perverse incentive  
 pharmacy practice  
 phase variation  
 phenotypic mixing  
 photonics  
 physician shortage  
 physiological coregulation  
 Phytoplasma infection  
 Pick body  
 pillar cell  
 Planktothrix  
 Planktothrix agardhii  
 plant defense against herbivores  
 plaque forming unit  
 plaque reduction neutralization test  
 plasmacytoid lymphocyte  
 point of use water treatment  
 point prevalence  
 polar body biopsy  
 polyhydroxyalkanoate granule  
 popliteal artery entrapment syndrome  
 population register  
 population surveillance  
 positive externality  
 postinfectious encephalopathy  
 postmortem interval  
 postprandial distress syndrome  
 postvaccinal encephalopathy  
 pragmatism  
 pranayama  
 preimplantation genetic screening  
 preoperative exercise  
 press freedom  
 pressure controlled inverse ratio ventilation  
 pressure necrosis  
 pretrial detention  
 preventive detention  
 price  
 price elasticity  
 price fixing  
 price transparency  
 probability discounting  
 Procambarus virginalis  
 procapsid  
 procedure registry  
 processing body  
 product market  
 production efficiency  
 production line  
 productive cough  
 professional ethics  
 professional-to-patient transmission  
 profiteering  
 prokaryotic evolution  
 prophage induction  
 propionic acid fermentation  
 proprioceptor  
 prosecution  
 prosocial behavior  
 prospective cost  
 protected sampling  
 protective equipment shortage  
 protein body  
 proximal tubule cell  
 pseudopupil

psychogenic cough  
 psychological distance  
 psychological safety  
 psychosocial intervention  
 public finance  
 public goods dilemma  
 public health surveillance  
 pulmonary amyloidosis  
 pulmonary stretch receptor  
 putrefaction  
 quadricuspid aortic valve  
 quantum optics  
 quick diagnosis unit  
 racewalker  
 racewalking  
 radiation fibrosis  
 rapidly adapting receptor  
 RD cell line (rhabdomyosarcoma)  
 real estate market  
 recreational drug use  
 rectal swab  
 reflexotherapy  
 refugee crisis  
 regulatory macrophage  
 Reissner's membrane  
 religious freedom  
 religious slaughter  
 replication slippage  
 reproductive coercion  
 residual neural network  
 resource shortage  
 retail outlet  
 retention basin  
 reticulate body  
 retrospective cost  
 return to school  
 reverse Warburg effect  
 reward seeking behavior  
 rhizosphere microbiome  
 right to be forgotten  
 right to freedom of movement  
 rising time (sleep)  
 risk attitude  
 risk aversion  
 risk behavior  
 risk denial  
 risk perception  
 risk seeking  
 RNA packaging  
 road safety  
 rouleaux formation  
 routinely collected health data  
 Ruffini corpuscle  
 rugosity

Sanguinaria canadensis  
 sanitary surveillance  
 SARS-CoV-2 (clinical isolate NLD/Leiden-0002/2020)  
 SARS-CoV-2 (clinical isolate TWN/CGMH-CGU-01/2020)  
 SARS-CoV-2 (clinical isolate Wuhan/WIV04/2019)  
 SARS-CoV-2 (strain France/IDF0571/2020)  
 scapegoating  
 Scarabaeoidea  
 schema therapy  
 seaweed farming  
 secondary attack rate  
 security  
 self blame  
 self-positivity bias  
 self-testing  
 selfkindness  
 semen cryopreservation  
 semen parameters  
 semen pH  
 semicircular canal dehiscence  
 senile entropion  
 sense of self  
 service animal  
 sexual headache  
 sexual trauma  
 shave biopsy  
 shell weight (egg)  
 shellfish farming  
 shelter seeking behavior  
 sheltered employment  
 shipyard  
 Shiraia  
 Shiraia bambusicola  
 shopping mall  
 shrapnel  
 shrapnel injury  
 shrimp farming  
 Siddha medicine  
 situational attribution  
 skeletonization (imaging)  
 skeletonization (postmortem)  
 skeletonization (surgical)  
 slaughterhouse waste  
 slaughterhouse wastewater  
 slaughtering  
 sleep depth  
 slit sense organ  
 slowly adapting receptor  
 social comparison  
 social discounting  
 social facilitation  
 social incentive

social inclusion  
 social loafing  
 social media analysis  
 social media monitoring  
 social network analysis  
 social synchronization  
 soil water holding capacity  
 solidarity  
 solventogenic fermentation  
 somatic cell nuclear transfer  
 sperm activation  
 sperm capacitation  
 sperm count  
 sperm function  
 sperm hyperactivation  
 sperm preparation  
 sperm selection  
 sperm sexing  
 sperm viability  
 sperm washing  
 spermatogenic failure  
 spermiation  
 staphylococcal toxic shock syndrome  
 statistical literacy  
 statocyst  
 statocyte  
 steppage gait  
 stereotype threat  
 Stickland fermentation  
 stimming  
 stock market  
 stomach corpus  
 stratum basale (epidermis)  
 stratum granulosum (epidermis)  
 stratum granulosum (ovary)  
 stratum spinosum (epidermis)  
 streptococcal toxic shock syndrome  
 stress theory  
 suffrage  
 superficial neuromast  
 superfood  
 supermarket  
 supplier-induced demand  
 supportive care need  
 surgery registry  
 sustenance  
 swabbing  
 swim up technique  
 systemic thrombolysis  
 Taiwanofungus  
 tapetum (corpus callosum)  
 tapetum (pollen)  
 tapetum lucidum  
 tax credit  
 tax deduction  
 tax exemption  
 tax incentive  
 technique for order preference by similarity to  
 ideal solution  
 Tembusu virus  
 tenectomy  
 test anxiety  
 test kit shortage  
 testing capacity  
 therapy animal  
 therapy escalation  
 throat swab  
 thrombotic storm  
 thymic involution  
 thyroid colloid  
 timbre  
 timbre perception  
 time in bed  
 TM 1 cell line (embryonic stem cell)  
 token economy  
 tolerance test  
 tone discrimination  
 tone perception  
 tone recognition  
 Toona  
 total body cholesterol  
 total body fat  
 total body surface area  
 total motile sperm count  
 total wake time  
 Touton giant cell  
 traditional Arabic medicine  
 tragedy of the commons  
 transmission at birth  
 transovarial transmission  
 transperineal biopsy  
 transperineal template guided mapping biopsy  
 transrectal biopsy  
 transrectal ultrasound guided biopsy  
 transtheoretical model  
 transurethral biopsy  
 treatment switching  
 Trendelenburg gait  
 Trier Social Stress Test  
 trophoctoderm  
 trophoctoderm biopsy  
 trust game  
 Tsuji Trost reaction  
 tumor metabolism  
 tumor-associated macrophage  
 U body  
 ultrasound guided biopsy  
 umbilical cord mesenchymal stem cell

unexploded ordnance  
 unilateral ureteral obstruction-induced renal fibrosis  
 universalism  
 unmet medical need  
 usability  
 usability testing  
 user-centered design  
 uterine involution  
 uterine secretion  
 utilitarianism  
 utility maximization  
 utility value  
 vaccinee  
 vacuum assisted biopsy  
 valorization  
 vector transmission  
 vehicle safety  
 ventilator shortage  
 vestibulotoxicity  
 victim blaming  
 Vietnamese traditional medicine  
 viral evolution  
 viral genomics  
 viral metagenomics  
 viral replication compartment  
 virogenic stroma  
 virome  
 viromics  
 virtopsy  
 virtue ethics  
 visual literacy  
 voice recognition  
 volume controlled inverse ratio ventilation  
 von Hansemann cell  
 voucher program  
 waddling gait  
 wake after sleep onset  
 wake up time  
 Warburg effect  
 warm ischemia time  
 waste valorization  
 wastewater  
 wastewater-based epidemiology  
 water deer  
 water depth  
 water disinfection  
 water filtration  
 water holding capacity  
 water insecurity  
 water loading (test)  
 water monitoring  
 water quantity  
 web conferencing  
 webinar  
 webshop  
 Wechsler Individual Achievement Test  
 weight cutting  
 West Nile encephalitis  
 West Nile meningitis  
 West Nile neuroinvasive disease  
 West Nile virus meningoencephalitis  
 wet gangrene  
 wet market  
 wide based gait  
 widespread community transmission  
 wilting point  
 workers rights  
 Xylophilus  
 Y1 cell line (adrenocortical tumor)  
 zero sum game  
 zona pellucida removal  
 zona pellucida thickness  
 zoonotic transmission



## Medical device terms

allergen exposure chamber  
 anemia test kit  
 angiographic X ray system  
 blood clotting factor 10 test kit  
 blood clotting factor 11 test kit  
 blood clotting factor 12 inhibitor test kit  
 blood clotting factor 12 test kit  
 blood clotting factor 13 A subunit test kit  
 blood clotting factor 2 test kit  
 blood clotting factor 5 test kit  
 blood clotting factor 7 test kit  
 blood clotting factor 8 test kit  
 blood clotting factor 8-associated antigen test kit  
 blood clotting factor 9 test kit  
 blood clotting factor test kit  
 body on a chip  
 Borrelia species test kit  
 brain on a chip  
 Brucella species test kit  
 carbon-13 breath test kit  
 chorionic gonadotropin test kit  
 clinical specimen analysis system  
 complement component C1 inhibitor test kit  
 complement component C1q test kit  
 complement component C5 test kit  
 complement component test kit  
 complement components C3/C3c test kit  
 complement components C4/C4c test kit  
 conveying system  
 coronavirus disease 2019 breathalyzer  
 cotton swab  
 cuvette  
 dacron swab  
 differentiation marker test kit  
 diving mask  
 electrochemical biosensor  
 elliptical trainer  
 exposure chamber  
 extractable nuclear antigen panel  
 fibrinogen degradation product test kit  
 fibrinogen test kit  
 flocked swab  
 flow cytometry kit  
 foam swab  
 full face snorkel mask  
 gastrointestinal disease test kit  
 gelatin culture medium  
 glove box  
 glutamic acid decarboxylase antibody test kit  
 Haemophilus/Neisseria identification kit  
 handheld device  
 heart on a chip  
 human on a chip  
 inertial sensor  
 iron diagnostic kit  
 kidney on a chip  
 leg press machine  
 Legionella longbeachae test kit  
 Legionella species test kit  
 Leishmania species test kit  
 leptospirosis test kit  
 lipoprotein A test kit  
 lipoprotein test kit  
 Listeria test kit  
 lithium therapeutic drug test kit  
 liver disease-associated antibody detection kit  
 liver on a chip  
 liver-kidney microsome 1 antibody detection kit  
 low density lipoprotein antibody test kit  
 low density lipoprotein test kit  
 lung on a chip  
 lupus anticoagulant marker test kit  
 magnesium diagnostic kit  
 magnetic particle separation instrument  
 mannitol-salt agar  
 metabolic profile clinical chemistry analyzer  
 methaqualone test kit  
 methyl red/Voges-Proskauer (MR-VP) broth  
     culture medium  
 microalbumin test kit  
 microarray equipment  
 microbial identification mass spectrometry  
     system  
 microcapillary blood collection tube  
 microplate  
 microprotein test kit  
 Middlebrook broth culture medium  
 motility agar  
 motion sensor  
 mounting medium  
 multiple acute kidney injury marker test kit  
 multiple antinuclear antibody test kit  
 multiplex analyzer  
 mutated citrullinated vimentin antibody  
     detection kit  
 Mycobacterium species test kit  
 myoglobin test kit  
 myositis-associated antibody detection kit  
 n-acetylprocainamide test kit  
 N-methyl-D-aspartate receptor antibody  
     detection kit  
 native DNA antibody test kit

neonatal thyroxine test kit  
 neonatal trypsin test kit  
 nucleic acid hybridization detection kit  
 nucleic acid isolation kit  
 nucleosome antibody detection kit  
 nylon flocked swab  
 nylon swab  
 organ on a chip  
 oxidative/fermentive broth  
 paclitaxel coated balloon catheter  
 parietal cell antibody detection kit  
 PCA3 test kit  
 perfusion chamber  
 personal ovulation microscope  
 phencyclidine test kit  
 phenobarbital test kit  
 phenylalanine agar  
 phenylethyl alcohol agar  
 phenytoin test kit  
 phosphatidylserine antibody detection kit  
 phosphatidylserine/prothrombin complex  
   antibody detection kit  
 phospholipase A2 receptor antibody detection  
   kit  
 placental growth factor test kit  
 plasminogen activator inhibitor test kit  
 plasminogen assay  
 platelet aggregation analyzer  
 platelet aggregation test kit  
 platelet factor 4 test kit  
 platelet factor test kit  
 Pneumocystis jirovecii test kit  
 polyester swab  
 polytetrafluoroethylene implant  
 prealbumin test kit  
 primidone test kit  
 procainamide test kit  
 procalcitonin test kit  
 procollagen type I N-terminal propeptide test kit  
 progesterone test kit  
 prolactin test kit  
 prostatic acid phosphatase test kit  
 protected specimen brush  
 protein C test kit  
 protein S test kit  
 proteinase 3 anti-neutrophil cytoplasmic  
   antibody test kit  
 Pseudomonas aeruginosa test kit  
 quinidine test kit  
 rayon swab  
 ribonucleoprotein antibody test kit  
 ribosomal phosphoprotein antibody test kit  
 Rickettsia test kit  
 RNA polymerase III antibody test kit  
 ro52 antibody test kit  
 rowing ergometer  
 rowing machine  
 sabouraud dextrose agar  
 Sabouraud fungal broth culture medium  
 Saccharomyces cerevisiae test kit  
 salicylate test kit  
 Salmonella paratyphi test kit  
 Salmonella/Shigella agar  
 SARS coronavirus 2 immunology test kit  
 SARS coronavirus 2 nucleic acid test kit  
 Schaedler anaerobic broth culture medium  
 Schistosoma mansoni test kit  
 scleroderma-70 antibody test kit  
 selenite broth culture medium  
 sex hormone binding globulin test kit  
 Shigella boydii test kit  
 Shigella flexneri test kit  
 Shigella sonnei test kit  
 Simmons-citrate agar  
 single stranded DNA antibody test kit  
 skeletal muscle antibody test kit  
 skin antibody test kit  
 Sm/RNP antibody test kit  
 Smith machine  
 sorbitol-MacConkey agar culture medium  
 specimen processing instrument  
 spermatozoa analyzer  
 stationary bicycle  
 Streptococcus test kit  
 sulfide indole motility agar culture medium  
 swab (sampler)  
 T lymphocyte FACS kit  
 Thayer-Martin agar  
 thermal cycler nucleic acid amplification system  
 thioglycollate broth  
 thyroid peroxidase antibody test kit  
 thyroid stimulating hormone receptor  
   immunoglobulin test kit  
 thyrosin phosphatase antibody test kit  
 tissue expander injection port locator  
 tissue processor  
 triple sugar iron agar  
 tryptic soy agar  
 tryptic soy broth  
 tryptose blood agar  
 tumor on a chip  
 urea agar  
 urea broth  
 urea test kit  
 vessel on a chip  
 wearable sensor  
 weight machine  
 xylose lysine desocyclolate agar

## Drug terms

### New or pre-existing term

*\* indicates pre-existing term*

adenovirus E1A protein  
 adenovirus E1B protein  
 alpha2a interferon\*  
 alpha2b interferon\*  
 alpha2b interferon plus ribavirin\*  
 alpha2c interferon\*  
 avalotcagene ontaparvovec\*  
 beclomethasone dipropionate  
 beta1b interferon  
 cipaglucosidase alfa plus miglustat  
 daleuton  
 edotreotide lutetium lu 177  
 emvododstat  
 Ephedra extract\*  
 eprenetapopt  
  
 favezelimab  
 fluoromisonidazole f 18

### Old (replaced) term

*These terms become synonyms of the new term*

E1A protein  
 E1B protein  
 recombinant alpha2a interferon  
 recombinant alpha2b interferon  
 rebetron  
 recombinant alpha2c interferon  
 dtx301  
 beclometasone dipropionate  
 interferon beta serine  
 atb200/at2221  
 diroleuton  
 edotreotide lu 177  
 ptc 299  
 Ephedra sinica extract  
 2 hydroxymethyl 2 methoxymethyl 3  
 quinuclidinone  
 mavezelimab  
 1 fluoro 3 (2 nitro 1 imidazolyl) 2 propanol f 18

## Medical device terms

### New or pre-existing term

*\* indicates pre-existing term*

exposure chamber  
 polytetrafluoroethylene implant

### Old (replaced) term

*These terms become synonyms of the new term*

atmosphere exposure chamber  
 politef implant

## Non-drug terms

### New or pre-existing term

*\* indicates pre-existing term*

Astacus  
 Astacus leptodactylus  
 atrial stretch receptor  
 Bacteroidia  
 baroreceptor  
 BR cell line (mastocytoma)  
 Clostridium perfringens A  
 correctional facility  
 Dickeya chrysanthemi  
 Dubowitz score  
 Enterobacterales  
 eukaryotic evolution  
 exocrine function  
 fetal bovine serum  
 Fowl aviadenovirus 1  
 GBM-2 cell line  
 H-1 cell line (ESC)  
 hair cell (inner ear)  
 HEL cell line (erythroid leukemia)  
 internalization (cell)  
 internet literacy  
 interprofessional education  
 labyrinth supporting cell  
 LU cell line (cervical adenocarcinoma)  
 MEC-1 cell line (leukemia)  
 necrotizing encephalopathy  
 nuclear weapon  
 physiological stress  
 RD cell line (rhabdomyosarcoma)  
 sheltered employment  
 sperm capacitation  
 sperm count  
 stratum granulosum (ovary)  
 TM 1 cell line (embryonic stem cell)  
 unilateral ureteral obstruction-induced renal fibrosis  
 wastewater  
 water loading (test)  
 Y1 cell line (adrenocortical tumor)

### Old (replaced) term

*These terms become synonyms of the new term*

Pontastacus  
 Pontastacus leptodactylus  
 heart atrium receptor  
 Bacteroides (class)  
 pressoreceptor  
 BR cell line  
 Clostridium perfringens type A  
 prison  
 Pectobacterium chrysanthemi  
 Dubowitz Neurological Assessment  
 Enterobacterales  
 eukaryote evolution  
 exocrine secretion  
 fetal calf serum  
 Chick embryo lethal orphan virus  
 GBM2 cell line  
 H-1 embryonic stem cell line  
 hair cell  
 HEL cell line  
 internalization  
 digital literacy  
 cross training  
 labyrinth supporting cells  
 LU cell line  
 MEC-1 cell line  
 necrotizing encephalitis  
 atomic bomb  
 stress  
 RD cell line  
 sheltered workshop  
 spermatozoon capacitation  
 spermatozoon count  
 ovary follicle stratum granulosum  
 TM 1 cell line  
 obstruction-induced renal fibrosis  
 waste water  
 water loading  
 Y1 cell line