



Emtree Terms Added and Changed (September 2024)

This is an overview of new terms added and changes made in the third Emtree release in 2024.

Overall, Emtree has grown by 553 preferred terms (57 drug terms and 496 non-drug terms) compared with the previous version released in May 2024. In total Emtree now counts 100283 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 September 2024

604 new terms (including 51 replacement terms and promoted synonyms) have been added to Emtree as preferred terms in version September 2024 (compared to May 2024):

- 70 drug terms (terms assigned to the Chemicals and Drugs facet).
- 534 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 2024 (typically as candidate terms), sometimes for several years, before they were added to Emtree.

Emtree Terms Changed in September 2024

51 terms (38 drug terms and 13 non-drug terms) from Emtree May 2024 have been replaced by 49 different terms in September 2024 (12 drug terms and 37 non-drug terms).

Of these, 47 terms (10 drug terms and 37 non-drug terms) are new (e.g. new generic names for drug chemical names) and have been assigned creation date 2024; the remaining 2 replacement terms (2 drug terms and 0 non-drug terms) were already present in Emtree.

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

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

Drug terms

aciduria
actinium dotatace ac 225
alpha tocopherol plus carnitine plus taurine plus
ubidecarenone
alxn2220
am 1476
apadamtase alfa plus cinaxadamtase alfa
arct 032
arct 810
ascorbic acid plus paracetamol plus phenylephrine
atirmociclib
avian infectious bronchitis avian infectious bursal
disease avian metapneumovirus avian reovirus
egg drop syndrome Newcastle disease vaccine
avian infectious bronchitis avian infectious bursal
disease avian metapneumovirus avian reovirus
Newcastle disease vaccine
avian infectious bronchitis avian
metapneumovirus egg drop syndrome
Newcastle disease vaccine
avian influenza Newcastle disease vaccine
avibactam plus aztreonam
benzyl nicotinate plus camphor plus dimethyl
sulfoxide plus nonivamide plus turpentine oil
beroterkib
bovine parainfluenza bovine respiratory syncytial
virus bovine viral diarrhea infectious bovine
rhinotracheitis vaccine
bovine parainfluenza bovine respiratory syncytial
virus bovine viral diarrhea vaccine
chikungunya vaccine
clopenthixol acetate
deproteinized calf blood extract
doruxapapogene ralaplasmid plus lalikinogene
sifuplasmid
eloralintide
enlertide
etalanetug
firtecan plus irinotecan
furosemide plus potassium chloride
gridegalutamide
hbi 0101
hg204
imneskibart
imzokitug
ingitamig
ismidenon
istisociclib
lunlekitug
lutetium dotatace lu 177
macitentan plus tadalafil
maribavir
mepivacaine plus noradrenalin
methyl [1 [[6 [(1 cyclopropylethyl)amino] 2
(pyrazolo[5,1 b][1,3]thiazol 7 yl)pyrimidin 4
yl]carbonyl]piperidin 4 yl]carbamate
mevrometostat
naxtarubicin
neldaleucel
nelitolimod
nicoboxil plus nonivamide
nms 03592088
nogapendekin alfa inbakcept
nvd 003
ocadusertib
olomorasib
oxylanthanum carbonate
p-htmi
pasifolate exatecan
pbas499
pebezertib
Pelargonium extract
polyhexanide
prgn 2012
progerinin
rilogrotug
ruxoprubart
salanersen
selonabant
shp610
spinosave
teprosulvose
ucart22
vlx1005
zelebrudomide

Non-drug terms

3-hydroxy-3-methylglutaric aciduria
5:2 diet
AAV-SARS-CoV-2 (N protein) pseudovirus
abdominal aortic stent graft
abdominal aponeurosis
aberrant artery
aberrant subclavian artery
accidental incision
accidental puncture
acquired Fanconi syndrome
acute hepatic porphyria
acute myeloid leukemia test kit
acute renal replacement therapy
adenectomy
adenylosuccinate lyase deficiency
affective neuroscience
Aicardi-Goutieres syndrome
amygdalectomy
amygdalohippocampectomy
anal region
aneurysm plication
aneurysmectomy
anterior lower leg
aortic arch stent graft
Aphaenogaster
aponeurectomy
APRT deficiency
arteriovenous stent graft
artificially sweetened soft drink
ataxia with vitamin e deficiency
ATP synthase deficiency
automated peritoneal dialysis
autonomic plexus
awake surgery
bacterial aneurysm
bacterial genital infection
baculum
Bat SARS-like coronavirus RsSHC014
baubellum
beta-ketothiolase deficiency
bias mitigation
Bifidobacterium animalis subsp. lactis DSM 10140
biopsy margin
bladder infection
blood cyst
Bouveret syndrome
brain dura mater
brain lobectomy
broad ligament pregnancy
bromism
bullous emphysema
Byler disease
Candida bezoar
carbapenem test kit
carbohydrate restriction
cardiac plexus
cardiovascular dysphagia
carnitine acylcarnitine translocase deficiency
central nervous system lymphoma
centrilobular emphysema
cerebral decortication
cerebral folate deficiency
cervical sympathectomy
cervicothoracic sympathectomy
cherry angioma
chlorine poisoning
choroid plexectomy
chronic hemodialysis
chronic intermittent hemodialysis
chronic myeloid leukemia test kit
chronic renal replacement therapy
cisterna chyli
closed comedo
combined pulmonary fibrosis and emphysema
congenital hemidysplasia with ichtyosiform erythroderma and limb defects
congenital lobar emphysema
conjoint tendon
context learning
continuous capillary (vasculature)
continuous cycling peritoneal dialysis
cranial fasciitis
creatine transporter deficiency
Crematogaster
cryptomenorrhea
cuffitis
dacyroadenectomy
dacyrocystectomy
dacyrocystoplasty
decerebrate posturing
decerebrate posturing
decorticate posturing
deep capillary plexus
demedullation
deoxyguanosine kinase deficiency
dermofasciectomy
dermolipectomy
diaphragm plication
diaphragm surgery
diaphragma sellae
diet analysis
diet beverage



diet quality
diet soda
diet soft drink
diet texture
direct antigen presentation
disorder of copper metabolism
disorders of bile acid metabolism and transport
disorders of biotin metabolism
disorders of carnitine transport and the carnitine cycle
disorders of cobalamin metabolism
disorders of creatine metabolism
disorders of energy metabolism
disorders of folate metabolism and transport
disorders of glucose transport
disorders of glyoxylate metabolism
disorders of phenylalanine or tyrosine metabolism
disorders of purine metabolism
disorders of pyrimidine metabolism
disorders of pyruvate metabolism
disorders of sterol biosynthesis
disorders of the metabolism of sterols
disorders of the metabolism of sulphur containing amino acids
disorders of vitamin metabolism
driving range anxiety
drug-induced parkinsonism
dural injury
dural puncture (complication)
dural sac
dural tear
durotomy
dysphagia aortica
dysphagia lusoria
dysphagia megalatriensis
elastosis perforans serpiginosa
Elizabethkingia anophelis
Elizabethkingia miricola
Elodea nuttallii
emphysematous cystitis
emphysematous gastritis
Enterobacter kobei
Enterococcus test kit
epidural air
esophageal food impaction
esophagogastric junction outflow obstruction
excoriation (injury)
exogenous ochronosis
experimental rabies
falx cerebelli
falx cerebri
familial chylomicronemia syndrome
familial hypertriglyceridemia
fasting mimicking diet
Favre-Racouchot syndrome
fenestrated capillary
few shot learning
fluoride poisoning
food impaction
foreign accent syndrome
frontal lobectomy
fruit puree
fumarase deficiency
galea aponeurotica
gastric outlet obstruction
gastroplication
genital bone
glandectomy
glutathione synthetase deficiency
glycerol kinase deficiency
glycoproteinoses
gossip
halogen poisoning
halogenoderma
hematocele
hematosalpinx
hemicerebellectomy
hemipancreatectomy
hepatic plexus
hepatocerebral mitochondrial DNA depletion syndrome
hereditary haemochromatosis
heterozygous familial hypercholesterolemia
hippocampectomy
HIV-1 SARS-CoV (S-protein) pseudovirus
hydrodebridement
hydrosurgery
hymenectomy
hymenotomy
hypercontractile esophagus
hypertensive urgency
hypochondrial pain
hypothalamectomy
hysteroscopic surgery
ileum obstruction
Imerslund Grasbeck syndrome
imperforate hymen
incidental durotomy
infantile nephropathic cystinosis
inferior hypogastric plexus
infraclavicular region
inframammary fold
inframammary region
inherited hypertriglyceridaemias
intermittent hemodialysis
intermittent peritoneal dialysis
internal vertebral venous plexus
interstitial dendritic cell



interstitial emphysema
intracranial stent graft
intravascular fasciitis
intrinsic factor deficiency
involved margin
iodine poisoning
iododerma
ischemic fasciitis
jejunum obstruction
juvenile gout
kidney medulla necrosis
lacrimal surgery
lactobezoar
latrorectism
left hypochondrial pain
Leptospira interrogans serovar Hardjo
Leptospirillum ferriphilum
Leptospirillum ferrooxidans
limited fasciectomy
loxoscelism
lumbar plexus
lymph capillary
lymphangion
lymphatic plexus
lymphomatous meningitis
Lysinibacillus fusiformis
lysosomal glycogen storage disease
macrocomedo
macropinosome
mammary region
mashed potato
mechanobiology
medical racism
melodic intonation therapy
methylcrotonyl-CoA carboxylase deficiency
methylglutaconic aciduria
microcomedo
Mohr-Tranebjærg syndrome
Mpox virus test kit
mucosectomy
myoadenylate deaminase deficiency
myofasciitis
myopathic mitochondrial DNA depletion
syndrome
necrotizing glomerulonephritis
neonatal haemochromatosis
neural therapy
neurodiverse person
neuroleptic induced parkinsonism
neuromyositis
neurosurgical complication
neurotypical person
nevus comedonicus
nodular fasciitis
nomophobia
nonprofessional antigen presenting cell
occipital horn syndrome
occipital lobectomy
olfactory reference syndrome
oligosaccharidoses
open comedo
orbital emphysema
organic acidurias
oxidative phosphorylation deficiency
palpebral emphysema
pampiniform plexus
panlobular emphysema
Papillotrema
parametrectomy
paraseptal emphysema
partial adrenalectomy
partial pancreatectomy
partial parotidectomy
pectoral region
pediatric acute liver failure
pelvic hematocoele
penile plication
penis surgery
percutaneous heart valve bioprosthetic device
perianal excoriation
periarterial space
peripheral artery stent graft
peristomal infection
peristomal pyoderma gangrenosum
perumbilical pain
perivenous space
peroxisomal alpha,beta,omega oxidation disorders
peroxisomal disorder
peroxisomal storage disorder
Pheidole
phosphoglycerate dehydrogenase deficiency
pinosome
plantar fascia
plexectomy
pneumobilia
pneuromolabryinth
pneumorrhachis
pneumoscrotum
point mutations in mitochondrial dna
Pontederia subgen. Oshunae
Pontederia subgen. Pontederia
posterior lower leg
pouchitis
precordial region
primary carnitine deficiency
processed beverage
professional antigen presenting cell
progressive familial intrahepatic cholestasis type 2

progressive familial intrahepatic cholestasis type 3
proliferative fasciitis
prompt engineering
pterygoid plexus
pubic pain
pubic region
public speaking anxiety
pulmonary plexus
punctoplasty
pureed diet
pureed food
pyruvate kinase deficiency
query design
rapid onset dystonia parkinsonism
Rasmussen aneurysm
recalcitrant wart
refractory inflammation
renal plexus
resectoscopic surgery
responsible artificial intelligence
Rickettsia montanensis
right hypochondrial pain
right lymphatic duct
robot assisted thoracoscopic lobectomy
robot assisted thoracoscopic surgery
rVSV deltaG-SARS-CoV-2 (D614G) pseudovirus
rVSV deltaG-SARS-CoV-2 (lineage B.1.427)
pseudovirus
sacral plexus
salivary gland surgery
Salla disease
SARS coronavirus 2 (Wuhan-Hu-1) (S protein)
pseudotyped VSV
SARS coronavirus 2 Omicron (lineage BA.2) (S
protein) pseudotyped VSV
SARS-CoV pseudotyped VSV
SARS-CoV-2 (BetaCoV/Munich/BavPat1/2020) (S
protein) pseudotyped VSV
SARS-CoV-2 (clinical isolate Ank1)
SARS-CoV-2 (clinical isolate SB3)
SARS-CoV-2 (clinical isolate
SP02/human/2020/BRA)
SARS-CoV-2 (D614G) (S protein) pseudotyped
Lentivirus
SARS-CoV-2 (D614G) (S protein) pseudovirus
SARS-CoV-2 (D614G) (S protein-deltaC19)
pseudotyped MLV
SARS-CoV-2 (hCoV-19/Canada/ON-ON-VIDO-01-
2/2020)
SARS-CoV-2 (hCoV-19/England/BRS-UoB-64/2022)
SARS-CoV-2 (hCoV-19/Harbin/HRB-25/2020)
SARS-CoV-2 (hCoV-19/Japan/TKYS02037/2022)
SARS-CoV-2 (hCoV-19/Russia/MOS-SRC-
49415/2022)

SARS-CoV-2 (hCoV-19/Russia/Omsk202118-1707-
/2020)
SARS-CoV-2 (hCoV-19/Russia/SAK-SRC-8527/2023)
SARS-CoV-2 (hCoV-19/Russia/TOM-SRC-
8663/2023)
SARS-CoV-2 (hCoV-19/Switzerland/VD-
GEN3159/2021)
SARS-CoV-2 (isolate FIN1/20)
SARS-CoV-2 (K417N, E484K, N501Y, D614G) (S
protein) pseudovirus
SARS-CoV-2 (lineage AY.2)
SARS-CoV-2 (lineage B.1.351) (S protein)
pseudotyped VSV deltaG
SARS-CoV-2 (lineage B.1.617) (S protein)
pseudotyped VSV deltaG
SARS-CoV-2 (lineage BA.1) (E166V)
SARS-CoV-2 (lineage BA.1) (L50F/E166A/L167F)
SARS-CoV-2 (lineage BA.1) (L50F/E166V)
SARS-CoV-2 (lineage BA.1) (T21I)
SARS-CoV-2 (lineage BA.1) (T21I/E166V)
SARS-CoV-2 (lineage BA.2.3)
SARS-CoV-2 (N protein) pseudovirus
SARS-CoV-2 (S protein (N501Y)) pseudovirus
SARS-CoV-2 (S protein ct19) pseudovirus
SARS-CoV-2 (S protein d21) pseudotyped
Vesiculovirus deltaG
SARS-CoV-2 (S protein d21) pseudotyped VSV
deltaG
SARS-CoV-2 (S protein d21) pseudovirus
SARS-CoV-2 (S protein del18) pseudotyped VSV
SARS-CoV-2 (S protein) pseudotyped Lentivirus
SARS-CoV-2 (S protein) pseudotyped MLV
SARS-CoV-2 (S protein) pseudotyped VSV
SARS-CoV-2 (S protein) pseudotyped VSV deltaG
SARS-CoV-2 (S protein) pseudovirus
SARS-CoV-2 (strain hCoV-19/Taiwan/NTU49/2020)
SARS-CoV-2 (strain MA30)
SARS-CoV-2 (strain N501Y-MA30)
SARS-CoV-2 (USA/WA1/2020) Nsp5 (E166V)
SARS-CoV-2 (USA/WA1/2020) Nsp5
(L50F/E166A/L167F)
SARS-CoV-2 (USA/WA1/2020) Nsp5 (L50F/E166V)
SARS-CoV-2 (USA/WA1/2020) Nsp5 (T21I)
SARS-CoV-2 (USA/WA1/2020) Nsp5 (T21I/E166V)
SARS-CoV-2 (Wuhan Hu-1 S protein) pseudotyped
Lentivirus
SARS-CoV-2 (Wuhan/WH04//2020)
SARS-CoV-2 Alpha (hCoV-
19/England/204690005/2020)
SARS-CoV-2 Alpha (S protein) pseudotyped VSV
deltaG
SARS-CoV-2 Alpha (S protein) pseudovirus
SARS-CoV-2 Alpha (S protein-deltaC19)
pseudotyped MLV



SARS-CoV-2 B.1 (hCoV-19/Italy/LOM-
UniMI32/2020)
SARS-CoV-2 Beta (20HY) (S protein) pseudovirus
SARS-CoV-2 Beta (hCoV-
19/England/205280030/2020)
SARS-CoV-2 Beta (S protein) pseudovirus
SARS-CoV-2 Beta (V1 S protein) pseudovirus
SARS-CoV-2 Beta (V2 S protein) pseudovirus
SARS-CoV-2 Beta (V3 S protein) pseudovirus
SARS-CoV-2 BQ.1.1 (hCoV-19/Italy/UMB-UNISI-
883/2022)
SARS-CoV-2 Delta (860-J1)
SARS-CoV-2 Delta (AY.117) (S protein)
pseudotyped VSV
SARS-CoV-2 Delta (S protein) pseudotyped
Lentivirus
SARS-CoV-2 Delta (S protein) pseudovirus
SARS-CoV-2 Delta (S protein-deltaC19)
pseudotyped MLV
SARS-CoV-2 Epsilon (S protein) pseudovirus
SARS-CoV-2 Epsilon pseudovirus
SARS-CoV-2 Gamma (hCoV-19/England/520336 B1
P0/2021)
SARS-CoV-2 Gamma (S protein) pseudovirus
SARS-CoV-2 Gamma (S protein-deltaC19)
pseudotyped MLV
SARS-CoV-2 Iota (S protein) pseudovirus
SARS-CoV-2 Iota pseudovirus
SARS-CoV-2 Lambda (S protein) pseudovirus
SARS-CoV-2 Lambda pseudovirus
SARS-CoV-2 lineage B.1.1 (strain JP/Hiroshima-
46059T/2020)
SARS-CoV-2 lineage B.1.617 (S protein)
pseudovirus
SARS-CoV-2 Omicron (lineage BA.1) (S protein)
pseudotyped VSV
SARS-CoV-2 Omicron (lineage BA.1) (S protein)
pseudovirus
SARS-CoV-2 Omicron (lineage BA.2) (S protein)
pseudovirus
SARS-CoV-2 Omicron (lineage BA.4) (S protein)
pseudovirus
SARS-CoV-2 Omicron (lineage BA.4/BA.5) (S
protein) pseudovirus
SARS-CoV-2 Omicron (S protein) pseudotyped
Lentivirus
SARS-CoV-2 Omicron (S protein) pseudovirus
SARS-CoV-2 pseudotyped AAV
SARS-CoV-2 pseudotyped Lentivirus
SARS-CoV-2 pseudotyped MLV
SARS-CoV-2 pseudotyped VSV
SARS-CoV-2 pseudotyped VSV deltaG
Schatzki ring
Schindler disease
scorpion envenomation
scratch wound
scrotal hematocoele
scrotal hematoma
scrotal hydrocele
sectionectomy
segmental pancreatectomy
self love
senile elastosis
sepiapterin reductase deficiency
sialoadenectomy
skeletal fluorosis
skin excision
smoothie
snake envenomation
social neuroscience
Sphecidae
sphincter surgery
sphincterectomy
spider envenomation
spinal dura mater
spinal plexus
sternal region
stoma complication
Streptococcus alactolyticus
subclavian artery disease
subclavian artery malformation
subclavian artery occlusion
subclavian artery stenosis
subdural air
subdural space
sublingual gland excision
submandibular gland excision
sucrase isomaltase deficiency
sugar-sweetened soda
sugar-sweetened soft drink
sulfite oxidase deficiency
superficial capillary plexus
superior hypogastric plexus
superior mesenteric artery syndrome
supplementary motor area syndrome
suprapubic pain
suprapubic region
surgical plication
survivor guilt
sweetened carbonated beverage
sweetened soft drink
syndrome of irreversible lithium effectuated
neurotoxicity
Tapinoma
Tetramorium
texture modified diet
texture modified food
theoretical neuroscience



thiamine-responsive megaloblastic anemia
syndrome
thickened beverage
thickened liquid diet
thoracic aortic stent graft
thoracic laminectomy
thoracolumbar sympathectomy
thoracoscopic surgery
thoracoscopic sympathectomy
thyroid toxicity
tooth exfoliation
total adrenalectomy
total hepatectomy
total pancreatectomy
total pancreatectomy with islet
autotransplantation
TPMT deficiency
transcobalamin II deficiency
trigonitis
tumor margin
tumor-close margin
tumor-free margin
ultra-processed beverage
ureter anastomosis
ureterocolostomy
ureteroenterostomy
ureteroileostomy
urogenital region
uterine cervix ectopy
V79-122D1 cell line
vaginal septum
vanishing lung
vegetable puree
veiled cell
venom-induced consumption coagulopathy
venous plexus
venous stent graft
vertebral venous plexus
vestibulectomy
visual decortication
VSV-SARS-CoV (S protein) pseudovirus
vulnerability assessment
X linked dystonia parkinsonism
X-linked adrenoleukodystrophy
X-linked protoporphyrria
Zellweger spectrum disorder

Drug terms

New or pre-existing term

* indicates pre-existing term

acetic acid*
apadamtase alfa plus cinaxadamtase alfa
deproteinized calf blood extract
deproteinized calf blood extract
enlicitide
ersodetug*
lutetium dotatake lu 177
maribavir
naxtarubicin
nicoboxil plus nonivamide
nogapendekin alfa inbakicept
Pelargonium extract
polyhexanide

Old (replaced) term

These terms become synonyms of the new term
vosol
tak 755
actovegin
solcoseryl
enlicitide chloride
xoma 358
oxodotreotide lutetium lu 177
benzimidavir
annamycin
finalgon
inbakicept
Pelargonium sidoides extract
poly(hexamethylenebiguanide)

Non-drug terms

New or pre-existing term

* indicates pre-existing term

percutaneous heart valve bioprostheses
peroxisomal disorder
pneumorrhachis
SARS coronavirus 2 (Wuhan-Hu-1) (S protein)
pseudotyped VSV
SARS coronavirus 2 Omicron (lineage BA.2) (S
protein) pseudotyped VSV
SARS-CoV-2 (BetaCoV/Munich/BavPat1/2020) (S
protein) pseudotyped VSV
SARS-CoV-2 (D614G) (S protein) pseudotyped
Lentivirus
SARS-CoV-2 (D614G) (S protein) pseudovirus
SARS-CoV-2 (K417N, E484K, N501Y, D614G) (S
protein) pseudovirus
SARS-CoV-2 (S protein ct19) pseudovirus
SARS-CoV-2 (S protein d21) pseudovirus
SARS-CoV-2 (S protein) pseudotyped VSV

SARS-CoV-2 (S protein) pseudovirus
SARS-CoV-2 (Wuhan Hu-1 S protein) pseudotyped
Lentivirus
SARS-CoV-2 Alpha (S protein) pseudovirus
SARS-CoV-2 Beta (20HY) (S protein) pseudovirus
SARS-CoV-2 Beta (S protein) pseudovirus
SARS-CoV-2 Beta (V1 S protein) pseudovirus
SARS-CoV-2 Beta (V2 S protein) pseudovirus
SARS-CoV-2 Beta (V3 S protein) pseudovirus
SARS-CoV-2 Delta (AY.117) (S protein) pseudotyped

Old (replaced) term

These terms become synonyms of the new term
percuteneous heart valve bioprostheses
disorders of peroxisomal functions
pneumorachis
SARS-CoV-2 (Wuhan-Hu-1) S-pseudotyped VSV

SARS-CoV-2 (lineage BA.2 S protein) pseudotyped
VSV
SARS-CoV-2 (BetaCoV/Munich/BavPat1/2020 S
protein) pseudotyped VSV
SARS-CoV-2 S (D614G) pseudotyped lentivirus

SARS-CoV-2 pseudovirus (spike protein (D614G))
SARS-CoV-2 pseudovirus (spike protein (K417N,
E484K, N501Y, D614G))
SARS-CoV-2 S pseudovirus (ct19)
SARS-CoV-2 pseudovirus (spike S protein d21)
SARS-CoV-2 S-pseudotyped vesicular stomatitis
virus
SARS-CoV-2 S pseudovirus
SARS-CoV-2 (Wuhan Hu-1 spike protein) Lentivirus
pseudoparticle
SARS-CoV-2 Alpha (spike protein) pseudovirus
SARS-CoV-2 Beta (20HY)-S pseudovirus
SARS-CoV-2 Beta (S-protein) pseudotyped virus
SARS-CoV-2 Beta V1-S pseudovirus
SARS-CoV-2 Beta V2-S pseudovirus
SARS-CoV-2 Beta V3-S pseudovirus
SARS-CoV-2 Delta (AY.117 S protein) pseudotyped



VSV	VSV
SARS-CoV-2 Delta (S protein) pseudotyped Lentivirus	SARS-CoV-2 Delta (Spike protein) pseudotyped lentivirus
SARS-CoV-2 Delta (S protein) pseudovirus	SARS-CoV-2 Delta pseudovirus (S protein)
SARS-CoV-2 Epsilon (S protein) pseudovirus	SARS-CoV-2 Epsilon pseudovirus (spike protein)
SARS-CoV-2 Gamma (S protein) pseudovirus	SARS-CoV-2 Gamma (spike protein) pseudovirus
SARS-CoV-2 Iota (S protein) pseudovirus	SARS-CoV-2 Iota pseudovirus (spike protein)
SARS-CoV-2 Lambda (S protein) pseudovirus	SARS-CoV-2 Lambda pseudovirus (spike protein)
SARS-CoV-2 Omicron (lineage BA.1) (S protein) pseudotyped VSV	SARS-CoV-2 Omicron (lineage BA.1 spike protein) pseudotyped vesicular stomatitis virus
SARS-CoV-2 Omicron (lineage BA.1) (S protein) pseudovirus	SARS-CoV-2 Omicron (lineage BA.1) pseudovirus (S protein)
SARS-CoV-2 Omicron (lineage BA.2) (S protein) pseudovirus	SARS-CoV-2 Omicron (lineage BA.2) pseudovirus (S protein)
SARS-CoV-2 Omicron (lineage BA.4) (S protein) pseudovirus	SARS-CoV-2 Omicron (lineage BA.4) pseudovirus (S protein)
SARS-CoV-2 Omicron (lineage BA.4/BA.5) (S protein) pseudovirus	SARS-CoV-2 Omicron (lineage BA.4/BA.5) pseudovirus (S protein)
SARS-CoV-2 Omicron (S protein) pseudotyped Lentivirus	SARS-CoV-2 Omicron (Spike protein) pseudotyped lentivirus
SARS-CoV-2 Omicron (S protein) pseudovirus	SARS-CoV-2 Omicron pseudovirus (S protein)
SARS-CoV-2 pseudotyped MLV	SARS-CoV-2 MLV pseudovirusparticle
SARS-CoV-2 pseudotyped VSV deltaG	SARS-CoV-2 (rVSVdeltaG-GFP/SARS2-S) pseudotyped VSV
SARS-CoV-2 pseudotyped VSV deltaG	SARS-CoV-2 (rVSVdeltaG-GFP/VSVG) pseudotyped VSV
scrotal hydrocele	hydrocele