

# RSV

## Respiratory syncytial virus

RSV (Respiratory syncytial virus) is a leading cause of acute respiratory infections. RSV can exploit host immunity and cause a strong inflammatory response that leads to lung damage and virus dissemination. There is a single RSV serotype with two major antigenic subgroups, A and B.

RSV is a non-segmented negative-sense single-stranded enveloped RNA virus that belongs to the family of Paramyxoviridae, genus Pneumovirus, subfamily Pneumovirinae. Its 10 genes encode 11 proteins since two overlapping open reading frames in the M2 mRNA yield two distinct matrix proteins, M2-1 and M2-2. The viral envelope contains three proteins, the G glycoprotein, the fusion (F) glycoprotein, and the small hydrophobic (SH) protein. The RSV virus comprises five other structural proteins, the large (L) protein, nucleocapsid (N), phosphoprotein (P), matrix (M), and M2-1, and two non-structural proteins (NS1 and NS2).

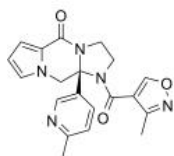
## RSV Inhibitors

### (S)-Enzaplatovir

((S)-BTA-C585)

Cat. No.: HY-109004A

(S)-Enzaplatovir ((S)-BTA-C585) is the S-enantiomer of Enzaplatovir. (S)-Enzaplatovir shows antiviral activities with an  $EC_{50}$  of 56 nM for respiratory syncytial viral (RSV) (patent WO2011094823A1 compound 77).

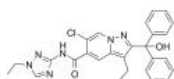


**Purity:** 99.35%  
**Clinical Data:** No Development Reported  
**Size:** 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

### ACSS2-IN-1

Cat. No.: HY-145392

ACSS2-IN-1 is a potent ACSS2 inhibitor for the treatment of cancer. ACSS2-IN-1 (Compound 1) is a potent ACSS2 inhibitor. ACSS2-IN-1 inhibits ACSS2 with the  $IC_{50}$  of 0.01 nM to <1 nM. ACSS2-IN-1 can be used for the research of cancer.



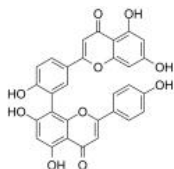
**Purity:** >98%  
**Clinical Data:** No Development Reported  
**Size:** 1 mg, 5 mg

### Amentoflavone

(Didemethyl-ginkgetin)

Cat. No.: HY-N0662

Amentoflavone is a natural biflavone compound with many biological properties, including anti-inflammatory, antioxidative, and neuroprotective effects.

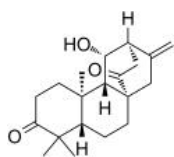


**Purity:** 98.88%  
**Clinical Data:** No Development Reported  
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

### ent-11β-Hydroxyatis-16-ene-3,14-dione

Cat. No.: HY-N3811

ent-11β-Hydroxyatis-16-ene-3,14-dione (compound 11) is a diterpenoid from the fresh roots of Euphorbia jolkinii. ent-11β-Hydroxyatis-16-ene-3,14-dione has anti-RSV activity.



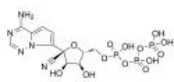
**Purity:** >98%  
**Clinical Data:** No Development Reported  
**Size:** 5 mg, 10 mg, 25 mg

### GS-443902

(GS-441524 triphosphate; Remdesivir metabolite)

Cat. No.: HY-126303

GS-443902 (GS-441524 triphosphate) is a potent viral RNA-dependent RNA-polymerases (RdRp) inhibitor with  $IC_{50}$ s of 1.1 μM, 5 μM for RSV RdRp and HCV RdRp, respectively. GS-443902 is the active triphosphate metabolite of Remdesivir.

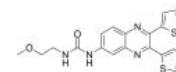


**Purity:** 99.87%  
**Clinical Data:** No Development Reported  
**Size:** 1 mg, 5 mg

### Ac-CoA Synthase Inhibitor1

Cat. No.: HY-104032

Ac-CoA Synthase Inhibitor1 is a potent, reversible acetate-dependent acetyl-CoA synthetase 2 (ACSS2) inhibitor with an  $IC_{50}$  of 0.6 μM. Ac-CoA Synthase Inhibitor1 inhibits the respiratory syncytial virus (RSV).

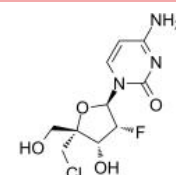


**Purity:** 99.23%  
**Clinical Data:** No Development Reported  
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg

### ALS-8112

Cat. No.: HY-12983

ALS-8112 is a potent and selective respiratory syncytial virus (RSV) polymerase inhibitor. The 5'-triphosphate form of ALS-8112 inhibits RSV polymerase with an  $IC_{50}$  of 0.02 μM.

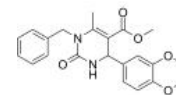


**Purity:** 99.97%  
**Clinical Data:** No Development Reported  
**Size:** 10 mM × 1 mL, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg

### Antiviral agent 10

Cat. No.: HY-142009

Antiviral agent 10 is an anti-viral agent that can inhibit respiratory syncytial virus (RSV).



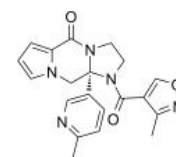
**Purity:** >98%  
**Clinical Data:** No Development Reported  
**Size:** 1 mg, 5 mg

### Enzaplatovir

(BTA-C585)

Cat. No.: HY-109004

Enzaplatovir (BTA-C585) is an orally bioavailable fusion inhibitor for respiratory syncytial virus (RSV) infection.

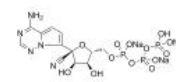


**Purity:** 99.98%  
**Clinical Data:** Phase 2  
**Size:** 5 mg, 10 mg, 25 mg

### GS-443902 trisodium (GS-441524 triphosphate trisodium; Remdesivir metabolite trisodium)

Cat. No.: HY-126303C

GS-443902 trisodium (GS-441524 triphosphate trisodium) is a potent viral RNA-dependent RNA-polymerases (RdRp) inhibitor with  $IC_{50}$ s of 1.1 μM, 5 μM for RSV RdRp and HCV RdRp, respectively. GS-443902 trisodium is the active triphosphate metabolite of Remdesivir (GS-5734).



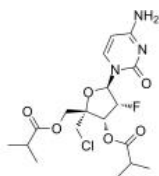
**Purity:** 99.98%  
**Clinical Data:** No Development Reported  
**Size:** 1 mg, 5 mg, 10 mg

### Lumicitabine

(ALS-008176; ALS-8176)

Cat. No.: HY-12983A

Lumicitabine (ALS-008176) is an inhibitor of the respiratory syncytial virus (RSV) polymerase.

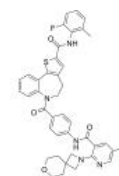


**Purity:** 99.78%  
**Clinical Data:** Phase 2  
**Size:** 10 mM × 1 mL, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg

### PC786

Cat. No.: HY-102038

PC786 is an inhaled respiratory syncytial virus (RSV) L protein polymerase inhibitor. PC786 demonstrates potent antiviral activity against RSV-A (IC<sub>50</sub> <0.09 to 0.71 nM) and RSV-B (IC<sub>50</sub> 1.3 to 50.6 nM).



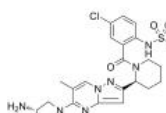
**Purity:** 99.69%  
**Clinical Data:** Phase 2  
**Size:** 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

### Presatovir

(GS-5806)

Cat. No.: HY-16727

Presatovir (GS-5806) is an orally bioavailable RSV fusion inhibitor with a mean EC<sub>50</sub> value of 0.43 nM.



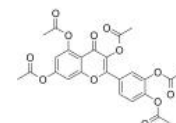
**Purity:** 99.95%  
**Clinical Data:** Phase 2  
**Size:** 5 mg, 10 mg, 50 mg, 100 mg

### Quercetin pentaacetate

(Pentaacetylquercetin)

Cat. No.: HY-124512

Quercetin pentaacetate could interact with F-protein with lower binding energy and better stability to block viral adhesion. Quercetin pentaacetate interacts with RSV and inhibit the viral adhesion on cell surface.

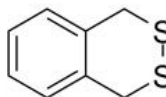


**Purity:** >98%  
**Clinical Data:** No Development Reported  
**Size:** 1 mg, 5 mg

### RD3-0028

Cat. No.: HY-100285

RD3-0028 is a potent and selective inhibitor of RSV replication with an EC<sub>50</sub> of 4.5 μM.



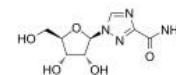
**Purity:** >98%  
**Clinical Data:** No Development Reported  
**Size:** 1 mg, 5 mg

### Ribavirin

(ICN-1229)

Cat. No.: HY-B0434

Ribavirin (ICN-1229) is an antiviral agent against a broad spectrum of viruses including HCV, HIV1, and RSV.



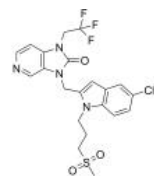
**Purity:** 99.80%  
**Clinical Data:** Launched  
**Size:** 10 mM × 1 mL, 100 mg, 200 mg, 500 mg

### Rilematovir

(JNJ-678; JNJ-53718678)

Cat. No.: HY-112180

Rilematovir (JNJ-678) is a novel fusion protein inhibitor. Rilematovir has the potential for respiratory syncytial virus (RSV) research.

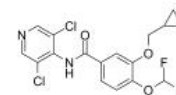


**Purity:** 98.00%  
**Clinical Data:** Phase 3  
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

### Roflumilast

Cat. No.: HY-15455

Roflumilast is a selective PDE4 inhibitor with IC<sub>50</sub>s of 0.7, 0.9, 0.7, and 0.2 nM for PDE4A1, PDEA4, PDEB1, and PDEB2, respectively, without affecting PDE1, PDE2, PDE3 or PDE5 isoenzymes from various cells.

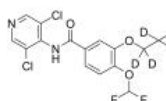


**Purity:** 99.43%  
**Clinical Data:** Launched  
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

### Roflumilast-d3

Cat. No.: HY-15455S2

Roflumilast-d3 is deuterium labeled Roflumilast. Roflumilast is a selective PDE4 inhibitor with IC<sub>50</sub>s of 0.7, 0.9, 0.7, and 0.2 nM for PDE4A1, PDEA4, PDEB1, and PDEB2, respectively, without affecting PDE1, PDE2, PDE3 or PDE5 isoenzymes from various cells.

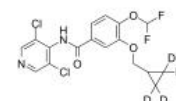


**Purity:** >98%  
**Clinical Data:** No Development Reported  
**Size:** 1 mg, 5 mg

### Roflumilast-d4

Cat. No.: HY-15455S

Roflumilast-d4 is the deuterium labeled Roflumilast. Roflumilast is a selective PDE4 inhibitor with IC<sub>50</sub>s of 0.7, 0.9, 0.7, and 0.2 nM for PDE4A1, PDEA4, PDEB1, and PDEB2, respectively, without affecting PDE1, PDE2, PDE3 or PDE5 isoenzymes from various cells.

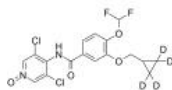


**Purity:** >98%  
**Clinical Data:**  
**Size:** 1 mg, 5 mg

### Roflumilast-d4 N-Oxide

Cat. No.: HY-15455S1

Roflumilast-d4 N-Oxide is the deuterium labeled Roflumilast. Roflumilast is a selective **PDE4** inhibitor with  $IC_{50}$ s of 0.7, 0.9, 0.7, and 0.2 nM for **PDE4A1**, **PDE4A**, **PDEB1**, and **PDEB2**, respectively, without affecting **PDE1**, **PDE2**, **PDE3** or **PDE5** isoenzymes from various cells.



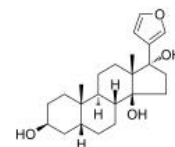
**Purity:** >98%  
**Clinical Data:** No Development Reported  
**Size:** 1 mg, 10 mg

### Rostafuroxin

(PST 2238)

Cat. No.: HY-12283

Rostafuroxin (PST 2238), a digitoxigenin derivative, is an orally active and potent  $Na^+, K^+$ -ATPase (**ATP1A1**) antagonist.

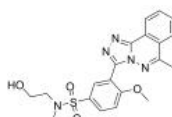


**Purity:** 98.07%  
**Clinical Data:** Phase 2  
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

### RSV-IN-1

Cat. No.: HY-112673

RSV-IN-1 is a human respiratory syncytial virus (hRSV) inhibitor, with an  $IC_{50}$  of 0.11  $\mu$ M.

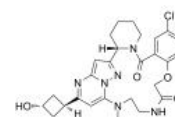


**Purity:** 99.95%  
**Clinical Data:** No Development Reported  
**Size:** 10 mM × 1 mL, 5 mg, 10 mg

### RSV-IN-2

Cat. No.: HY-142645

RSV-IN-2 is a potent dual inhibitor of wild-type and mutant respiratory syncytial virus fusion proteins (wild-type,  $EC_{50}$  = 0.27 nM; D486N-mutant,  $EC_{50}$  = 0.70 nM).

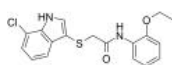


**Purity:** >98%  
**Clinical Data:** No Development Reported  
**Size:** 1 mg, 5 mg

### RSV/IAV-IN-1

Cat. No.: HY-130626

RSV/IAV-IN-1 (compound 14e) is a potent and dual inhibitor of RSV/IAV. RSV/IAV-IN-1 has lesser cytotoxicity than the clinical drug, Ribavirin. RSV/IAV-IN-1 has the potential for the research of RSV and/or IAV infections.

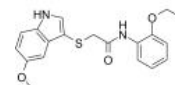


**Purity:** >98%  
**Clinical Data:** No Development Reported  
**Size:** 1 mg, 5 mg

### RSV/IAV-IN-2

Cat. No.: HY-130627

RSV/IAV-IN-2 (compound 14c) is a potent and dual inhibitor of RSV/IAV. RSV/IAV-IN-2 has lesser cytotoxicity than the clinical drug, Ribavirin. RSV/IAV-IN-2 has the potential for the research of RSV and/or IAV infections.

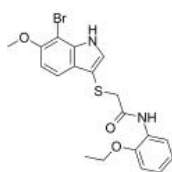


**Purity:** >98%  
**Clinical Data:** No Development Reported  
**Size:** 1 mg, 5 mg

### RSV/IAV-IN-3

Cat. No.: HY-143494

RSV/IAV-IN-3 (compound 14'i) is a dual inhibitor of respiratory syncytial virus (RSV) and influenza A virus (IAV) with  $EC_{50}$  values of 2.92  $\mu$ M and 1.90  $\mu$ M, respectively.



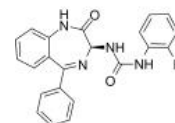
**Purity:** >98%  
**Clinical Data:** No Development Reported  
**Size:** 1 mg, 5 mg

### RSV604

(A-60444)

Cat. No.: HY-12993

RSV604 (A-60444) is an inhibitor of respiratory syncytial virus (RSV) replication. RSV604 targets the nucleocapsid protein, with a  $K_d$  of 1.6  $\mu$ M. RSV604 displays submicromolar activity against numerous clinical isolates of both the A and B subtypes of RSV (average  $EC_{50}$ =0.8  $\mu$ M).



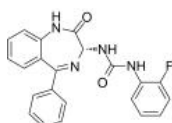
**Purity:** 99.96%  
**Clinical Data:** Phase 1  
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

### RSV604 (R enantiomer)

(A-60444 (R enantiomer))

Cat. No.: HY-12993B

RSV604 R enantiomer is the R-enantiomer of RSV604. RSV604 is an inhibitor of respiratory syncytial virus (RSV) replication. R-enantiomer is less active against RSV.



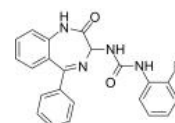
**Purity:** >98%  
**Clinical Data:** No Development Reported  
**Size:** 10 mM × 1 mL, 2 mg, 5 mg

### RSV604 racemate

(A-60444 racemate)

Cat. No.: HY-12993A

RSV604 (A-60444) racemate is a racemic mixture, shows less potency against strains of respiratory syncytial virus (RSV) than the S-isomer.

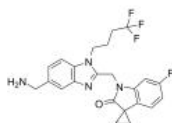


**Purity:** 98.60%  
**Clinical Data:** No Development Reported  
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

**Sisunatovir**  
(RV521)

Cat. No.: HY-123475

Sisunatovir (RV521), an orally available inhibitor of the **RSV fusion (RSV-F)** protein, exhibits potent efficacy against a panel of clinical isolates of RSV-A and RSV-B viruses, with  $IC_{50}$ s of 1.4 nM and 1.0 nM, respectively.

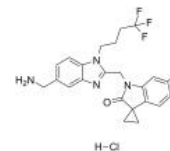


**Purity:** 99.08%  
**Clinical Data:** No Development Reported  
**Size:** 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

**Sisunatovir hydrochloride**  
(RV521 hydrochloride)

Cat. No.: HY-123475A

Sisunatovir (RV521) hydrochloride, an orally available inhibitor of the **RSV fusion (RSV-F)** protein, exhibits potent efficacy against a panel of clinical isolates of RSV-A and RSV-B viruses, with  $IC_{50}$ s of 1.4nM and 1.0nM, respectively.

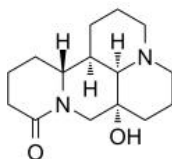


**Purity:** 98.54%  
**Clinical Data:** No Development Reported  
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

**Sophoranol**

Cat. No.: HY-126033

Sophoranol is an alkaloid that can be isolated from *S. flavescens*, with antiviral activity. Sophoranol has anti-**HBV (hepatitis B virus)** activity. Sophoranol shows potent antiviral activities against **respiratory syncytial virus (RSV)** with an  $IC_{50}$  of 10.4  $\mu$ g/mL.

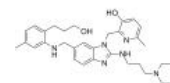


**Purity:** >98%  
**Clinical Data:** No Development Reported  
**Size:** 5 mg, 10 mg, 25 mg

**TMC353121**

Cat. No.: HY-11097

TMC353121 is a potent respiratory syncytial virus (RSV) fusion inhibitor with  $pEC_{50}$  of 9.9.



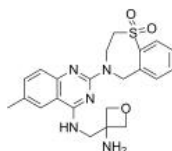
**Purity:** 97.40%  
**Clinical Data:** No Development Reported  
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

**Ziresovir**

(AK0529; RO-0529)

Cat. No.: HY-109142

Ziresovir (AK0529;RO-0529) is a potent, selective, and orally bioavailable respiratory syncytial virus (RSV) fusion (F) protein (RSV F) protein inhibitor. Ziresovir shows anti-RSV activity ( $EC_{50}$ =3 nM) and highlights pharmacokinetics in animal species.



**Purity:** 99.86%  
**Clinical Data:** Phase 3  
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg