

SCH-C



Drug Description

SCH-C is an oxime-piperidine compound. [1]

HIV/AIDS-Related Uses

SCH-C is a CCR5 receptor antagonist being investigated for the treatment of HIV. SCH-C has been studied in Phase 1 clinical trials in healthy volunteers and in HIV infected patients.[2] Currently, SCH-D, another CCR5 receptor antagonist being developed by Schering-Plough, has been assigned priority status over SCH-C due to SCH-D's increased antiviral potency.[3]

Pharmacology

CCR5 is the coreceptor used by the most commonly transmitted macrophage-tropic HIV-1 strains, which predominate during the early stages of HIV infection.[4] SCH-C binds to the transmembrane domain of CCR5. This is thought to disrupt the conformation of CCR5's extracellular domain, thereby inhibiting ligand binding to CCR5.[5]

In a Phase I clinical trial in HIV infected adults, the mean C_{max} and C_{min} levels of SCH-C at steady state were approximately 140 nM and 90 nM, respectively. There was a short lag time (2 to 3 days) in effect and a prolonged effect following cessation of dosing. Ten of twelve patients had at least a 0.5 log₁₀ reduction in viral load from baseline.[6]

Adverse Events/Toxicity

SCH-C has been shown generally safe and well tolerated in both healthy volunteers and HIV infected adults. Mild headache and bad taste in the mouth were both reported.

One case of an isolated triplet on EKG was reported. Prolongation of the QTc interval was noted at higher doses among healthy volunteers.[7] [8]

Drug and Food Interactions

SCH-C is synergistic in vitro with zidovudine, lamivudine, efavirenz, indinavir, and enfuvirtide.[9]

Clinical Trials

For information on clinical trials that involve SCH-C, visit the ClinicalTrials.gov web site at <http://www.clinicaltrials.gov>. In the Search box, enter: SCH-C AND HIV Infections.

Dosing Information

Mode of Delivery: Oral.[10]

Other Names

SCH 351125[11]

SCH-351125[12]

Further Reading

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Tremblay CL, Giguel F, Kollmann C, Guan Y, Chou TC, Baroudy BM, Hirsch MS. Anti-human immunodeficiency virus interactions of SCH-C (SCH 351125), a CCR5 antagonist, with other antiretroviral agents in vitro. *Antimicrob Agents*

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Further Reading (cont.)

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Manufacturer Information

SCH-C

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2000 Galloping Hill Rd
Kenilworth, NJ 07033-0530
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For More Information

Contact your doctor or an AIDSinfo Health Information Specialist:

- Via Phone: 1-800-448-0440 Monday - Friday, 12:00 p.m. (Noon) - 5:00 p.m. ET
- Via Live Help: http://aidsinfo.nih.gov/live_help Monday - Friday, 12:00 p.m. (Noon) - 4:00 p.m. ET

References

1. Proc Natl Acad Sci USA - 2001 October;98(22):12718-23.
2. Conf Retroviruses Opportunistic Infect. - 9th. 2002. Abstract 1.
3. Communication - Personal, with Aracelia Villa. 10/30/03.
4. Proc Natl Acad Sci USA - 2001 October;98(22):12718-23.
5. J Virol - 2003 May;77(9):5201-8.
6. Conf Retroviruses Opportunistic Infect. - 9th. 2002. Abstract 1.
7. Conf Retroviruses Opportunistic Infect. - 9th. 2002. Abstract 1.
8. Schering Plough - Schering Plough. Available at <http://www.sch-plough.com/>. Accessed 10/29/03.

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9. Antimicrob Agents Chemother - 2002 May;46(5):1336-9.
10. Conf Retroviruses Opportunistic Infect. - 9th. 2002. Abstract 1.
11. Antimicrob Agents Chemother - 2002 May;46(5):1336-9.
12. J Virol - 2003 May;77(9):5201-8.