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Boceprevir *(Victrelis)*

Discontinued. This treatment has been discontinued.

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Drug Summary

Boceprevir is a first-generation hepatitis C protease inhibitor that played a valuable role in treatment of patients with genotype 1 infection during the years 2011, 2012, and 2013. With the availability of multiple, new direct-acting antiviral agents that are far superior to boceprevir, Merck has made the decision to discontinue the manufacturing of boceprevir. The relevance of boceprevir is now historical, but prior treatment failure with a boceprevir-based regimen may have resulted in development of resistance-associated variants.

Class and Mechanism

Boceprevir (*Victrelis*) is a NS3/4A protease inhibitor. Specifically, boceprevir inhibits the proteolytic cleavage of the HCV encoded polyprotein, an essential step in the viral life cycle for the production of mature forms of the viral proteins NS4A, NS4B, NS5A, and NS5B.

Manufacturer for United States

Boceprevir (*Victrelis*) is no longer manufactured in the United States. Boceprevir (*Victrelis*) (Figure 1) was previously manufactured by Merck & Co. Boceprevir was developed at Schering-Plough, which merged with Merck & Co. in 2009.

Cost and Medication Access

Boceprevir (*Victrelis*) is no longer manufactured in the United States.

Adverse Effects

The most common adverse effects reported with boceprevir are anemia, decreased neutrophil count, dysgeusia (alteration in taste), and vomiting. Rare cases of severe hypersensitivity reaction have been reported in patients taking boceprevir in combination with peginterferon and ribavirin. Boceprevir is clasified as pregnancy category B.

Key Drug Interactions

Boceprevir metabolism occurs primarily through aldo-ketoreductase and partly via CYP3A4/5. In addition, boceprevir is a substrate for p-glycoprotein. Levels of boceprevir do not significantly change with concomitant administration of aldo-ketoreductase inhibitors. Significant interactions can occur with boceprevir and other drugs that are primarily metabolized via CYP3A4/5. Use of boceprevir is contraindicated with a number of medications that are either potent CYP3A4/5 inducers or medications that are highly depend on CYP3A4/5 for clearance. See the Boceprevir (*Victrelis*) full Prescribing Information for a detailed description of drug interactions with boceprevir.
For complete information on boceprevir-related drug interactions, see the Drug Interactions section in the Boceprevir (*Victrelis*) Prescribing Information.

Figures

Figure 1 Boceprevir (*Victrelis*) Packaging

Photo: Andrew Karpenko, University of Washington

Figure 2 Boceprevir (*Victrelis*) Capsules

Photo: Andrew Karpenko, University of Washington