

Boceprevir

Information about the drug and genetic variation

What is boceprevir?

- Boceprevir is used for treatment of patients with chronic hepatitis C virus (specifically the genotype 1 infection).
 - Also approved for patients with compensated liver disease, cirrhosis, and those unresponsive to other antiviral therapies.
- Functions by inhibiting specific host cell functions (the major one is replication of HCV). This is done by reversibly binding to a key enzyme that is required for the virus to mature.

Genetic Variation

- The gene we are interested in is interferon-lambda 3 (IFNL3).
- IFNL3 codes for cytokine, a small protein that is released in response to a viral infection.
- It is a signal to the rest of the immune system where the virus is located.

Drug-Gene Interaction

- Patients carrying the rs12979860 polymorphism have an improved response to boceprevir (used in combination with ribavirin and pegylated interferon alfa-2a).
- Boceprevir is no longer manufactured in the United States due to lack of demand and changes in treatment of Hepatitis C.

If you have any more questions, please visit the websites listed below or talk to a healthcare professional.

- <http://drugsandgenes.com>
- <http://www.pharmgkb.org>