Hepatitis B Immune Globulin (Human)
Nabi-HB®

DESCRIPTION
Hepatitis B Immune Globulin (Human), Nabi-HB, is a sterile solution of immunoglobulin G (5 % protein) containing antibodies to hepatitis B surface antigen (anti-HBs). It is prepared from plasma harvested by continuous flow plasma fractionation by the Pickering process and is further treated with calcium/ethylene diamine tetraacetic acid (EDTA) and diethyl ether before use.

Each milliliter (mL) of Nabi-HB contains greater than 312 IU anti-HBs. The potency of each milliliter of Nabi-HB exceeds the potency of anti-HBs in a U.S. reference immunoglobulin (FDA).

INSTRUCTIONS FOR USE
The Nabi-HB formulation is a non-pyrogenic, clear, colorless solution and is ready for use as supplied. It is administered parenterally, subcutaneously, intramuscularly, or intravenously.

PRECAUTIONS AND ADVERSE REACTIONS
Precautions
Nabi-HB, Hepatitis B Immune Globulin (Human), may be necessary to reconstitute patients who received Nabi-HB shortly after live virus vaccination.

Adverse Reactions
No anaphylactic reactions with Nabi-HB have been reported. However, these reactions, although rare, have been reported following the injection of human immune globulins.

INDICATIONS AND USAGE
Nabi-HB, Hepatitis B Immune Globulin (Human), is indicated for the treatment of acute HBV infection, perinatal exposure of infants born to HBsAg-positive mothers, sexual exposure to HBsAg-positive persons and household exposure to persons with acute HBV infection in the following settings:

- Acute Exposure to Blood Containing HBsAg
  Following either parenteral (needlestick, bite, sharp), direct mucous membrane contact, or ocular exposure (pipetting accident), involving HBsAg-positive materials such as blood, plasma, or serum.

- Perinatal Exposure of Infants Born to HBsAg-positive Mothers
  Infants born to mothers positive for HBsAg with or without HBeAg.

CONTRAINDICATIONS
Individuals known to have had an anaphylactic or severe systemic reaction to human globulin should not receive Nabi-HB. Hepatitis B Immune Globulin (human) or any other hepatitis B immunoglobulin, Nabi-HB contains not more than 40 micrograms per mL IgA. Individuals who are deficient in IgA may have the potential to develop antibodies against IgA and anaphylactic reactions. The physician must weigh the potential benefits of treatment with Nabi-HB against the potential for hypersensitivity reactions.

WARNINGS
In patients who have severe thrombocytopenia or any coagulation disorder that would contraindicate intramuscular injections, Nabi-HB, Hepatitis B Immune Globulin (Human), should be given only if the expected benefits outweigh the potential risks.

Nabi-HB is made from human plasma. Products made from human plasma may contain infectious agents, e.g., viruses, and theoretically, the Creutzfeldt-Jakob disease (CJD) agent. The risk that such products can transmit an infectious agent has been assessed by screening plasma donors for prior exposure to certain viruses, by testing for the presence of certain current viral infections, and by inactivating and/or reducing certain viruses. The Nabi-HB manufacturing process includes a solvent/detergent treatment step (using tri-n-Butyl phosphite and Triton X-100) that is effective in inactivating known enveloped viruses such as HBV, HCV, and HIV. Nabi-HB is filtered using a Planova® 35 nm Virus Filter that is effective in reducing the levels of some enveloped and non-enveloped viruses. These two processes are designed to increase product safety. Despite these measures, such products can still potentially transmit disease. There is also the possibility that unknown infectious agents may be present in such products. All individuals thought by a physician possibly to have been transmitted by this product should be reported by the physician to other health care provider to ADMA Biologics at 1-800-608-4244.
OVERDOSAGE

Although no data are available, clinical experience reported with other human immune globulins suggests that the only manifestations of overdose with Nabi-HB, Hepatitis B Immune Globulin (Human), would be pain and tenderness at the injection site.

DOSAGE AND ADMINISTRATION

No product is further required for intramuscular use only. The use of this product by the intravenous route is not indicated. Parenteral drug products should be inspected visually for particulate matter and foreign particles before administration.

It is important to use a separate iv. sterile syringe and needle for each individual patient, in order to prevent transmission of infectious agents from one person to another. Any vial of Nabi-HB, Hepatitis B Immune Globulin (Human) that has been entered should be used promptly. Do not reseal or save for future use. This product contains no preservative; therefore, partially used vials should be discarded immediately.

Hepatitis B Immune Globulin (Human) may be administered at the same time (but at a different site) or up to one month preceding Hepatitis B vaccination without impairing the active immune response to Hepatitis B vaccine.

* Acute Exposure to Blood Containing HBsAg

Table 2 summarizes prophylaxis for percutaneous (needlestick, bite, sharp), ocular, or mucous membrane exposure to blood according to the source of exposure and vaccination status of the exposed person, for the greatest effectiveness. Passive prophylaxis with Hepatitis B Immune Globulin (Human) should be given as soon as possible after exposure, as its value after seven days following exposure is uncertain.

An injection of 0.06 mL/kg of body weight should be administered intramuscularly as soon as possible after exposure and within 24 hours, if possible. Consult the Hepatitis B vaccine package insert for dosage information regarding the vaccine.

For persons who refuse Hepatitis B vaccine or are known non-responders to vaccine, a second dose of Hepatitis B Immune Globulin (Human) should be given one month after the first dose.

Table 2 Recommendations for Hepatitis B Prophylaxis Following Percutaneous or Permucosal Exposure

<table>
<thead>
<tr>
<th>Source</th>
<th>Exposed Persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>HBsAg-positive</td>
<td>Unvacciated</td>
</tr>
<tr>
<td>1. Hepatitis B Immune Globulin (Human)</td>
<td>1. Test exposed person for anti-HBs</td>
</tr>
<tr>
<td>2. If negative antibody, Hepatitis B Immune Globulin (Human)</td>
<td></td>
</tr>
<tr>
<td>*Notes for HBsAg-positive</td>
<td>Immediate*</td>
</tr>
<tr>
<td>1. Hepatitis B Immune Globulin (Human)</td>
<td>1. Hepatitis B Immune Globulin (Human)</td>
</tr>
<tr>
<td>**Note for HBsAg-positive</td>
<td>Immediate* plus either HB vaccine booster dose or second dose of hepatitis B Immune Globulin (Human)</td>
</tr>
<tr>
<td>*Hepatitis B Immune Globulin (Human) dose of 0.06 mL/kg IV.</td>
<td></td>
</tr>
<tr>
<td>**See manufacturers’ recommendation for appropriate dose.</td>
<td></td>
</tr>
<tr>
<td>*Less than 10 million, antibody by radioimmunoassay, negative by enzyme immunoassay.</td>
<td></td>
</tr>
<tr>
<td>**Two doses of Hepatitis B Immune Globulin (Human) is preferred if no response after at least four doses of vaccine.</td>
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</tbody>
</table>

* Prophylaxis of infants born to mothers who are Positive for HBsAg with or without HBsAb

Table 3 contains the recommended schedule of hepatitis B prophylaxis for infants born to mothers that are either known to be positive for HBsAg or have not been screened. Infants born to mothers known to be HBsAg-positive should receive 0.5 mL Hepatitis B Immune Globulin (Human) after physiologic stabilization of the infant and preferably within 12 hours of birth. The Hepatitis B vaccine series should be initiated simultaneously. It is not contraindicated, with the first dose of the vaccine given concurrently with the Hepatitis B Immune Globulin (Human), but at a different site. Subsequent doses of the vaccine should be administered in accordance with the recommendations of the manufacturer.

Women admitted for delivery, who were not screened for HBsAg during the prenatal period, should be tested. While test results are pending, the newborn infant should receive hepatitis B vaccine within 12 hours of birth (sees manufacturers’ recommendations for dose). If the mother is later found to be HBsAg-positive, the infant should receive 0.5 mL Hepatitis B Immune Globulin (Human) as soon as possible and within seven days of birth; however, the efficacy of Hepatitis B Immune Globulin (Human) administered after 48 hours of age is not known. Testing for HBsAb and anti-HBs is recommended at 12-15 months of age. If HBsAg is not detectable and anti-HBs is present, the child has been protected.

Table 3 Recommended Schedule of Hepatitis B Immunoprophylaxis to Prevent Perinatal Transmission of Hepatitis B Virus Infection

<table>
<thead>
<tr>
<th>Age of Infant</th>
<th>Administer</th>
<th>First Vaccination*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infants born to mother known to be HBsAg-positive</td>
<td>Infants born to mother not screened for HBsAg</td>
<td>Birth within 12 hours</td>
</tr>
<tr>
<td>Infants born to mother not screened for HBsAg</td>
<td></td>
<td>Birth within 12 hours</td>
</tr>
<tr>
<td>Hepatitis B Immune Globulin (Human)</td>
<td></td>
<td>If dose is found to be HBsAg-positive. administred dose Not given.</td>
</tr>
<tr>
<td>Second Vaccination*</td>
<td>1 month</td>
<td>1-2 months</td>
</tr>
<tr>
<td>Third Vaccination*</td>
<td>6 months*</td>
<td>6 months*</td>
</tr>
</tbody>
</table>

*See manufacturer’s recommendations for appropriate dose. |

**NB: Notes that are different from that used for the vaccine. |

**See AIPD recommendation. |

**Sexual Exposure to HBsAg-Positive Persons

All susceptible persons with HBsAg-positive partners should receive HBsAb and vaccine. If partner has acute hepatitis B infection should receive a single dose of Hepatitis B Immune Globulin (Human) (0.06 mL/kg) and should begin the hepatitis B vaccine series if not contraindicated, within 7-10 days of the last sexual contact or if sexual contact with the infected person will continue. Administering the vaccine with Hepatitis B Immune Globulin (Human) may improve the efficacy of post-exposure treatment. The vaccine has the added advantage of confering long-term protection. |

**Household Exposure to Persons with Acute HBV Infection

Prophylaxis of an infant less than 12 months of age with 0.5 mL Hepatitis B Immune Globulin (Human) and hepatitis B immune globulin is indicated if the mother or primary caregiver has acute hepatitis B infection. Prophylaxis of other household contacts of persons with acute hepatitis B infection is not indicated unless they had an identifiable blood exposure to the index patient, such as by sharing toothbrushes or razors. Such exposures should be treated like sexual exposures. If the index patient becomes an HBV carrier, all household contacts should receive hepatitis B vaccine.

**How Supplied

Nabi-HB, Hepatitis B Immune Globulin (Human), is supplied as:

Nabi-HB 69800-4202-1 a carton containing a 1 mL dose in a single-use vial (>312 IU) and package insert

Nabi-HB 69800-4203-1 a carton containing a 5 mL dose in a single-use vial (>1560 IU) and package insert

**STORAGE

Refrigerate between 2 to 8 °C (36 to 46 °F). Do not freeze. Do not use after expiration date. Use within 6 hours after the vial has been opened.

**REFERENCES


