Two treatment regimens are recommended:

- Two doses separated by 1-month intervals, followed by a third dose 6 months after the first dose (0-1-6).
- Three doses separated by 1-month intervals (0-1-2). This scheme is used in people at high risk of contracting the disease.

In immunocompromised patients (e.g. hemodialysis patients) higher doses are required.

Doses of 40 µg (2 mL) are recommended using the three-dose schedule separated by 1-month intervals and a 6-month booster dose (0-1-2-6).

Booster dose: The follow-up of cohorts of vaccinated patients who show seroprotection for more than 10 years after vaccination indicates that no booster dose is required, at least during that time, in people who received either of the two recommended administration schedules.

MODE OF ADMINISTRATION

The vaccine should be administered by deep intramuscular injection into the anterolateral face of the thigh of newborns and children younger than 1 year, or into the deltoid region of older children or adults. Injection into the buttock is not recommended. Intradermal, intravenous, or other forms of administration are also not recommended. Shake the container before use.

INTERACTIONS WITH OTHER MEDICINAL PRODUCTS AND OTHER FORMS OF INTERACTION

Heberbiovac HB® can be administered safely and effectively at the same time as BCG, DPT, *Haemophilus influenzae* type b, BC meningococcal, measles, oral or injectable polio (OPV or IPV) vaccines, yellow fever and vitamin A supplements. In cases of simultaneous administration with other vaccines, it should be applied at different injection sites and with independent syringes. It should not be mixed in the vial or syringe with any other vaccine, unless it has been produced as a combination

product (example: DTP-HB). It is interchangeable with other hepatitis B vaccines of a plasma or recombinant nature.

USE IN PREGNANCY AND LACTATION

Vaccination of pregnant women is not recommended, but in case of high-risk situations or other special cases, the doctor may consider administration. It is not necessary to terminate the pregnancy in case of unintentional vaccination of the pregnant woman.

EFFECTS ON THE DRIVING OF VEHICLES / MACHINERY

Although the reactogenicity of this vaccine is very low, fever and local symptoms may appear, which if they become intense in people with low threshold, could affect their ability to drive and use machines.

OVERDOSE

Not reported.



Center for Genetic Engineering and Biotechnology

Distinctive company of Cuban biotechnology which develops, produces, markets and exports innovative products, for key areas of the biomedical, veterinary, agricultural, aquaculture and industrial sectors, for one health. It has a portfolio of research and development (R&D) projects and products, protected by patents. Its more than 30 products marketed in more than 35 countries, include first and only drugs of its kind, to treat diseases that do not have other effective therapeutic solutions. Several of its medicines are inserted into national programs to offer comprehensive health care. We work with social responsibility and in harmony with the environment.

CIGB CENTRO
DE INGENIERÍA GENÉTICA
Y BIOTECNOLOGÍA

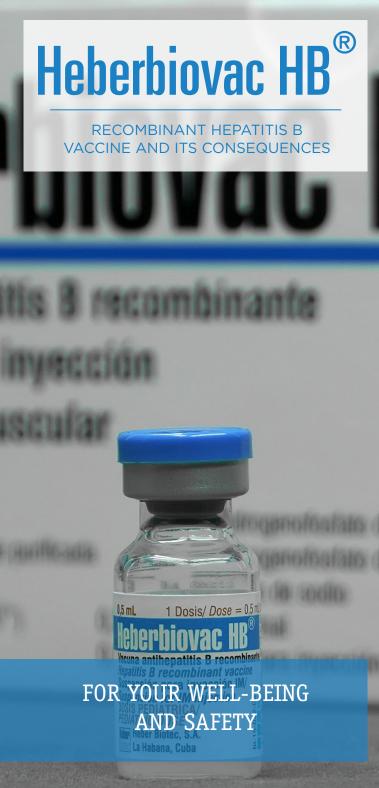
Ave. 31, e/ 158 y 190, Playa, Habana, Cuba Tel: (537) 7271 6022 www.cigb.edu.cu











Heberbiovac HB®

Recombinant vaccine against hepatitis B and its consequences

FOR YOUR WELL-BEING AND SAFETY

- VACCINE THAT PROTECTS AGAINST THE HEPATITIS B VIRUS AND ITS CONSEQUENCES.
- HEBERBIOVAC HB® IS SAFE AND IMMUNOGENIC.
- IT IS A GOOD ALLY IN THE CONTROL OF DELTA HEPATITIS.
- THE PRODUCTION OF **HEBERBIOVAC HB**® MEETS THE REQUIREMENTS OF THE WORLD HEALTH ORGANIZATION.

PHARMACEUTICAL FORM

Suspension for intramuscular injection.

STRENGTH

Each dose (1 mL) contains recombinant hepatitis B virus (AqsHB) surface DNA antiqen: 20 µq.

PRESENTATION

- Cases per 1; 10 or 25 vials of 10 μ g/0.5 mL.
- \bullet Cases per 1; 10 or 25 vials of 20 $\mu g/1$ mL.
- Cases per 1 and 10 vials of 100 μ g/5 mL.
- Cases per 1 and 10 vials of 200 μ g/10 mL.

COMPOSITION

- Each 0.5 mL dose contains recombinant HBV 10 surface DNA antigen µg; aluminum hydroxide (Al3+); sodium chloride; anhydrous dibasic sodium phosphate; monobasic sodium phosphate dihydrate or monobasic sodium phosphate monohydrate; thiomersal 0.05 mg; water for injection c.s.
- Each 1 mL dose contains recombinant HBV 20 surface DNA antigen µg; aluminum hydroxide (Al3+); sodium

chloride; anhydrous dibasic sodium phosphate; monobasic sodium phosphate dihydrate or monobasic sodium phosphate monohydrate; thiomersal 0.05 mg; water for injection c.s.

SHELF LIFE AND STORAGE CONDITIONS

Heberbiovac HB® is stable for 36 months at 2 to 8 °C. Protected from light. Do not freeze.

INDICATIONS

Heberbiovac HB® is indicated for active immunization against hepatitis B virus (HBV) infection and the prevention of its potential consequences, such as acute and chronic hepatitis, liver cirrhosis and primary hepatocarcinoma. It should be applied to all newborns and children who reach adolescence without having been vaccinated. It is particularly recommended in population groups at high risk of contracting hepatitis B virus.

CONTRAINDICATIONS

It should not be given to individuals with febrile conditions due to severe infections, or to people allergic to any component of the vaccine, or who have suffered a severe adverse reaction at a previous dose. The vaccine will not harm individuals who have been or are infected with the hepatitis B virus.

PRECAUTIONS

As with any vaccine, an epinephrine solution (1:1000) should be available, ready for immediate use in a rare and unexpected case where an anaphylactic reaction or another acute hypersensitivity reaction may occur.

SPECIAL WARNINGS AND PRECAUTIONS FOR USE

Due to the long incubation period of hepatitis B (up to 6 months or more), the disease may not be prevented if it is being incubated at the time of vaccination. This vaccine is not able to prevent hepatitis caused by agents other than hepatitis B virus (such as hepatitis A, C and E viruses), but is considered to be effective in

preventing hepatitis caused by the delta agent. Do not administer intravenously.

UNDESIRABLE EFFECTS

Several studies have shown that the **Heberbiovac HB**® vaccine is highly safe. Adverse effects that occur temporarily associated with its administration have low frequency and are mild and short-lived. In a post-marketing study that evaluated 40 533 doses administered to children under one year of age, the most frequent effects, according to the total doses administered, were pain at the site of inoculation (0.15 %), light fever less than 38 °C (0.14 %) and redness at the injection site (0.10 %).

In controlled clinical trials in children, adolescents and adults, the above symptoms have also been reported as the most frequent, and to a lesser extent limited induration, between local symptoms; and fever, headache and weakness, between systemic symptoms.

No relationship has been established between the most serious reactions and the **Heberbiovac HB**® vaccine. In other vaccines against hepatitis B anaphylaxis and other types of immediate hypersensitivity reactions are reported in a very low proportion, which take place in the first hours after the administration of the vaccine.

There is no confirmed scientific evidence that hepatitis B vaccines cause diseases of the central or peripheral nervous system such as Guillain-Barré syndrome, optic neuritis, multiple sclerosis or other demyelinating diseases, chronic fatigue syndrome, rheumatoid arthritis or autoimmune diseases. It is recommended to evaluate the advisability of preventing hepatitis B and its sequelae through vaccination against the risk, not scientifically confirmed, of inducing any of these diseases.

DOSAGE

- \bullet For newborns and children up to the age of 10 years: dosis de 10 µq.
- For children older than 10 years and adults: dosis de 20 µg.