ENGERIX B

SCHEDULING STATUS:
S2

PROPRIETARY NAME AND DOSAGE FORM:
ENGERIX-B
ENGERIX-B PAEDIATRIC
Suspension for injection
Recombinant DNA hepatitis B vaccine.

COMPOSITION:
ENGERIX-B:
1 dose (1 ml) contains:
Hepatitis B surface antigen[1, 2] 20 µg
[1]Adsorbed on aluminium hydroxide, hydrated Total: 0,50 mg Al^{3+}
[2]Produced in yeast cells (*Saccharomyces cerevisiae*) by recombinant DNA technology

ENGERIX-B PAEDIATRIC:
1 dose (0,5 ml) contains:
Hepatitis B surface antigen [1, 2] 10 µg
[1]Adsorbed on aluminium hydroxide, hydrated Total: 0,25 mg Al^{3+}
[2]Produced in yeast cells (*Saccharomyces cerevisiae*) by recombinant DNA technology

Excipients: Sodium chloride, sodium phosphate dihydrate, sodium dihydrogen phosphate, water for injections.
Residue: Polysorbate 20

ENGERIX-B is highly purified, and meets the WHO requirements for recombinant hepatitis B vaccines. No substances of human origin are used in its manufacture.

PHARMACOLOGICAL CLASSIFICATION:
A 30.2 Antigens

PHARMACOLOGICAL ACTION:
ENGERIX-B induces specific humoral antibodies against HBsAg (anti-HBs antibodies). An anti-HBs antibody titre above 10 IU/ℓ correlates with protection to hepatitis B viral infection.

Protective efficacy:
At risk groups:
In field studies, a protective efficacy between 95 % and 100 % was demonstrated in neonates, children and adults at risk.
A 95 % protective efficacy was demonstrated in neonates of HBeAg positive mothers, immunised according to the 0, 1 and 2 month or 0, 1 and 6 month schedules without the concomitant administration of HBIg at birth. However, simultaneous administration of HBIg and vaccine at birth increased the protective efficacy to 98 %.
Twenty years after primary vaccination during infancy, subjects born to mothers who were HBV carriers, received a challenge dose of ENGERIX B. One month later, at least 93 % of subjects (N = 75) mounted an anamnestic response demonstrating immune memory.

In healthy subjects:
When the 0, 1 and 6 month schedule is followed, 96 % of vaccinees have seroprotective levels of antibody 7 months after the first dose.
When the 0-, 1- and 2- month primary schedule plus a booster at month 12 is followed, 15 % and 89 % of vaccinees have seroprotective levels of antibody one month after first dose and one month

after completion of the primary schedule respectively. One month after the booster dose 95,8 % of vaccinees achieved seroprotective levels of antibody.
For use in exceptional circumstances, the 0, 7 and 21 day primary schedule plus a booster at month 12 results in 65,2 % and 76 % of vaccinees having seroprotective levels of antibody within 1 and 5 weeks respectively following completion of the primary schedule. One month after the booster dose 98,6 % of vaccines achieved seroprotective levels of antibody.

Rechallenge in healthy subjects:
Subjects (N = 284) aged 12 to 13 years vaccinated during infancy with 3 doses of ENGERIX B received a challenge dose. One month later, 98,9 % of subjects were shown to be seroprotected.

Seroconversion rate in patients with renal insufficiency including patients undergoing haemodialysis 16 years of age and above:
The primary immunisation of four double doses (2 x 20 µg) at elected date, 1 month, 2 months and 6 months after the date of first dose results in 55,4 % and 87,1 % of vaccinees having seroprotective levels of antibody respectively 3 and 7 months after the first dose.
The seroprotection rates (SP) obtained with the two different dosages and schedules licensed in subjects from 11 years up to and including 15 years of age were evaluated up to 66 months after the first dose of the primary vaccination and are presented in the Table below:

Vaccine Groups	Anti-HBs Month 2 SP (%)	Anti-HBs Month 6 SP (%)	Anti-HBs Month 7 SP (%)	Anti-HBs Month 30 SP (%)	Anti-HBs Month 42 SP (%)	Anti-HBs Month 54 SP (%)	Anti-HBs Month 66 SP (%)
ENGERIX B 10 µg (0, 1, 6 month schedule)	55,8	87,6	98,2	96,9	92,5	94,7	91,4
ENGERIX B 20 µg (0, 6 month schedule)	11,3	26,4	96,7	87,1	83,7	84,4	79,5

These data show that a primary vaccination with hepatitis B vaccine induces circulating anti-HBs antibodies that persist for at least 66 months. After having completed the primary course, at each time point there is no clinically significant difference in the seroprotection rates when comparing the 2 vaccine groups. Indeed, all subjects in both vaccine groups (including subjects with anti-HBs antibody concentrations <10 IU/ℓ) received a challenge dose 72 to 78 months after primary vaccination. One month after the challenge dose, all subjects mounted an anamnestic response to the challenge dose and were shown to be seroprotected (i.e. anti-HBs antibody concentrations ≥ 10 IU/ℓ). These data suggest that protection against hepatitis B may still be conferred through immune memory in all subjects who responded to primary vaccination but lost seroprotection level of anti-HBs antibodies.

Reduction in the incidence of hepatocellular carcinoma in children:
A significant reduction in the incidence of hepatocellular carcinoma has been observed in children aged 6-14 years following a nationwide hepatitis B vaccination in Taiwan. This resulted from a significant decline in the prevalence of hepatitis B antigen, the persistence of which is an essential factor in the development of hepatocellular carcinoma.
The recombinant DNA technology and the purification procedures used for its manufacture ensure that ENGERIX-B is of a very high purity. It is devoid of any contaminants of blood origin.

INDICATIONS:
ENGERIX-B is indicated for active immunisation against hepatitis B virus infection. The vaccine is of no value in the treatment of established hepatitis B virus infection. The vaccine will not protect against infection caused by hepatitis A and non-A, non-B hepatitis viruses. As hepatitis D (caused by the delta agent) does not occur in the absence of hepatitis B infection, it can be expected that hepatitis D will also be prevented by vaccination with ENGERIX-B. The vaccine can be administered at any age from birth onwards. It may be used to start a primary course of vaccination or as a booster dose. It may also be used to complete a primary course of vaccination started with

plasma-derived vaccines or as a booster dose in subjects who have previously received a primary course of vaccination with plasma-derived vaccines.
In areas of low prevalence of hepatitis B, vaccination is specially recommended in subjects who are at increased risk of infection. These include:

- **Health care personnel:** Oral surgeons, dentists, physicians and surgeons; nurses, dental nurses, dental hygienists; paramedical personnel in close contact with patients; staff in haemodialysis, haematology, and oncology units; laboratory personnel handling blood and other clinical specimens; pathologists; morticians and embalmers, blood bank and plasma fractionation workers; chiropodists; cleaning staff in hospitals who handle waste; emergency and first aid workers; ambulance staff.
- **Patients:** Patients receiving frequent blood transfusions or clotting factor concentrates such as patients in haemodialysis and oncology units, thalassaemics, sickle-cell anaemics; cirrhotics and haemophiliacs, etc.
- **Personnel and residents of institutions:** Persons with frequent and/or close contacts with high risk groups; prisoners and prison staff; residents and staff of institutions for the mentally handicapped.
- **Persons at increased risk due to their sexual practices:** Sexually promiscuous persons, persons who repeatedly contract sexually transmitted disease, homosexually active males, prostitutes.
- **Illicit users of addictive injectable drugs.**
- **Travellers to high endemicity areas and their close contacts.**
- **Household contacts of any of the above groups and of patients with acute or chronic hepatitis B infection.**
- **Infants born to mothers who are carriers.**
- **Others:** Police personnel, fire brigade personnel, Armed Forces personnel and anybody who through their work or personal lifestyle may be exposed to the hepatitis B virus.
- Subjects with chronic liver disease (CLD) or at risk of developing CLD (e.g. Hepatitis C virus carriers, persons who abuse alcohol).

In areas of intermediate or high prevalence, vaccination should be offered to all young children and neonates as well as to adult high risk groups because most of the population is at risk of acquiring hepatitis B.
Vaccination against hepatitis B is expected in the long term to reduce not only the overall incidence of hepatitis B but also chronic complications such as chronic active hepatitis and cirrhosis. It may also decrease the incidence of primary hepatocellular carcinoma.

CONTRA-INDICATIONS:
Hypersensitivity to any component of the vaccine or to patients having shown signs of hypersensitivity after previous ENGERIX-B administration.
ENGERIX-B should be postponed in subjects suffering from acute severe febrile infections. However, the presence of a minor infection does not contra-indicate vaccination.
HIV infection is not considered as a contra-indication for hepatitis B vaccination.

WARNINGS AND SPECIAL PRECAUTIONS:
Syncope (fainting) can occur following, or even before, any vaccination as a psychogenic response to the needle injection. It is important to have procedures in place to avoid injuries from faints.
Because of the long incubation period of hepatitis B it is possible for unrecognised infection to be present at the time of vaccination. The vaccine may not prevent hepatitis B in such cases.
ENGERIX-B should not be administered in the gluteal region or intradermally since these routes of administration may not result in an optimum immune response.
ENGERIX-B should under no circumstances be administered intravascularly.
In patients with renal insufficiency including patients undergoing haemodialysis, HIV infected patients and persons with an impaired immune system, adequate HBs antibody titres may not be obtained after the usual primary vaccination course and such patients may therefore require administration of additional doses of the vaccine.
The vaccine will not prevent infection caused by other pathogens known to infect the liver such as hepatitis A, hepatitis C and hepatitis E virus.

The potential risk of apnoea and the need for respiratory monitoring for 48-72 hours should be considered when administering the primary immunization series to very premature infants (born ≤ 28 weeks of gestation) and particularly for those with a previous history of respiratory immaturity. As the benefit of vaccination is high in this group of infants, vaccination should not be withheld or delayed.
A solution of 1 in 1 000 adrenaline should always be readily available for immediate use in case of a rare anaphylactic reaction.

INTERACTIONS:
ENGERIX-B should not be mixed with other vaccines. ENGERIX-B can be given concomitantly with BCG, DTP, DT, polio, measles-mumps-rubella, Haemophilus b and hepatitis A vaccine, but different injectable vaccines should always be administered at different injection sites.
ENGERIX B can be given concomitantly with Human Papillomavirus (HPV) vaccine.
Administration of ENGERIX B at the same time as HPV vaccine has shown no clinically relevant interference in the antibody response to the HPV antigens. Anti-HBs geometric mean antibody concentrations were lower on co-administration, but the clinical significance of this observation is not known since the seroprotection rates remain unaffected. The proportion of subjects reaching anti-HBs ≥ 10 mIU/ml was 97,9 % for concomitant vaccination and 100 % for ENGERIX B alone.
ENGERIX-B may be used to complete a primary immunisation course started either with plasma-derived or with other genetically-engineered hepatitis B vaccines, or, if it is desired to administer a booster dose, it may be administered to subjects who have previously received a primary immunisation course with plasma-derived or with other genetically-engineered hepatitis B vaccines.

PREGNANCY AND LACTATION:
Pregnancy: Adequate human data on use during pregnancy and adequate animal reproduction studies are not available. The effect of the antigen on foetal development is unknown and therefore general vaccination of pregnant women cannot be recommended. However, vaccination of a pregnant woman may be considered in order to prevent hepatitis B in high-risk situations.

Lactation: Adequate human data on use during lactation and adequate animal reproduction studies are not available.

DOSAGE AND DIRECTIONS FOR USE:
Adults and older children:
A dose of 20 µg of antigen protein in 1 ml suspension is recommended for adults and children over 16 years of age.

Neonates, infants and younger children:
Three doses of 10 µg of antigen protein in 0,5 ml suspension at 6, 10 and 14 weeks of age is recommended for neonates, infants and children up to and including 15 years of age.
However, the 20 µg vaccine can also be used in subjects from 11 years up to and including 15 years of age as a 2-dose schedule in situations when there is a low risk of hepatitis B infection during the vaccination course and when compliance with the complete vaccination course can be assured (see PHARMACOLOGICAL ACTION).
ENGERIX-B should be injected intramuscularly. In adults the injection should be given in the deltoid region but it may be preferable to inject ENGERIX-B in the anterolateral thigh in neonates and infants because of the small size of their deltoid muscle.
Exceptionally the vaccine may be administered subcutaneously in patients with thrombocytopenia or bleeding disorders.
ENGERIX-B should not be administered in the buttock or intradermally since this may result in a lower immune response.
ENGERIX-B SHOULD UNDER NO CIRCUMSTANCES BE ADMINISTERED INTRAVASCULARLY
The vaccine should be inspected visually for any foreign particulate matter and/or colouration prior to administration. Before use, ENGERIX-B should be well shaken to obtain a slightly opaque, white suspension. Discard if the content appears otherwise.

As with other vaccines, a dose of ENGERIX-B should be withdrawn under strict aseptic conditions and precautions taken to avoid contamination of the contents. Use different needles to pierce the rubber stopper and to inject the vaccine.

Primary Immunisation schedule:

- ***All subjects:***
  A 0, 1 and 6 months schedule gives optimal protection at month 7 and produces high antibody titres.
  An accelerated schedule, with immunisation at 0, 1 and 2 months, will confer protection more quickly and is expected to provide better patient compliance. With this schedule, a booster should be administered at 12 months as titres after the third dose are lower than those obtained after the 0, 1, 6 months schedule. In infants this schedule will allow for simultaneous administration of hepatitis B with other childhood vaccines.
- ***Subjects from 11 years up to and including 15 years of age:***
  The 20 µg vaccine may be administered in subjects from 11 years up to and including 15 years of age according to a 0, 6 months schedule. However, in this case, protection against hepatitis B infections may not be obtained until after the second dose (see PHARMACOLOGICAL ACTION). Therefore, this schedule should be used only when there is a low risk of hepatitis B infection during the vaccination course and when completion of the two-dose vaccination course can be assured. If both conditions cannot be assured (for instance patients undergoing haemodialysis, travellers to endemic regions and close contacts of infected subjects), the three-dose or the accelerated schedule of the 10 µg vaccine should be used.
- ***Subjects 18 years of age and above:***
  In exceptional circumstances in adults, where a more rapid induction of protection is required, e.g. persons travelling to areas of high endemicity and who commence a course of vaccination against hepatitis B within one month prior to departure, a schedule of three intramuscular injections given at 0, 7 and 21 days may be used. When this schedule is applied, a booster dose is recommended 12 months after the first dose (see PHARMACOLOGICAL ACTION for seroconversion rates).

Booster dose:

For haemodialysis and other immunocompromised patients, booster doses are recommended.
The need for a booster dose in healthy individuals who have received a full primary vaccination course has not been established. Thus a booster dose is not recommended in these circumstances.
The booster dose is as well tolerated as the primary vaccination course.

Special dosage recommendations:

Neonates born of mothers who are HBV carriers:

The immunisation with ENGERIX-B PAEDIATRIC of these neonates should start at birth, and one of the two immunisation schedules have to be followed. Either the 0, 1 and 2 months or the 0, 1 and 6 months schedule can be used; however, the former schedule provides a more rapid immune response.
When available, hepatitis B immune globulins (HBIg) should be given simultaneously with ENGERIX-B PAEDIATRIC at a separate injection site as this may increase the protective efficacy.

Dosage recommendation for known or presumed exposure to HBV:

In circumstances where exposure to hepatitis B virus has recently occurred (e.g. needlestick with contaminated needle) the first dose of ENGERIX-B may be administered simultaneously with hepatitis B immunoglobulin which however must be given at a separate injection site. The accelerated immunisation schedule should be advised.

Patients with renal insufficiency including patients undergoing haemodialysis 16 years of age and above:

The primary immunisation schedule for patients with renal insufficiency including patients undergoing haemodialysis is four double doses (2 x 20 µg) at elected date, 1 month, 2 months and 6 months from the date of the first dose. The immunisation schedule should be adapted in order to

ensure that the anti-HBs antibody titre remains equal to or higher than the accepted protective level of 10 IU/ℓ.

Patients with renal insufficiency including patients undergoing haemodialysis up to and including 15 years of age, including neonates:
Patients with renal insufficiency, including patients undergoing haemodialysis, have a reduced immune response to hepatitis B vaccines. Either, the 0, 1, 2 and 12 months or the 0, 1, 6 months schedule of ENGERIX-B 10 µg can be used. Based on adult experience, vaccination with a higher dosage of antigen may improve the immune response. Consideration should be given to serological testing following vaccination. Additional doses of vaccine may be needed to ensure a protective anti-HBs level ≥ 10 IU/ℓ.

Use and Handling:
Upon storage, a fine white deposit with a clear colourless supernatant may be observed. The vaccine should be well shaken before use to obtain a slightly opaque, white suspension.
The vaccine should be inspected visually for any foreign particulate matter and/or abnormal physical appearance prior to administration.
Any unused product or waste material should be disposed of in accordance with local requirements.

SIDE EFFECTS:
Clinical Trial Data:
Frequencies are reported as:
Very common: (≥ 1/10)
Common: (≥ /100, < 1/10)
Uncommon: (≥ 1/1 000, <1/100)
Rare: (≥ 1/10 000, < 1/1 000)
Very rare: (≤ 1/10 000) including isolated reports.
Blood and lymphatic system disorders:
Rare: lymphadenopathy
Metabolism and nutrition disorders:
Common: appetite lost
Psychiatric disorders:
Very common: irritability
Nervous system disorders:
Common: headache (very common with 10 µg formulation), drowsiness
Uncommon: dizziness
Rare: paresthesia
Gastrointestinal disorders:
Common: gastrointestinal symptoms (such as nausea, vomiting, diarrhoea, abdominal pain)
Skin and subcutaneous tissue disorders:
Rare: rash, pruritus, urticaria
Musculoskeletal and connective tissue disorders:
Uncommon: myalgia
Rare: arthralgia
General disorders and administration site conditions:
Very common: pain and redness at injection site, fatigue
Common: swelling at injection site, malaise, injection site reaction (such as induration), fever (≥ 37,5 °C)
Uncommon: influenza-like illness.
In a comparative trial in subjects from 11 years up to and including 15 years of age, the incidence of local and general solicited symptoms reported after a two-dose regimen of ENGERIX-B 20 µg was similar overall to that reported after the standard three-dose regimen of ENGERIX-B 10 µg.

Post-marketing Data:
Infections and infestations: meningitis
Blood and lymphatic system disorders: thrombocytopenia

Immune system disorders: anaphylaxis, allergic reactions including anaphylactoid reactions and mimicking serum sickness
Nervous system disorders: paralysis, convulsions, hypoaesthesia, encephalitis, encephalopathy, neuropathy, neuritis
Vascular disorders: hypotension, vasculitis
Skin and subcutaneous tissue disorders: angioneurotic oedema, lichen planus, erythema multiforme
Musculoskeletal and connective tissue disorders: arthritis, muscular weakness.

KNOWN SYMPTOMS OF OVERDOSAGE AND PARTICULARS OF TREATMENT:
Cases of overdose have been reported during post-marketing surveillance. Adverse events reported following overdosage were similar to those reported with normal vaccine administration.

IDENTIFICATION:
ENGERIX-B: A 3 ml neutral, colourless glass vial, closed by a grey rubber stopper, and silver fixed aluminium cap, covered by an orange flip-off cap. A fine, white deposit with a clear, colourless supernatant may form upon storage.
ENGERIX-B PAEDIATRIC: A 3 ml neutral, colourless glass vial closed by a grey rubber stopper, and silver fixed aluminium cap, covered by a blue flip-off cap. A fine, white deposit with a clear, colourless supernatant may form upon storage.

PRESENTATION:
ENGERIX-B: Monodose vials.
ENGERIX-B PAEDIATRIC: Monodose vials.

STORAGE INSTRUCTIONS:
The vaccine should be shipped under refrigeration and stored at +2 °C to +8 °C.
DO NOT FREEZE.
Store in the original package in order to protect from light.
Discard if vaccine has been frozen.
Keep out of reach of children.

REGISTRATION NUMBER:
ENGERIX-B: U/30.1/186
ENGERIX-B PAEDIATRIC: W/30.1/35

NAME AND BUSINESS ADDRESS OF THE HOLDER OF THE CERTIFICATE OF REGISTRATION:
GlaxoSmithKline South Africa (Pty) Ltd
39 Hawkins Ave
Epping Industria 1, 7460

DATE OF PUBLICATION OF THE PACKAGE INSERT:
19 June 2015

GDS-14

PATIENT INFORMATION LEAFLET

SCHEDULING STATUS:
S2

PROPRIETARY NAME, STRENGTH AND PHARMACEUTICAL FORM:
ENGERIX-B
ENGERIX-B PAEDIATRIC
Recombinant DNA hepatitis B vaccine
Suspension for injection

Read all of this leaflet carefully before you or your child are ~~[vaccinated]~~ given ENGERIX-B.
ENGERIX-B is not for self-medication and must be administered by a healthcare professional.

- Keep this leaflet. You may need to read it again.
- If you have any further questions, please ask your doctor or pharmacist.
- ENGERIX-B has been prescribed for you or your child personally and you should not share your medicine with other people. It may harm them, even if their symptoms are the same as yours.

WHAT ENGERIX-B CONTAINS:
ENGERIX-B contains the outer coat of the hepatitis B virus.
ENGERIX-B:
1 dose (1 ml) contains:
Hepatitis B surface antigen[1, 2] 20 µg
[1]Adsorbed on aluminium hydroxide, hydrated Total: 0,50 mg Al^{3+}
[2]Produced in yeast cells (*Saccharomyces cerevisiae*) by recombinant DNA technology

ENGERIX-B PAEDIATRIC:
1 dose (0,5 ml) contains:
Hepatitis B surface antigen [1, 2] 10 µg
[1]Adsorbed on aluminium hydroxide, hydrated Total: 0,25 mg Al^{3+}
[2]Produced in yeast cells (*Saccharomyces cerevisiae*) by recombinant DNA technology

The other ingredients are: aluminium hydroxide, sodium chloride, sodium phosphate dihydrate, sodium dihydrogen phosphate, and water for injections. Polysorbate 20 can also be present in trace amounts.

WHAT ENGERIX-B IS USED FOR:
ENGERIX-B is a vaccine used to prevent hepatitis B disease.
This vaccine can also protect against hepatitis D, as hepatitis D does not occur in the absence of hepatitis B infection.
Hepatitis B is an infectious illness of the liver caused by a virus. Some people have the hepatitis B virus in their body but cannot get rid of it. They can still infect other people and are known as carriers. The disease is spread by the virus entering the body following contact with body fluids, most often blood, from an infected person.
If the mother is a carrier of the virus she can pass the virus to her baby at birth. It is also possible to catch the virus from a carrier through, for example, unprotected sex, shared injection needles or treatment with medical equipment which has not been properly sterilised.
The main signs of the illness include headache, fever, sickness and jaundice (yellowing of the skin and eyes) but in about three out of 10 patients there are no signs of illness.
In those infected with hepatitis B one out of 10 adults and up to nine out of 10 babies will become carriers of the virus and are likely to go on to develop serious liver damage and in some cases cancer of the liver.
ENGERIX B contains a small amount of the 'outer coating' of the hepatitis B virus. This 'outer coating' is not infectious and cannot make you ill.

- When you/your child are given the vaccine it will trigger the body's immune system to prepare itself to protect against these viruses in the future.
- ENGERIX B will not protect you/your child if you have already caught the hepatitis B virus.

ENGERIX B can only help to protect you or your child against infection with hepatitis B virus.

BEFORE YOU ARE GIVEN ENGERIX-B:

You or your child should not be given ENGERIX-B if you:

- have previously had an allergic reaction to ENGERIX-B, or any ingredient contained in this vaccine. The active substance and other ingredients in ENGERIX-B are listed at the beginning of this leaflet
- are suffering from a fever or infection. In these cases, the vaccination will be postponed until you or your child are feeling better. A minor infection such as a cold should not be a problem; your doctor will advise whether you or your child can still be vaccinated with ENGERIX-B.

Tell your doctor or healthcare professional before being given ENGERIX-B if you or your child:

- are on dialysis for kidney disease
- have an illness which may affect your immune system
- have a bleeding problem or bruise(s) easily.

Fainting can occur following, or even before any needle injection, therefore tell your doctor or nurse if you/your child fainted with a previous injection.

If your child has breathing difficulties, please contact your doctor. This may be more common in the first three days following vaccination if your child is born prematurely (before or at 28 weeks of pregnancy).

Not everyone who is vaccinated will be protected from getting the infection. Also if you/your child have unknowingly been infected with hepatitis B virus before being vaccinated with ENGERIX-B, the vaccine may not be able to prevent you or your child getting the disease.

Pregnancy and Breastfeeding:

If you are pregnant or breastfeeding your baby, please consult your doctor, pharmacist or other healthcare professional for advice, before you are given ENGERIX-B.

Taking other medicines with ENGERIX-B:

Always tell your healthcare professional if you are taking any other medicine. (This includes complementary or traditional medicines.)

HOW TO RECEIVE ENGERIX-B:

ENGERIX B-PAEDIATRIC is used to vaccinate children from birth up to 15 years of age. The dose is 0,5 ml.

ENGERIX-B is used to vaccinate people from 16 years of age and over. The dose is 1,0 ml.

ENGERIX-B is usually injected into the upper arm muscle in adults and children or into the thigh muscle in babies and young children. However this vaccine may be injected under the skin for patients with blood disorders.

The vaccine must NOT be injected into the buttocks, into the skin, or into a vein.

ENGERIX-B is usually given as a total of three separate injections over 6 months as follows:

1st injection	2nd injection	3rd injection
Now	one month later	6 months after first injection

ENGERIX-B can also be given as a total of three doses over 3 months as follows: (This accelerated schedule may be given to people needing rapid protection).

1st injection	2nd injection	3rd injection
Now	one month later	2 months after first injection

A fourth dose (booster injection) is recommended 12 months after the first injection. In infants this schedule will allow for simultaneous administration of hepatitis B with other childhood vaccines. However these should be given at separate injection sites.

In children aged 11 to 15 years, ENGERIX-B may be given as a total of 2 doses as follows:

1st injection	2nd injection
Now	6 months after first injection

However, in this case, protection against hepatitis B may not be obtained until after the second dose. Therefore this schedule should be used only when there is a low risk of hepatitis B infection during the vaccination course and when it is certain that the two doses will be taken. If not, then the three dose schedule or the accelerated schedule of ENGERIX-B PAEDIATRIC should be used.
In adults only, ENGERIX-B can also be given as a total of three doses over 1 month as follows:(This schedule may be given only to adults needing a rapid protection (e.g. if travelling to a high risk area).

1st injection	2nd injection	3rd injection
Now	7 days later	21 days after first injection

A fourth dose is recommended 12 months after the first dose.
Depending on individual circumstances and particularly if you or your child suffers from kidney disease, your doctor may decide to do a blood test or give extra doses of vaccine to ensure protection.
For maximum protection from getting infected by Hepatitis B virus, make sure you or your child completes the full course of injections.

If you miss a dose of ENGERIX-B:
If you miss an injection arrange another appointment as soon as you can.
Your doctor will advise on the possible need for extra doses, including future booster doses.

POSSIBLE SIDE EFFECTS:
ENGERIX-B can have side effects.
Not all side effects reported for ENGERIX-B are included in this leaflet. Should your general health worsen or if you experience any untoward effects while using ENGERIX-B, please consult your doctor, pharmacist or other healthcare professional for advice.
Some people can have a serious allergic reaction to ENGERIX-B. Tell your doctor or nurse immediately if you/your child have any of the following side effects:
- itchy rash of the hands and feet
- swelling of the eyes and face
- difficulty in breathing or swallowing.

These reactions will usually occur before leaving the doctor's surgery. However, if any of the above happens, tell your doctor immediately or go to the nearest casualty department at your nearest hospital.

➔ These are all very serious side effects. If you or your child have them, you/your child may have had a very serious allergic reaction to ENGERIX-B.

Frequent side effects:
- Irritability, pain and redness at the injection site, tiredness
- loss of appetite; headache, drowsiness; nausea, vomiting, diarrhoea, abdominal pain; hard lump and swelling at the injection site; fever, generally feeling unwell.

Less frequent side effects:
- dizziness; aching muscles; flu-like symptoms, such as high temperature, sore throat, runny nose, cough and chills.

Other side effects which may occur:
- swollen glands in the neck, armpit or groin; abnormal sensation such as of burning, prickling, tickling or tingling; rash, itching, hives; joint pain
- Inflammation of the membrane around the brain (meningitis). The symptoms are fever, nausea, vomiting, headache, stiff neck and extreme sensitivity to bright light
- bleeding or bruising more easily than normal
- paralysis, convulsions, fits or seizures, loss of skin sensitivity to pain or touch; swelling or infection of the brain, numbness or weakness of the arms and legs, inflammation of nerves
- low blood pressure, narrowing or blockage of blood vessels

- purple or reddish-purple bumps on the skin, serious rashes
- joint pain and swelling, muscle weakness.

If any of these side effects get serious, please tell your doctor or pharmacist. If you notice any side effects not mentioned in this leaflet, please inform your doctor or pharmacist.

STORING AND DISPOSING OF ENGERIX-B:
Store all medicines out of reach of children.
Store at +2 °C to +8 °C (in a refrigerator).
Do not freeze.
Store in the original package in order to protect from light.
Discard if vaccine has been frozen.
Do not use after the expiry date stated on the label and packaging. The expiry date refers to the last day of that month.
Return all unused medicne to your pharmacist. Do not dispose of unused medicine in drains or sewerage systems (e.g. toilets).

PRESENTATION OF ENGERIX-B:
ENGERIX-B: Available as a single dose in a 3 ml colourless glass vial, closed by a grey rubber stopper, and silver fixed aluminium cap, covered by an orange flip-off cap. Presented in a pack of one vial.

ENGERIX-B PAEDIATRIC: Available as a single dose in a 3 ml colourless glass vial closed by a grey rubber stopper, and silver fixed aluminium cap, covered by a blue flip-off cap. Presented in a pack of one vial.

IDENTIFICATION OF ENGERIX-B:
A white milky liquid after shaking. A fine white deposit with a clear, colourless liquid may form upon storage.

REGISTRATION NUMBER:
ENGERIX-B: U/30.1/186
ENGERIX-B PAEDIATRIC: W/30.1/35

NAME AND ADDRESS OF REGISTRATION HOLDER:
GlaxoSmithKline South Africa (Pty) Ltd
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