PRODUCT MONOGRAPH
INCLUDING PATIENT MEDICATION INFORMATION

AVAXIM® - Pediatric

Hepatitis A Vaccine Inactivated

Suspension for injection (80U/0.5mL)
(For active immunization against Hepatitis A infection)

ATC Code: J07BC02

Manufactured by:
Sanofi Pasteur SA
Lyon, France

Distributed by:
Sanofi Pasteur Limited
Toronto, Ontario, Canada

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AVAXIM® - Pediatric
Hepatitis A Vaccine Inactivated

PART I: HEALTH PROFESSIONAL INFORMATION

SUMMARY PRODUCT INFORMATION

Route of Administration
Intramuscular injection.

Dosage Form/Strength
Suspension for injection.
Each 0.5 mL dose is formulated to contain:

Active Ingredients
Hepatitis A virus Inactivated (GBM strain) – 80 antigen units (U)

Clinically Relevant Non-medicinal Ingredients
Excipients: 2-phenoxyethanol, formaldehyde, aluminum hydroxide (expressed as aluminum), Medium 199 Hanks, polysorbate 80.
Manufacturing process residuals: neomycin.
For a complete listing see DOSAGE FORMS, COMPOSITION AND PACKAGING.

DESCRIPTION
AVAXIM® - Pediatric [Hepatitis A vaccine Inactivated] is a sterile, whitish, cloudy suspension. The active ingredient is a purified and formaldehyde-inactivated hepatitis A virus (HAV) obtained from the GBM strain, cultured on MRC-5 human diploid cells. HAV is adsorbed onto aluminum.

INDICATIONS AND CLINICAL USE

AVAXIM® - Pediatric is indicated for active immunization against infection caused by HAV in persons 12 months to 15 years of age inclusive. AVAXIM® - Pediatric can be used for primary immunization or as a booster following primary immunization with AVAXIM® - Pediatric or other similar hepatitis A vaccines. (1) (2) (3)

NACI (National Advisory Committee on Immunization) encourages all those who wish to decrease their risk of acquiring HAV to be vaccinated. (4)
Outbreak Control (4)
AVAXIM® - Pediatric should be used as part of a coordinated public health response to potential hepatitis A outbreaks in the community, in institutions (correctional facilities, institutions for the developmentally challenged, etc.) and associated with infected food handlers.

Pediatrics
AVAXIM® - Pediatric is not indicated for immunization of persons under the age of 12 months or persons 16 years of age and older.

CONTRAINDICATIONS

Hypersensitivity
Known systemic hypersensitivity reaction to any component of AVAXIM® - Pediatric or a life-threatening reaction after previous administration of the vaccine or a vaccine containing one or more of the same components are contraindications to vaccination. (4) (See SUMMARY PRODUCT INFORMATION.)

WARNINGS AND PRECAUTIONS

General
Before administration of AVAXIM® - Pediatric, health-care providers should inform the recipient or the parent or guardian of the recipient of the benefits and risks of immunization, inquire about the recent health status of the recipient, review the recipient’s history concerning possible hypersensitivity to the vaccine or similar vaccine, previous immunization history, the presence of any contraindications to immunization and comply with any local requirements with respect to information to be provided to the recipient, parent or guardian before immunization.

Because of the incubation period of hepatitis A disease, infection may be present but not clinically apparent at the time of vaccination. It is not known whether AVAXIM® - Pediatric will prevent hepatitis A in this case.

Seropositivity against HAV is not a contraindication. (5)

Administration Route-Related Precautions:  Do not administer AVAXIM® - Pediatric by intravascular injection; ensure that the needle does not penetrate a blood vessel. Do not administer intradermally.

AVAXIM® - Pediatric should not be administered into the buttocks.
Febrile or Acute Disease: Vaccination should be postponed in cases of an acute or febrile disease. (6) However, a disease with a low-grade fever should not usually be a reason to postpone vaccination.

Protection

AVAXIM® - Pediatric does not provide protection against infection caused by hepatitis B virus, hepatitis C virus, hepatitis D virus, hepatitis E virus, or by other liver pathogens, other than hepatitis A virus.

As with any vaccine, AVAXIM® - Pediatric may not protect 100% of vaccinated individuals.

Hematologic

Because any intramuscular injection can cause an injection site hematoma in persons with any bleeding disorders, such as hemophilia or thrombocytopenia, or in persons on anticoagulant therapy, intramuscular injections with AVAXIM® - Pediatric should not be administered to such persons unless the potential benefits outweigh the risk of administration. If the decision is made to administer any product by intramuscular injection to such persons, it should be given with caution, with steps taken to avoid the risk of hematoma formation following injection.

In exceptional circumstances (e.g., in patients with thrombocytopenia or in patients at risk of hemorrhage), the vaccine may be administered by the subcutaneous route, however, this may be associated with a higher risk of local reaction including injection site nodule. (4) (7) (8)

Immune

The possibility of allergic reactions in persons sensitive to components of the vaccine should be evaluated. Hypersensitivity reactions may occur following the use of AVAXIM® - Pediatric even in persons with no prior history of hypersensitivity to the product components. (See DOSAGE FORMS, COMPOSITION AND PACKAGING.)

As with all other products, epinephrine hydrochloride solution (1:1,000) and other appropriate agents should be available for immediate use in case an anaphylactic or acute hypersensitivity reaction occurs. (4) Health-care providers should be familiar with current recommendations for the initial management of anaphylaxis in non-hospital settings, including proper airway management. (4) For instructions on recognition and treatment of anaphylactic reactions, see the current edition of the Canadian Immunization Guide or visit the Health Canada website.

Immunocompromised persons (whether from disease or treatment) may not obtain the expected immune response. If possible, consideration should be given to delaying vaccination until after the completion of any immunosuppressive treatment. (4) Nevertheless, vaccination of persons with chronic immunodeficiency such as HIV infection is recommended even if the antibody response might be limited. (4) (6)
Pregnant Women

Animal reproduction studies have not been conducted with AVAXIM® - Pediatric. Data on the use of this vaccine in pregnant women are limited. Therefore, the administration of the vaccine during pregnancy is not recommended. AVAXIM® - Pediatric should be given to pregnant women only if clearly needed, and following an assessment of its risks and benefits.

Nursing Women

It is not known whether this vaccine is excreted in human milk. Caution must be exercised when AVAXIM® - Pediatric is administered to a nursing mother.

ADVERSE REACTIONS

Clinical Trial Adverse Reactions

Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a vaccine cannot be directly compared to rates in the clinical trials of another vaccine and may not reflect rates observed in practice. The adverse reaction information from clinical trials does however, provide a basis for identifying the adverse events that appear to be related to vaccine use and for approximating rates of those events.

In four clinical trials conducted in which over 3,500 children aged 12 months to 15 years (around 7,000 administered doses) received AVAXIM® - Pediatric, adverse events were usually mild and confined to the first few days after vaccination with spontaneous recovery. (7) (9) (10) Younger children (12 months – 4 years) experienced fewer reactions than older children (9 – 15 years). Adverse reactions were reported less frequently after the booster dose than after the first dose.
Table 1: Adverse Reactions Within 7 Days Following Avaxim® - Pediatric (7)

<table>
<thead>
<tr>
<th>Reaction</th>
<th>First Dose (%) N = 2,363</th>
<th>Booster Dose (%) N = 2,294</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Local Reactions</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pain</td>
<td>12.0</td>
<td>9.0</td>
</tr>
<tr>
<td>Redness</td>
<td>8.7</td>
<td>7.6</td>
</tr>
<tr>
<td>Hematoma</td>
<td>2.5</td>
<td>1.4</td>
</tr>
<tr>
<td>Induration/edema</td>
<td>1.4</td>
<td>0.8</td>
</tr>
<tr>
<td>Pruritus</td>
<td>1.5</td>
<td>0.6</td>
</tr>
<tr>
<td><strong>Systemic Reactions</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fever (&gt;37.5°C axillary)</td>
<td>11.3</td>
<td>6.5</td>
</tr>
<tr>
<td>Asthenia/drowsiness</td>
<td>2.5</td>
<td>1.1</td>
</tr>
<tr>
<td>Headache*</td>
<td>1.9</td>
<td>1.0</td>
</tr>
<tr>
<td>Myalgia/arthralgia*</td>
<td>5.4</td>
<td>2.7</td>
</tr>
<tr>
<td>GI disorders</td>
<td>3.9</td>
<td>2.4</td>
</tr>
<tr>
<td>Behavioural changes</td>
<td>4.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Skin disorders</td>
<td>3.4</td>
<td>2.2</td>
</tr>
</tbody>
</table>

* recorded only for age >4 years

In subjects seropositive to HAV, AVAXIM® - Pediatric, was as well tolerated as in seronegative subjects.

**Post-Market Adverse Reactions**

From the adverse events spontaneously reported during the post-marketing use, safety profile of AVAXIM® - Pediatric remains comparable to what was observed during clinical trials with the vaccine.

Physicians, nurses and pharmacists should report any adverse occurrences temporally related to the administration of the product in accordance with local requirements and to the Global Pharmacovigilance & Epidemiology Department, Sanofi Pasteur Limited, 1755 Steeles Avenue West, Toronto, ON, M2R 3T4 Canada. 1-888-621-1146 (phone) or 416-667-2435 (fax).
DRUG INTERACTIONS

Vaccine-Drug Interactions

Immunosuppressive treatments may interfere with the development of the expected immune response. (See WARNINGS AND PRECAUTIONS.) No interaction with other medication is currently known.

Concomitant Vaccine Administration

AVAXIM® - Pediatric may be administered simultaneously with immune globulin at separate sites with separate syringes. Seroconversion rates are not modified, but antibody titres could be lower than after vaccination with the vaccine alone. (11)

As the vaccine is inactivated, concomitant administration of other vaccine(s) given at other injection sites is unlikely to interfere with immune responses.

AVAXIM® - Pediatric may be administered concomitantly with trivalent live attenuated vaccine for combined immunization against measles, mumps and rubella (MMR). (12) (13)

Vaccines administered simultaneously must be given using separate syringes at separate sites.

AVAXIM® - Pediatric should not be mixed in the same syringe with other parenterals.

DOSAGE AND ADMINISTRATION

Recommended Dose

AVAXIM® - Pediatric should be administered as a single dose injection (0.5 mL) by the intramuscular route.

Primary immunization consists of one dose of vaccine, followed by a booster dose 6 to 36 months later in order to confer long term protection. (14)

Administration

Inspect for extraneous particulate matter and/or discolouration before use. (See DESCRIPTION.) If these conditions exist, the product should not be administered.

Shake the pre-filled syringe well until a uniform, cloudy suspension results.

AVAXIM® - Pediatric may be packaged in one of three presentations: a pre-filled syringe with a choice of two needles, a pre-filled syringe with attached needle, or a 10 dose vial.

If two needles are present, select a needle of appropriate length to ensure that the vaccine will be delivered intramuscularly. Remove the tip cap from the syringe, take the chosen needle from the blister pack and fix to the tip of the pre-filled syringe.
If a syringe with attached needle is present, the vaccine is ready to administer.

Use a separate sterile needle and syringe, or a sterile disposable unit for each individual patient to prevent disease transmission. When administering a dose from a stoppered vial, do not remove either the stopper or the metal seal holding it in place. Aseptic technique must be used for withdrawal of each dose. Needles should not be recapped and should be disposed of according to biohazard waste guidelines.

Administer the vaccine intramuscularly (I.M.). The preferred site of injection is the deltoid muscle.

Give the patient a permanent personal immunization record. In addition, it is essential that the physician or nurse record the immunization history in the permanent medical record of each patient. This permanent office record should contain the name of the vaccine, date given, dose, manufacturer and lot number.

**OVERDOSAGE**

For management of a suspected drug overdose, contact your regional Poison Control Centre.

**ACTION AND CLINICAL PHARMACOLOGY**

**Mechanism of Action**

AVAXIM® - Pediatric confers immunity against HAV infection by inducing the production of specific anti-HAV antibodies.

**Pharmacodynamics**

In clinical studies involving over 1,000 adult volunteers, specific humoral antibodies against hepatitis A were elicited after the first injection and more than 95% of immunocompetent subjects were protected (titres above 20 mIU/mL) 14 days after vaccination. One month after the first injection, 100% of the subjects were protected. (7)

In clinical studies for immunogenicity in 656 children aged 12 months to 15 years (inclusive), seroconversion rates 2 weeks following vaccination ranged from 95.4% to 99.1% depending on the study. One hundred percent of those tested at 24 and 28 weeks following vaccination had protective antibody levels. (7) (9) (10)

**Duration of Effect**

Protective titers of Anti-HAV antibodies following the 1st dose of AVAXIM® - Pediatric persist for up to 36 months and are reinforced after a booster dose. (14) (15)
Data relative to long-term persistence of anti-HAV antibodies following booster vaccination with AVAXIM® - Pediatric are not currently available. Nevertheless, published data with AVAXIM® - Pediatric suggest that anti-HAV antibodies persist beyond 10 years after the booster vaccination in healthy individuals. (16) (17) (18) (19) (20) According to NACI, kinetic models of antibody decline following hepatitis A vaccination suggest that protective levels of anti-HAV antibody will likely persist for at least 20 years. (4)

**STORAGE AND STABILITY**

Store at 2°C to 8°C (35°C to 46°F). **Do not freeze.** Discard product if exposed to freezing. Do not use vaccine after expiration date.

**DOSAGE FORMS, COMPOSITION AND PACKAGING**

**Dosage Forms**

AVAXIM® - Pediatric is supplied as a sterile, whitish, cloudy suspension.

**Composition**

Each dose (0.5 mL) is formulated to contain:

**Active Ingredient**

Inactivated Hepatitis A Virus, GBM strain 80 antigen units†

**Other Ingredients**

*Excipients*

2-phenoxyethanol 2.5 µL

Formaldehyde 12.5 µg

Aluminum hydroxide (expressed as aluminum) 0.15 mg

Medium 199 Hanks‡ in water for injection up to 0.5 mL

Polysorbate 80‡ ≤750 µg

*Manufacturing Process Residuals*

Neomycin is present in trace amounts.

† In the absence of an international standardized reference, the antigen content is expressed using an in-house reference.

‡ Medium 199 Hanks (without phenol red) is a mixture of amino acids, mineral salts, vitamins and other components supplemented with polysorbate 80.
Packaging

The plunger stoppers and needle shield for the syringes and the vial stoppers do not contain latex (natural rubber).

AVAXIM® - Pediatric is supplied in packages of:
1 x 0.5 mL (single dose) syringe with attached needle.
1 x 0.5 mL (single dose) syringe with choice of two needles (1 x 25G x 16 mm and 1 x 25G x 25 mm).
1 x 10 dose vial.

Vaccine Information Service: 1-888-621-1146 or 416-667-2779. Business Hours: 7:30 a.m. to 7:30 p.m. Eastern Time, Monday to Friday.

Full product monograph available on request or visit us at www.sanofipasteur.ca

Product information as of June 2015.

Manufactured by:
Sanofi Pasteur SA
Lyon, France

Distributed by:
Sanofi Pasteur Limited
Toronto, Ontario, Canada

R4-0615 Canada
PART II: SCIENTIFIC INFORMATION

PHARMACEUTICAL INFORMATION

Drug Substance

Proper name: Hepatitis A Vaccine Inactivated

Product Characteristics

AVAXIM® - Pediatric [Hepatitis A vaccine Inactivated] is a sterile, cloudy, whitish suspension of inactivated hepatitis A.

The active ingredient is a purified and formaldehyde-inactivated hepatitis A virus (HAV) obtained from the GBM strain cultured on MRC-5 human diploid cells. HAV is adsorbed onto aluminum. Each dose (0.5 mL) of inactivated hepatitis A vaccine contains 80 antigen units (in the absence of an international standardized reference, the antigen content is expressed using an in-house reference).

CLINICAL TRIALS

Table 2: Summary of Demographics and Study Design of the Trials with AVAXIM® - Pediatric (7) (13) (15)

<table>
<thead>
<tr>
<th>Study #</th>
<th>Trial Design</th>
<th>Dosage, Route of Administration and Duration</th>
<th>Study Subjects</th>
<th>Age Range</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAF11395</td>
<td>Unicentre, open, non-controlled study with three age groups and direct individual benefit</td>
<td>0.5 mL I.M. 1 Dose + Booster</td>
<td>N = 189</td>
<td>18 months – 15 years 18 months – 4 years (N = 42) 4 – 9 years (N = 59) 9 – 15 years (N = 88)</td>
<td>Males N = 103 Females N = 86</td>
</tr>
<tr>
<td>Study #</td>
<td>Trial Design</td>
<td>Dosage, Route of Administration and Duration</td>
<td>Study Subjects</td>
<td>Age Range</td>
<td>Gender</td>
</tr>
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<td>-------------------------------------------------------------------------------</td>
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<tr>
<td>HAF17396</td>
<td>Multicentre, open, non-controlled, descriptive with direct individual benefit.</td>
<td>0.5 mL I.M. 1 Dose + Booster</td>
<td>N = 1244</td>
<td>18 months – 15 years</td>
<td>Males N = 652</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>18 months – 4 years (N = 353)</td>
<td>Females N = 592</td>
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<td>4 – 9 years (N = 463)</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>9 – 15 years (N = 428)</td>
<td></td>
</tr>
<tr>
<td>HAF19396</td>
<td>Multicentre, open, non-controlled, with direct individual benefit.</td>
<td>0.5 mL I.M. 1 Dose + Booster</td>
<td>N = 597</td>
<td>18 months – 15 years</td>
<td>Males N = 301</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>18 months – 4 years (N = 200)</td>
<td>Females N = 296</td>
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<tr>
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<td>4 – 9 years (N = 197)</td>
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<td></td>
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<td></td>
<td>9 – 15 years (N = 200)</td>
<td></td>
</tr>
<tr>
<td>HAF20396</td>
<td>Unicentre, open, non-controlled, with direct individual benefit.</td>
<td>0.5 mL I.M. 1 Dose + Booster</td>
<td>N = 537</td>
<td>12 months – 15 years</td>
<td>Males N = 292</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12 months – 4 years (N = 257)</td>
<td>Females N = 245</td>
</tr>
<tr>
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<td></td>
<td></td>
<td>4 – 9 years (N = 163)</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9 – 15 years (N = 117)</td>
<td></td>
</tr>
<tr>
<td>HAF82</td>
<td>Unicentre descriptive prospective cohort study (epidemiological trial).</td>
<td>Not applicable</td>
<td>N = 546</td>
<td>24 – 39 months</td>
<td>Males N = 271</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Females N = 275</td>
</tr>
<tr>
<td>HAF65</td>
<td>Multi-center, randomized, blind observer, controlled study.</td>
<td>0.5 mL I.M. 1 Dose + Booster (concomitant or separately 1 dose MMR)</td>
<td>N = 470</td>
<td>12 – 13 months</td>
<td>Males N = 261</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Females N = 209</td>
</tr>
</tbody>
</table>
Immunogenicity

Clinical studies indicate that the vaccine confers immunity against HAV by inducing antibody titres greater than those obtained after passive immunization with immunoglobulin. Immunity appears shortly after the first injection. (7) (21)

In clinical studies for immunogenicity in 656 children aged 12 months to 15 years (inclusive), seroconversion rates 2 weeks following vaccination ranged from 95.4% to 99.1% depending on the study. One hundred percent of those tested at 24 and 28 weeks following vaccination had protective antibody levels. (7) (9) (10) A second dose given 6 months following the initial dose resulted in a marked booster response (increase in antibody titres of 22.6-fold and 35.5-fold).

In clinical studies involving over 1,000 adult volunteers, specific humoral antibodies against hepatitis A were elicited after the first injection and more than 90% of immunocompetent subjects were protected (titres above 20 mIU/mL) 14 days after vaccination. One month after the first injection, 100% of the subjects were protected. Immunity persisted for at least 36 months and was reinforced after a booster dose. (14) (15)

In comparative trials with another hepatitis A vaccine, AVAXIM® - Pediatric demonstrated a superior immunogenicity profile. (5) (22) Although seroconversion rates at 14 days were similar to that of the other hepatitis A vaccine, GMTs were significantly higher following AVAXIM® - Pediatric. (23) (24) This prompt immune response may be an important consideration when travellers must be vaccinated immediately prior to departure or when post-exposure prophylaxis cannot be done immediately after exposure. (1)

A descriptive prospective antibody persistence mono-center study was conducted in a cohort of 600 Argentinian children who received 1 or 2 doses of AVAXIM® - Pediatric. This study showed that the seroprotection rate remained high 3 years after hepatitis A vaccination course in children 11 to 23 months old; 99.7% of the children who received a single dose of AVAXIM® - Pediatric and 100% of the children who received two doses of AVAXIM® - Pediatric had an anti-HAV IgG titer ≥10 mIU/mL. Two and three years after hepatitis A vaccination, no statistically significant relationship was found between suspected clinical hepatitis A cases in household members and positive variation in anti-HAV IgG titers of included children, regardless of number of doses (1 or 2) used for vaccination course. Anti-HAV IgG titers were high 1, 2 and 3 years after hepatitis A vaccination course, including in children who received only a single dose of AVAXIM® - Pediatric, but tended to decrease 3 years after vaccination. (15)

A randomized, blind-observer, controlled trial was conducted in Turkey to compare the immunogenicity of AVAXIM®-Pediatric administered alone or concomitantly but at different sites with Sanofi Pasteur's MMR vaccine, in HAV seronegative children, 12 to 13 months of age. A total of 470 subjects were randomly assigned to one of three groups and received a dose of either AVAXIM® - Pediatric or MMR vaccine alone, or both vaccines concomitantly (at separate sites) on D0. All groups received one booster dose of AVAXIM® - Pediatric vaccine on Day 213.
The primary parameter was the difference in seroprotection rates (anti-HAV antibody titer ≥20 mIU/mL on D28) between the Group C and Group A. Non-inferiority was defined as the lower limit of the 95% CI of this difference being ≥-5%. (13) As shown in Table 3, when AVAXIM® - Pediatric was administered alone or concomitantly with Sanofi Pasteur’s MMR vaccine, high anti-HAV antibody titers were induced and seroprotection was achieved in 92.7% to 93.6% of subjects. (13)

### Table 3: Anti-HAV Seroprotection Rates on Day 28

<table>
<thead>
<tr>
<th></th>
<th>Group A N=172</th>
<th>Group C N=164</th>
<th>Group C - Group A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-HAV ≥20 mIU/mL</td>
<td>161 93.60</td>
<td>152 92.68</td>
<td>-0.92 [-6.68;4.69]</td>
</tr>
</tbody>
</table>

Previous concomitant AVAXIM® - Pediatric and MMR did not impact the anamnestic response to a booster dose of AVAXIM® - Pediatric. (13)

### Safety

In four clinical trials in which over 3,500 children received AVAXIM® - Pediatric, adverse events were usually mild and confined to the first few days after vaccination with spontaneous recovery. (7) (9) (10) Younger children experienced fewer reactions than older children. Reactions were reported less frequently after the booster dose than after the first dose.

Mild transient elevation of serum transaminases has been reported on rare occasions. (7) (10) Adverse reactions were less frequently reported after the booster dose than after the first dose.

In subjects seropositive to HAV, AVAXIM® - Pediatric was as well tolerated as in seronegative subjects.

The safety results of clinical trial HAF65 studying concomitant administration of AVAXIM® - Pediatric and Sanofi Pasteur’s MMR vaccine were consistent with the safety profile of each individual vaccine and showed a tendency towards a greater number of subjects experiencing at least one systemic reaction when AVAXIM® - Pediatric and Sanofi Pasteur’s MMR vaccine were administered concomitantly. (13)
ADDITIONAL RELEVANT INFORMATION

Hepatitis A: HAV is a single serotype, ribonucleic acid (RNA) virus of the *Picornaviridae* family. (25) The virus can survive in a dried state for at least a week in ambient conditions and can survive in water for as long as 10 months. (26) HAV is transmitted via the fecal-oral route, which can occur from direct person-to-person contact, from contamination of the environment or objects, or through contaminated food or water. Transmission through infected blood or blood products has also been reported. Symptoms appear after an incubation period of 15 to 50 days (average 28 days). Cases are typically infectious two weeks before the onset of symptoms and remain infectious until a week after the onset of jaundice. The virus may remain infectious in the environment for several weeks. Viral shedding can be greatly prolonged in immunocompromised individuals. (25)

Older children and adults typically have abrupt onset of anorexia, nausea, fatigue, fever and jaundice. (25) In children less than 6 years of age, illness may be asymptomatic or mild; jaundice is uncommon. (26) The severity of HAV can range from a mild illness lasting 1 to 2 weeks to a severely disabling disease lasting several months. Approximately 25% of adult cases are hospitalized. The overall case fatality rate is 0.1% to 0.3%, but can reach 1.8% in adults over 50 years of age. Individuals with chronic liver disease have an increased risk of progressing to fulminant hepatic failure resulting in death. Chronic hepatitis and carrier states are not associated with HAV; however, relapsing hepatitis lasting up to a year occurs in 15% of cases. Lifelong immunity to HAV follows infection. (25) However, disease severity is high in those with pre-existing chronic liver disease and is age related: case fatality rates among adults >40 years of age are at least 2%, increasing to >10% among hospitalized individuals >60 years of age. (26)

While 1.5 million cases are reported worldwide every year, the true incidence is likely much greater. (26) Since the introduction of HAV in Canada in 1996, the incidence of HAV has declined. The number of cases of HAV reported annually has declined from 2,978 (1991) to 298 (2008), (10.6 and 0.9 per 100,000 population, respectively). (25) Hepatitis A is one of the most common vaccine-preventable diseases in travellers to developing world countries, and has the highest mortality and morbidity rates of any vaccine-preventable infection in travellers. (26)

Persons at increased risk of HAV infection in Canada include the following: Travellers to HAV endemic countries. Studies estimate that 44% to 55% of reported HAV cases are linked to travel. The risk of hepatitis A exists even for travelers going for short periods of time, staying in luxury hotels where meals are provided and who follow good hygiene and water and food precautions. (27) Volunteer humanitarian workers, and Canadian-born children of new Canadians returning to their country of origin to visit friends and relatives, may be at increased risk; men who have sex with men (MSM); household or close contacts of an acute HAV case; persons residing in certain institutions, such as correctional facilities and those for developmentally challenged individuals and illicit drug users. Increased risk is associated with low hygiene standards, contaminated drugs, and sharing of materials for oral or nasal use of drugs; household or close contacts of children adopted from HAV endemic countries and residents in some Aboriginal communities. Higher risk may be attributed to inadequate water supplies and high housing density; and hemophiliacs who use plasma-derived blood products. (25) The National Advisory Committee on Immunization (NACI) encourages all those who wish to decrease their risk of acquiring HAV to be vaccinated. NACI recommends pre-exposure prophylaxis for individuals at increased risk of infection or
increased risk of severe hepatitis A, including: travellers to or immigrants from HAV endemic areas; household or close contacts of children adopted from HAV endemic countries; populations of communities at risk of HAV outbreaks or in which HAV is highly endemic (e.g. some aboriginal communities); persons with life-style risks for infection, including those who use illicit drugs (injectable and non-injectable) and MSM; persons who have chronic liver disease from any cause, including persons infected with hepatitis C (while these persons may not be at increased risk of hepatitis A infection, they may be at risk of more severe disease if infection occurs); people with hemophilia A or B receiving plasma-derived replacement clotting factors; military personnel and humanitarian relief workers likely to be posted to areas with high rates of HAV; zoo-keepers, veterinarians and researchers who handle non-human primates; workers involved in research on HAV virus or production of HAV vaccine who may be exposed to HAV virus and any person who wishes to decrease his or her risk of HAV. (25)

Post-exposure prophylaxis should be offered to household and close contacts of proven or suspected cases of HAV. It should be given when HAV occurs in group child care centres and kindergartens and should be offered to co-workers and clients of infected food handlers. Post-exposure prophylaxis is not necessary for other contacts, such as school, workplace or health care workers caring for HAV cases unless an outbreak is suspected. (25)

Vaccine Information Service: 1-888-621-1146 or 416-667-2779. Business Hours: 7:30 a.m. to 7:30 p.m. Eastern Time, Monday to Friday.

Full product monograph available on request or visit us at www.sanofipasteur.ca

Product information as of June 2015.

Manufactured by:
Sanofi Pasteur SA
Lyon, France

Distributed by:
Sanofi Pasteur Limited
Toronto, Ontario, Canada

R4-0615 Canada
REFERENCES

7. Data on file at Sanofi Pasteur Limited.
26 Committee to Advise on Tropical Medicine and Travel (CATMAT). Statement on hepatitis vaccines for travellers. CCDR 2008:34(ACS-2).
PATIENT MEDICATION INFORMATION

**AVAXIM® - Pediatric**

**Hepatitis A Vaccine Inactivated**

Read this carefully before you start taking AVAXIM® - Pediatric. This leaflet is a summary and will not tell you everything about this product. Talk to your healthcare professional about your medical condition and treatment and ask if there is any new information about taking AVAXIM® - Pediatric.

**What is AVAXIM® - Pediatric used for?**

AVAXIM® - Pediatric [Hepatitis A vaccine Inactivated] is a vaccine that is used to prevent hepatitis A infection. This vaccine may be given to persons 12 months to 15 years of age inclusive. Hepatitis A is a contagious liver disease that is spread from person to person through drinking water or eating food with the hepatitis A virus (HAV) in it. It is also spread by close personal contact. It is more common in areas of the world with poor sanitation. Hepatitis A can cause a mild illness, but about 1 person in 5 has to be hospitalized and sometimes people die as a result of hepatitis A. Although young children usually are not very ill, they can continue to spread the virus to others for several months.

The majority of persons who are vaccinated with AVAXIM® - Pediatric will produce enough antibodies to help protect them against this disease. However, as with all vaccines, 100% protection cannot be guaranteed.

**How does AVAXIM® - Pediatric work?**

AVAXIM® - Pediatric causes the body to produce its own natural protection against hepatitis A infection. After you receive the vaccine, your body begins to make substances called antibodies. Antibodies help the body to fight disease. If a vaccinated person comes into contact with the germ that causes this disease, the body is usually ready to destroy it.

**What are the ingredients in AVAXIM® - Pediatric?**

Medicinal ingredients: inactivated hepatitis A virus.

Non-medicinal ingredients: aluminum hydroxide, formaldehyde, neomycin, 2-phenoxyethanol, and polysorbate 80.

AVAXIM® - Pediatric comes in the following dosage forms:

AVAXIM® - Pediatric is a suspension for injection (80U/0.5mL), supplied in 0.5 mL prefilled syringes and 5 mL vials.

**Do not use AVAXIM® - Pediatric if:**

- You have a known severe allergy to any ingredient in AVAXIM® - Pediatric or its container, or who have had a severe allergic reaction after receiving a vaccine that contained similar ingredients.

**To help avoid side effects and ensure proper use, talk to your healthcare professional before you or your child take AVAXIM® - Pediatric.**

**Tell your healthcare professional about all the medicines you take, including any drugs, vitamins, minerals, natural supplements or alternative medicines.**

The following may interact with AVAXIM® - Pediatric:

- DO NOT mix AVAXIM® - Pediatric with other vaccines or medicinal products in the same syringe.
How to take AVAXIM® - Pediatric:

Usual dose:
A single dose of 0.5 mL is recommended for immunization in persons 12 months to 15 years of age inclusive.

For long-term protection against hepatitis A, a booster vaccination will be required 6 to 36 months after vaccination with AVAXIM® - Pediatric.

The vaccination should be given in the muscle, preferably in the deltoid (shoulder) region.

Overdose:
If you think you have taken too much AVAXIM® - Pediatric, contact a health care professional, hospital emergency department or regional Poison Control Centre immediately, even if there are no symptoms.

Missed Dose:
If you miss the second dose, contact your doctor to schedule a visit.

These are not all the possible side effects you may feel when taking AVAXIM® - Pediatric. If you experience any side effects not listed here, contact your healthcare professional. Please also see Warnings and Precautions.

A vaccine, like any medicine, may cause serious problems, such as severe allergic reactions. The risk of AVAXIM® - Pediatric causing serious harm is extremely small. The small risks associated with AVAXIM® - Pediatric are much less than the risks associated with getting the diseases.

Tell your doctor, nurse or pharmacist as soon as possible if you do not feel well after receiving AVAXIM® - Pediatric.

Serious side effects are very rare.

Some children who receive AVAXIM® - Pediatric may have mild side effects such as mild pain at the injection site, associated with redness and swelling. Other common side effects include headache, gastrointestinal tract disorders such as abdominal pain, diarrhea, nausea and vomiting, muscle or joint ache, behavioural changes such as decreased appetite and nervousness, fever, and weakness. These side effects usually go away within a few days.

If you have a troublesome symptom or side effect that is not listed here or becomes bad enough to interfere with your daily activities, talk to your healthcare professional.

Reporting Suspected Vaccine Adverse Events
For the General Public:
If you suspect you have had a serious or unexpected event following receipt of a vaccine, please ask your healthcare professional to complete the Adverse Events Following Immunization (AEFI) Form and send it to your local health unit in your province/territory.

For Health Care Professionals:
If a patient experiences an adverse event following immunization, please complete the appropriate Adverse Events following Immunization (AEFI) Form and send it to your local health unit in your province/territory.

If you have any questions or have difficulties contacting your local health unit, please contact Vaccine Safety Section at Public Health Agency of Canada:
By toll-free telephone: (1-866-844-0018)
By toll-free fax: (1-866-844-5931)
By email: caefi@phac-aspc.gc.ca

NOTE: Should you require information related to the management of the adverse events, please contact your health-care provider before notifying the Public Health Agency of Canada. The Public Health Agency of Canada does not provide medical advice.

Storage:
Store AVAXIM® - Pediatric in a refrigerator at 2°C to 8°C (35°F to 46°F). Do not freeze. Throw the product away if it has been exposed to freezing.

Do not use after the expiration date.

Keep out of reach and sight of children.

If you want more information about AVAXIM® - Pediatric:
- Talk to your healthcare professional.
- Find the full product monograph that is prepared for healthcare professionals and includes this Patient Medication Information by visiting the Health Canada website (http://hc-sc.gc.ca/index-eng.php), the Sanofi Pasteur Limited website (http://www.sanofipasteur.ca), or by calling the Sanofi Pasteur Limited Vaccine Information Service at 1-888-621-1146 (no charge) or at 416-667-2779 (Toronto area).
Business hours are 7:30 a.m. to 7:30 p.m. EST
Monday to Friday.

This leaflet was prepared by Sanofi Pasteur Limited.
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