# ANNEX I SUMMARY OF PRODUCT CHARACTERISTICS

### 1. NAME OF THE MEDICINAL PRODUCT

Adjupanrix suspension and emulsion for emulsion for injection. Pandemic influenza vaccine (H5N1) (split virion, inactivated, adjuvanted)

### 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

After mixing, 1 dose (0.5 ml) contains:

Split influenza virus, inactivated, containing antigen\* equivalent to:

A/VietNam/1194/2004 (H5N1) like strain used (NIBRG-14)

3.75 micrograms\*\*

This vaccine complies with the WHO recommendation and EU decision for the pandemic.

AS03 adjuvant composed of squalene (10.69 milligrams), DL- $\alpha$ -tocopherol (11.86 milligrams) and polysorbate 80 (4.86 milligrams).

The suspension and emulsion vials once mixed form a multidose container. See section 6.5 for the number of doses per vial.

### Excipient with known effect

The vaccine contains 5 micrograms thiomersal (see section 4.4).

For the full list of excipients see section 6.1.

### 3. PHARMACEUTICAL FORM

Suspension and emulsion for emulsion for injection.

The suspension is a colourless light opalescent liquid.

The emulsion is a whitish to yellowish homogeneous milky liquid.

### 4. CLINICAL PARTICULARS

### 4.1 Therapeutic indications

Prophylaxis of influenza in an officially declared pandemic situation.

Adjupanrix should be used in accordance with official guidance.

### 4.2 Posology and method of administration

### **Posology**

### Adults from the age of 18 years

One dose of 0.5 ml at an elected date.

A second dose of 0.5 ml should be given after an interval of at least three weeks and up to twelve months after the first dose for maximum efficacy.

<sup>\*</sup> propagated in eggs

<sup>\*\*</sup> haemagglutinin (HA)

Based on very limited data, adults aged >80 years may require a double dose of Adjupanrix on an elected date and again after an interval of at least three weeks in order to achieve an immune response (see section 5.1).

### Paediatric population

Children aged 6 months to <36 months:

One dose of 0.125 ml (equals quarter the adult dose per injection) at an elected date. A second dose of 0.125 ml at least three weeks after the first dose for maximum efficacy.

Children and adolescents aged 36 months to <18 years:

One dose of 0.25 ml (equals half the adult dose per injection) at an elected date.

A second dose of 0.25 ml at least three weeks after the first dose for maximum efficacy.

Children aged <6 months:

The safety and efficacy of Adjupanrix in children less than 6 months have not been established.

### Method of administration

Immunisation should be carried out by intramuscular injection.

If a double dose is given, the injections should be given into opposite limbs preferably into the deltoid muscle or anterolateral thigh (depending on the muscle mass).

For instructions on mixing of the medicinal product before administration, see section 6.6.

### 4.3 Contraindications

History of an anaphylactic (i.e. life-threatening) reaction to any of the constituents or trace residues (egg and chicken protein, ovalbumin, formaldehyde, gentamicin sulphate and sodium deoxycholate) of this vaccine. However, in a pandemic situation, it may be appropriate to give the vaccine, provided that facilities for resuscitation are immediately available in case of need. See section 4.4.

### 4.4 Special warnings and precautions for use

As with all injectable vaccines, appropriate medical treatment and supervision should always be readily available in case of a rare anaphylactic event following the administration of the vaccine.

### **Traceability**

In order to improve the traceability of biological medicinal products, the name and the batch number of the administered product should be clearly recorded.

### **Hypersensitivity**

Caution is needed when administering this vaccine to persons with a known hypersensitivity (other than anaphylactic reaction) to the active substance, to any of the excipients listed in section 6.1, to thiomersal and to residues (egg and chicken protein, ovalbumin, formaldehyde, gentamicin sulphate and sodium deoxycholate).

### Concurrent illness

If the pandemic situation allows, immunisation shall be postponed in patients with severe febrile illness or acute infection.

### Thrombocytopenia and coagulation disorders

Adjupanrix should under no circumstances be administered intravascularly. There are no data with Adjupanrix using the subcutaneous route. Therefore, healthcare providers need to assess the benefits and potential risks of administering the vaccine in individuals with thrombocytopenia or any bleeding

disorder that would contraindicate intramuscular injection unless the potential benefit outweighs the risk of bleedings.

### Protection

There are no data on administration of AS03-adjuvanted vaccines before or following other types of influenza vaccines intended for pre-pandemic or pandemic use.

Antibody response in patients with endogenous or iatrogenic immunosuppression may be insufficient.

A protective immune response may not be elicited in all vaccinees (see section 5.1).

### Syncope

Syncope (fainting) can occur following, or even before, any vaccination as a psychogenic response to the needle injection. This can be accompanied by several neurological signs such as transient visual disturbance, paraesthesia and tonic-clonic limb movements during recovery. It is important that procedures are in place to avoid injury from faints.

### Narcolepsy

Epidemiological studies relating to another AS03-adjuvanted vaccine (Pandemrix H1N1, also manufactured in the same facility as Adjupanrix), in several European countries have indicated an increased risk of narcolepsy with or without cataplexy in vaccinated as compared with unvaccinated individuals. In children/adolescents (aged up to 20 years), these studies have indicated an additional 1.4 to 8 cases in 100 000 vaccinated subjects. Available epidemiological data in adults aged over 20 years have indicated approximately 1 additional case per 100 000 vaccinated subjects. These data suggest that the excess risk tends to decline with increasing age at vaccination. Narcolepsy has not been observed in clinical trials with Adjupanrix, however clinical trials are not powered to detect very rare adverse events with incidence rates as low as narcolepsy ( $\approx 1.1/100,000$  Person-Years).

### Paediatric population

Clinical data in children less than 6 years of age who received two doses of pandemic preparedness influenza vaccine (H5N1) indicate an increase in frequency of fever (axillary≥38°C) after the administration of the second dose. Therefore, monitoring of temperature and measures to lower the fever (such as antipyretic medication as seems clinically necessary) are recommended in young children (e.g. up to approximately 6 years of age) post-vaccination.

### Sodium and potassium content

This vaccine contains less than 1 mmol sodium (23 mg) per dose, that is to say essentially 'sodium-free'.

This vaccine contains potassium, less than 1 mmol (39 mg) per dose, i.e. essentially 'potassium-free'.

### 4.5 Interaction with other medicinal products and other forms of interaction

There are no data on co-administration of Adjupanrix with other vaccines. If co-administration with another vaccine is considered, immunisation should be carried out on separate limbs. It should be noted that the adverse reactions may be intensified.

The immunological response may be diminished if the patient is undergoing immunosuppressant treatment.

Following influenza vaccination, false-positive serology test results may be obtained by the ELISA method for antibody to human immunodeficiency virus-1 (HIV-1), hepatitis C virus and, especially, HTLV-1. In such cases, the Western blot method is negative. These transitory false-positive results may be due to IgM production in response to the vaccine.

### 4.6 Fertility, pregnancy and lactation

### **Pregnancy**

There are currently no data available on the use of Adjupanrix in pregnancy.

An AS03-containing vaccine containing HA from H1N1v has been administered to women in each trimester of pregnancy. Information on outcomes from estimated more than 200 000 women who have been vaccinated during pregnancy is currently limited. There was no evidence of an increased risk of adverse outcomes in over 100 pregnancies that were followed in a prospective clinical study.

Animal studies with Adjupanrix do not indicate reproductive toxicity (see section 5.3).

Data from pregnant women vaccinated with different inactivated non-adjuvanted seasonal vaccines do not suggest malformations or foetal or neonatal toxicity.

The use of Adjupanrix may be considered during pregnancy if this is thought to be necessary, taking into account official recommendations.

### **Breast-feeding**

Adjupanrix may be used in lactating women.

### Fertility

No fertility data are available.

### 4.7 Effects on ability to drive and use machines

Some of the effects mentioned under section 4.8 "Undesirable Effects" may affect the ability to drive or operate machinery.

### 4.8 Undesirable effects

### Summary of the safety profile

Clinical studies have evaluated the incidence of adverse reactions listed below in approximately 5 000 subjects 18 years old and above who received formulations of H5N1 vaccine containing A/Vietnam/1194/2004 (H5N1) strain with at least 3.75 microgram HA/AS03.

Two clinical studies evaluated the incidence of adverse reactions in approximately 824 children aged 3 to <18 years who received half the adult dose, 0.25 mL, containing A/Indonesia/2005 (H5N1) strain with at least 1.9 microgram HA/AS03.

Three clinical studies evaluated the incidence of adverse reactions in approximately 437 children aged 6 months to <36 months who received either half the adult dose (n=400), 0.25 mL, or a quarter adult dose, 0.125 mL (n=37).

### List of adverse reactions

Adverse reactions reported are listed according to the following frequency:

Frequencies are reported as:

Very common ( $\geq 1/10$ ) Common ( $\geq 1/100$  to < 1/10) Uncommon ( $\geq 1/1 000$  to < 1/100) Rare ( $\geq 1/10 000$  to < 1/1 000) Very rare (< 1/10 000) Adverse reactions from clinical trials with the pandemic preparedness vaccine are listed here below (see section 5.1 for more information on pandemic preparedness vaccines).

Within each frequency grouping, undesirable effects are presented in order of decreasing seriousness.

### Adults

The following adverse reactions per dose have been reported:

System Organ Class	Frequency	Adverse Reactions
Blood and lymphatic system	Common	Lymphadenopathy
disorders		
Psychiatric disorders	Uncommon	Insomnia
Nervous system disorders	Very common	Headache
	Uncommon	Dizziness, somnolence, paraesthesia
Gastrointestinal disorders	Uncommon	Gastrointestinal symptoms (such as
		nausea, diarrhoea, vomiting, abdominal
		pain)
Skin and subcutaneous tissue	Common	Ecchymosis at the injection site, sweating
disorders		increased
	Uncommon	Pruritus, rash
Musculoskeletal and connective	Very common	Myalgia, arthralgia
tissue disorders		
General disorders and	Very common	Pain, redness, swelling and induration at
administration site conditions		the injection site, fatigue, fever
	Common	Injection site warmth and injection site
		pruritus, influenza-like illness, shivering
	Uncommon	Malaise

### Paediatric population

The following adverse reactions per dose have been reported:

### Children 6 to <36 months

Data for this age group is derived from a pooling of safety data from 3 studies (D-PAN-H5N1-013, Q-PAN-H5N1-021 and Q-PAN-H5N1-023).

6 to <36 (months)					
System Organ Class	Frequency	Adverse reactions			
Metabolism and nutrition disorders	Very common	Decreased appetite			
Psychiatric disorders	Very common	Irritability/Fussiness			
Nervous system disorders	Very common	Somnolence			
Gastrointestinal disorders	Very common	Gastrointestinal symptoms (such as diarrhoea and vomiting)			
	Uncommon	Rash/Rash macular			

Skin and subcutaneous tissue	Uncommon Urticaria		
disorders			
General disorders and administration site conditions	Very common <sup>1</sup>	Fever (≥38.0°C)	
	Very common	Injection site pain	
	Common	Injection site redness	
	Common	Injection site swelling	
	Uncommon	Injection site induration	
	Uncommon	Injection site scab	
	Uncommon	Swelling face	
	Uncommon	Injection site bruising	
	Uncommon	Injection site eczema	
	Uncommon	Vaccination site nodule	

<sup>&</sup>lt;sup>1</sup>A higher frequency of fever occurred following dose 2 compared to dose 1 in each age group.

### Children 36 months to <18 years

Data for this age group is derived from a pooling of safety data from 2 studies (D-PAN-H5N1-032 and Q-PAN-H5N1-021).

System Organ Class	Free	quency	Adverse reactions		
Class	3 to <6 (years)	6 to <18 (years)	7		
Metabolism and nutrition disorders	Very common	Uncommon	Decreased appetite		
Psychiatric disorders	Very common	Uncommon	Irritability/Fussiness		
Nervous system	Very common	Uncommon	Somnolence		
disorders	Uncommon	Very common	Headache		
	NR	Uncommon	Hypoesthesia		
	NR	Uncommon	Dizziness		
	NR	Uncommon	Syncope		
	NR	Uncommon	Tremor		
Gastrointestinal disorders	Common		Gastrointestinal symptoms (such as nausea, diarrhoea, vomiting and abdominal pain)		
Skin and	Unce	ommon	Rash		
subcutaneous tissue	NR	Common	Hyperhidrosis		
disorders	NR	Uncommon	Skin Ulcer		
Musculoskeletal and connective	Uncommon	Very common	Myalgia		
tissue disorders	NR	Uncommon	Musculoskeletal stiffness		
	NR	Very common	Arthralgia		
General disorders	Very	common	Injection site pain		
and administration	·	nmon <sup>1</sup>	Fever (≥38.0°C)		
site conditions	Con	mmon	Injection site redness		
	Con	mmon	Injection site swelling		
	Uncommon	Very common	Fatigue		

Uncommon	Common	Chills
Uncommon	NR	Injection site bruising
Unco	ommon	Injection site pruritus
NR	Uncommon	Axillary pain

<sup>&</sup>lt;sup>1</sup>A higher frequency of fever occurred following dose 2 compared to dose 1 in each age group. NR=Not reported

Similar reactogenicity results were obtained in a clinical study (D-PAN-H5N1-009) that was conducted in children 3 to 5 and 6 to 9 years of age; of whom 102 subjects received 2 doses of 0.25 ml of Adjupanrix; in this study fever was common with no increase in incidence seen after the second primary dose. In addition, the following adverse reactions were also observed: ecchymosis at the injection site, shivering and sweating increased. All three reactions were common.

### • <u>Post-marketing surveillance</u>

No post-marketing surveillance data are available following Adjupanrix administration.

AS03-containing vaccines containing 3.75 µg HA derived from A/California/7/2009 (H1N1)

From post-marketing experience with AS03-containing vaccines containing 3.75 µg HA derived from A/California/7/2009 (H1N1), the following adverse reactions have been reported:

### Immune system disorders

Anaphylaxis, allergic reactions

### Nervous system disorders

Febrile convulsions

### Skin and subcutaneous tissue disorders

Angioedema, generalised skin reactions, urticaria

### Interpandemic trivalent vaccines

In addition, from post-marketing surveillance with interpandemic trivalent vaccines, the following adverse reactions have been reported:

#### Rare

Neuralgia, transient thrombocytopenia.

### Very rare:

Vasculitis with transient renal involvement.

Neurological disorders, such as encephalomyelitis, neuritis and Guillain Barré syndrome.

This medicinal product contains thiomersal (an organomercuric compound) as a preservative and therefore, it is possible that sensitisation reactions may occur (see section 4.4).

### Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the national reporting system listed in Appendix V.

### 4.9 Overdose

No case of overdose has been reported.

### 5. PHARMACOLOGICAL PROPERTIES

### 5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Influenza vaccines, ATC Code: J07BB02.

### Pharmacodynamic effects

This section describes the clinical experience with the pandemic preparedness vaccines.

Pandemic preparedness vaccines contain influenza antigens that are different from those in the currently circulating influenza viruses. These antigens can be considered as "novel" antigens and simulate a situation where the target population for vaccination is immunologically naïve. Data obtained with the pandemic preparedness vaccine will support a vaccination strategy that is likely to be used for the pandemic vaccine: clinical immunogenicity, safety and reactogenicity data obtained with pandemic preparedness vaccines are relevant for the pandemic vaccines.

### Adults

### Adults aged 18-60 years

In clinical studies that evaluated the immunogenicity of AS03-adjuvanted vaccine containing  $3.75~\mu g$  HA derived from A/Vietnam/1194/2004 in subjects aged 18-60 years the anti-haemagglutinin (anti-HA) antibody responses were as follows:

anti-HA antibody	Immune response to A/Vietnam/1194/2004					
	0, 21 days	schedule	0, 6 months schedule			
	(D-Pan-H5N1-002)		(D-Pan-H5N1-012)			
	21 days after 21 days after		21 days after	7 days after	21 days after	
	1 <sup>st</sup> dose 2 <sup>nd</sup> dose		1 <sup>st</sup> dose	2 <sup>nd</sup> dose	2 <sup>nd</sup> dose	
	N=925 N=924		N=55	N=47	N=48	
Seroprotection rate <sup>1</sup>	44.5% 94.3%		38.2%	89.4%	89.6%	
Seroconversion rate <sup>2</sup>	42.5% 93.7%		38.2%	89.4%	89.6%	
Seroconversion factor <sup>3</sup>	4.1	39.8	3.1	38.2	54.2	

<sup>&</sup>lt;sup>1</sup>seroprotection rate: proportion of subjects with haemagglutination inhibition (HI) titre ≥1:40;

After two doses given 21 days or 6 months apart, 96.0% of subjects had a 4-fold increase in serum neutralising antibody titres and 98-100% had a titre of at least 1:80.

Subjects of D-Pan-H5N1-002 were followed up for persistence of the immune response. The seroprotection rates 6, 12, 24 and 36 months after the first dose were as follows:

anti-HA antibody	Immune response to A/Vietnam/1194/2004					
	6 months after the	12 months after	24 months after	36 months after		
	1 <sup>st</sup> dose the 1 <sup>st</sup> dose		the 1st dose	the 1st dose		
	N=256 N=559		N=411	N=387		
Seroprotection rate <sup>1</sup>	40.2%	23.4%	16.3%	16.3%		

¹seroprotection rate: proportion of subjects with haemagglutination inhibition (HI) titre ≥1:40.

In a clinical study (Q-Pan-H5N1-001) in which two doses of AS03-adjuvanted vaccine containing  $3.75~\mu g$  HA derived from A/Indonesia/05/2005 were administered on days 0 and 21 to 140 subjects aged 18-60 years, the anti-HA antibody responses were as follows:

<sup>&</sup>lt;sup>2</sup>seroconversion rate: proportion of subjects who were either seronegative at pre-vaccination and have a protective post-vaccination titre of ≥1:40, or who were seropositive at pre-vaccination and have a 4-fold increase in titre:

<sup>&</sup>lt;sup>3</sup>seroconversion factor: ratio of the post-vaccination geometric mean titre (GMT) and the pre-vaccination GMT.

anti-HA antibody	Immune response to A/Indonesia/05/2005						
	Day 21 Day 42 Day 180						
	N=140 N=140 N=138						
Seroprotection rate <sup>1</sup>	45.7%	96.4%	49.3%				
Seroconversion rate <sup>2</sup>	45.7%	96.4%	48.6%				
Seroconversion factor <sup>3</sup>	4.7	95.3	5.2				

¹seroprotection rate: proportion of subjects with haemagglutination inhibition (HI) titre ≥1:40;

A 4-fold increase in serum neutralising antibody titres was observed in 79.2% of subjects twenty-one days after the first dose, 95.8% twenty-one days after the second dose and 87.5% six months after the second dose.

In a second study, 49 subjects aged 18-60 years received two doses of AS03-adjuvanted vaccine containing 3.75  $\mu$ g HA derived from A/Indonesia/05/2005 on days 0 and 21. At day 42, the anti-HA antibody seroconversion rate was 98%, all subjects were seroprotected and the seroconversion factor was 88.6. In addition, all subjects had neutralising antibody titres of at least 1:80.

<u>Cross-reactive immune responses elicited by AS03-adjuvanted vaccine containing 3.75 μg HA derived from A/Vietnam/1194/2004 (H5N1)</u>

Anti-HA responses against A/Indonesia/5/2005 following administration of AS03-adjuvanted vaccine containing 3.75 µg HA derived from A/Vietnam/1194/2004 were as follows:

anti-HA antibody	A/Indonesia/5/2005					
	0, 21 days schedule 0, 6 months schedule (D-Pan-H5N1-002) (D-Pan-H5N1-012)					
	21 days after 2 <sup>nd</sup> dose N = 924	7 days after $2^{nd}$ dose $N = 47$	21 days after $2^{nd}$ dose $N = 48$			
Seroprotection rate*1	50.2% 74.5%		83.3%			
Seroconversion rate <sup>2</sup>	50.2% 74.5%		83.3%			
Seroconversion factor <sup>3</sup>	4.9	12.9	18.5			

<sup>\*</sup>anti-HA ≥1:40

A 4-fold increase in serum neutralising antibody against A/Indonesia/5/2005 was achieved in >90% of subjects after two doses regardless of the schedule. After two doses administered 6 months apart all subjects had a titre of at least 1:80.

Subjects from study D-Pan-H5N1-002 were followed up for persistence of anti-HA antibodies against A/Indonesia/5/2005. The seroprotection rates were 2.2%, 4.7%, 2.4% and 7.8% at months 6, 12, 24 and 36, respectively.

In a different study (D-Pan-H5N1-007) in 50 subjects aged 18-60 years the anti-HA antibody seroprotection rates 21 days after the second dose of AS03-adjuvanted vaccine containing 3.75  $\mu g$  HA derived from A/Vietnam/1194/2004 were 20% against A/Indonesia/5/2005, 35% against A/Anhui/01/2005 and 60% against A/Turkey/Turkey/1/2005.

<sup>&</sup>lt;sup>2</sup>seroconversion rate: proportion of subjects who were either seronegative at pre-vaccination and have a protective post-vaccination titre of ≥1:40, or who were seropositive at pre-vaccination and have a 4-fold increase in titre;

<sup>&</sup>lt;sup>3</sup>seroconversion factor: ratio of the post-vaccination geometric mean titre (GMT) and the pre-vaccination GMT.

<sup>&</sup>lt;sup>1</sup>seroprotection rate: proportion of subjects with haemagglutination inhibition (HI) titre  $\geq$ 1:40;

<sup>&</sup>lt;sup>2</sup>seroconversion rate: proportion of subjects who were either seronegative at pre-vaccination and have a protective post-vaccination titre of ≥1:40, or who were seropositive at pre-vaccination and have a 4-fold increase in titre;

<sup>&</sup>lt;sup>3</sup>seroconversion factor: ratio of the post-vaccination geometric mean titre (GMT) and the pre-vaccination GMT.

<u>Cross-reactive immune response elicited by AS03-adjuvanted vaccine containing 3.75 μg HA derived</u> from A/Indonesia/05/2005 (H5N1)

After two doses of AS03-adjuvanted vaccine containing 3.75 µg HA derived from A/Indonesia/05/2005 administered on days 0 and 21 to 140 subjects aged 18-60 years, the anti-HA antibody responses to A/Vietnam/1194/2004 were as follows:

anti-HA antibody	Immune response to A/Vietnam/1194/2004				
	Day 21	Day 42			
	N=140	N=140			
Seroprotection rate <sup>1</sup>	15%	59.3%			
Seroconversion rate <sup>2</sup>	12.1%	56.4%			
Seroconversion factor <sup>3</sup>	1.7	6.1			

¹seroprotection rate: proportion of subjects with haemagglutination inhibition (HI) titre ≥1:40;

At day 180, the seroprotection rate was 13%.

A 4-fold increase in serum neutralising antibody titres against A/Vietnam was obtained in 49% of subjects twenty-one days after the first dose, 67.3% twenty-one days after the second dose and 44.9% six months after the second dose.

### Alternative schedules

An extended dosing interval was investigated in study D-H5N1-012 in which a group of subjects 18-60 years of age received two doses of Adjupanrix 6 months or 12 months apart. Twenty-one days after the second dose, the seroprotection rate and the vaccine response rate against A/Vietnam/1194/2004 in subjects who received the vaccine 6 months apart were 89.6% and 95.7%, respectively. Twenty-one days after the second dose, the seroprotection rate and the vaccine response rate in subjects who received the vaccine 12 months apart were 92.0% and 100%, respectively.

In this study, cross-reactive immune responses against A/Indonesia/5/2005 were also observed. Twenty-one days after the second dose, the seroprotection rate and the vaccine response rate in subjects who received the vaccine 6 months apart were 83.3% and 100%, respectively. Twenty-one days after the second dose, the seroprotection rate and the vaccine response rate in subjects who received the vaccine 12 months apart were 84.0% and 100%, respectively.

One dose of AS03-adjuvanted vaccine containing 3.75 μg HA derived from A/Indonesia/05/2005 administered after one or two doses of AS03-adjuvanted vaccine containing 3.75 μg HA derived from A/Vietnam/1194/2004

In a clinical study (D-Pan-H5N1-012), subjects aged 18-60 years received a dose of AS03-adjuvanted vaccine containing 3.75  $\mu$ g HA derived from either A/Vietnam/1194/2004 or Indonesia/5/2005 six months after they had received one or two priming doses of AS03-adjuvanted vaccine containing 3.75  $\mu$ g HA derived from A/Vietnam/1194/2004 on day 0 or on days 0 and 21 respectively. The anti-HA responses were as follows:

anti-HA antibody		nam 21 days after ith A/Vietnam	Against A/Indonesia 21 days after boosting with A/Indonesia		
	N=46		N=49		
	After one After two		After one	After two	
	priming doses priming doses		priming dose	priming doses	
Seroprotection rate <sup>1</sup>	89.6% 91.3%		98.1%	93.9%	
Booster	87.5% 82.6%		98.1%	91.8%	
seroconversion rate <sup>2</sup>					
Booster factor <sup>3</sup>	29.2	11.5	55.3	45.6	

<sup>&</sup>lt;sup>2</sup>seroconversion rate: proportion of subjects who were either seronegative at pre-vaccination and have a protective post-vaccination titre of  $\geq 1:40$ , or who were seropositive at pre-vaccination and have a 4-fold increase in titre:

<sup>&</sup>lt;sup>3</sup>seroconversion factor: ratio of the post-vaccination geometric mean titre (GMT) and the pre-vaccination GMT.

Regardless of whether one or two doses of priming vaccine had been given 6 months earlier, the seroprotection rates against A/Indonesia were >80% after a dose of AS03-adjuvanted vaccine containing 3.75 µg HA derived from A/Vietnam/1194/2004 and the seroprotection rates against A/Vietnam were >90% after a dose of AS03-adjuvanted vaccine containing 3.75 µg HA derived from A/Indonesia/05/2005. All subjects achieved a neutralising antibody titre of at least 1:80 against each of the two strains regardless of the HA type in the vaccine and the previous number of doses.

In another clinical study (D-Pan-H5N1-015), 39 subjects aged 18-60 years received a dose of AS03-adjuvanted vaccine containing 3.75  $\mu$ g HA derived from A/Indonesia/5/2005 fourteen months after they had received two doses of AS03-adjuvanted vaccine containing 3.75  $\mu$ g HA derived from A/Vietnam/1194/2004 administered on day 0 and day 21. The seroprotection rate against A/Indonesia 21 days after booster vaccination was 92% and 69.2% at day 180.

In another clinical study (D-Pan-H5N1-038), 387 subjects aged 18-60 years received 1 dose of AS03-adjuvanted vaccine containing 3.75  $\mu$ g HA derived from A/Indonesia/5/2005 36 months after they had received two doses of A/Vietnam/1194/2004. The seroprotection rate, booster seroconversion rate and booster factor against A/Indonesia/5/2005 21 days after booster vaccination was 100%, 99.7% and 123.8, respectively.

### Older adults (>60 years)

In another clinical study (D-Pan-H5N1-010), 297 subjects aged > 60 years (stratified in ranges from 61 to 70, 71 to 80 and > 80 years of age) received either a single or a double dose of AS03-adjuvanted vaccine containing 3.75  $\mu$ g HA derived from A/Vietnam/1194/2004 (H5N1) at 0 and 21 days. At day 42, the anti-HA antibody responses were as follows:

anti-HA antibody	Immune response to A/Vietnam/1194/2004 (D42)					
	61 to 7	70 years	71 to 80 years		>80 years	
	Single	Double	Single	Double	Single	Double dose
	dose	dose	dose	dose	dose	N=10
	N=91	N=92	N=48	N=43	N=13	
Seroprotection rate <sup>1</sup>	84.6%	97.8%	87.5%	93.0%	61.5%	90.0%
Seroconversion rate <sup>2</sup>	74.7%	90.2%	77.1%	93.0%	38.5%	50.0%
Seroconversion factor <sup>3</sup>	11.8	26.5	13.7	22.4	3.8	7.7

<sup>&</sup>lt;sup>1</sup>seroprotection rate: proportion of subjects with haemagglutination inhibition (HI) titre ≥1:40;

Although an adequate immune response was achieved at day 42 following two administrations of a single dose of AS03-adjuvanted vaccine containing 3.75 µg HA derived from A/Vietnam/1194/2004 (H5N1), a higher response was observed following two administrations of a double dose of vaccine.

Very limited data in seronegative subjects >80 years of age (N=5) showed that no subject achieved seroprotection rate following two administrations of a single dose of ASO3-adjuvanted vaccine

¹seroprotection rate: proportion of subjects with haemagglutination inhibition (HI) titre ≥1:40;

<sup>&</sup>lt;sup>2</sup>booster seroconversion rate: proportion of subjects who were either seronegative at pre-booster and have a protective post-vaccination titre of ≥1:40, or who were seropositive at pre-booster and have a 4-fold increase in titre:

<sup>&</sup>lt;sup>3</sup>booster factor: ratio of the post-booster geometric mean titre (GMT) and the pre-booster GMT.

<sup>&</sup>lt;sup>2</sup>seroconversion rate: proportion of subjects who were either seronegative at pre-vaccination and have a protective post-vaccination titre of ≥1:40, or who were seropositive at pre-vaccination and have a 4-fold increase in titre:

<sup>&</sup>lt;sup>3</sup>seroconversion factor: ratio of the post-vaccination geometric mean titre (GMT) and the pre-vaccination GMT.

containing 3.75  $\mu$ g HA derived from A/Vietnam/1194/2004 (H5N1). However, following two administrations of a double dose of vaccine, the seroprotection rate at day 42 was 75%. Subjects of D-Pan-H5N1-010 were followed up for persistence of the immune response. The seroprotection rates 6, 12 and 24 months after vaccination were as follows:

anti-HA antibody		Immune response to A/Vietnam/1194/2004				
	6 mont	hs after	12 months after		24 months after	
	vaccii	nation	vaccii	nation	vaccin	ation
	Single	Double	Single	Double	Single	Double
	dose	dose	dose	dose	dose	dose
	(N=140)	(N=131)	(N=86)	(N=81)	(N=86)	(N=81)
Seroprotection rate <sup>1</sup>	52.9%	69.5%	45.3%	44.4%	37.2%	30.9%

¹seroprotection rate: proportion of subjects with haemagglutination inhibition (HI) titre ≥1:40.

In addition, 44.8% and 56.1% of subjects in respective dose groups had a 4-fold increase in serum neutralising antibody titres from day 0 to day 42 and 96.6% and 100% of subjects had a titre of at least 1:80 at day 42.

Twelve and twenty-four months after vaccination, the neutralising antibody titres were as follows:

Serum neutralising	Immune response to A/Vietnam/1194/2004			
antibody	12 months after vaccination		24 months after vaccination	
	Single dose	Double dose	Single dose	Double dose
	N=51	N=54	N=49	N=54
GMT <sup>1</sup>	274.8	272.0	391.0	382.8
Seroconversion	27.5%	27.8%	36.7%	40.7%
rate <sup>2</sup>				
$\geq 1:80^3$	82.4%	90.7%	91.8%	100%

<sup>&</sup>lt;sup>1</sup>Geometric Mean Titre;

In 297 subjects aged > 60 years the anti-HA antibody seroprotection and seroconversion rates against A/Indonesia/5/2005 at day 42 after two doses of AS03-adjuvanted vaccine containing 3.75  $\mu$ g HA derived from A/Vietnam/1194/2004 were 23% and the seroconversion factor was 2.7. Neutralising antibody titres of at least 1:40 or at least 1:80 were achieved in 87% and 67%, respectively, of the 87 subjects tested.

Subjects from study D-Pan-H5N1-010 who received a single dose were followed-up for persistence of anti-HA antibodies against A/Indonesia/5/2005. The seroprotection rates were 16.3% and 4.7% at months 12 and 24, respectively. Seroconversion rates for neutralising antibodies against A/Indonesia/5/2005 were 15.7% and 12.2% for months 12 and 24, respectively. The percentage of subjects reaching neutralising antibody titres of >1/80 were 54.9% and 44.9% at months 12 and 24, respectively.

### Paediatric population (children aged 6 months to <18 years)

### Children 6 to <36 months of age

In a clinical study (Q-Pan-H5N1-023), two doses of 0.125 ml containing the A/Indonesia/2005 H5N1 strain were administered on days 0 and 21 to 37 children aged 6 to <36 months.

Seroconversion rates for the anti-HA immune responses against homologous (A/Indonesia/05/2005) strain in this age group at Day 42 (21 days after the second dose) were as follows:

<sup>&</sup>lt;sup>2</sup>4-fold increase in serum neutralising antibody titre;

<sup>&</sup>lt;sup>30</sup>% of subjects reaching a serum neutralising antibody titre of at least 1:80.

anti-HA antibody	Immune response to A/Indonesia/05/2005 (0.125ml)	
	21 days after 2 <sup>nd</sup> dose (Day 42)	
	$N^1=33$	
Seroconversion rate <sup>2</sup>	100%	
Seroconversion factor <sup>3</sup>	168.2	

<sup>&</sup>lt;sup>1</sup>according-to-protocol (ATP) immunogenicity cohort;

In children 6 to <36 months of age who received a dose of 0.125 ml (Q-Pan H5N1-023), 100% (N=31) had a vaccine response rate for A/Indonesia/05/2005, 96.9% (N=32) had a vaccine response rate for heterologous strain A/Vietnam/1194/2004 and 96.9% (N=32) had a vaccine response rate for heterologous strain A/duck/Bangladesh/19097/2013.

Subjects enrolled in Q-Pan-H5N1-023 were followed up for persistence of the anti-HA immune response against the homologous A/Indonesia/05/2005 strain and heterologous A/duck/Bangladesh/19097, A/Vietnam/1194/2004 and A/gyrfalcon/Washington/41088-6/2014 strain after 12 months. The seroconversion rates 12 months after the second dose in children aged 6 to <36 months were as follows:

anti-HA antibody	0.125 ml			
	Immune response to	Immune response to	Immune response to	Immune
	A/Indonesia/05/2005	A/duck/Bangladesh/	A/Vietnam/1194/200	response to
		19097/2013	4	A/gyrfalcon/W
				ashington/4108
				8-6/2014
	12 months after the	12 months after the	12 months after the	12 months
	2 <sup>nd</sup> dose	2 <sup>nd</sup> dose	2 <sup>nd</sup> dose	after the 2 <sup>nd</sup>
	$N^1=33$	$N^1 = 29$	$N^1 = 29$	dose
				$N^1 = 29$
Seroconversi on rate <sup>2</sup>	78.8%	20.7%	27.6%	0%

<sup>&</sup>lt;sup>1</sup>according-to-protocol (ATP) immunogenicity cohort at Day 385 (persistence);

For Q-PAN-H5N1-023 study, after primary vaccination with two doses of 0.125 ml containing A/Indonesia/2005 (H5N1) strain, one booster dose of same Q-H5N1 vaccine administered at Month 12. The anti-HA immune response against A/Indonesia/05/2005 was evaluated 7 days after the booster dose. The seroconversion rates are as follows:

anti-HA	0.125 ml			
antibody				
	Immune response to	Immune response to	Immune response to	Immune response to
	A/Indonesia/05/200	A/duck/Bangladesh	A/Vietnam/1194/20	A/gyrfalcon/Washi
	5	/19097/2013	04	ngton/41088-
				6/2014

<sup>&</sup>lt;sup>2</sup>seroconversion rate: proportion of subjects who were either seronegative at pre-vaccination and have a protective post-vaccination titre of ≥1:40, or who were seropositive at pre-vaccination and have a 4-fold increase in titre;

<sup>&</sup>lt;sup>3</sup>seroconversion factor: ratio of the post-vaccination reciprocal HI titre to the pre-vaccination (Day 0) reciprocal HI titre.

<sup>&</sup>lt;sup>2</sup>seroconversion rate: proportion of subjects who were either seronegative at pre-vaccination and have a protective post-vaccination titre of ≥1:40, or who were seropositive at pre-vaccination and have a 4-fold increase in titre.

	7 days after the booster dose N¹=33	7 days after the booster dose $N^1 = 29$	7 days after the booster dose $N^1 = 29$	7 days after the booster dose $N^1 = 29$
Seroconvers ion rate <sup>2</sup>	100%	100%	100%	51.7%

<sup>&</sup>lt;sup>1</sup>according-to-protocol (ATP) immunogenicity cohort at Day 392 post-booster dose;

### Children 36 months to < 18 years of age

In a clinical study (D-Pan-H5N1-032), two doses of 0.25 ml containing the A/Indonesia/2005 H5N1 strain were administered on days 0 and 21 to 312 children aged 3 to < 18 years. The result below is presented from the group where subjects have received 2 doses (D0, D21) of H5N1 Indonesia and 1 booster dose (D182) of H5N1 Turkey (1.9 $\mu$ g HA + AS03<sub>B</sub>), 1 dose (D364) of Havrix. Twenty-one days after the second dose (Day 42), the immune responses in terms of seroconversion rate against the homologous strain were presented were as follows:

anti-HA	Immune response to		Immune response to	A/Turkey/01/2005
antibody	A/Indonesia/05/2005			
	21 days	s after 2 <sup>nd</sup> dose	21 days after 2 <sup>nd</sup> dose	
	$N^{1}=155$		$N^{l=1}$	155
	3 to < 10 years	10 to < 18 years	3 to < 10 years	10 to < 18 years
	$N^2 = 79$	$N^2 = 76$	$N^2=79$	$N^2 = 76$
Seroconversion	100%	98.7%	100%	97.4%
rate <sup>3</sup>				
Seroconversion	118.9	78.3	36.2	21.0
factor <sup>4</sup>				

<sup>&</sup>lt;sup>1</sup>Day 42 ATP cohort for immunogenicity cohort;

Subjects of D-Pan-H5N1-032 were followed up for persistence of the immune response against the homologous A/Indonesia/05/2005 strain and heterologous strain A/Turkey/01/2005 after 6 months. The seroconversion rates at Day 182 in children aged 3 to < 18 years were as follows:

anti-HA	Immune response to		Immune response to A/	Turkey/01/2005
antibody	A/Indone	sia/05/2005		
	0, 21 day	s schedule	0, 21 days sch	nedule
	Day	y 182	Day 182	
	$N^{1}=155$		$N^{1}=155$	
	3 to < 10 years	10 to < 18 years	3 to < 10 years	10 to < 18
	$N^2 = 79$	$N^2 = 76$	$N^2=79$	years
				$N^2 = 76$
seroconversion	83.5%	73.7%	55.7%	40.8%
rate <sup>3</sup>				
seroconversion	10.2	8.1	6.2	5.1
factor <sup>4</sup>				

<sup>&</sup>lt;sup>2</sup>seroconversion rate: proportion of subjects who were either seronegative at pre-vaccination and have a protective post-vaccination titre of ≥1:40, or who were seropositive at pre-vaccination and have a 4-fold increase in titre.

<sup>&</sup>lt;sup>2</sup>Day 42 ATP cohort for immunogenicity cohort for specific age category;

<sup>&</sup>lt;sup>3</sup>seroconversion rate: proportion of subjects who were either seronegative at pre-vaccination and have a protective post-vaccination titre of ≥1:40, or who were seropositive at pre-vaccination and have a 4-fold increase in titre:

<sup>&</sup>lt;sup>4</sup>seroconversion factor: ratio of the post-vaccination reciprocal HI titre to the pre-vaccination (Day Day 0) reciprocal HI titre.

After primary vaccination with two doses of 0.25 ml containing A/Indonesia/2005 (H5N1) strain, one booster dose of D-H5N1 containing A/Turkey/2005/HA was administered at Month 6 to children aged 3 to < 18 years (D-PAN-H5N1-032). Antibody immunogenicity at post-booster against A/Indonesia/05/2005 was evaluated at 10 days (Day 192) and persistence of antibody at 6 months (Day 364) after the booster dose. The seroconversion rates and seroconversion factors at these time points were as follows:

Immune response to A/Indonesia/05/2005 <sup>1</sup>		
Day 192 N <sup>1</sup> =127		
3 to < 10 years	10 to < 18 years	
$N^2 = 68$	$N^2=59$	
100%	100%	
142.6	94.4	
Day 364 N <sup>3</sup> =151		
3 to < 10 years	10 to < 18 years	
$N^4 = 79$	$N^4=72$	
100%	100%	
42.4	30.4	
	Day 192 II  3 to < 10 years $N^2=68$ $100\%$ 142.6  Day 364 II  3 to < 10 years $N^4=79$ $100\%$	

<sup>&</sup>lt;sup>1</sup>Month 6 ATP cohort for immunogenicity;

Similar immunogenicity results for the primary vaccination were obtained in a clinical study (D-PAN-H5N1-009) conducted in 102 children 3 to 5 and 6 to 9 years of age who received 2 doses of 0.25 ml of Adjupanrix containing A/Vietnam/1194/2004. Furthermore, this study evaluated persistence against homologous A/Vietnam/1194/2004 up to 24 months after the second dose. The seroconversion rate was 38.3% for 3-5 year olds and 22.9% for 6-9 year olds at Month 24. Cross-reactive antibody responses against the heterologous strain A/Indonesia/05/2005 were also observed and, although declining persisted up to 24 months after the second dose.

### Information from non-clinical studies:

The ability to induce protection against homologous and heterologous vaccine strains was assessed non-clinically using ferret challenge models.

In each experiment, four groups of six ferrets were immunised intramuscularly with an AS03 adjuvanted vaccine containing HA derived from H5N1/A/Vietnam/1194/04 (NIBRG-14). Doses of 15, 5, 1.7 or 0.6 micrograms of HA were tested in the homologous challenge experiment, and doses of 15, 7.5, 3.8 or 1.75 micrograms of HA were tested in the heterologous challenge experiment. Control

<sup>&</sup>lt;sup>1</sup>Day 42 ATP cohort for immunogenicity cohort;

<sup>&</sup>lt;sup>2</sup>Day 42 ATP cohort for immunogenicity cohort for specific age category;

<sup>&</sup>lt;sup>3</sup>seroconversion rate: proportion of subjects who were either seronegative at pre-vaccination and have a protective post-vaccination titre of ≥1:40, or who were seropositive at pre-vaccination and have a 4-fold increase in titre:

<sup>&</sup>lt;sup>4</sup>seroconversion factor: ratio of the post-vaccination reciprocal HI titre to the pre-vaccination (Day 0) reciprocal HI titre.

<sup>&</sup>lt;sup>2</sup>Month 6 ATP cohort for immunogenicity for specific age category;

<sup>&</sup>lt;sup>3</sup>Month 12 ATP cohort for immunogenicity;

<sup>&</sup>lt;sup>4</sup>Month 12 ATP cohort for immunogenicity for specific age category;

<sup>&</sup>lt;sup>5</sup>seroconversion rate: proportion of subjects who were either seronegative at pre-vaccination and have a protective post-vaccination titre of ≥1:40, or who were seropositive at pre-vaccination and have a 4-fold increase in titre;

<sup>&</sup>lt;sup>6</sup>seroconversion factor: ratio of the post-vaccination reciprocal HI titre to the pre-vaccination (Day 0) reciprocal HI titre.

groups included ferrets immunized with adjuvant alone, non-adjuvanted vaccine (15 micrograms HA) or phosphate buffered saline solution. Ferrets were vaccinated on days 0 and 21 and challenged by the intra-tracheal route on day 49 with a lethal dose of either H5N1/A/Vietnam/1194/04 or heterologous H5N1/A/Indonesia/5/05. Of the animals receiving adjuvanted vaccine, 87% and 96% were protected against the lethal homologous or heterologous challenge, respectively. Viral shedding into the upper respiratory tract was also reduced in vaccinated animals relative to controls, suggesting a reduced risk of viral transmission. In the unadjuvanted control group, as well as in the adjuvant control group, all animals died or had to be euthanized as they were moribund, three to four days after the start of challenge.

### This medicinal product has been authorised under 'exceptional circumstances'.

This means that for scientific reasons it has not been possible to obtain complete information on this medicinal product.

The European Medicines Agency will review any new information which may become available every year and this SmPC will be updated as necessary.

### 5.2 Pharmacokinetic properties

Not applicable.

### 5.3 Preclinical safety data

Non-clinical data reveal no special hazard for humans based on conventional studies of safety pharmacology, acute and repeated dose toxicity, local tolerance, female fertility, embryo-foetal and postnatal toxicity (up to the end of the lactation period).

### 6. PHARMACEUTICAL PARTICULARS

### 6.1 List of excipients

Suspension vial:

Polysorbate 80

Octoxynol 10

Thiomersal

Sodium chloride (NaCl)

Disodium hydrogen phosphate (Na<sub>2</sub>HPO<sub>4</sub>)

Potassium dihydrogen phosphate (KH<sub>2</sub>PO<sub>4</sub>)

Potassium chloride (KCl)

Magnesium chloride (MgCl<sub>2</sub>)

Water for injections

### **Emulsion vial:**

Sodium chloride (NaCl)

Disodium hydrogen phosphate (Na<sub>2</sub>HPO<sub>4</sub>)

Potassium dihydrogen phosphate (KH<sub>2</sub>PO<sub>4</sub>)

Potassium chloride (KCl)

Water for injections

For adjuvants, see section 2.

### 6.2 Incompatibilities

In the absence of compatibility studies, this medicinal product must not be mixed with other medicinal products.

### 6.3 Shelf life

5 years.

After mixing, the vaccine should be used within 24 hours. Chemical and physical in-use stability has been demonstrated for 24 hours at 25°C.

### 6.4 Special precautions for storage

Store in a refrigerator  $(2^{\circ}C - 8^{\circ}C)$ .

Do not freeze.

Store in the original package in order to protect from light.

For storage conditions after mixing of the medicinal product, see section 6.3.

### 6.5 Nature and contents of container

One pack containing:

- one pack of 50 vials (type I glass) of 2.5 ml suspension with a stopper (butyl rubber).
- two packs of 25 vials (type I glass) of 2.5 ml emulsion with a stopper (butyl rubber).

The volume after mixing 1 vial of suspension (2.5 ml) with 1 vial of emulsion (2.5 ml) corresponds to 10 doses of vaccine (5 ml).

### 6.6 Special precautions for disposal and other handling

Adjupanrix consists of two containers:

Suspension: multidose vial containing the antigen,

Emulsion: multidose vial containing the adjuvant.

Prior to administration, the two components should be mixed.

### Instructions for mixing and administration of the vaccine:

- 1. Before mixing the two components, the emulsion (adjuvant) and suspension (antigen) should be allowed to reach room temperature (for a minimum of 15 minutes); each vial should be shaken and inspected visually for any foreign particulate matter and/or abnormal physical appearance. In the event of either being observed (including rubber particles from the stopper), do not mix the vaccine.
- 2. The vaccine is mixed by withdrawing the entire contents of the vial containing the adjuvant by means of a 5 ml syringe and by adding it to the vial containing the antigen. It is recommended to equip the syringe with a 23-G needle. However, in the case this needle size would not be available, a 21-G needle might be used. The vial containing the adjuvant should be maintained in upside down position to facilitate the withdrawal of the full content.
- 3. After the addition of the adjuvant to the antigen, the mixture should be well shaken. The mixed vaccine is a whitish to yellowish homogeneous milky liquid emulsion. In the event of other variation being observed, do not administer the vaccine.
- 4. The volume of the Adjupanrix vial after mixing is at least 5 ml. The vaccine should be administered in accordance with the recommended posology (see section 4.2).
- 5. The vial should be shaken prior to each administration and inspected visually for any foreign particulate matter and/or abnormal physical appearance. In the event of either being observed (including rubber particles from the stopper), do not administer the vaccine.
- 6. Each vaccine dose of 0.5 ml or 0.25 ml or 0.125 ml is withdrawn into a syringe with appropriate graduation for injection and administered intramuscularly. It is recommended to equip the syringe with a needle gauge not larger than 23-G.
- 7. After mixing, use the vaccine within 24 hours. The mixed vaccine can either be stored in a refrigerator (2°C 8°C) or at room temperature not exceeding 25°C. If the mixed vaccine is

stored in a refrigerator, it should be allowed to reach room temperature (for a minimum of 15 minutes) before each withdrawal.

Any unused medicinal product or waste material should be disposed of in accordance with local requirements.

### 7. MARKETING AUTHORISATION HOLDER

GlaxoSmithKline Biologicals s.a. rue de l'Institut 89 B-1330 Rixensart, Belgium

### 8. MARKETING AUTHORISATION NUMBER(S)

EU/1/09/578/001

## 9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

Date of first authorisation: 19 October 2009

Date of latest renewal: 31 July 2019

### 10. DATE OF REVISION OF THE TEXT

Detailed information on this medicinal product is available on the website of the European Medicines Agency http://www.ema.europa.eu.

### **ANNEX II**

- A. MANUFACTURER OF THE BIOLOGICAL ACTIVE SUBSTANCE AND MANUFACTURER RESPONSIBLE FOR BATCH RELEASE
- B. CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE
- C. OTHER CONDITIONS AND REQUIREMENTS OF THE MARKETING AUTHORISATION
- D. CONDITIONS OR RESTRICTIONS WITH REGARD TO THE SAFE AND EFFECTIVE USE OF THE MEDICINAL PRODUCT
- E. SPECIFIC OBLIGATION TO THE COMPLETE POST-AUTHORISATION MEASURES FOR THE MARKETING AUTHORISATION UNDER EXCEPTIONAL CIRCUMSTANCES

### A. MANUFACTURER OF THE BIOLOGICAL ACTIVE SUBSTANCE AND MANUFACTURER RESPONSIBLE FOR BATCH RELEASE

Name and address of the manufacturer of the biological active substance

GlaxoSmithKline Biologicals Branch of the SmithKline Beecham Pharma GmbH & Co. KG Zirkusstr. 40 01069 Dresden Germany

Name and address of the manufacturer responsible for batch release

GlaxoSmithKline Biologicals S.A. 89, rue de l'Institut B-1330 Rixensart Belgium

### B. CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE

Medicinal product subject to medical prescription.

Adjupanrix can only be marketed when there is an official WHO/EU declaration of an influenza pandemic, on the condition that the Marketing Authorisation Holder for Adjupanrix takes due account of the officially declared pandemic strain.

### Official batch release

In accordance with Article 114 of Directive 2001/83/EC, the official batch release will be undertaken by a state laboratory or a laboratory designated for that purpose.

### C. OTHER CONDITIONS AND REQUIREMENTS OF THE MARKETING AUTHORISATION

### • Periodic safety update reports (PSURs)

The requirements for submission of PSURs for this medicinal product are set out in the list of Union reference dates (EURD list) provided for under Article 107c(7) of Directive 2001/83/EC and any subsequent updates published on the European medicines web-portal.

Outside of the pandemic period, the normal PSUR periodicity and format will be maintained, with a specific review of AESI and possible adverse events related to adjuvants. This should include data from ongoing studies, or actual use if applicable, of the pandemic preparedness strains and any safety data relevant to the adjuvant system.

In order to effectively monitor the safety profile of Adjupanrix during an officially-declared H5N1 influenza pandemic, GSK Biologicals will prepare monthly simplified PSURs, accompanied by a summary of vaccine distribution, as described in the CHMP recommendations for PhV plans of pandemic influenza vaccines (EMEA/359381/2009). The preparation and submission of the safety reports are described below.

### Objectives of the simplified PSUR

The objectives of the simplified PSUR, as indicated by CHMP, include the following:

- To notify regulatory authorities of the AERs that have been received within a pre-specified time period and that may have the greatest implications for risk-benefit balance in a pandemic;
- To flag any preliminary safety concerns and prioritise them for further evaluation within an appropriate timeframe.

### Frequency of submission

- The clock will start from the first Monday after shipment of the first batch of vaccine.
- First data-lock point is 28 days later.
- Report submission will be no later than day 43 (15 days after data-lock point), as agreed with European Medicines Agency (EMA) during the H1N1 influenza pandemic, because Day 14 after data-lock point will always fall on a Sunday- Reports will be submitted monthly for the first 6 months of the pandemic.
- Periodicity will be reviewed by the GSK Biologicals and the (Co-)Rapporteur at 6-month intervals.

### Format of the simplified PSUR

The report will include the following tables of aggregate data, using the format specified in the CHMP recommendations (EMEA/359381/2009) in the order listed below:

- 1. An overview for all spontaneous reports per country, stratified according to type of report (medically confirmed or non-medically confirmed) and seriousness, for the period covered by the report and cumulatively.
- 2. An overview for all spontaneous adverse events by SOC, High Level Term (HLT) and Preferred Term (PT), stratified according to type of report (medically confirmed or non-medically confirmed) and including the number of fatal reports, for the period covered by the report and cumulatively.
- 3. Adverse Events of Special Interest stratified according to type of report (medically confirmed or non-medically confirmed). AESIs will be defined as follows:

- Neuritis: PT "Neuritis"

- Convulsion: narrow standardised MedDRA query (SMQ)

"Convulsions"

- Anaphylaxis: narrow SMQ "Anaphylactic reaction" and narrow SMQ

"Angioedema"

- Encephalitis: narrow SMQ "Non-infectious encephalitis"

- Vasculitis: narrow SMQ "Vasculitis"

- Guillain-Barré syndrome: narrow SMQ "Guillain-Barré syndrome" (the PTs

'Chronic inflammatory demyelinating

polyradiculoneuropathy' and 'Demyelinating

polyneuropathy' will be tabulated in the "Demyelination"

category).

- Demyelination: narrow SMQ "Demyelination" (as GBS is also included

in this SMQ, there will be an overlap in the number of

cases for these two categories).

Bell's palsy: PT "Bell's Palsy"

- Narcolepsy: PT Narcolepsy; SMQ "Convulsions", SMQ "Generalised

convulsive seizures following immunisation", SMQ

"Immune-mediated/autoimmune disorders"

- Autoimmune hepatitis: PT "Autoimmune hepatitis", SMQ "Immune-mediated

autoimmune disorders"

- Increased concentrations of hepatic enzymes:

PT "Hepatic enzyme increased", SMQ

"Liver related investigations, signs and symptoms"

- Potential immune-mediated diseases: GSKMQ pIMD
- 4. Serious unlisted adverse reactions (SOC, HLT, PTs) stratified according to type of report (medically confirmed or non-medically confirmed), for the period covered by the report and cumulatively.
- 5. All spontaneous adverse reactions by age group, per SOC, HLT and PT, stratified according to type of report (medically confirmed or non-medically confirmed), for the period covered by the report and cumulatively. The following age groups will be used: < 2 years, 2-8 years, ≥ 9 years, and age unknown.
- 6. All spontaneous adverse reactions (SOC, HLT, PT) occurring in pregnant women, stratified according to type of report (medically confirmed or non-medically confirmed), for the period covered by the report and cumulatively.

The following principles will be followed when compiling the data:

- Table 1 of the PSUR will be based on the number of reports, while all other tables will be based on number of reactions (presented on PT level, sorted by SOC and HLT).
- All tables will be based on generic and not product-specific data, based on the assumption that product name will not be provided in a significant proportion of cases. Product-specific data will be evaluated during signal evaluation.
- "Cumulatively" means all adverse events since the use of the vaccine.
- All non-medically confirmed events will be those that had been entered into GSK's worldwide clinical safety database (referred to as ARGUS) by the data-lock point. Those which have not yet been entered will be reported in the following PSURs.
- "Serious" refers to the seriousness using regulatory criteria based on outcomes; this definition will be used in all tables.
- CIOMS I forms for fatal cases and reports of GBS will be provided in annexes.

A short summary will be provided in which the total number of new AERs since the last simplified PSUR will be outlined and validated signals and areas of concern will be highlighted, signal evaluation prioritised (in the event of multiple signals), and appropriate timelines for submission of a full signal evaluation report provided.

Signals occurring in pregnant women will be summarised in a table that will include the following data elements: gestational age at time of vaccination, gestational age at time of occurrence of adverse event, adverse event, and outcome.

### Vaccine distribution report

To put the safety report into context, a summary of vaccine distribution will be included and will provide details of the number of doses of vaccine distributed in

- i) EU member states for the reporting period by batch number,
- ii) EU member states cumulatively and
- iii) the rest of the world.

### D. CONDITIONS OR RESTRICTIONS WITH REGARD TO THE SAFE AND EFFECTIVE USE OF THE MEDICINAL PRODUCT

### • Risk management plan (RMP)

The marketing authorisation holder (MAH) shall perform the required pharmacovigilance activities and interventions detailed in the agreed RMP presented in Module 1.8.2 of the marketing authorisation and any agreed subsequent updates of the RMP.

An updated RMP should be submitted:

- At the request of the European Medicines Agency;
- Whenever the risk management system is modified, especially as the result of new information being received that may lead to a significant change to the benefit/risk profile or as the result of an important (pharmacovigilance or risk minimisation) milestone being reached.

## E. SPECIFIC OBLIGATION TO COMPLETE POST-AUTHORISATION MEASURES FOR THE MARKETING AUTHORISATION UNDER EXCEPTIONAL CIRCUMSTANCES

This being an approval under exceptional circumstances and pursuant to Article 14(8) of Regulation (EC) No 726/2004, the MAH shall conduct, within the stated timeframe, the following measures:

Description	Due date
During the pandemic, the applicant will collect clinical safety	Depending on and after
and effectiveness data of the pandemic vaccine and submit	implementation of vaccine when
this information to the CHMP for evaluation.	first pandemic will take place.
During the pandemic, the applicant will conduct a	Depending on and after
prospective cohort study as identified in the	implementation of vaccine when
Pharmacovigilance plan.	first pandemic will take place.

## ANNEX III LABELLING AND PACKAGE LEAFLET

A. LABELLING

### PARTICULARS TO APPEAR ON THE OUTER PACKAGING PACK CONTAINING 1 PACK OF 50 VIALS OF SUSPENSION AND 2 PACKS OF 25 VIALS OF EMULSION

### 1. NAME OF THE MEDICINAL PRODUCT

Adjupanrix suspension and emulsion for emulsion for injection. Pandemic influenza vaccine (H5N1) (split virion, inactivated, adjuvanted)

### 2. STATEMENT OF ACTIVE SUBSTANCE(S)

After mixing, 1 dose (0.5 ml) contains:

Split influenza virus inactivated, containing antigen equivalent to:

A/VietNam/1194/2004 (H5N1) like strain used (NIBRG-14)

3.75 micrograms\*

AS03 adjuvant composed of squalene, DL-α-tocopherol and polysorbate 80

### 3. LIST OF EXCIPIENTS

Polysorbate 80

Octoxynol 10

Thiomersal

Sodium chloride (NaCl)

Disodium hydrogen phosphate (Na<sub>2</sub>HPO<sub>4</sub>)

Potassium dihydrogen phosphate (KH<sub>2</sub>PO<sub>4</sub>)

Potassium chloride (KCl)

Magnesium chloride (MgCl<sub>2</sub>)

Water for injections

### 4. PHARMACEUTICAL FORM AND CONTENTS

Suspension and emulsion for emulsion for injection

50 vials: suspension (antigen)

50 vials: emulsion (adjuvant)

The volume after mixing 1 vial of suspension (2.5 ml) with 1 vial of emulsion (2.5 ml) corresponds to **10 doses** of 0.5 ml vaccine

### 5. METHOD AND ROUTE(S) OF ADMINISTRATION

Intramuscular use

Shake before use

Read the package leaflet before use

<sup>\*</sup> haemagglutinin

6.	SPECIAL WARNING THAT THE MEDICINAL PRODUCT MUST BE STORED OUT OF THE SIGHT AND REACH OF CHILDREN
Keep	out of the sight and reach of children.
7.	OTHER SPECIAL WARNING(S), IF NECESSARY
Suspe	ension and emulsion to be mixed before administration
8.	EXPIRY DATE
EXP	
9.	SPECIAL STORAGE CONDITIONS
Do no	in a refrigerator ot freeze in the original package in order to protect from light
10.	SPECIAL PRECAUTIONS FOR DISPOSAL OF UNUSED MEDICINAL PRODUCTS OR WASTE MATERIALS DERIVED FROM SUCH MEDICINAL PRODUCTS, IF APPROPRIATE
Dispo	ose of in accordance with local regulations
11.	NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER
Rue d	oSmithKline Biologicals s.a. de l'Institut 89 30 Rixensart, Belgium
12.	MARKETING AUTHORISATION NUMBER(S)
EU/1.	/09/578/001
13.	BATCH NUMBER
Lot:	
14.	GENERAL CLASSIFICATION FOR SUPPLY
15.	INSTRUCTIONS ON USE
16.	INFORMATION IN BRAILLE

### 17. UNIQUE IDENTIFIER – 2D BARCODE

2D barcode carrying the unique identifier included.

### 18. UNIQUE IDENTIFIER - HUMAN READABLE DATA

PC

SN

NN

### PARTICULARS TO APPEAR ON THE IMMEDIATE PACKAGING PACK OF 50 VIALS OF SUSPENSION

### 1. NAME OF THE MEDICINAL PRODUCT

Suspension for emulsion for injection for Adjupanrix

### 2. STATEMENT OF ACTIVE SUBSTANCE(S)

Split influenza virus, inactivated, containing antigen\* equivalent to

3.75 micrograms haemagglutinin/dose

\*Antigen: A/VietNam/1194/2004 (H5N1) like strain used (NIBRG-14)

### 3. LIST OF EXCIPIENTS

**Excipients:** 

Polysorbate 80

Octoxynol 10

Thiomersal

Sodium chloride

Disodium hydrogen phosphate

Potassium dihydrogen phosphate

Potassium chloride

Magnesium chloride

Water for injections

### 4. PHARMACEUTICAL FORM AND CONTENTS

Antigen suspension for injection

50 vials: suspension

2.5 ml per vial.

After mixing with adjuvant emulsion: 10 doses of 0.5 ml

### 5. METHOD AND ROUTE(S) OF ADMINISTRATION

Intramuscular use

Shake before use

Read the package leaflet before use

## 6. SPECIAL WARNING THAT THE MEDICINAL PRODUCT MUST BE STORED OUT OF THE SIGHT AND REACH OF CHILDREN

Keep out of the sight and reach of children.

### 7. OTHER SPECIAL WARNING(S), IF NECESSARY

Suspension to be exclusively mixed with adjuvant emulsion before administration

8. EXPIRY DATE
EXP
9. SPECIAL STORAGE CONDITIONS
Store in a refrigerator Do not freeze Store in the original package in order to protect from light
10. SPECIAL PRECAUTIONS FOR DISPOSAL OF UNUSED MEDICINAL PRODUCTS OR WASTE MATERIALS DERIVED FROM SUCH MEDICINAL PRODUCTS, IF APPROPRIATE
11. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER
GSK Biologicals, Rixensart - Belgium
12. MARKETING AUTHORISATION NUMBER(S)
EU/1/09/578/001
13. BATCH NUMBER
Lot:
14. GENERAL CLASSIFICATION FOR SUPPLY
15. INSTRUCTIONS ON USE
16. INFORMATION IN BRAILLE
Justification for not including Braille accepted
17. UNIQUE IDENTIFIER – 2D BARCODE
18. UNIQUE IDENTIFIER - HUMAN READABLE DATA

### PARTICULARS TO APPEAR ON THE IMMEDIATE PACKAGING PACK OF 25 VIALS OF EMULSION

### 1. NAME OF THE MEDICINAL PRODUCT

Emulsion for emulsion for injection for Adjupanrix

### 2. STATEMENT OF ACTIVE SUBSTANCE(S)

Content: AS03 adjuvant composed of squalene (10.69 milligrams), DL- $\alpha$ -tocopherol (11.86 milligrams) and polysorbate 80 (4.86 milligrams)

### 3. LIST OF EXCIPIENTS

Excipients:
Sodium chloride
Disodium hydrogen phosphate
Potassium dihydrogen phosphate
Potassium chloride
Water for injections

### 4. PHARMACEUTICAL FORM AND CONTENTS

Adjuvant emulsion for injection 25 vials: emulsion 2.5 ml

### 5. METHOD AND ROUTE(S) OF ADMINISTRATION

Intramuscular use Shake before use Read the package leaflet before use

### 6. SPECIAL WARNING THAT THE MEDICINAL PRODUCT MUST BE STORED OUT OF THE SIGHT AND REACH OF CHILDREN

Keep out of the sight and reach of children.

### 7. OTHER SPECIAL WARNING(S), IF NECESSARY

Emulsion to be exclusively mixed with antigen suspension before administration

### 8. EXPIRY DATE

**EXP** 

9.	SPECIAL STORAGE CONDITIONS
Do n	e in a refrigerator not freeze e in the original package in order to protect from light
10.	SPECIAL PRECAUTIONS FOR DISPOSAL OF UNUSED MEDICINAL PRODUCTS OR WASTE MATERIALS DERIVED FROM SUCH MEDICINAL PRODUCTS, IF APPROPRIATE
11.	NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER
GSK	Biologicals, Rixensart - Belgium
12.	MARKETING AUTHORISATION NUMBER(S)
EU/1	1/09/578/001
13.	BATCH NUMBER
Lot:	
14.	GENERAL CLASSIFICATION FOR SUPPLY
15.	INSTRUCTIONS ON USE
16.	INFORMATION IN BRAILLE
Justi	fication for not including Braille accepted
17.	UNIQUE IDENTIFIER – 2D BARCODE
18.	UNIQUE IDENTIFIER - HUMAN READABLE DATA

### MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS

### **SUSPENSION VIAL**

### 1. NAME OF THE MEDICINAL PRODUCT AND ROUTE(S) OF ADMINISTRATION

Antigen suspension for

Adjupanrix

A/VietNam/1194/2004 (H5N1) like strain used (NIBRG-14)

I.M.

### 2. METHOD OF ADMINISTRATION

Mix with adjuvant emulsion before use

### 3. EXPIRY DATE

**EXP** 

After mixing: Use within 24 hours and do not store above 25°C.

Date and time of mixing:

### 4. BATCH NUMBER

Lot

### 5. CONTENTS BY WEIGHT, BY VOLUME OR BY UNIT

2.5 ml

After mixing with adjuvant emulsion: 10 doses of 0.5 ml

### 6. OTHER

Storage (2°C-8°C), do not freeze, protect from light

MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS			
EMULSION VIAL			
1. N.	AME OF THE MEDICINAL PRODUCT AND ROUTE(S) OF ADMINISTRATION		
Adjuvant emulsion for Adjupanrix I.M.			
2. M	ETHOD OF ADMINISTRATION		
Mix into Antigen suspension before use			
3. EX	XPIRY DATE		
EXP			
4. B	ATCH NUMBER		
Lot			
5. C	ONTENTS BY WEIGHT, BY VOLUME OR BY UNIT		
2.5 ml			
6. O	THER		
Storage I	Storage (2°C-8°C), do not freeze, protect from light		

Storage (2°C-8°C), do not freeze, protect from light

**B. PACKAGE LEAFLET** 

### Package leaflet: Information for the user

### Adjupanrix suspension and emulsion for emulsion for injection

Pandemic influenza vaccine (H5N1) (split virion, inactivated, adjuvanted)

## Read all of this leaflet carefully before you start receiving this vaccine because it contains important information for you.

- Keep this leaflet. You may need to read it again.
- If you have any further questions, ask your doctor or nurse.
- This vaccine has been prescribed for you only. Do not pass it on to others.
- If you get any side effects, talk to your doctor. This includes any possible side effects not listed in this leaflet. See section 4.

#### What is in this leaflet:

- 1. What Adjupanrix is and what it is used for
- 2. What you need to know before you receive Adjupanrix
- 3. How Adjupanrix is given
- 4. Possible side effects
- 5. How to store Adjupanrix
- 6. Contents of the pack and otherinformation

### 1. What Adjupanrix is and what it is used for

### What Adjupanrix is and what it is used for

Adjupanrix is a vaccine for use in prophylaxis of influenza in an officially declared pandemic situation.

Pandemic flu is a type of influenza that happens at intervals that vary from less than 10 years to many decades. It spreads rapidly around the world. The signs of pandemic flu are similar to those of ordinary flu but may be more serious.

### How Adjupanrix works

When a person is given the vaccine, the body's natural defence system (immune system) produces its own protection (antibodies) against the disease. None of the ingredients in the vaccine can cause flu.

As with all vaccines, Adjupanrix may not fully protect all persons who are vaccinated.

### 2. What you need to know before you receive Adjupanrix

### Adjupanrix should not be given

- If you have previously had a sudden life-threatening allergic reaction to any ingredient of this vaccine (listed in section 6) or to anything else that may be present in very small amounts, such as: egg and chicken protein, ovalbumin, formaldehyde, gentamicin sulphate (antibiotic) or sodium deoxycholate.
  - Signs of an allergic reaction may include itchy skin rash, shortness of breath and swelling of the face or tongue.
  - However, in a pandemic situation, you may still be given the vaccine. This is as long as medical treatment is available straight away, in case you have an allergic reaction.

Do not have Adjupanrix if any of the above apply to you.

If you are not sure, talk to your doctor or nurse before having this vaccine.

### Warning and precautions:

Talk to your doctor or nurse before you are given Adjupanrix

- if you have had any allergic reaction other than a sudden life-threatening allergic reaction to any ingredient of Adjupanrix (listed in section 6) or to thiomersal, to egg and chicken protein, ovalbumin, formaldehyde, gentamicin sulphate (antibiotic) or to sodium deoxycholate.
- if you have a serious infection with a high temperature (over 38°C). If this applies to you then your vaccination will usually be postponed until you are feeling better. A minor infection such as a cold should not be a problem, but your doctor will advise whether you could still be vaccinated with Adjupanrix.
- if you have problems with your immune system, since your response to the vaccine may then be poor.
- if you are having a blood test to look for evidence of infection with certain viruses. In the first few weeks after vaccination with Adjupanrix the results of these tests may not be correct. Tell the doctor requesting these tests that you have recently received Adjupanrix.
- you have a bleeding problem or you bruise easily.

Fainting can occur following, or even before, any needle injection. Therefore tell the doctor or nurse if you fainted with a previous injection.

If any of the above apply to you (or you are not sure), talk to your doctor or nurse before having Adjupanrix. This is because the vaccination may not be recommended, or may need to be delayed.

### Children <6 years of age

If your child receives the vaccine, you should be aware that the side effects may be more intense after the second dose, especially temperature over 38°C. Therefore monitoring of temperature and measures to lower the temperature (such as giving paracetamol or other medicines that lower fever) after each dose are recommended.

### Other medicines and Adjupanrix

Tell your doctor or nurse if you are taking, have recently taken or might take any other medicines or have recently received any other vaccine.

In particular, tell your doctor or nurse if you are having any treatments (such as corticosteroid treatments or chemotherapy for cancer) that affect the immune system. Adjupanrix can still be given but your response to the vaccine may be poor.

Adjupanrix is not intended to be given at the same time as some other vaccines. However, if this needs to happen, the other vaccine will be injected into the other arm. Any side effects that happen may be more serious.

### **Pregnancy and breast-feeding**

If you are pregnant or breast-feeding, think you may be pregnant or are planning to have a baby, ask your doctor for advice before taking this vaccine.

### **Driving and using machines**

Some side effects listed in Section 4. "Possible side effects" may affect your ability to drive or use tools or machines. It is best to see how Adjupanrix affects you before you try these activities.

### Adjupanrix contains thiomersal

Adjupanrix contains thiomersal as a preservative and it is possible that you may experience an allergic reaction. Tell your doctor if you have any known allergies.

### Adjupanrix contains sodium and potassium

Adjupanrix contains less than 1 mmol sodium (23 mg) and less than 1 mmol of potassium (39 mg) per dose. It is essentially sodium- and potassium-free.

### 3. How Adjupanrix is given

### Adults aged 18 years and above

- From 18 years onwards: you will receive two doses of Adjupanrix (each 0.5 ml). The second dose should be given after an interval of at least three weeks and up to twelve months after the first dose.
- From 80 years onwards: you may receive two double injections of Adjupanrix. The first two injections should be given at the elected date and the two other injections should preferably be given 3 weeks after.

### Children 6 months to <36 months of age

Your child will receive two doses (each 0.125 ml equals quarter the adult dose per injection) of Adjupanrix. The second dose will be given preferably at least three weeks after the first dose.

### Children and adolescents 36 months to <18 years of age

Your child will receive two doses (each 0.25 ml equals half the adult dose per injection) of Adjupanrix. The second dose will be given preferably at least three weeks after the first dose.

Your doctor or nurse will give you Adjupanrix.

- They will give Adjupanrix as an injection into a muscle.
- This will usually be in the upper arm.
- The double injections will be given in opposite arms.

If you have any further questions on the use of this vaccine, ask your doctor or nurse.

### 4. Possible side effects

Like all medicines, this vaccine can cause side effects, although not everybody gets them. The following side effects may happen with this medicine:

### Allergic reactions

Allergic reactions which may cause you to have dangerously low blood pressure. If this is not treated it may lead to shock. Your doctors know that this might happen and will have emergency treatment ready to use.

### Other side effects:

Side effects that occurred in adults ≥18 years of age

### Very common: may affect more than 1 in 10 people

- Headache
- Feeling tired
- Pain, redness, swelling or a hard lump where the injection was given
- Fever
- Aching muscles, joint pain

### Common: may affect less than 1 in 10 people

- Warmth, itching or bruising where the injection was given
- Increased sweating, shivering, flu-like symptoms

• Swollen glands in your neck, armpit or groin

### Uncommon: may affect less than 1 in 100 people

- Tingling or numbness of the hands or feet
- Sleepiness
- Feeling dizzy
- Diarrhoea, vomiting, abdominal pain, nausea
- Itching, rash
- Generally feeling unwell
- Sleeplessness

### Side effects that occurred in children 6 to <36 months of age

### Very common: these may occur with more than 1 in 10 doses of the vaccine

- Gastrointestinal symptoms (such as diarrhoea and vomiting)
- Decreased appetite
- Sleepiness
- Pain at the injection site
- Fever
- Irritability/Fussiness

### Common: these may occur in up to 1 in 10 doses of the vaccine

• Redness and swelling at the injection site

### Uncommon: these may occur in up to 1 in 100 doses of the vaccine

- (Hard) lump, scab, bruising and eczema at the injection site
- Swelling face
- Rash, including red blotches
- Hives

### Side effects that occurred in children 3 to <6 years of age

### Very common: these may occur with more than 1 in 10 doses of the vaccine

- Decreased appetite
- Sleepiness
- Pain at the injection site
- Irritability/Fussiness

### Common: these may occur in up to 1 in 10 doses of the vaccine

- Gastrointestinal symptoms (such as nausea, diarrhoea, vomiting and abdominal pain)
- Fever
- Redness and swelling at the injection site

### Uncommon: these may occur in up to 1 in 100 doses of the vaccine

- Headache
- Rash
- Aching muscles
- Feeling tired
- Chills
- Bruising and itching at the injection site

### Side effects that occurred in children 6 to <18 years of age

### Very common: these may occur with more than 1 in 10 doses of the vaccine

Headache

- Aching muscles
- Joint pain
- Pain at the injection site
- Feeling tired

### Common: these may occur in up to 1 in 10 doses of the vaccine

- Gastrointestinal symptoms (such as nausea, diarrhoea, vomiting and abdominal pain
- Excessive sweating
- Fever
- Redness and swelling at the injection site
- Chills

### Uncommon: these may occur in up to 1 in 100 doses of the vaccine

- Decreased appetite
- Irritability/Fussiness
- Sleepiness
- Numbness
- Feeling dizzy
- Fainting
- Shaking
- Rash
- Skin Ulcer
- Musculoskeletal stiffness
- Itching at the injection site
- Armpit pain

In children aged 3 to 9 years, the following side effects were also observed: bruising, shivering and increased sweating.

The side effects listed below have happened with H1N1 AS03-containing vaccines. They may also happen with Adjupanrix. If any of the side effects below occur, please tell your doctor or nurse immediately:

- Allergic reactions leading to a dangerously low blood pressure. If this is not treated, it may lead to shock. Your doctors will know that this might happen and will have emergency treatment ready to use
- Fits
- Generalised skin reactions including urticaria (hives)

The side effects listed below have happened in the days or weeks after vaccination with vaccines given routinely every year to prevent flu. They may also happen with Adjupanrix. If any of the side effects below occur, please tell your doctor or nurse immediately:

### Very rare: may affect less than 1 in 10,000 people

- Problems with your brain and nerves such as inflammation of the central nervous system (encephalomyelitis), inflammation of nerves (neuritis) or a type of paralysis known as 'Guillain-Barré Syndrome'.
- Inflammation of your blood vessels (vasculitis). This can cause skin rashes, joint pain and kidney problems

### Rare: may affectless than 1 in 1,000 people

- Serious stabbing or throbbing pain along one or more nerves
- Low blood platelet count. This can cause bleeding or bruising

### Reporting of side effects

If you get any side effects, talk to your doctor or nurse. This includes any possible side effects not listed in this leaflet. You can also report side effects directly via the national reporting system listed in <u>Appendix V</u>. By reporting side effects you can help provide more information on the safety of this medicine.

### 5. How to store Adjupanrix

Keep this vaccine out of the sight and reach of children.

### Before the vaccine is mixed:

Do not use the suspension and the emulsion after the expiry date which is stated on the carton. The expiry date refers to the last day of that month.

Store in a refrigerator (2°C - 8°C).

Store in the original package in order to protect from light.

Do not freeze.

### After the vaccine is mixed:

After mixing, use the vaccine within 24 hours and do not store above 25°C.

Do not throw away any medicines via wastewater or household waste. Ask your pharmacist how to throw away medicines you no longer use. These measures will help protect the environment.

### 6. Contents of the pack and other information

### What Adjupanrix contains

### • Active substance:

Split influenza virus, inactivated, containing antigen\* equivalent to:

A/Vietnam/1194/2004 (H5N1) like strain used (NIBRG-14) 3.75 micrograms\*\* per 0.5 ml dose

This vaccine complies with the WHO recommendation and EU decision for the pandemic.

### • Adjuvant:

The vaccine contains an 'adjuvant' AS03. This adjuvant contains squalene (10.69 milligrams), DL- $\alpha$ -tocopherol (11.86 milligrams) and polysorbate 80 (4.86 milligrams). Adjuvants are used to improve the body's response to the vaccine.

### • Other ingredients:

The other ingredients are: polysorbate 80, octoxynol 10, thiomersal, sodium chloride, disodium hydrogen phosphate, potassium dihydrogen phosphate, potassium chloride, magnesium chloride, water for injections

### What Adjupanrix looks like and contents of the pack

The suspension is a colourless light opalescent liquid.

The emulsion is a whitish to yellowish homogeneous milky liquid.

Before the vaccine is given, the two parts will be mixed together. The mixed vaccine is a whitish to yellowish homogeneous milky liquid emulsion.

<sup>\*</sup>propagated in eggs

<sup>\*\*</sup>expressed in microgram haemagglutinin

One pack of Adjupanrix consists of:

- one pack containing 50 vials of 2.5 ml suspension (antigen)
- two packs containing 25 vials of 2.5 ml emulsion (adjuvant)

### Marketing Authorisation Holder and Manufacturer

GlaxoSmithKline Biologicals s.a. Rue de l'Institut 89 B-1330 Rixensart Belgium

For any information about this medicinal vaccine, please contact the local representative of the Marketing Authorisation Holder:

### België/Belgique/Belgien

GlaxoSmithKline Pharmaceuticals SA/NV Tél/Tel: + 32 10 85 52 00

### България

GlaxoSmithKline Biologicals SA Тел. + 359 80018205

### Česká republika

GlaxoSmithKline s.r.o. Tel: + 420 2 22 00 11 11 cz.info@gsk.com

### **Danmark**

GlaxoSmithKline Pharma A/S Tlf: +45 36 35 91 00 dk-info@gsk.com

### **Deutschland**

GlaxoSmithKline GmbH & Co. KG Tel: +49 (0)89 360448701 produkt.info@gsk.com

### Eesti

GlaxoSmithKline Biologicals SA Tel: +372 8002640

### Ελλάδα

GlaxoSmithKline Μονοπρόσωπη A.E.B.E Τηλ: + 30 210 68 82 100

### España

GlaxoSmithKline, S.A. Tel: + 34 900 202 700 es-ci@gsk.com

#### France

Laboratoire GlaxoSmithKline Tél: +33 (0) 1 39 17 84 44 diam@gsk.com

#### Lietuva

GlaxoSmithKline Biologicals SA Tel: +370 80000334

### Luxembourg/Luxemburg

GlaxoSmithKline Pharmaceuticals SA/NV Tél/Tel: + 32 10 85 52 00

### Magyarország

GlaxoSmithKline Biologicals SA Tel.: + 36 80088309

#### Malta

GlaxoSmithKline Biologicals SA Tel: + 356 80065004

### Nederland

GlaxoSmithKline BV Tel: + 31 (0)33 2081100

### Norge

GlaxoSmithKline AS Tlf: + 47 22 70 20 00

### Österreich

GlaxoSmithKline Pharma GmbH Tel: +43 (0)1 97075 0 at.info@gsk.com

### **Polska**

GSK Services Sp. z o.o. Tel.: + 48 (22) 576 9000

### **Portugal**

GlaxoSmithKline - Produtos Farmacêuticos, Lda. Tel: + 351 21 412 95 00 FI.PT@gsk.com

#### Hrvatska

GlaxoSmithKline Biologicals SA

Tel.: + 385 800787089

#### Ireland

GlaxoSmithKline (Ireland) Ltd Tel: +353 (0)1 495 5000

### Ísland

Vistor hf.

Sími: +354 535 7000

### Italia

GlaxoSmithKline S.p.A. Tel: + 39 (0)45 7741 111

### Κύπρος

GlaxoSmithKline Biologicals SA Tηλ: + 357 80070017

### Latvija

GlaxoSmithKline Biologicals SA Tel: +371 80205045

### This leaflet was last revised in {MM/YYYY}..

This medicine has been authorised under 'exceptional circumstances'.

This means that for scientific reasons it has been impossible to get complete information on this medicine.

The European Medicines Agency will review any new information on the medicine every year and this leaflet will be updated as necessary.

### Other sources of information

Detailed information on this medicine is available on the European Medicines Agency web site: http://www.ema.europa.eu/

\_\_\_\_\_

The following information is intended for healthcare professionals only:

Adjupanrix consists of two containers:

Suspension: multidose vial containing the antigen, Emulsion: multidose vial containing the adjuvant.

Prior to administration, the two components should be mixed.

### <u>Instructions for mixing and administration of the vaccine:</u>

1. Before mixing the two components, the emulsion (adjuvant) and suspension (antigen) should be allowed to reach room temperature (for a minimum of 15 minutes); each vial should be shaken and inspected visually for any foreign particulate matter and/or abnormal physical appearance.

#### România

GlaxoSmithKline Biologicals SA

Tel: +40 800672524

### Slovenija

GlaxoSmithKline Biologicals SA

Tel: + 386 80688869

### Slovenská republika

GlaxoSmithKline Biologicals SA

Tel.: + 421 800500589

### Suomi/Finland

GlaxoSmithKline Oy Puh/Tel: + 358 10 30 30 30

### **Sverige**

GlaxoSmithKline AB Tel: +46 (0)8 638 93 00 info.produkt@gsk.com

### **United Kingdom (Northern Ireland)**

GlaxoSmithKline Biologicals SA

Tel: +44(0)800 221441 customercontactuk@gsk.com

- In the event of either being observed (including rubber particles from the stopper), do not mix the vaccine.
- 2. The vaccine is mixed by withdrawing the entire contents of the vial containing the adjuvant by means of a 5 ml syringe and by adding it to the vial containing the antigen. It is recommended to equip the syringe with a 23-G needle. However, in the case this needle size would not be available, a 21-G needle might be used. The vial containing the adjuvant should be maintained in upside down position to facilitate the withdrawal of the full content.
- 3. After the addition of the adjuvant to the antigen, the mixture should be well shaken. The mixed vaccine is a whitish to yellowish homogeneous milky liquid emulsion. In the event of other variation being observed, do not administer the vaccine.
- 4. The volume of the Adjupanrix vial after mixing is at least 5 ml. The vaccine should be administered in accordance with the recommended posology (see section 3 "How Adjupanrix is given").
- 5. The vial should be shaken prior to each administration and inspected visually for any foreign particulate matter and/or abnormal physical appearance. In the event of either being observed (including rubber particles from the stopper), do not administer the vaccine.
- 6. Each vaccine dose of 0.5 ml or 0.25 ml or 0.125 ml is withdrawn into a syringe with appropriate graduation for injection and administered intramuscularly. It is recommended to equip the syringe with a needle gauge not larger than 23-G.
- 7. After mixing, use the vaccine within 24 hours. The mixed vaccine can either be stored in a refrigerator (2°C 8°C) or at room temperature not exceeding 25°C. If the mixed vaccine is stored in a refrigerator, it should be allowed to reach room temperature (for a minimum of 15 minutes) before each withdrawal.

The vaccine should not be administered intravascularly.

Any unused product or waste material should be disposed of in accordance with local requirements.