SUMMARY OF PRODUCT CHARACTERISTICS (SPC)

#### 1. NAME OF THE MEDICINAL PRODUCT

Adimflu Tetra Quadrivalent Influenza Vaccine

#### 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

This vaccine, a clear or slightly whitish opaque liquid, contains purified influenza virus haemagglutinin (HA) antigen.

Influenza virus surface antigens (haemagglutinin and neuraminidase), inactivated, of the following strains\*:

A/H1N1: 15 micrograms HA per 0.5 ml dose A/H3N2: 15 micrograms HA per 0.5 ml dose

B (Victoria lineage): 15 micrograms HA per 0.5 ml dose B (Yamagata lineage): 15 micrograms HA per 0.5 ml dose

#### 3. PHARMACEUTICAL FORM

Suspension for injection in pre-filled syringe.

A clear or slightly whitish opaque liquid.

## 4. CLINICAL PARTICULARS

# 4.1 Therapeutic indications

This vaccine is intended for use in the prevention of influenza.

#### 4.2 Posology and method of administration

For children of age  $\geq 3$  and for adults, one dose of 0.5 mL of vaccine is injected. For children of age < 9 previously unvaccinated with any seasonal flu vaccine, two doses should be administered. Each dose should be administered at least 4 weeks apart.

This vaccine is administered intramuscularly.

#### 4.3 Contraindications

Hypersensitivity to the active substances, to any of the excipients listed in Section 6.1 or to any component that may be present as traces such as eggs (ovalbumin, chicken proteins), formaldehyde and polysorbate 80.

#### 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 an anaphylactic reaction following the

<sup>\*</sup> propagated in fertilised hens' eggs from healthy chicken flocks

administration of the vaccine.

Adimflu Tetra should under no circumstances be administered intravascularly. As with other vaccines administered intramuscularly, the vaccine should be administered with caution to subjects with thrombocytopaenia or a bleeding disorder since bleeding may occur following an intramuscular administration to these subjects. Syncope (fainting) can occur following, or even before, any vaccination as a psychogenic response to the needle injection. Procedures should be in place to prevent injury from fainting and manage syncopal reactions.

As with any vaccine, vaccination with Adimflu Tetra may not protect 100% of susceptible individuals.

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

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

- Interactions: with relation to immuno-suppressants such as Cyclosporin. For individuals using immuno-suppressants, especially for long term or large quantity use, the expected effect of this vaccine may not be achieved.
- There are no data on co-administration of Adimflu Tetra with other vaccines.
- However, if co-administration with another vaccine is considered, immunization should be carried out on separate limbs. It should be noted that the adverse reactions may be intensified.
- 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

Inactivated influenza vaccines can be used in all stages of pregnancy. Larger datasets on safety are available for the second and third trimester, compared with the first trimester; however, data from worldwide use of inactivated influenza vaccines do not indicate any adverse foetal and maternal outcomes attributable to the vaccine.

Breastfeeding

Adimflu Tetra may be used during breastfeeding.

**Fertility** 

No fertility data are available.

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

Adimflu Tetra has no or negligible influence on the ability to drive and use machines.

## 4.8 Undesirable effects

(1) During clinical trials of Adimflu Tetra, the following side effects have been observed:

Adverse reactions are listed according to the following frequencies:

Very common:  $\geq 1/10$ 

Common:  $\geq 1/100 \text{ to} < 1/10$ 

Uncommon:  $\geq 1/1,000 \text{ to } < 1/100$ 

The local and systemic adverse events reported in the clinical trial in healthy subjects aged over 18 years are listed below:

System Organ Class	Item and Frequency
Nervous system disorders	Very common: Headache
	Uncommon: Drowsiness
Gastrointestinal disorders	Common: Nausea, Vomiting
	Uncommon: Diarrhea
Musculoskeletal and	Very common: Muscle aches
connective tissue	Uncommon: Back soreness pain
disorders	
General disorders and	Very common: Injection site pain/ swelling, Malaise
administration site	Common: Injection site redness, Injection site ecchymosis,
conditions	Decrease limb mobility, Fever, Chest tightness,
	Facial edema
	Uncommon: Fatigue, Injection site itchiness
Respiratory, thoracic and	Very common: Nasal congestion, Cough, Sore throat
mediastinal disorders	Common: Respiratory distress
	Uncommon: Chronic bronchitis
Eye disorders	Common: Eye redness
Infections and	Uncommon: Nasopharyngitis, Upper respiratory tract
infestations	infection

The local and systemic adverse events reported in the clinical trial in healthy children aged over 3 years are listed below:

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System Organ Class	Item and Frequency
Nervous system disorders	Common: headache
Gastrointestinal disorders	Common: nausea, vomiting, gastroenteritis, gastritis

System Organ Class	Item and Frequency
Musculoskeletal and	Very common: muscle aches (myalgia)
connective tissue	Common: dental caries
disorders	
General disorders and	Very common: injection site pain, injection site swelling,
administration site	malaise
conditions	Common: injection site redness, injection site ecchymosis,
	decreased limb mobility, fever, chest tightness,
	face edema
Respiratory, thoracic and	Very common: nasal congestion, cough,
mediastinal disorders	Common: respiratory distress, sore throat, bronchitis,
	pneumonia, epistaxis
Eye disorders	Common: eye redness, conjunctivitis
Infections and	Very common: upper respiratory tract infection
infestations	Common: nasopharyngitis, acute sinusitis, tonsillitis,
	pharyngitis, cellulitis, hand-foot-and-mouth
	disease, otitis media acute, herpangina
Metabolism and nutrition	Common: dehydration
disorders	
Skin and subcutaneous	Common: eczema
tissue disorders	

(2) The following adverse reactions occurred after the vaccine came on the market (based on the post-marketing experience from Adimflu trivalent influenza vaccine):

Blood and lymphatic system disorders: Thrombocytopenia, Lymphadenopathy

Gastrointestinal disorders: Abdominal pain, Dysphagia, Anhepatia

Metabolism and nutrition disorders: Lack of appetite

General disorders and administration site conditions: Malaise, Influenza-like

symptoms, Severe swelling

Musculoskeletal and connective tissue disorders: Arthritis, Back pain, Pain of limbs

Nervous system disorders: Neurologic abnormality (Facial palsy symptoms),

Dizziness, Somnolence, Syncope, Nerves pain, Abnormal gait, Facial palsy, Hypesthesia, Dysesthesia, Seizure,

Guillain-Barre syndrome (GBS), shake, Acute disseminated

encephalomyelitis (ADEM)

Vascular disorders: Pale, Hot flashes, Vasculitis, Transient renal involvement (very rare)

Hypersensitivity: Shock, Asthma, Stevens-Johnson syndrome, Toxic epidermal necrolysis, Rash

#### 4.9 Overdose

No case of overdose has been reported.

#### 5. PHARMACOLOGICAL PROPERTIES

#### 5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Influenza vaccine, ATC code: J07BB02.

An antibody immune response is generally induced within 3 weeks. The duration of postvaccinal immunity to homologous strains or to strains closely related to the vaccine strains varies.

#### 5.2 Pharmacokinetic properties

Not applicable.

## 5.3 Preclinical safety data

Non-clinical data revealed no special hazard for humans based on conventional studies of repeat dose and local toxicity studies.

#### 6. PHARMACEUTICAL PARTICULARS

#### **6.1** List of excipients

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>)

Water for injection (WFI)

## **6.2** Incompatibilities

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

#### 6.3 Shelf-life

One year.

## 6.4 Special precautions for storage

Store this vaccine in a cool and dark place  $(2\sim8^{\circ}\text{C})$ . Do not freeze. Keep the syringe in the outer carton in order to protect from light.

#### 6.5 Nature and contents of container

Syringe: One-dose prefilled syringe (0.5ml)

This vaccine is filled in syringe (type I glass) with plunger stopper (chlorobutyl rubber) with needle.

#### 6.6 Special precautions for disposal and other handling

- Handling of the vaccine:
  - 1. Do not freeze the product. If the vaccine is frozen by mistake, discard it due to the possibility of deterioration.
  - 2. After taking out from the refrigerator, this vaccine has to be warmed up to the room temperature and mixed well before use.
  - 3. Check the vaccine for abnormal cloudiness, color, foreign material and other anomaly; if any of these is present, discard the product.
  - 4. Due to an absence of clinical data to support the interchangeability of influenza vaccines, one should not complete the vaccination course with different brands of seasonal flu vaccines.
- Handling of the product in prefilled syringe packaging:
  Each syringe is aseptically packaged and for single dose only. Do not use the medicament contained inside once the needle structure has been destroyed or broken.

#### 7. MARKETING AUTHORIZATION HOLDER

Adimmune Corporation

No. 3, Sec. 1, Tanxing Rd., Tanzi Dist., Taichung City, 42743, Taiwan

#### 8. MARKETING AUTHORIZATION NUMBER(S)

Number of product-license Taiwan: DOH-BM-000138

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

First authorization: June 23, 2017

Renewal of authorization: March 27, 2018

# 10. DATE OF REVISION OF THE TEXT

March 31, 2018