ANNEX I

SUMMARY OF PRODUCT CHARACTERISTICS
1. **NAME OF THE MEDICINAL PRODUCT**

**Optafu** suspension for injection in pre-filled syringe
Influenza vaccine (surface antigen, inactivated, prepared in cell cultures)

(2015/2016 season)

2. **QUALITATIVE AND QUANTITATIVE COMPOSITION**

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

- A/California/7/2009 (H1N1)pdm09 - like strain
  (A/Brisbane/10/2010, wild type) 15 micrograms HA**

- A/Switzerland/9715293/2013 (H3N2) - like strain
  (A/South Australia/55/2014, wild type) 15 micrograms HA**

- B/Phuket/3073/2013 – like strain
  (B/Utah/9/2014, wild type) 15 micrograms HA**

per 0.5 ml dose

* propagated in Madin Darby Canine Kidney (MDCK) cells
** haemagglutinin

The vaccine complies with the WHO recommendation (northern hemisphere) and EU decision for the 2015/2016 season.

For the full list of excipients, see section 6.1.

3. **PHARMACEUTICAL FORM**

Suspension for injection in pre-filled syringe.
Clear to slightly opalescent.

4. **CLINICAL PARTICULARS**

4.1 **Therapeutic indications**

Prophylaxis of influenza for adults, especially in those who run an increased risk of associated complications.

Optafu should be used in accordance to Official guidance.

4.2 **Posology and method of administration**

**Posology**

Adults from the age of 18 years:
One dose of 0.5 ml
Paediatric population

The safety and efficacy of Optaflu in children and adolescents less than 18 years of age have not yet been established. No data are available. Therefore, Optaflu is not recommended for use in children and adolescents less than 18 years of age (see section 5.1).

Method of administration

Immunisation should be carried out by intramuscular injection into the deltoid muscle.

4.3 Contraindications

Hypersensitivity to the active substances or to any of the excipients listed in section 6.1. Immunisation shall be postponed in patients with febrile illness or acute infection.

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.

Optaflu should under no circumstances be administered intravascularly.

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.

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

4.5 Interaction with other medicinal products and other forms of interaction

Optaflu may be given at the same time as other vaccines. Immunisation should be carried out on separate limbs. It should be noted that 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

The safety of Optaflu in pregnancy and breast-feeding has not been assessed in clinical trials.

Pregnancy

In general data from influenza vaccinations in pregnant women do not indicate adverse foetal and maternal outcomes attributable to the vaccine. Animal studies do not indicate reproductive toxicity (see Section 5.3 – Preclinical safety data). The use of Optaflu may be considered from the second trimester of pregnancy. For pregnant women with medical conditions that increase their risk of complications from influenza, administration of the vaccine is recommended, irrespective of their stage of pregnancy.

Breast-feeding

There is no human data on use of Optaflu during lactation. No effects on the breastfed newborn/infant are anticipated. Optaflu may be used during lactation.
Fertility
No human fertility data are available. Animal data have not shown effects on female fertility (see section 5.3). Male fertility has not been assessed in animals (see section 5.3).

4.7 Effects on ability to drive and use machines

Optaflu has minor influence on the ability to drive and use machines.

4.8 Undesirable effects

a) Summary of safety profile

The safety of Optaflu has been assessed in seven randomized, active controlled clinical trials performed as part of the development program. Overall 7253 single doses of Optaflu were administered to 6180 adults aged 18 – 60 years of age and to 1073 elderly (aged 61 years or older). Safety and reactogenicity evaluations were performed for all subjects during the first 3 weeks following vaccination and SAEs have been collected for approximately 6700 vaccinees during six months of follow-up.

b) Summary of adverse reactions

Adverse reactions are listed according to the following frequency:
Very Common (≥1/10)
Common (≥1/100 - <1/10)
Uncommon (≥1/1000 - <1/100)
Rare (≥1/10,000 - <1/1000)
Very Rare (<1/10,000)
Not known (cannot be estimated from the available data)

Within each frequency grouping, undesirable effects are presented in order of decreasing seriousness. The following adverse reactions have been observed:

Table 1: Frequency in adults (18-60 years of age)

<table>
<thead>
<tr>
<th>Organ class</th>
<th>Very common (≥1/10)</th>
<th>Common (≥1/100 to &lt;1/10)</th>
<th>Uncommon (≥1/1000 to &lt;1/100)</th>
<th>Rare (≥1/10,000 to &lt;1/1000)</th>
<th>Very rare (&lt;1/10,000)</th>
<th>Not known (cannot be estimated from available data)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nervous system disorders</td>
<td>Headache*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Paraesthesia</td>
</tr>
<tr>
<td>Vascular disorders</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Vasculitis, possibly associated with transient renal involvement</td>
</tr>
<tr>
<td>Immune system disorders</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Allergic reactions, in very rare cases leading to shock</td>
</tr>
<tr>
<td>Blood and lymphatic system disorders</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Thrombocytopenia**</td>
</tr>
</tbody>
</table>
Organ class | Very common ≥ 1/10 | Common ≥ 1/100 to < 1/10 | Uncommon ≥ 1/1000 to < 1/100 | Rare ≥ 1/10,000 to < 1/1000 | Very rare < 1/10,000 | Not known (cannot be estimated from available data)
---|---|---|---|---|---|---
Musculoskeletal and connective tissue disorders | - Myalgia* | - Arthralgia* | | | | 
General disorders and administration site disorders | - Erythema* | - Injection site pain* | - Malaise* | - Fatigue* | - Swelling* | - Ecchymosis* | - Induration* | - Fever greater than 38.0°C* | - Shivering/chills* | - Gastrointestinal disorders such as abdominal pain, diarrhoea or dyspepsia* | - Fever greater than 39.0°C | - Extensive swelling of injected limb | 
Skin and subcutaneous tissue disorders | | | - Sweating* | | - Generalised skin reactions including pruritus, urticaria or non-specific rash | | | | | |

* These reactions usually disappeared within 1-2 days without treatment.
** Thrombocytopenia (some very rare cases were severe with platelet counts less than 5000 per mm³)

In the elderly frequencies were similar, except for myalgia, headache and injection site pain which were classified as ‘common’. The incidence rates for moderate and severe pain after Optaflu vaccination are similar to those of egg-derived influenza vaccines; however a slightly increased risk for mild short-lasting injection site pain was observed with Optaflu in the subgroup of elderly vaccinees (8% compared to 6% with egg-derived influenza vaccine).

Post-marketing surveillance:

So far there is limited post-marketing experience with Optaflu.

The following additional adverse reactions were reported from post-marketing surveillance with egg-based seasonal trivalent vaccines:

Nervous system disorders:

Neuralgia, convulsion, febrile convulsion.

Reporting of suspected adverse reactions:

Reporting of suspected adverse reactions after authorisation of the medicinal products 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 for Optaflu.
5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Influenza vaccine, ATC Code: J07BB02

Efficacy against Culture-Confirmed Influenza

A multinational (US, Finland, and Poland), randomized, observer-blinded, placebo-controlled trial was performed to assess clinical efficacy and safety of Optaflu during the 2007-2008 influenza season in adults aged 18 to 49 years. A total of 11,404 subjects were enrolled to receive Optaflu (N=3828), Agrippal (N=3676) or placebo (N=3900) in a 1:1:1 ratio. Among the overall study population enrolled, the mean age was 33 years, 55% were female, 84% were Caucasian, 7% were Black, 7% were Hispanic, and 2% were of other ethnic origin.

Optaflu efficacy was defined as the prevention of culture-confirmed symptomatic influenza illness caused by viruses antigenically matched to those in the vaccine compared to placebo. Influenza cases were identified by active and passive surveillance of influenza-like illness (ILI). ILI was defined according to Centers for Disease Control and Prevention (CDC) case definition, i.e., a fever (oral temperature ≥ 100.0°F / 38°C) and cough or sore throat. After an episode of ILI, nose and throat swab samples were collected for analysis. Vaccine efficacies against vaccine-matched influenza viral strains, against all influenza viral strains, and against individual influenza viral subtypes were calculated (Tables 2 and 3).

Table 2: Vaccine Efficacy against Culture-Confirmed Influenza

<table>
<thead>
<tr>
<th></th>
<th>Number of subjects per protocol</th>
<th>Number of subjects with influenza</th>
<th>Attack Rate (%)</th>
<th>Vaccine Efficacy*</th>
<th>Lower Limit of One-Sided 97.5% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Antigenically Matched Strains</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Optaflu</td>
<td>3776</td>
<td>7</td>
<td>0.19</td>
<td>83.8</td>
<td>61.0</td>
</tr>
<tr>
<td>Placebo</td>
<td>3843</td>
<td>44</td>
<td>1.14</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td><strong>All Culture-Confirmed Influenza</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Optaflu</td>
<td>3776</td>
<td>42</td>
<td>1.11</td>
<td>69.5</td>
<td>55.0</td>
</tr>
<tr>
<td>Placebo</td>
<td>3843</td>
<td>140</td>
<td>3.64</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

* Simultaneous one-sided 97.5% confidence intervals for the vaccine efficacy of each influenza vaccine relative to placebo based on the Sidak-corrected score confidence intervals for the two relative risks. Vaccine Efficacy = (1 - Relative Risk) x 100 %

Table 3: Comparative Efficacy of Optaflu versus Placebo against Culture-Confirmed Influenza by Influenza Viral Subtype

<table>
<thead>
<tr>
<th></th>
<th>Optaflu (N=3776)</th>
<th>Placebo (N=3843)</th>
<th>Vaccine Efficacy*</th>
<th>Lower Limit of One-Sided 97.5% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Antigenically Matched Strains</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A/H3N2</td>
<td>0.05</td>
<td>0.05</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>A/H1N1</td>
<td>0.13</td>
<td>1.12</td>
<td>43</td>
<td>67.4</td>
</tr>
<tr>
<td>B</td>
<td>0.03</td>
<td>1</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td><strong>All Culture-Confirmed Influenza</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A/H3N2</td>
<td>0.16</td>
<td>0.65</td>
<td>25</td>
<td>75.6</td>
</tr>
<tr>
<td>A/H1N1</td>
<td>0.16</td>
<td>1.48</td>
<td>57</td>
<td>89.3</td>
</tr>
<tr>
<td>B</td>
<td>0.79</td>
<td>1.59</td>
<td>61</td>
<td>49.9</td>
</tr>
</tbody>
</table>

* Simultaneous one-sided 97.5% confidence intervals for the vaccine efficacy of each influenza vaccine relative to placebo based on the Sidak-corrected score confidence intervals for the two relative risks. Vaccine Efficacy = (1 - Relative Risk) x 100 %;

** There were too few cases of influenza due to vaccine-matched influenza A/H3N2 or B to adequately assess vaccine efficacy.
Immunogenicity

Seroprotection is generally obtained within 3 weeks, as shown by the pivotal phase III clinical study V58P4 for the adult and elderly population.

In this comparative trial against an egg-derived influenza vaccine the seroprotection* rate, seroconversion or significant increase rate** and the geometric mean ratio (GMR) for anti-HA antibody (measured by HI) were assessed according to predefined criteria. Data for adults were as follows (values in brackets show the 95% confidence intervals):

**Table 4: Immunogenicity in Adults**

<table>
<thead>
<tr>
<th>Strain specific anti-HA antibody</th>
<th>A/H1N1 N=650</th>
<th>A/H3N2 N=650</th>
<th>B N=650</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seroprotection rate</td>
<td>86% (83, 88)</td>
<td>98% (97, 99)</td>
<td>82% (80, 86)</td>
</tr>
<tr>
<td>Seroconversion/Significant increase rate</td>
<td>63% (59, 67)</td>
<td>58% (54, 62)</td>
<td>78% (75, 81)</td>
</tr>
<tr>
<td>GMR</td>
<td>7.62 (6.86, 8.46)</td>
<td>4.86 (4.43, 5.33)</td>
<td>9.97 (9.12, 11)</td>
</tr>
</tbody>
</table>

* Seroprotection = HI titers ≥ 40
** Seroconversion = negative pre-vaccination HI titer and post-vaccination HI titer ≥ 40; significant increase = positive pre-vaccination HI titer and at least a 4-fold increase in post-vaccination HI titer.

Data for elderly were as follows (values in brackets show the 95% confidence intervals):

**Table 5: Immunogenicity in Elderly**

<table>
<thead>
<tr>
<th>Strain specific anti-HA antibody</th>
<th>A/H1N1 N=672</th>
<th>A/H3N2 N=672</th>
<th>B N=672</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seroprotection rate</td>
<td>76% (72, 79)</td>
<td>97% (96, 98)</td>
<td>84% (81, 87)</td>
</tr>
<tr>
<td>Seroconversion/Significant increase rate</td>
<td>48% (44, 52)</td>
<td>65% (61, 68)</td>
<td>76% (72, 79)</td>
</tr>
<tr>
<td>GMR</td>
<td>4.62 (4.2, 5.08)</td>
<td>5.91 (5.35, 6.53)</td>
<td>9.63 (8.77, 11)</td>
</tr>
</tbody>
</table>

* Seroprotection = HI titers ≥ 40
** Seroconversion = negative pre-vaccination HI titer and post-vaccination HI titer ≥ 40; significant increase = positive pre-vaccination HI titer and at least a 4-fold increase in post-vaccination HI titer.

No differences were observed between the cell-culture and the comparator egg-derived vaccine. Across all three influenza strains, for the egg-derived vaccine seroprotection rates ranged between 85% and 98%, seroconversion or significant increase rates ranged between 62% and 73% and GMRs ranged between 5.5- and 8.7-fold over baseline HI titers.

The persistence of postvaccination antibodies to strains included in the vaccine is usually 6-12 months, as shown by studies performed during the clinical development of this vaccine.

Paediatric population

Optaflu has not been studied in the paediatric population and therefore, data on immune response are not available for this age group.

The European Medicines Agency has deferred the obligation to submit the results of studies with Optaflu in one or more subsets of the paediatric population in the prevention of influenza (see section 4.2 for information on paediatric use).
5.2 Pharmacokinetic properties

Not applicable

5.3 Preclinical safety data

Non-clinical data reveal no special hazard for humans based on conventional repeat dose toxicity studies. Optaflu was well tolerated and immunogenic in mice and ferrets. In a repeated-dose toxicity study in rabbits there was no evidence of systemic toxicity and the vaccine was locally well tolerated.

No evidence of reproductive or developmental toxicity was seen in a study where the human dose of Optaflu was administered prior to and during gestation to female rabbits.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Sodium chloride, Potassium chloride, Magnesium chloride hexahydrate, Disodium phosphate dihydrate, Potassium dihydrogen phosphate, Water for injections.

6.2 Incompatibilities

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

6.3 Shelf life

1 year

6.4 Special precautions for storage

Store in a refrigerator (2 °C – 8 °C), Do not freeze.
Keep the pre-filled syringes in the outer carton in order to protect from light.

6.5 Nature and contents of container

0.5 ml suspension in pre-filled syringes (type I glass), with a plunger stopper (bromobutyl rubber). Pack sizes of 1, 10 or multipacks containing 20 (2 packs of 10) pre-filled syringes, each with or without needle.
Not all pack sizes may be marketed.

6.6 Special precautions for disposal and other handling

The vaccine should be allowed to reach room temperature before use. Shake before use.

Visually inspect the contents of each Optaflu syringe for particulate matter and/or change in colour prior to administration. If either condition exists, do not administer the vaccine.
Any unused medicinal product or waste material should be disposed of in accordance with local requirements.

7. MARKETING AUTHORISATION HOLDER

Seqirus GmbH
Emil-von-Behring-Strasse 76
D-35041 Marburg
Germany

8. MARKETING AUTHORISATION NUMBER(S)

EU/1/07/394/001 – EU/1/07/394/011

9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

Date of first authorisation: 01 June 2007
Date of latest renewal: 01 June 2012

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

Medicinal product no longer authorised
A. MANUFACTURER OF THE BIOLOGICAL ACTIVE SUBSTANCE AND MANUFACTURER RESPONSIBLE FOR BATCH RELEASE

Name and address of the manufacturer of the biological active substance

Novartis Influenza Vaccines Marburg GmbH
Emil-von-Behring-Strasse 76
D-35041 Marburg
Germany

Name and address of the manufacturer responsible for batch release

Novartis Influenza Vaccines Marburg GmbH
Emil-von-Behring-Strasse 76
D-35041 Marburg
Germany

The printed package leaflet of the medicinal product must state the name and address of the manufacturer responsible for the release of the concerned batch.

B. CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE

Medicinal product subject to medical prescription.

- 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 PSUR cycle for the medicinal product should follow a twice-yearly cycle until otherwise agreed by the CHMP.

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

- Risk Management Plan (RMP)

The 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.

If the dates for submission of a PSUR and the update of a RMP coincide, they can be submitted at the same time.
ANNEX III
LABELLING AND PACKAGE LEAFLET
A. LABELLING
PARTICULARS TO APPEAR ON THE OUTER PACKAGING

Carton Box for syringe(s) with needle
- 1 pre-filled syringe (0.5 ml) with needle
- 10 pre-filled syringes (0.5 ml) with needle

Carton box for syringe(s) without needle
- 1 pre-filled syringe (0.5 ml) without needle
- 10 pre-filled syringes (0.5 ml) without needle

1. NAME OF THE MEDICINAL PRODUCT

Optaflu suspension for injection in pre-filled syringe
Influenza vaccine (surface antigen, inactivated, prepared in cell cultures)
(2015/2016 season)

2. STATEMENT OF ACTIVE SUBSTANCE(S)

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

A/California/7/2009 (H1N1)pdm09 - like strain 15 micrograms HA**
A/Switzerland/9715293/2013 (H3N2) - like strain 15 micrograms HA**
B/Phuket/3073/2013 – like strain 15 micrograms HA** per 0.5 ml dose

* propagated in Madin Darby Canine Kidney (MDCK) cells
** haemagglutinin

The vaccine complies with the WHO recommendation (northern hemisphere) and EU decision for the 2015/2016 season.

3. LIST OF EXCIPIENTS

Sodium chloride, potassium chloride, magnesium chloride hexahydrate, disodium phosphate dihydrate, potassium dihydrogen phosphate and water for injections.

4. PHARMACEUTICAL FORM AND CONTENTS

Suspension for injection
1 pre-filled syringe (0.5 ml) with needle
10 pre-filled syringes (0.5 ml) with needle
1 pre-filled syringe (0.5 ml) without needle
10 pre-filled syringes (0.5 ml) without needle
5. METHOD AND ROUTE(S) OF ADMINISTRATION

For intramuscular use. The vaccine should be allowed to reach room temperature before 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

Do not inject intravascularly.

8. EXPIRY DATE

EXP

9. SPECIAL STORAGE CONDITIONS

Store in a refrigerator. Do not freeze. Keep the pre-filled syringe in the outer carton 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

Dispose of in accordance with local requirements.

11. NAME AND ADDRESS OF THE MARKETING AUTHORIZATION HOLDER

Seqirus GmbH
Emil-von-Behring-Strasse 76
D-35041 Marburg
GERMANY

12. MARKETING AUTHORIZATION NUMBER(S)

EU/1/07/394/001
EU/1/07/394/002
EU/1/07/394/004
EU/1/07/394/005
EU/1/07/394/007
EU/1/07/394/008
EU/1/07/394/010
EU/1/07/394/011
13. BATCH NUMBER

Batch:

14. GENERAL CLASSIFICATION FOR SUPPLY

Medicinal product subject to medical prescription.

15. INSTRUCTIONS ON USE

16. INFORMATION IN BRAILLE

Justification for not using Braille accepted.
PARTICULARS TO APPEAR ON THE OUTER PACKAGING

MULTIPACK
- Outer carton box for containing 2 carton boxes with 10 syringes each (with or without needles)

Outer carton box will include “Blue Box”.

1. NAME OF THE MEDICINAL PRODUCT

Optaflu suspension for injection in pre-filled syringe
Influenza vaccine (surface antigen, inactivated, prepared in cell cultures)
(2015/2016 season)

2. STATEMENT OF ACTIVE SUBSTANCE(S)

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

A/California/7/2009 (H1N1)pdm09 - like strain 15 micrograms HA**
A/Switzerland/9715293/2013 (H3N2) - like strain 15 micrograms HA**
B/Phuket/3073/2013 – like strain 15 micrograms HA**

per 0.5 ml dose

* propagated in Madin Darby Canine Kidney (MDCK) cells
** haemagglutinin

The vaccine complies with the WHO recommendation (northern hemisphere) and EU decision for the 2015/2016 season.

3. LIST OF EXCIPIENTS

Sodium chloride, potassium chloride, magnesium chloride hexahydrate, disodium phosphate dihydrate, potassium dihydrogen phosphate and water for injections.

4. PHARMACEUTICAL FORM AND CONTENTS

Suspension for injection

Multipack: 20 (2 packs of 10) pre-filled syringes (0.5 ml) without needle
Multipack: 20 (2 packs of 10) pre-filled syringes (0.5 ml) with needle

5. METHOD AND ROUTE(S) OF ADMINISTRATION

For intramuscular use.
The vaccine should be allowed to reach room temperature before 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 site and reach of children.

7. OTHER SPECIAL WARNING(S), IF NECESSARY

Do not inject intravascularly!

8. EXPIRY DATE

EXP

9. SPECIAL STORAGE CONDITIONS

Store in a refrigerator. Do not freeze. Keep the pre-filled syringe in the outer carton 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

Dispose of in accordance with local requirements.

11. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER

Seqirus GmbH
Emil-von-Behring-Strasse 76
D-35041 Marburg
GERMANY

12. MARKETING AUTHORISATION NUMBER(S)

EU/1/07/394/003
EU/1/07/394/006
EU/1/07/394/009

13. BATCH NUMBER

Batch:

14. GENERAL CLASSIFICATION FOR SUPPLY

Medicinal product subject to medical prescription.
15. INSTRUCTIONS ON USE

16. INFORMATION IN BRAILLE

Justification for not using Braille accepted.
PARTICULARS TO APPEAR ON THE OUTER PACKAGING

MULTIPACK
- Inner Carton Box for 10 pre-filled syringes with needles
- Inner Carton Box for 10 pre-filled syringes without needles

Inner carton box will not include “Blue Box”.

1. NAME OF THE MEDICINAL PRODUCT

Optaflu suspension for injection in pre-filled syringe
Influenza vaccine (surface antigen, inactivated, prepared in cell cultures)
(2015/2016 season)

2. STATEMENT OF ACTIVE SUBSTANCE(S)

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

A/California/7/2009 (H1N1)pdm09 - like strain  15 micrograms HA**
A/Switzerland/9715293/2013 (H3N2) - like strain  15 micrograms HA**
B/Phuket/3073/2013 – like strain 15 micrograms HA**

* propagated in Madin Darby Canine Kidney (MDCK) cells
** haemagglutinin

The vaccine complies with the WHO recommendation (northern hemisphere) and EU decision for the 2015/2016 season.

3. LIST OF EXCIPIENTS

Sodium chloride, potassium chloride, magnesium chloride hexahydrate, disodium phosphate dihydrate, potassium dihydrogen phosphate and water for injections.

4. PHARMACEUTICAL FORM AND CONTENTS

Suspension for injection
- 10 pre-filled syringes with needle. Component of a multipack, can’t be sold separately.
- 10 pre-filled syringes without needle. Component of a multipack, can’t be sold separately.

5. METHOD AND ROUTE(S) OF ADMINISTRATION

For intramuscular use. The vaccine should be allowed to reach room temperature before 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**

Do not inject intravascularly.

8. **EXPIRY DATE**

EXP

9. **SPECIAL STORAGE CONDITIONS**

Store in a refrigerator. Do not freeze. Keep the pre-filled syringe in the outer carton 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**

Dispose of in accordance with local requirements.

11. **NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER**

Seqirus GmbH
Emil-von-Behring-Strasse 76
D-35041 Marburg
GERMANY

12. **MARKETING AUTHORISATION NUMBER(S)**

EU/1/07/394/003
EU/1/07/394/006
EU/1/07/394/009

13. **BATCH NUMBER**

Batch:

14. **GENERAL CLASSIFICATION FOR SUPPLY**

Medicinal product subject to medical prescription.
<table>
<thead>
<tr>
<th>15. INSTRUCTIONS ON USE</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>16. INFORMATION IN BRAILLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Justification for not using Braille accepted.</td>
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</tbody>
</table>

Medicinal product no longer authorised.
### MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS

Prefilled syringe

<table>
<thead>
<tr>
<th>1. NAME OF THE MEDICINAL PRODUCT AND ROUTE(S) OF ADMINISTRATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optaflu</td>
</tr>
<tr>
<td>(2015/2016 season)</td>
</tr>
<tr>
<td>i.m. injection</td>
</tr>
</tbody>
</table>

| 2. METHOD OF ADMINISTRATION                                   |

<table>
<thead>
<tr>
<th>3. EXPIRY DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXP</td>
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</table>

<table>
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<tr>
<th>4. BATCH NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batch:</td>
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</table>

<table>
<thead>
<tr>
<th>5. CONTENTS BY WEIGHT, BY VOLUME OR BY UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5 ml</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>6. OTHER</th>
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</thead>
</table>

Medicinal product no longer authorised
B. PACKAGE LEAFLET
Package leaflet: Information for the user

Optaflu suspension for injection in a pre-filled syringe
Influenza vaccine (surface antigen, inactivated, prepared in cell cultures)

Read all of this leaflet carefully before you receive 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, pharmacist or nurse.
- If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. See section 4.

What is in this leaflet

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

1. What OPTAFLU is and what it is used for

Optaflu is a vaccine against flu (influenza). Due to the kind of manufacturing Optaflu is free of chicken/egg protein.

When a person is given the vaccine, the immune system (the body’s natural defence system) will produce its own protection against the influenza virus. None of the ingredients in the vaccine can cause the flu.

Optaflu is used to prevent flu in adults, especially in those who run an increased risk of experiencing associated complications in case they fall ill with flu.

The vaccine targets three strains of influenza virus following the recommendations by the World Health Organisation for the 2015/2016 season.

2. What you need to know before you receive OPTAFLU

You should not receive Optaflu

- if you are allergic to influenza vaccine or any of the other ingredients of this vaccine (listed in section 6)
- if you have an acute infection.

Warnings and precautions

Talk to your doctor, pharmacist or nurse before receiving Optaflu.

BEFORE receiving the vaccine

- you should tell your doctor if your immune system is impaired, or if you are undergoing treatment which affects the immune system, e.g. with medicine against cancer (chemotherapy) or corticosteroid medicines (see Section 2, “Taking other medicines”).
- your doctor or nurse will make sure that appropriate medical treatment and supervision is readily available in case of a rare anaphylactic reaction (a very severe allergic reaction with symptoms such as difficulty in breathing, dizziness, a weak and rapid pulse and skin rash) following the administration. This reaction may occur with Optaflu as with all vaccines that are injected.
Fainting can occur following, or even before, any needle injection. Therefore tell the doctor or nurse if you fainted with a previous injection.

If you have an acute illness associated with fever.

If you need a blood test to look for evidence of infection with certain viruses in the first few weeks after vaccination with Optaflu, the result of the test may not be correct. Tell the doctor requesting the test that you have recently received Optaflu.

**Other medicines and Optaflu**

Tell your doctor or nurse if you are using, have recently used or might use any other medicines, including medicines obtained without a prescription or if you have recently received any other vaccine.

If you take any medicines against cancer (chemotherapy), corticosteroid medicines (such as cortisone) or other medicines affecting the immune system, the immune response of your body may be weakened. Therefore, the vaccine may work less effectively.

Optaflu may be given at the same time as other vaccines. In this case the vaccines should be injected into separate limbs. Note that the side effects of the vaccines may be intensified.

**Pregnancy, breast-feeding and fertility**

**Pregnancy:**
Tell your doctor if you are pregnant, think you may be pregnant or plan to become pregnant. Your doctor will decide if you should receive Optaflu.

The limited data from influenza vaccinations in pregnant women do not indicate that there are negative effects for the unborn child. The use of this vaccine may be considered from the second trimester of pregnancy. For pregnant women with medical conditions that increase their risk of complications from the flu, administration of the vaccine is recommended, irrespective of their stage of pregnancy.

**Breast-feeding:**
Optaflu may be used during breast feeding.

**Fertility:**
No human fertility data are available. Animal data have not shown effects on female fertility.

**Driving and using machines:**
Optaflu may have a minor effect on your ability to drive and use machines.

**Optaflu contains sodium chloride and potassium chloride**
This vaccine contains less than 1 mmol sodium (23 mg) per dose, i.e. essentially ‘sodium-free’.

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

3. **How OPTAFLU is given**

Optaflu is given to you by your doctor or nurse. Optaflu should under no circumstances be injected into a blood vessel.

Adults from the age of 18 years:
One dose of 0.5 ml
Optaflu is injected into the muscle on the top of the upper arm (deltoid muscle).

Children and adolescents:
Optaflu is not recommended for use in children below 18 years of age since there is no information available.
4. Possible side effects

Like all medicines, this vaccine can cause side effects, although not everybody gets them. The following side effects have been observed during clinical trials and post-marketing surveillance:

**Very serious side effects**
Tell your doctor immediately or go to the casualty department at your nearest hospital if you experience the following side effect – you may need urgent medical attention or hospitalisation:

Not known (cannot be estimated from the available data)
- swelling most apparent in the head and neck, including the face, lips, tongue, throat or any other part of the body (angioedema)

Very rare (affects less than 1 user in 10,000):
- difficulty in breathing, dizziness, a weak and rapid pulse and skin rash which are symptoms of an anaphylactic reaction (a very severe allergic reaction)

Rare (affects 1 to 10 users in 10,000):
- painful disorders of the nerves, e.g. attacks of extreme pain in the face, throat or ear fits (convulsions) (only observed with egg-derived influenza vaccines)

Also, tell your doctor immediately if you experience any of the following side effects – you may need medical attention:

Very rare (affects less than 1 user in 10,000):
- skin rashes, fever, joint pain or kidney problems which are symptoms of an inflammation of the blood vessels
- fever, headache, vomiting and drowsiness progressing to coma or fits (convulsions) which are symptoms of an inflammation of the brain and spinal cord
- weakness beginning in the legs and progressing to the arms with numbness and tingling sensation which are symptoms of an inflammation of the nerves

Serious side effects
Tell your doctor immediately if you experience any of the following side effects – you may need medical attention:

Not known (cannot be estimated from the available data)
- extensive swelling of injected limb

Very Rare (affects less than 1 user in 10,000):
- bleeding or bruising which are symptoms of a low platelet count in the blood

Mild side effects

Not known (cannot be estimated from the available data):
- numbness and tingling sensation

Very common (affects more than 1 user in 10):
- flu-like symptoms such as headache, feeling of discomfort, tiredness, muscle pain.
- injection site pain, reddening.

These reactions are usually mild and only last a few days. Injection site pain and headache were common in the elderly.
Common (affects 1 to 10 users in 100):
- sweating, joint pain, chills, hardening or swelling at the site of the injection, bruising, fever, shivering
- gastrointestinal disorders such as abdominal pain, diarrhoea or disturbance of the digestive tract
These reactions are usually mild and only last a few days.

Uncommon (affects 1 to 10 users in 1,000):
- generalised skin reactions such as itching, bumps on the skin or non-specific rash

Rare (affects 1 to 10 users in 10,000):
- swelling and pain of local lymphnodes
- Fever greater than 39.0 °C

Reporting of side effects.
If you get any side effects, talk to your doctor, pharmacist 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 Appendix V. By reporting side effects you can help provide more information on the safety of this medicine.

5. How to store OPTAFLU

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

Do not use this vaccine after the expiry date which is stated on the label and carton after EXP. The expiry date refers to the last day of that month.

Store in a refrigerator (2 °C to 8 °C).
Do not freeze.
Keep the pre-filled syringe in the carton in order to protect from light.

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 Optaflu contains
The active substances are influenza virus surface antigens (haemagglutinin and neuraminidase)*, inactivated, of the following strains:

A/California/7/2009 (H1N1)pdm09 - like strain
(A/Brisbane/10/2010, wild type) 15 micrograms HA**

A/Switzerland/9715293/2013 (H3N2) - like strain
(A/South Australia/55/2014, wild type) 15 micrograms HA**

B/Phuket/3073/2013 – like strain
(B/Utah/9/2014, wild type) 15 micrograms HA**

............................
* produced in Madin Darby Canine Kidney (MDCK) cells (this is the special cell culture in which the influenza virus is grown)
** haemagglutinin

The other ingredients are: sodium chloride, potassium chloride, magnesium chloride hexahydrate, disodium phosphate dihydrate, potassium dihydrogen phosphate and water for injections.
What Optaflu looks like and contents of the pack
Optaflu is a suspension for injection in a pre-filled syringe (ready-to-use syringe). Optaflu is a clear to slightly opalescent suspension.
A single syringe contains 0.5 ml of suspension for injection.
Optaflu is available in packs containing 1 or 10 pre-filled syringes and in multipacks comprising 2 cartons, each containing 10 pre-filled syringes. All pack sizes are available with or without needle(s).

Marketing Authorisation Holder and Manufacturer
Seqirus GmbH
Emil-von-Behring-Strasse 76
D-35041 Marburg
Germany

This leaflet was last revised in.

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