# Written Story Board

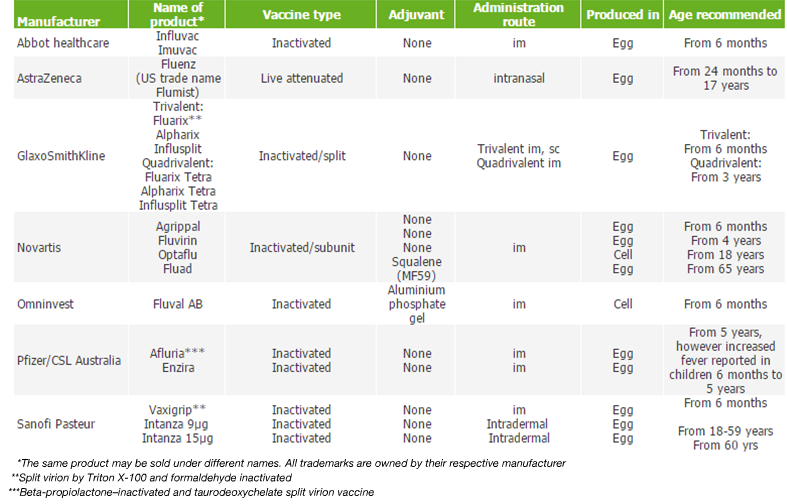
| F# | **TOC / Section Title** | Bullet Text | **Transcript** | **Frame Title** | **Pop-up (User gen)** | Macro  Data | **Notes** | **Quiz Content** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Introduction |  |  | Welcome |  |  | Loading Frame With Logo  Creative Notes: Please show loading frame with launch button. When the user clicks/taps the launch button move to the next frame. |  |
|  |  |  | Welcome to the Influenza Learning System.  This module on **Influenza Vaccines Competitive Landscape,** provides an overview of the influenza vaccines currently approved for use in the European Union (EU).  Before proceeding, read the listed learning objectives.  After completing this module, you should be able to:   * List the various manufacturers that produce and deliver influenza vaccines in Europe. * Describe the various influenza vaccines approved in the EU region. | Learning Objectives |  |  | **Learning Objectives**  After completing this module, you should be able to:   * List the various manufacturers that produce and deliver influenza vaccines in Europe. * Describe the various influenza vaccines approved in the EU region.   \\mgmgrand\Library-Resources\AV Resources\Thinkstock\Feb_15\177235853.jpg  Thinkstock ID: 177235853  Creative Notes: Please allow the bullets to appear in sync with the audio. Let the image appear at the right. |  |
|  | Approved Influenza Vaccines in the EU |  | The on-screen table summarises the key information about the various influenza vaccines approved for use in the European Union (EU). The influenza vaccine manufacturers producing and delivering the seasonal vaccines in European countries at present are shown in the table on-screen. The vaccines produced are named differently in different countries, despite being the same product.1  We will discuss some of these major vaccines in detail in the following frames. | Influenza Vaccines in the EU |  |  | **Influenza Vaccines and their Manufacturers in the EU**    Adapted from ECDC Web site1  Creative: Recreate the above table. Please let the table stay on-screen for complete frame.  Enlarged image of the table is placed at the end of the module. |  |
| 4 | Influvac |  | Influvac is a trivalent inactivated influenza vaccine.6  The vaccine is composed of influenza virus surface **antigen**s (haemagglutinin and neuraminidase), of the following strains:  A (H1N1), A (H3N2) and B. The vaccine antigens are propagated in fertilized hens' eggs from healthy chicken flocks.6  For more information on Influvac, click/tap the corresponding tabs. | Overview |  |  | **Composition**   * Influvac, a trivalent, inactivated influenza vaccine * Vaccine is composed of influenza virus surface antigens of the following strains: * A (H1N1) * A (H3N2) * B   **Creative Note: Sync the bullets above with the transcript.**  **Creative Notes: Create the following tabs as shown in screenshot according to branding guidelines. All the tabs will have audio. The user should be able to move to next frame only after viewing all the tabs.**  **Tabs**  **Therapeutic Indications**  **Method of Administration**  **Contraindications**  **Undesirable Effects**  **Posology**  **Nature and Contents of Container** |  |
| 4a | Influvac |  | Influvac is indicated in the prophylaxis of influenza, especially for those who run an increased risk of associated complications. Influvac is indicated in adults and children from 6 months of age.6  Click/tap the Close button to choose the next tab. | Therapeutic Indications (Tab 1) |  |  | **Therapeutic Indications**   * Prophylaxis of influenza, especially those who run an increased risk of associated complications * Influvac is indicated in adults and children from 6 months of age   **\\mgmgrand\Library-Resources\AV Resources\Thinkstock\Feb_15\178099249.jpg**  Thinkstock id: [178099249](http://www.thinkstockphotos.in/image/stock-photo-girl-crying-and-cleaning-nose-with-tissue/178099249)  **Creative Notes: Please allow the bullets to appear in sync with the audio. Image will appear on the right side.**  **Creative Notes: Show the following prompt at the end of all the bullets in sync with the audio.**  Click/tap the Close button to choose the next tab |  |
| 4b | Influvac |  | Immunisation should be carried out by intramuscular or deep subcutaneous injection.6  Click/tap the Close button to choose the next tab. | Method of Administration (Tab 2) |  |  | **Method of Administration**   * Intramuscular * Deep subcutaneous injection   \\mgmgrand\Library-Resources\AV Resources\Thinkstock\Feb_15\532684337.jpg  Thinkstock id: [532684337](http://www.thinkstockphotos.in/image/stock-photo-child-vaccinations-on-blue-background/532684337)  **Creative Notes: Please allow the bullets to appear in sync with the audio. Image will appear on the right side.**  **Creative Notes: Show the following prompt at the end of all the bullets in sync with the audio.**  Click/tap the Close button to choose the next tab |  |
| 4c | Influvac |  | Influvac should not be administered to anyone with hypersensitivity to the active substances, to any of the **excipients** and to any component that may be present in traces such as eggs (ovalbumin, chicken proteins), formaldehyde, cetyltrimethylammonium bromide, polysorbate 80 or gentamicin.6  Click/tap the Close button to choose the next tab. | Contraindications (Tab 3) |  |  | **Contraindications**   * Hypersensitivity to:   + Active substances   + Any of the excipients   + Any component that may be present in traces such as:     - Egg (ovalbumin, chicken proteins)     - Formaldehyde     - Cetyltrimethylammonium bromide     - Polysorbate 80     - Gentamicin   **\\venetian\Product\Novartis\Global Influenza e-Learning System Update\Deliverables\E module\Module03\Content\References\Images\Watermark free\Thinkstock Images_Global Flu Mod 03\115454729_jpg.jpg**  Thinkstock ID: 115454729  **Creative Notes: Please allow the bullets to appear in sync with the audio. Image will appear in the background.**  **Creative Notes: Show the following prompt at the end of all the bullets in sync with the audio.**  Click/tap the Close button to choose the next tab |  |
| 4d | Influvac |  | During the clinical trials of Influvac, the common systemic adverse events were headache, sweating, **myalgia**, **arthralgia**, fever, **malaise**, shivering and fatigue. The local reactions were redness, swelling, pain, ecchymosis, and induration.6  Click/tap the Close button to choose the next tab. | Undesirable Effects (Tab 4) |  |  | **Undesirable Effects**   * Commonly reported adverse events:   + Headache, sweating, myalgia, arthralgia, fever, malaise, shivering and fatigue   + Local reactions:     - Redness, swelling, pain, ecchymosis, and induration   \\mgmgrand\Library-Resources\AV Resources\Thinkstock\Feb_15\482426197.jpg  Thinkstock id: 482426197  **Creative Notes: Please allow the bullets to appear in sync with the audio. Image will appear on the right side.**  **Creative Notes: Show the following prompt at the end of all the bullets in sync with the audio.**  Click/tap the Close button to choose the next tab |  |
| 4e | Influvac |  | A dose of 0.5 mL of Influvac should be administered to adults. Children aged 36 months and older should be given 0.5 mL. Clinical data are limited in children aged from 6 months to 35 months. Dosages of 0.25 mL or 0.5 mL may be given. For children who have not previously been vaccinated, a second dose should be given after an interval of at least 4 weeks. The safety and efficacy of Influvac in children less than 6 months have not been established. No data are available.6  Click/tap the Close button to choose the next tab. | Posology  (Tab 5) |  |  | **Posology**    Adapted from Influvac SmPC (2014)6  **Creative Notes: Please allow the table to appear in sync with the audio.**  **Creative Notes: Show the following prompt at the end of all the bullets in sync with the audio.**  Click/tap the Close button to choose the next tab |  |
| 4f | Influvac |  | A 0.5-mL suspension for injection in prefilled syringe with/without needle (glass, type I) in a pack of 1 or 10.6  Click/tap the Close button to return to the Influvac section. | Nature and Contents of Container (Tab 6) |  |  | **Nature and Contents of Container**   * 0.5 mL suspension for injection in prefilled syringe with/without needle (glass, type I) * Pack of 1 or 10   \\mgmgrand\Library-Resources\AV Resources\Thinkstock\Feb_15\122411967.jpg  Thinkstock id: 122411967  **Creative Notes: Please allow the bullets to appear in sync with the audio. Image will appear in the background.**  **Creative Notes: Show the following prompt at the end of all the bullets in sync with the audio.**  Click/tap the Close button to return to the Influvac section |  |
| 5 |  |  | Respirationis a process of gas exchange in the body involving four basic steps—pulmonary ventilation,external respiration,transport of respiratory gases, andinternal respiration.1, 2  These steps ensure exchange of oxygen and carbon dioxide between the external environment and body cells. Continuous supply of oxygen is vital for the body cells to carry out their functions.2 | Overview |  |  | **Respiration**   * Process of gas exchange in the body * Involves four basic steps:   + Pulmonary ventilation   + External respiration   + Transport of respiratory gases   + Internal respiration * Ensures exchange of oxygen and carbon dioxide between the external environment and body cells   Continuous supply of oxygen: vital for cellular functions |  |
| 6 |  |  | Pulmonary ventilation involves the exchange of air between the atmosphere and the lungs and occurs through inhalation and exhalation of air.1  External respiration refers to the exchange of gases between the alveoli of the lungs and the blood in the capillaries of the lungs. During this process, oxygen moves into the blood in lung capillaries, while carbon dioxide moves out.1, 2  The oxygen from the lung capillaries is transported via blood to different organs and tissue cells, and the carbon dioxide from these cells is again transported in a similar fashion to the lung capillaries.2  Internal respiration, or tissue respiration, refers to the exchange of gases between the blood in the systemic capillaries and tissue cells. Metabolic processes that occur within the cells are termed as cellular respiration. In cellular respiration, cells use oxygen and release carbon dioxide during the metabolic process of generating energy from nutrient molecules.1 | Steps of Respiration |  |  | **Steps of Respiration**  Source: (Tortora\_2012), (Marieb\_2013) |  |
| 7 | Upper Respiratory System |  | Let’s first take a look at the anatomy of the upper respiratory tract, which broadly consists of the nose and the pharynx.  The external portion of the nose has two openings called the nostrils or external nares. The space inside the nose is called the nasal cavity. The anterior portion of the nasal cavity which is situated just inside the nostrils and is surrounded by **cartilage** is called the **nasal vestibule.** The superior part of nasal cavity is surrounded by bone.1  The nasal septum separates the nasal cavity into right and left sides. Similar to the nasal cavity, the anterior part of the nasal septum is formed by cartilage, whereas the posterior part is formed by bone.1 | Nose |  |  | **Upper Respiratory System**  **Nostrils and Nasal Cavity**  Source: (Marieb\_2013)  **Upper Respiratory System**  **Nasal Septum**  Source: (Tortora\_2012) |  |
| 8 | Upper Respiratory System |  | Before moving on to the next section on the anatomy of the lower respiratory tract, let’s briefly recapitulate the functions of the structures forming the upper airway.  The nasal cavity and its mucosa along with the paranasal sinuses condition the inhaled air by warming and moistening it. The mucus produced in the cavity and vibrissae filters air from foreign particles. The nasal cavity and sinuses also act as resonating chambers for speech.2  Olfaction is performed by receptors in the olfactory epithelium present on the roof of the nasal cavity.2  The pharynx acts as a passageway for air and food. The lymphatic tissue housed in the different tonsils provides protection against pathogens and other inhaled antigens.2 | Functions |  |  | *Tap on each of the hotspots to reveal their functions*  **Functions of Upper Airway**      Source: (Marieb\_2013)  **Nasal Cavity**   * Warms and moistens (conditions) inhaled air * Mucus and vibrissae filter air * Acts as resonating chamber for speech   **Paranasal Sinuses**   * Warm and moisten (conditions) inhaled air * Act as resonating chamber for speech   **Olfactory Epithelium**   * Olfaction   **Pharynx**   * Passageway for air and food   **Tonsils**  Protect against pathogens and inhaled antigens |  |
| 9 | Nervous System |  | Let’s now take a look at the major divisions of the nervous system and the **autonomic nervous system** control of respiration.  The two primary divisions of the nervous system are the central nervous system (CNS)and the **peripheral nervous system**. The CNS, consisting of the brain and the spinal cord, is the command center of the nervous system. It interprets all the incoming messages from the body and generates responses to them. The peripheral nervous system primarily consists of the nerves that extend from the brain and spinal cord and link the body and CNS.10  The peripheral nervous system has two functional subdivisions—the sensory or afferent division and the motor or efferent division. The efferent or motor division of the peripheral nervous system is further subdivided into the somatic nervous system and the autonomic nervoussystem.10  The autonomic nervous system is functionally divided into sympathetic and parasympathetic divisions, which act on the same muscles or glands but usually exerting opposite effects. As a whole, the autonomic nervous system regulates the body’s involuntary functions, influencing factors such as heart rate or the movement of food through the digestive tract.10 | Organization |  |  | **Organization of the Nervous System**   * Two principal parts of the nervous system:   + Central nervous system (CNS)   + Peripheral nervous system (PNS)     Source: (Marieb\_2013) |  |
| 10 |  |  | There are two types of adaptive immune responses: antibody-mediated immunity and cell-mediated immunity.1, 3  Antibody-mediated immunity, also referred to as humoral immunity, involves the production of antibodies by B-cell derivatives known as plasma cells.1, 7 These antibodies circulate in the body and bind to foreign substances, such as bacteria and bacterial toxins, and temporarily inactivate them.1  Cell-mediated immunity, on the other hand, involvesthe production of T cells that either directly attack infected cells or indirectly destroy them by releasing chemical substances that enhance the response mediated by the other immune cells.1, 2 | Classification |  |  | Adapted from Marieb (2013)1, Murphy (2012)2, 7, Nairn (2013)3  *It should synch with audio .* |  |
| 11 | Quiz |  | You will now be presented with a Quiz.  Choose the type of quiz you want to attempt. You can choose the types in any order; however, you must attempt all the questions in each type to be able to move to the next selection. |  |  |  | **Learning Activity 1**  **Choose the best response and click/tap the Submit button.**   1. Which of the following vaccines is manufactured by Abbott? 2. Agrippal 3. Influvac 4. Fluad 5. Optaflu   **Answer: B**   1. What is the minimum age requirement for the administration of Agrippal? 2. 2 months 3. 3 months 4. 4 months 5. 6 months   **Answer: D**   1. Which of the following influenza vaccines is not indicated for use in infants/children? 2. INTANZA 15 µg 3. Imuvac 4. Influvac 5. Fluarix   **Answer: A**   1. What is the minimum age requirement for the administration of Imuvac in children? 2. 4 months 3. 6 months 4. 2 months 5. 3 months   **Answer: B** |  |
| 12 |  |  |  |  |  |  | **Learning Activity 2**  **Drag the vaccines to their respective manufacturers.**   |  |  | | --- | --- | | **Manufacturer** | **Vaccine** | | Novartis | Optaflu | | AstraZeneca | Fluenz Tetra | | GlaxoSmithKline | Fluarix | | Pfizer/CSL Australia | ENZIRA | | Sanofi Pasteur | INTANZA |   **Correct answers are shown above. Only three attempts are allowed. User can see the attempt count on title box of drag and drop.** |  |
| 12 |  |  |  |  |  |  | **Learning Activity 3**  **Fill the blanks with the most appropriate options using drag and drop.**   1. Immunisation by Fluenz Tetra is carried out by \_\_\_\_\_\_\_\_\_\_\_. 2. Fluarix is administered by \_\_\_\_\_\_\_\_\_\_\_\_\_. 3. Immunisation by Enzira should be carried out by \_\_\_\_\_\_\_\_. 4. INTANZA is administered by \_\_\_\_\_\_\_\_\_\_\_\_\_.   **Answers:**   1. Nasal route 2. Intramuscular or deep subcutaneous injection 3. Intramuscular or deep subcutaneous injection 4. Intradermal route   Drag-drop to blanks: Finding the correct guesses.  Nasal route  Intramuscular or deep subcutaneous injection  Intradermal route |  |
| 12 | End of Module |  |  |  |  |  |  |  |

**Glossary**

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| --- | --- |
| **Term** | **Definition** |
| ANTIGEN | Any entity that is capable of triggering an immune response.18 |
| ARTHRALGIA | Pain in the joints.18 |
| EXCIPIENTS | Substances added to a medicine for ease of proper shaping and consistency; the vehicle for the drug.19 |
| MALAISE | Feeling of discomfort, weakness or fatigue.18 |
| MYALGIA | Muscular pain.18 |
| PROPHYLAXIS | Prevention of a disease or of a process that can lead to disease.18 |
| REYE’S SYNDROME | Syndrome characterised by acute encephalopathy and fatty infiltration of the liver, pancreas, heart, spleen and lymph nodes. It occurs in children aged <19 years following an acute viral infection. Generally associated with the increased use of salicylates (aspirin) in children during or following viral infection.19 |

**Enlarged tables:**

**Frame 3**



Reference List

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6. INFLUVAC® [Summary of Product Characteristics]. Maidenhead, UK: Abbott Healthcare Products Limited; 2014.

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18. Stedman, Lathrop T. *Stedman's Medical Dictionary*. 28th ed. Philadelphia: Lippincott Williams & Wilkins; 2006.

19. Taber's Cyclopedic Medical Dictionary. Taber's Online. <http://www.tabers.com/tabersonline/ub/view/>. Accessed January 16, 2015.