

## **Novartis secures contract to supply additional H5N1 influenza vaccine to the US government**

- *Novartis to manufacture bulk vaccine that will expand US National Strategic Stockpile of pre-pandemic vaccine*

**Basel, November 20, 2006** - Novartis announced today that it has been awarded a contract valued at USD 40.95 million to supply to the US government a pre-pandemic influenza vaccine\* against the H5N1 avian influenza strain. Global health authorities have identified H5N1 as an influenza strain with pandemic potential.

The pre-pandemic vaccine ordered by the US Department of Health and Human Services (HHS) will contribute to the US National Strategic Stockpile, which is being built in accordance with the US Pandemic Preparedness Plan. The current plan calls for availability of enough avian influenza vaccine to immunize a 20 million-member critical workforce prior to and at the onset of an influenza pandemic. This contract follows a USD 62.5 million award from the US government that was announced in October 2005.

"Novartis is pleased to have been chosen to support the US government in its proactive approach to ensuring protection against the impact of a potential pandemic. At Novartis, we have the knowledge, skills and commitment in research and development as well as manufacturing to be a long-term partner in pandemic preparedness," said Jörg Reinhardt, CEO of Novartis Vaccines and Diagnostics. "We will continue working with governments around the world to proactively help address this public health concern."

The US government will determine the dosage and formulation of the final product, including potentially adding an adjuvant such as MF59, at a later date. Studies have shown that the proprietary adjuvant MF59 of Novartis could boost the protective effect of an avian influenza vaccine, thereby reducing the required dose and possibly providing protection against other potential strains of avian flu virus.

Novartis will manufacture the pre-pandemic egg-based vaccine in 2007 at its facility in Liverpool, England, following the production of Fluvirin® influenza virus vaccine for the 2007-2008 influenza season. The vaccine will be based on an inactivated H5N1 influenza strain.

Novartis is also manufacturing H5N1 influenza vaccine at its other European facilities for stockpiling efforts of other countries. Earlier this year, Novartis submitted a "mock-up" file for pandemic influenza vaccine containing its MF59 adjuvant to the European Medicines Agency (EMA). The mock-up file lays the groundwork for a potentially more rapid approval of a vaccine once a pandemic occurs.

In addition, Novartis announced in May 2006 that the US government had awarded Novartis up to USD 220 million to support the development and manufacturing of a cell culture-derived influenza vaccine, both to supply seasonal influenza vaccine and to respond rapidly in the event of an influenza pandemic. Part of this grant will support the planning and construction of a new cell culture-derived influenza vaccines manufacturing plant at a site in Holly Springs, North Carolina.

### **About pandemic influenza**

Pandemic influenza occurs when a new virus emerges that is easily transmitted among humans and causes serious illness. In this situation, the virus can result in a worldwide outbreak of disease, or

pandemic. Pandemic influenza occurred three times in the last century; the 1918 outbreak killed at least 40 million people, with a mortality rate of approximately 2.5 percent in the United States.

Avian influenza, or "bird flu," does not normally infect humans, but there have been several examples in recent years of transmission to people, leading to fears of a strain with the potential to result in a pandemic. The current outbreak of H5N1 avian influenza has resulted in more than 250 laboratory-confirmed human cases since 2003, with cases in Azerbaijan, Cambodia, China, Djibouti, Egypt, Indonesia, Iraq, Thailand, Turkey and Vietnam. The associated mortality rate has exceeded 50 percent. The World Health Organization (WHO) classifies the current global situation as a level 3 pandemic alert (on a 1-6 scale where 6 is pandemic).

\* The stockpile vaccine is for government supply and is not approved for general sale.

#### **Disclaimer**

This release contains certain forward-looking statements, relating to the Novartis Group's business, which can be identified by the use of forward-looking terminology such as "will", "could", "possibly", "potential" or similar expressions, or by express or implied discussions regarding potential marketing approvals or future sales of the Fluvirin influenza vaccine, the H5N1 influenza vaccine, Novartis' cell culture-derived influenza vaccine or other candidate vaccines. Such statements reflect current views with respect to future events and are subject to certain risks, uncertainties and assumptions. There can be no guarantee that Novartis' cell culture-derived influenza vaccine or any other vaccine candidates, including vaccines that contain the MF59 adjuvant, will be approved for any indications in any market or that Fluvirin vaccine, the H5N1 influenza vaccine, Novartis' cell culture-derived influenza vaccine or any candidate vaccines will reach any particular sales levels. In particular, management's expectations regarding commercialization of Fluvirin, the H5N1 influenza vaccine, Novartis' cell culture-derived influenza vaccine or other vaccine candidates could be affected by, among other things, additional analysis of clinical data; new clinical data; unexpected clinical trial results; unexpected regulatory actions or delays or government regulation generally; the ability of Novartis to obtain or maintain patent or other proprietary intellectual property protection; competition in general; increased government, industry, and general public pricing pressures; and other risks and factors referred to in Novartis AG's current Form 20-F on file with the U.S. Securities and Exchange Commission. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those anticipated, believed, estimated or expected. Novartis is providing the information in this press release as of this date and does not undertake any obligation to update any forward-looking statements contained in this press release as a result of new information, future events or otherwise.

#### **About Novartis**

Novartis Vaccines & Diagnostics is a new division of Novartis focused on the development of preventive treatments and tools. It was formed following the recent acquisition of Chiron Corporation. The division has two businesses: Novartis Vaccines and Chiron. Novartis Vaccines is the world's fifth-largest vaccines manufacturer and second-largest supplier of flu vaccines in the United States. Leading products also include meningococcal, pediatric and travel vaccines. Chiron, the blood testing and molecular diagnostics business, is dedicated to preventing the spread of infectious diseases through the development of novel blood-screening tools that protect the world's blood supply.

Novartis AG (NYSE: NVS) is a world leader in offering medicines to protect health, treat disease and improve well-being. Our goal is to discover, develop and successfully market innovative products to treat patients, ease suffering and enhance the quality of life. Novartis is the only company with leadership positions in both patented and generic pharmaceuticals. We are strengthening our medicine-based portfolio, which is focused on strategic growth platforms in innovation-driven pharmaceuticals, high-quality and low-cost generics, human vaccines and leading self-medication OTC brands. In 2005, the Group's businesses achieved net sales of USD 32.2 billion and net income of USD 6.1 billion. Approximately USD 4.8 billion was invested in R&D. Headquartered in Basel, Switzerland, Novartis Group companies employ approximately 99,000 people and operate in over 140 countries around the world. For more information, please visit <http://www.novartis.com>.

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### **Media Materials**

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