



Novartis Vaccines Influenza Vaccine Update

National Influenza Vaccine Summit

Presented by Thomas Gibbs, Senior Director of Marketing

April 19-20, 2007



Our First Year in Business



Earliest Delivery

- FLUVIRIN® Influenza Virus Vaccine shipments marked beginning of injectable influenza vaccine supply
 - 31.2 doses delivered to US market in 2006
- Supported public health efforts for early immunization planning

Government Collaborations

- HHS award to further develop MF59 in the US to potentially extend vaccine supplies in case of a pandemic
- HHS contract to help fund development of Novartis cell culture-derived influenza vaccine

Increased Access

- Championed public health efforts to increase vaccination rates
- Supported CDC late season vaccination week and the ACIP expanded vaccination recommendations

Innovation & Growth

- Broke ground on first US cell culture-derived influenza vaccine manufacturing facility
- Global headquarters to relocate to Cambridge, MA

Manufacturing Update

Novartis Vaccines committed to being a major contributor for 2007–2008 season

- Estimated supply
 - Projected to produce up to 40 million doses of FLUVIRIN® Influenza Virus Vaccine
 - Final production output to be determined after potency testing with reagents supplied by CBER

- Commitment to Communication
 - Work with CDC to keep stakeholders informed of supply and timing
 - Updates also available via FluSource.com

Preparing for the 2007–2008 Influenza Season

- Continue to support physicians to increase vaccination rates
- Work to expand access through alternative channels for community-at-large
- Execute multifaceted programs to help increase vaccination rates via:
 - Consumer outreach
 - Event marketing
 - Interactive media
 - Third-party partnerships
- Provide healthcare professionals and alternative channels with patient education and resources to increase consumer demand

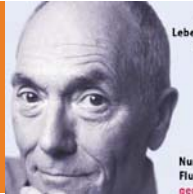
The Future: Novartis Influenza Vaccine Landscape

Egg-based products



FLUVIRIN®
AGRIPPAL® (investigational)

Enhanced products



FLUAD®* (investigational)

Cell culture-derived products



Novartis cell culture-derived influenza vaccine (investigational)

Pandemic products



H5N1 vaccines (investigational)

* Product contains proprietary adjuvant MF59

The Future: Novartis Influenza Vaccine Landscape

Egg-based products



FLUVIRIN[®]
AGRIPPAL[®]
(investigational)

In the US:

- FLUVIRIN major contributor to 2007–2008 influenza vaccine supply
- AGRIPPAL submission planned for 2007

Enhanced products



FLUAD^{®*}
(investigational)

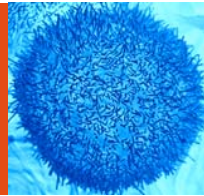
In the US:

- FLUAD submission anticipated in 2008

* Product contains proprietary adjuvant MF59

The Future: Novartis Influenza Vaccine Landscape

Cell culture-derived products



Novartis cell culture-derived influenza vaccine
(investigational)

In the US:

- Novartis cell culture-derived influenza vaccine submission planned for 2008

Pandemic products



H5N1 vaccines
(investigational)

In the US:

- Pre pandemic and pandemic vaccines currently in development and under review globally
- Submission planned for 2008



Caring Begins with Prevention

At Novartis Vaccines we believe that caring for patients begins with protecting individuals and societies from infection in the first place. We are committed to developing innovative vaccines designed to prevent the spread of life-threatening diseases; protecting vulnerable populations; and keeping healthy people healthy.