Influenza and Emerging Infectious Diseases Division

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Improving Preparedness and Response

Vaccine Doses Available (Millions)

Weeks

Target

2006

Key Target Milestones

- **First Vaccine Dose**
- **Sufficient vaccine for US Population**

- 0 Weeks
- 12 Weeks
- 26 Weeks

Ongoing Influenza Countermeasure Initiatives

Domestic Capacity Gaps

Production

Better, Faster, Flu Vaccines

Speed/Flexibility

Antigen supply

Adjuvant supply

Efficacy

One develops disease

Pre-pandemic Vaccines for Pandemic Preparedness

Procure Pre-pandemic Vaccines and Adjuvants

Monitor Stability of Vaccines & Adjuvants Tests & clinical trials

Procure/ Maintain

Improve Versatility

Flexible & Optimized Stockpile: Antigen +Adjuvant Studies

Broader Protection: Induction of cross-protective immunity

BRITE study
Diagnostics

Faster Diagnosis/
Reduce Transmission

Outbreak Identification
Therapeutics

Current strategy-new mechanisms of action

Strategies of interest

One of many potential pathways to target

Immune modulators

Pimodivir

Baloxavir

Monoclonal antibodies

Visterra

Galani 2017 Immunity. 46(5):875
Respiratory Protective Devices

Production Capacity

Innovative Approaches

Strategies we are interested in:

- Better Production Capacity
- Innovative Approaches
- Usability & Comfort
- Flexibility
- Reuse
Sustainability

1st Valley of Death: Advanced Development and Licensure

2nd Valley of Death: Sustainment/Sustainability
Seasonal Influenza Preparedness

Pandemic Influenza Preparedness

End-to-End Strategy

Risk
Initial Costs
Sustainment Costs

Impact of Success
Emerging Infectious Diseases Preparedness

Pandemic Influenza Preparedness