

Respiratory Syncytial Virus (RSV) Vaccines Working Group: Advisory Committee on Immunization Practices (ACIP) Update

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Department of Health and Human Services
Centers for Disease Control and Prevention

RECOVERY FROM INFANTS WITH RESPIRATORY ILLNESS
OF A VIRUS RELATED TO CHIMPANZEE
CORYZA AGENT (CCA)

I. ISOLATION, PROPERTIES AND CHARACTERIZATION

By

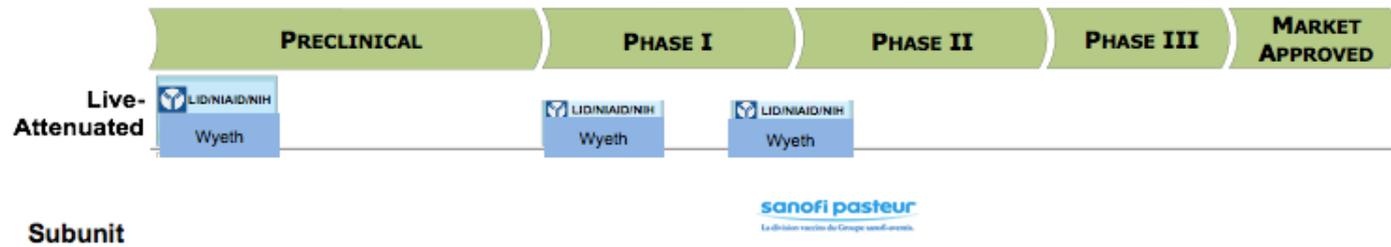
ROBERT CHANOCK,¹ BERNARD ROIZMAN AND RUTH MYERS

(Received for publication July 2, 1957)

- **RSV is a major cause of lower respiratory tract illness (LRI) in infants, children, and older adults**
 - ~150,000 hospitalizations/yr in US infants & children
 - ~180,000 hospitalizations/yr in US elderly
 - Substantial outpatient disease burden in both populations
- **Despite being recognized as a human pathogen for 59 years, a vaccine does not exist**
 - RSV F mAb palivizumab is recommended for only a subset of high-risk infants

Progress on RSV Vaccine Development

RSV Vaccine Snapshot 2003



RSV Vaccine and mAb Snapshot: June 2016

	PRECLINICAL				▶	PHASE 1		▶	PHASE 2	▶	PHASE 3	▶	MARKET APPROVED
LIVE-ATTENUATED/CHIMERIC	AmVac Sendai virus	Intravacc Delta-G RSV	Meissa Vaccines RSV	Sanofi Pasteur RSV		LID/NIAID/NIH ^P RSV LID ΔM2-2	LID/NIAID/NIH ^P RSV D46 cpΔM2-2		MedImmune, LID/NIAID/NIH ^P RSV cps2				
	Codagenix RSV	LID/NIAID/NIH PIV1-3/RSV	Pontificia Universidad Catolica de Chile BCG/RSV	St. Jude Hospital SeV/RSV		LID/NIAID/NIH ^P RSV ΔNS2 Δ1313	MedImmune, LID/NIAID/NIH ^P RSV Medi ΔM2-2						
WHOLE-INACTIVATED	NanoBio RSV												
PARTICLE-BASED	AgilVax VLP	Fraunhofer VLP	Ruhr-Universität Bochum VLP	University of Massachusetts VLP		Novavax ^P RSV F Nanoparticle					Novavax ^M RSV F Nanoparticle		
	Artificial Cell Technologies Peptide microparticle	Georgia State University VLP	TechnoVax VLP	VBI Vaccines RSV F eVLP							Novavax ^E RSV F Nanoparticle		
	DBV technologies RSV N/F rings	Mucosis BLP RSV pre-F	University of Massachusetts VLP	VLP Biotech VLP									
SUBUNIT	Advaccine Biotech RSV G+CSA	Instituto de Salud Carlos III RSV F protein	NIH/NIAID/VRC RSV pre-F Protein	University of Saskatchewan RSV F protein	University of Illinois RSV F protein	GlaxoSmithKline ^M RSV post-F Protein				GlaxoSmithKline ^M RSV F protein			
	GlaxoSmithKline RSV F protein	Janssen Pharmaceutical RSV pre-F Protein	PeptiVir RSV peptides	University of Georgia RSV G protein		Immunovaccine ^E DPX-RSV-SH Protein				MedImmune ^E RSV F protein			
NUCLEIC ACID	CureVac RNA	GlaxoSmithKline RNA	Inovio Pharmaceuticals DNA	Ruhr-Universität Bochum DNA									
GENE-BASED VECTORS	AlphaVax Alphavirus	GenVec Adenovirus	University of Pittsburg Adenovirus	Vaxart Adenovirus		Bavarian Nordic ^T MVA	Janssen Pharmaceutical ^P Adenovirus						
	Emergent BioSolutions MVA	Ruhr-Universität Bochum Adenovirus	Vanderbilt University Alphavirus			GlaxoSmithKline ^P Adenovirus							
COMBINATION/IMMUNOPROPHYLAXIS	Biomedical Research Models DNA prime, particle boost	Fudan University DNA+protein combo	UCAB/mAbXience Anti-F mAb						MedImmune ^P Anti-F mAb		Regeneron ^P Anti-F mAb		MedImmune ^P Anti-F mAb

UPDATED: JUNE 2, 2016

<http://sites.path.org/vaccinedevelopment/respiratory-syncytial-virus-rsv/>



Terms of Reference

GOAL: Consider recommendations for the use of RSV vaccine in adults ≥ 60 years and in adults with underlying medical conditions

- 1. Review the epidemiology of RSV infection and burden of RSV disease in older adults.**
- 2. Review efficacy, immunogenicity, safety, and cost-effectiveness of RSV vaccine(s) in older adults and adults with underlying medical conditions as these data become available.**

Terms of Reference

- 3. Provide evidence-based recommendations regarding use of RSV vaccine(s) in older adults.**
- 4. Identify areas in need of further research for informing potential future vaccine recommendations.**

Working Group Members

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Today's Session and Future Sessions

- **Overview of RSV and RSV vaccines**
 - Obstacles and progress in RSV vaccine development
 - Targeted vaccine populations
 - Considerations for RSV vaccine use
- **Future presentations will include burden of RSV in older adults, clinical trial results, cost-effectiveness**

Thank You

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Visit: www.cdc.gov | Contact CDC at: 1-800-CDC-INFO or www.cdc.gov/info

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.



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