



CIVICs Vaccine Pipeline

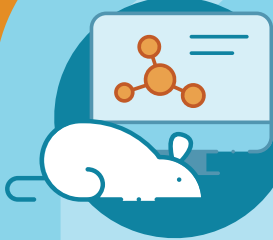
CIVICs is a multidisciplinary network working collaboratively to develop, manufacture, & evaluate influenza vaccines providing broader & longer-lasting protection against seasonal & pandemic viruses. Vaccine Centers & external collaborators identify potential candidates through exploratory & preclinical research, which are manufactured & evaluated for safety & immunogenicity by CIVICs Cores.

Exploratory, discovery research

125+ Studies
285+ Publications
95+ Investigators



215+ Vaccine candidates
8+ Model systems
16+ Platforms
8+ Adjuvants



NIAID selection of vaccine candidates

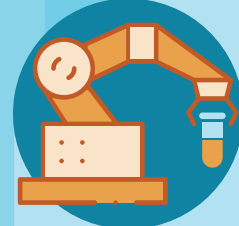
Preclinical research

6+ Candidates advancing



Vaccine manufacturing

2+ Vaccines manufactured



2+ Master Cell Banks produced
4+ Feasibility studies
2+ Toxicology studies



Phase 1 & 2 clinical trials

4+ Clinical trials
6+ Sites
550+ Subjects enrolled

Vaccine Advances

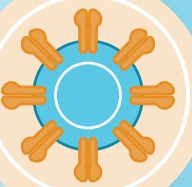
Platforms

CIVICs investigates a myriad of vaccine platforms, like live attenuated, inactivated, viral vector, DNA, mRNA, & protein-based vaccines to boost immunity.



Antigens

CIVICs candidates vary to train the immune system on many antigens at once or focus immunity on stable or broadly conserved viral targets.



Adjuvants

CIVICs investigators test & compare adjuvants to elicit stronger & more effective immune responses in combination with influenza antigens.



Candidate Highlights

PMID: 37075129
mRNA H1 vaccine to boost immunity to stable hemagglutinin (HA) stem domain

PMID: 34773048
Live, replication-deficient vaccines to induce local antibody & cellular immunity

PMID: 36423275
All-in-one HA mRNA vaccine against 20 influenza A subtypes & B lineages

PMID: 33288923
Chimeric HA protein targeting the HA stalk, a conserved domain across many strains



Manufacturing

The Duke VMTC is designed to allow flexibility in vaccine production while following Good Manufacturing Practices to ensure patient safety & product quality.



Clinical Trials

CIVICs investigates the safety & immunogenicity of vaccine candidates in clinical trials to inform future development & conducts human challenge studies.



Collaboration

CIVICs collaborates with other institutions, governmental programs, & private companies to develop improved, safe, & effective vaccines against seasonal & pandemic influenza strains.

The CIVICs program partnered with FluGen & NIAID Vaccine Research Center, respectively, to advance pediatric & adult candidates into clinical testing.

NCT04960397 | **NCT05755620**

