CureVac's mRNA based Vaccine Candidate against SARS-CoV-2

Press Briefing Paul-Ehrlich-Institute

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Key Company Highlights

- Founded in 2000, currently 470 employees
- Pioneer in developing mRNA therapies with a proprietary and clinically validated platform technology addressing a broad range of diseases in prophylactic vaccines, oncology, and protein therapies
- Leveraging versatility of non-modified mRNA with longstanding RNAoptimizer™ platform: delivering low dose potent, differentiated, safe and efficacious compounds; Rabies protection in human with 1 millionth of a gram
- mRNA vaccine program against SARS-CoV-2 (COVID-19) with thorough preclinical testing. Initiation of Phase 1 study in June 2020
- Existing manufacturing capacity to deliver hundreds of million of doses
- Continued GMP manufacturing scale-up (GMP I-IV) and down-scaling mobile facilities to potentially supply billions of doses
- Broad IP portfolio covering platform, manufacturing and product candidates
- Strategic partnerships spanning with leading biopharmas, Bill & Melinda Gates Foundation and research institutes to maximize potential, including a partnership with CEPI for SARS-CoV-2 vaccine program

Accelerating Efforts to Develop a SARS-CoV-2 Vaccine

Covid-19 Program Overview

- Company has been rapidly advancing one mRNA vaccine candidate against SARS-CoV-2 out of several candidates
- The candidate encodes for full-length stabilized S (Spike)-protein and has been selected based on biological, biophysical and process development data
- Phase 1 trial planned with 168 subjects to show safety and immunogenicity of the vaccine
- Accelerated timeline to bring SARS-CoV-2 vaccine to the market
- Preparatory work and early clinical trials fully funded by CEPI
- CureVac is in close interaction with the Paul-Ehrlich Institute (PEI), EMA and the Belgian FAMHP
- Existing manufacturing capacity could provide hundreds of million of doses
- European commission committing a EUR 75 Mio. loan to create added capacity in GMP IV (billions of doses)

Plan to make a vaccine available as soon as possible at approval – More than 100 mio. doses ready at launch

Development Plan Overview

Timeline:

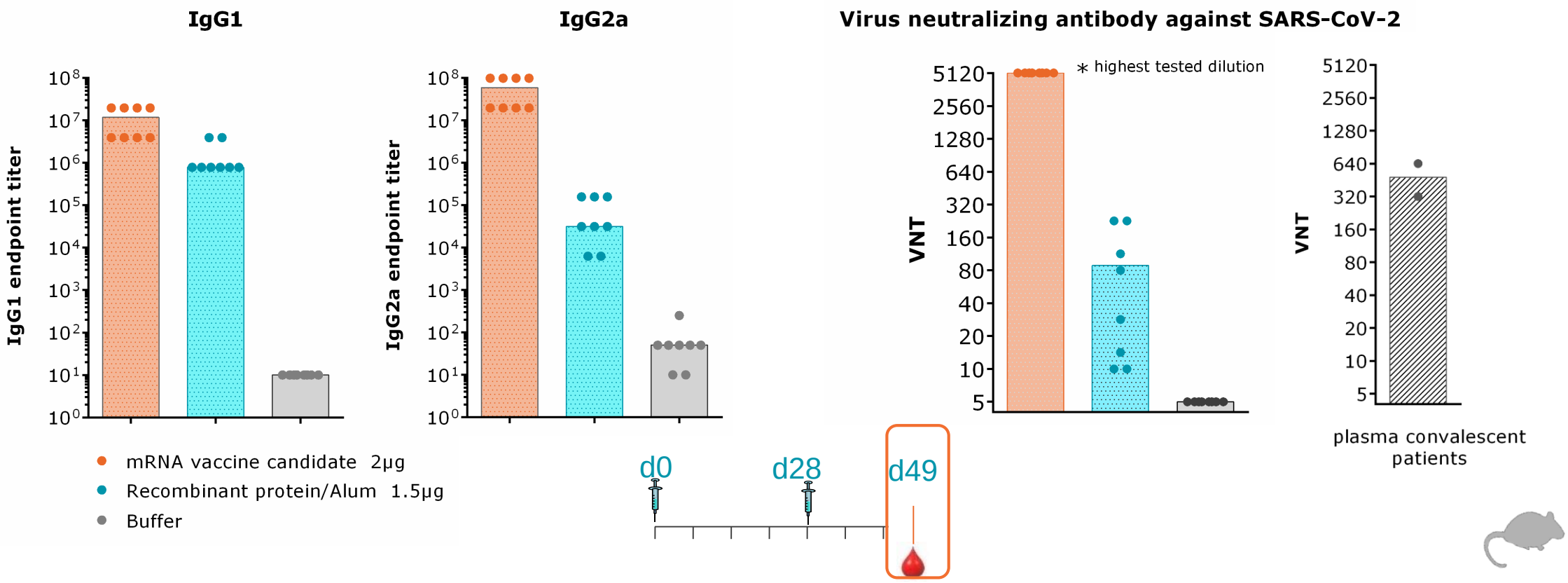
- ✓ **January 2020:** Design of multiple vaccine candidates
- ✓ **March 2020:** Lead candidate selected out of several candidates
- ✓ **March – June 2020:** GMP production of lead candidate
- ✓ **June 2020:** CTA approval
- **June 2020 :** Start of Phase 1 clinical trial (First Patient In)
- **Autumn 2020:** First human Phase 1 clinical trial data (Safety and immunogenicity)

Development plan supported by regulatory authorities

CUREVAC the RNA people®

CureVac's SARS-CoV-2 mRNA Vaccine Candidate Induces Strong and Balanced Immune Response

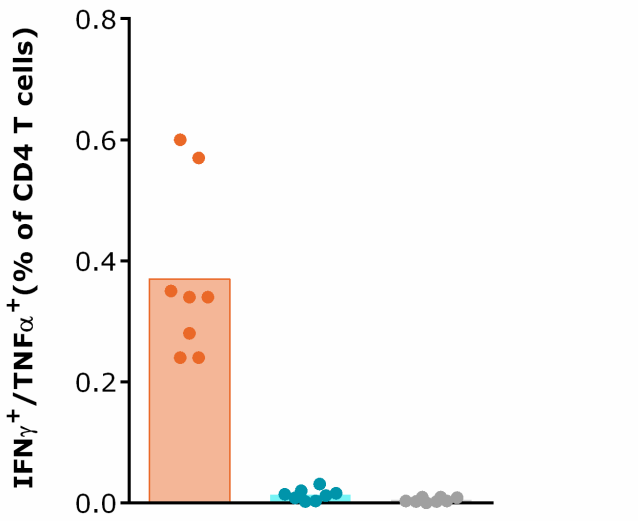
CureVac's SARS-CoV-2 mRNA vaccine candidate with high antibody titers leading to neutralizing antibodies against SARS-CoV-2 in mice



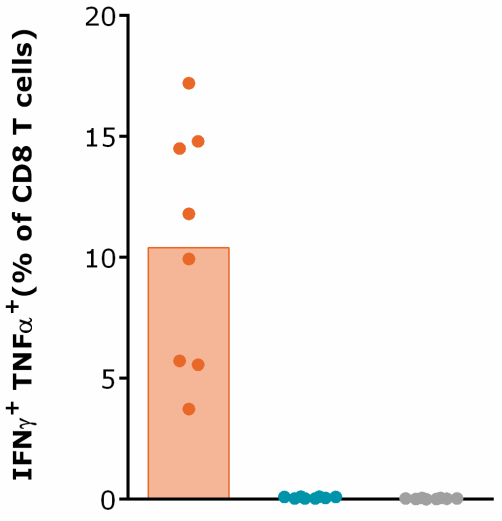
CureVac's SARS-CoV-2 mRNA Vaccine Candidate Induces Strong T Cell Response

CureVac's SARS-CoV-2 mRNA vaccine induces multifunctional (IFNg$^+$ and TNFa$^+$) CD4 and CD8 T cell responses

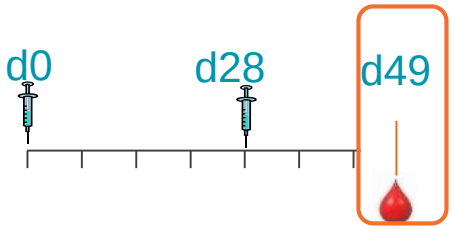
Induction of SARS-CoV-2 specific CD4$^+$ T cell responses



Induction of SARS-CoV-2 specific CD8$^+$ T cells



- mRNA vaccine candidate 2µg
- Recombinant protein/Alum 1.5µg
- Buffer



CureVac's SARS-CoV-2 Project: Overview on the Design of the First-in-human Trial CVnCoV

- Partially blinded, placebo-controlled, dose-escalation study in healthy adults (18-60 years of age)
- Three dose groups of 2µg, 4µg, and 8µg with 48 vaccinees and 8 placebo recipients per group
- Two vaccinations administered by intra muscular injection on day 1 and day 29
- Sites in Tübingen, Hannover, Munich, and Ghent
- Participants will be followed for at least one year after the last vaccination
- Study will assess safety and reactogenicity as well as immunogenicity of the vaccine candidate

Dose-escalation study		2µg	4µg	8µg
N	CVnCoV	48	48	48
N	Placebo (saline)	8	8	8
Total N	CVnCoV + Placebo	56	56	56

N = 144 Vaccinees
+ 24 Placebo recipients

Total = 168 Participants

Thank You For Your Attention!

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