RACING AGAINST THE VIRUS

Roadmap for new vaccines

START OF TESTING SEVERAL VACCINE CANDIDATES AGAINST SARS-COV-2 (Status Spring 2020)

Parallel testing of several vaccines in the same study

PARTIALLY OVERLAPPING IMPLEMENTATION OF PRECLINICAL, PHASE I, PHASE II, AND PHASE III STUDIES

RESEARCH

PRECLINIC

PHASE I

PHASE II

PHASE III

20*

10*

5*

3*

1*

Search for suitable vaccines

Tests on tolerance and protective effects in animals

Tests on safety and immune response

Tests on safety and immune response

Test in specific target group

Protection from infection/disease

* Estimated number of candidates
New vaccines must prove their worth in time-consuming trials before they can be approved. Only one candidate in 20 passes all tests. The studies make sure that people only receive effective and safe vaccines. In cases of emergency, such as the Corona crisis in 2020, researchers are trying to accelerate the development of candidates.

“Currently, there is no ideal model to study the SARS-CoV-2-Virus.”

Prof. Stefan H. E. Kaufmann
Max Planck Institute for Infection Biology