



## Overview

35 new cases in Bavaria yesterday

Problem is the Lichtenfels district with an incidence of 46

50.9 % of Bavarians have been vaccinated once. (rank 15 in D)

35.2 % are vaccinated twice (6th place in Germany)

In total, more than 11 million vaccine doses were administered in Bavaria.

This week, more than 260,000 first vaccinations may take place in Bavaria.

15% of all infections in Germany are already of the delta variant.

## Forecasts

Vaccine forecasts:

Moderna: 1.33 million per week in July, with a strong upward trend: 14.5 million doses planned for Germany in September

BioNTech: 3.2 million per week in July

Additional doses from AZ and J&J

Over 1.5 million vaccine doses for Bavaria in weeks 26-30

Outlook for upcoming vaccinations in D until 25 July 2021 (as of 14.6.)

Expected deliveries until 25.7.

Pending second vaccinations with mRNA vaccine until 25 July 2021

Available vaccine doses for possible first vaccinations with mRNA vaccines until 25 July 2021 (= deliveries - pending second vaccinations)

59,049,363 initial vaccinations possible by 25 July

Thus possible proportion of adults with at least one vaccination: 85% Assumption: vaccination readiness of 75%: 113% first vaccination Assumption: vaccination readiness of 80%: 106% first vaccination

## Main section: Biotechnology in Bavaria

How the biotechnology sector got through the pandemic and what homework it has to do for the future.

How did the biotechnology sector get through the pandemic?

Stresses:

Clinical trials were suspended as only covid treatments took place

Positive developments:

There is tremendous creativity among companies

In testing:

Diagnostic, testing, production and test application companies.

Here, the Bavarian testing strategy was beneficial, in which multiple tests, free of charge for the citizen, were built upon at a very early stage in order to put a stop to the pandemic.

In the course of the vaccinations, antibody tests will probably also increase again. They have not been in great demand lately.

In Therapy Development:

EY writes in its Biotechnology Report 2021: "With the focus on vaccines, therapeutic approaches are falling by the wayside" This does not apply to Bavaria!

EY also emphasises the importance of therapeutics, research on them and funding.

Many own initiatives by companies that have entered into research with sums ranging from €10,000 to over €100,000.

Therapy strategy:

Funding of €50 million from the ranks of the parliament.

Funding is provided for 6 companies with a maximum funding quota of 70%.

In addition, 8 companies are funded by the German government to the tune of 300 million € with a maximum funding rate of 80%.

Some of the companies that will receive funding: Formycon (By) Ethris (By) Eisbach Bio (Federal).

In vaccine development:

Again, there are efforts for the second generation vaccine with mRNA, which put high emphasis on formulation (mixture of mixed substance and adjuvants) and thus should be able to be stored and transported at high temperatures, e.g. in Africa.

(Company: Baseclick from Neuried)

## Perspective

All in all, Bavarian biotechnology companies are in the right position.

The industry is strong on its own. However, there is a lack of investors who want to get involved in therapy research.

A brief look at the biotech industry in Germany: (Source: EY Report)

10% employment growth last year to 37 415

19 new start-ups despite pandemic give hope

3 billion in new capital raised by listed companies in D 2020. A new record for the sector. In the US it was almost \$100bn also a record

Challenges:

Corona as a catalyst, presenting problems that were already there before the pandemic with force: here exemplary production bottlenecks for pharmaceuticals.

There is a need for better domestic production capacities (also with the help of government investments to lure investors)

Globally, there is a big fight for production sites, which are usually located in East Asia.

For example, American companies reserve large production capacities for themselves and thus block capacities worldwide.

Use public attention on the issue to lure companies and investors out of the closet through clever incentives and (government) support

If millions in subsidies are possible for microchips, as was the case for the Bosch factory in Dresden, where € 140 million in aid flowed, the same must be possible for the production of medicines.

Industry's task: to be internationally successful, investments must be made at home.

However, Bavaria does not need mass so much as flexible locations that can react to different clinical studies. This would also further promote the research location

There is an example of this in Bavaria:

Recipharm in Wasserburg, which also masters mRNA, but cannot produce enough for Biontech, which is why there is no cooperation. A sister company, for example, produces Moderna in France.

Roche Diagnostics in Penzberg, which bundles everything there from research and development to production. However, there are no capacities available for external production.

There, in Penzberg, a new Faunhofer Institute for Immunology, Infection and Pandemic Research will be built in cooperation with Roche and the LMU. Funded by the federal government and Bavaria with about € 40 million each.

In Baden-Württemberg near the border to Bavaria: Boehringer-Ingelheim (Biberach) and Rentschler (Laupheim) (offer services for the production of biopharmaceuticals. These include the service areas of cell line and process development, GMP production, formulation, filling, analytics, quality control, registration and quality assurance).