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Title

mRNA -Vaccines on the fast track – How Polymun contributed to tackle the pandemic

Abstract

RNA-based therapeutics, which function by either silencing pathological genes through delivery of siRNA or expressing therapeutic proteins through the delivery of exogenous mRNA to cells, hold great potential for the treatment of various diseases, like Covid-19 related diseases.

In early 2020 Industry partners reached out to Polymun to set up production processes for mRNA-LNPs together with the respective analytical test methods. Within weeks, a robust and scalable process has been developed and first animal trial materials have been provided to initiate toxicology studies. Just a few weeks later, initial GMP batches were produced, which entered first in man studies around mid-April. Since then the process has been scaled-up, validated and transferred within the supplier networks.

Data will be presented, which describe hurdles and solutions throughout these processes.