

PROCESS ENABLEMENT OF NEXT GENERATION COVID-19 INHIBITOR IBUZATRELVIR AND OVERVIEW OF PFIZER SUSTAINABILITY STRATEGY

Allais, C.

Groton, CT 06340

Pfizer, Chemical Research and Development

United States

christophe.allais@pfizer.com

Shortly after the COVID-19 pandemic was declared in March 2020 by the WHO, Pfizer initiated a multi-front approach to combat the virus, which included a vaccine but also recognized very early the need for an orally dosed treatment able to help infected patients. This initiative resulted in the discovery of nirmatrelvir, active ingredient of PAXLOVID®, which was then developed at unprecedented speed.

In parallel to this massive effort, Pfizer continued to seek additional options for patients, and ultimately discovered ibuzatrelvir, an orally bioavailable, next-generation clinical candidate developed for the treatment of COVID-19 infections. Advantages of this asset will be discussed, along with its accelerated timeline and synthetic challenges such as the chiral CF₃-proline throughout development of a commercial route.

Emphasis on the sustainability aspects of the latest route will also be highlighted as well as an overview of Pfizer Drug Substance strategy in this space as we commit to Net Zero engagements.

