

## PFIZER, INC. – CLINICAL

Accelerating Molecule To Market Timelines By Maximizing Resource Utilization

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**Pfizer** is a leader in the biopharmaceutical industry with annual revenues of \$53 billion supporting a portfolio for oncology, immunology, and vaccines. **Pfizer** is currently addressing two industry wide disruptions: an increasing difficulty to deliver blockbuster drugs and a shift towards precision medicines for cancers and rare diseases. These shifts led to two bold initiatives by CEO Albert Bourla. The first initiative focuses on accelerated delivery of medicines to market by reducing operational cycle times across product development. The second initiative focuses on portfolio diversification, with an emphasis on delivering breakthrough therapies to meet unmet patient needs globally.

To support the accelerated delivery of a diversified portfolio, Pfizer identified an opportunity to review working practices and enhance capacity in clinical manufacturing at its Sandwich, UK facility. The project's goal was to increase batch throughput with reduced cycle times by maximizing resource utilization, thus delivering an expanded portfolio on expedited timelines.

The Tauber team focused its analysis in two primary areas: operational revamp and data utilization. In addressing the operational revamp, the team developed a series of new ways of working. The main recommendations included two technician teams for manufacture, continuous manufacture enablement, and a structured approach to fulfilling non-manufacture tasks. The team also recommended several manufacture cubicle design changes and technician training program enhancements.

To improve data utilization, the Tauber team developed a simulation tool that incorporates the facility's process flows, resource constraints, and capabilities. The simulation tool can analyze major site changes such as changing product mixes and new product capabilities, enabling data-driven decisions on potential cost-benefit changes. To improve performance visibility, the team developed 10 key performance indicators and a visual dashboard to encourage continuous improvement.

When implemented, the Tauber team's recommendations will enable a 62% annual batch throughput increase, while reducing end-to-end batch cycle times by 45% and technician working time per batch by 23%. These projections are derived from the Sandwich 2020 forecasted clinical demand and product mix. The results were confirmed by a 3-week facility-wide pilot with long-term impact validated by the simulation tool. These impacts will enable Sandwich to deliver clinical product at an accelerated pace, reducing the time to deliver new medicines to market. This supports Pfizer's industry leadership in both developing future blockbusters and meeting unmet patient needs through the development of breakthrough therapies and precision medicines.