

CRISIS AS OPPORTUNITY: USING RAW MATERIAL SHORTAGES TO ACCELERATE STRATEGIC IMPROVEMENTS

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Takeda's Massachusetts Biologics Operations (MA Bio Ops) created a task force called Operation Lighthouse to address the unprecedented raw material shortages caused by Covid. Co-lead by supply chain, materials science, and operational excellence partners, Operation Lighthouse created a forum where all solutions – supply options, technical options, and manufacturing process changes – are evaluated, pursued, and implemented by one centralized cross-functional team.

Although the primary goal was to ensure manufacturing continuity, Operation Lighthouse preferentially chose solutions with long-term benefits, such as second sourcing, utilizing additional manufacturing sites from existing suppliers, and accelerating component interchange. This approach required a fundamental shift in thinking to view existing proprietary technologies and materials of construction as an artifact of the original sourcing exercise, rather than an inherent process requirement, thus allowing the team to evaluate multiple options with respect to fitness for use.

As of November 2021, Operation Lighthouse has successfully executed >20 change controls across all material categories, including changes to single-use mixing technologies, bag films, tubing formulations, etc. Our desired end state is to build redundancy into individual assemblies via component interchangeability, to build redundancy into assemblies via multiple suppliers or multiple manufacturing sites within a single supplier, and to partner with our suppliers on these approaches to achieve a long-term state of supply agility that benefits both parties.

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