

AGILE RESPONSE TO COVID SUPPLY DISRUPTIONS TO STRENGTHEN RAW MATERIAL RESILIENCY AND ENSURE UNINTERRUPTED SUPPLY

Elizabeth Rainbeau, Amgen Inc
Rainbeau@amgen.com

Key Words: Manufacturing, Single-Use Systems, Supply disruption, Resiliency, COVID

The Biopharmaceutical Industry experienced severe raw material shortages throughout 2021 due to unprecedented demand driven by COVID vaccine and monoclonal antibody therapies production and government rated orders. In response, Amgen established a broad Network-wide, cross functional effort to ensure a reliable and agile oversight strategy to assess and prioritize the risks. The team worked closely with internal and external partners to find immediate and long-term solutions to avoid any disruption and support our mission to serve every patient every time.

These cross-functional efforts enabled broad mitigation of stock out risk for several hundred raw materials to ensure supply and avoid disruption to the Amgen manufacturing network. Amgen modified how we operate to expand equipment platforms and enable hybrid Single-Use Systems/SS manufacturing within plants to maintain production schedules. Another key mitigation strategy was to extend raw material usage through network inventory sharing, reduced consumption, and qualified the reuse of specific Single-Use Systems materials. Amgen also qualified functional equivalent dual sources and leveraged alternative materials to ensure material supply to our production facilities. Multiple mitigation strategies pursued established capabilities and business processes to generate sustainable savings and support Amgen's efforts to increase raw material supply resiliency, continuous improvement culture and sustainability.