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Grey Space Bioprocessing: Myth or Reality?

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As disposable skids are more frequently used in biotech companies and their comfort increases, their applications have slowly surpassed research and development into clinical and commercial products that impact human patients.

As the biotech market continues to grow, there is interest in grey space processing due to lower initial capital and operating costs. The aspiration is to be able to perform processing in grey space to reduce facility requirements while maintaining product purity. This poster will address

- 1) What defines grey space
- 2) How single use technology can facilitate closed processing
- 3) Can we leverage single use closed processing to operate in grey space

As a case study, incorporation of aseptic connectors and jumpers in operating a disposable chromatography system will be explored. This would close the process and eliminate steps that are traditionally performed with open containers and transfers. Incorporation of these technologies may reduce to concerns of endotoxin, bioburden, and contamination, which may further the use of single use technology skids and other applications.