362f Adsorptive Depth Filters for Virus Filtration

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The biopharmaceutical market is facing competing pressures with the implementation of virus filtration. One requirement is to reduce the cost of goods for large scale antibody production. However, manufacturers are also under regulatory pressure to implement small virus removal filtration. Data will be presented showing that the use of adsorptive depth filters can dramatically increase the throughput and robustness of 20 nm virus clearance filters. The mechanism of the adsorptive binding in the prefilter will be reviewed along with a methodology for optimization of the prefiltration conditions. Data will be presented to demonstrate that this technology can be scaled-up from bench to production scale. Economic modeling will be presented to show the impact of this approach on typical monoclonal antibody processing costs.