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Cost-effective bioprocess design for the manufacture of allogeneic CAR-T cell therapies using a decisional tool with multi-attribute decision-making analysis

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Highlights

- Decisional tool presented for identifying cost-effective allogeneic CAR-T cell bioprocesses
- Operational attributes were considered in addition to financial attributes
- Optimal flowsheet contains rocking motion bioreactors for cell culture
- Optimal flowsheet uses spinning membrane filtration technology and MACS purification
- Viral transduction and electroporation efficiencies were key process economic drivers.