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## Impact of Allogeneic Stem Cell Manufacturing Decisions on Cost of Goods, Process Robustness and Reimbursement

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### **Highlights**

- Planar technologies are cheaper than microcarriers in STRs for demands  $\leq 1B$  cells/year
- Microcarriers in STRs are cheaper than planar technologies for demands  $\geq 10B$  cells/year
- MSC products with high annual demands face economic and operational challenges
- Cell culture optimization can address the economic challenges
- DSP optimization is required to address operational challenges

### **Abstract**

This article presents a framework to evaluate holistically the operational and economic performance of different manufacturing platforms for the expansion of allogeneic mesenchymal stromal cells (MSCs) across different commercialisation scenarios. The tool comprised models for whole

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