

Bioreactors for cell proliferation and differentiation The therapeutic promise of stem cell-based technologies for the treatment of pathologies ranging from hair loss¹ to blindness² has precipitated the need for a cell-manufacturing sector to provide therapeutic allogeneic cells. Owing to the extensive infrastructure requirements and rigorous standards defined by regulatory agencies, the cost will likely be too burdensome for traditional hospitals and treatment centers and will manifest as centralized facilities that specialize in providing high-quality cells with verifiable characteristics. Variable designs have been employed for adherent versus non-adherent cells and to account for differences in cellular responses to microenvironmental cues.