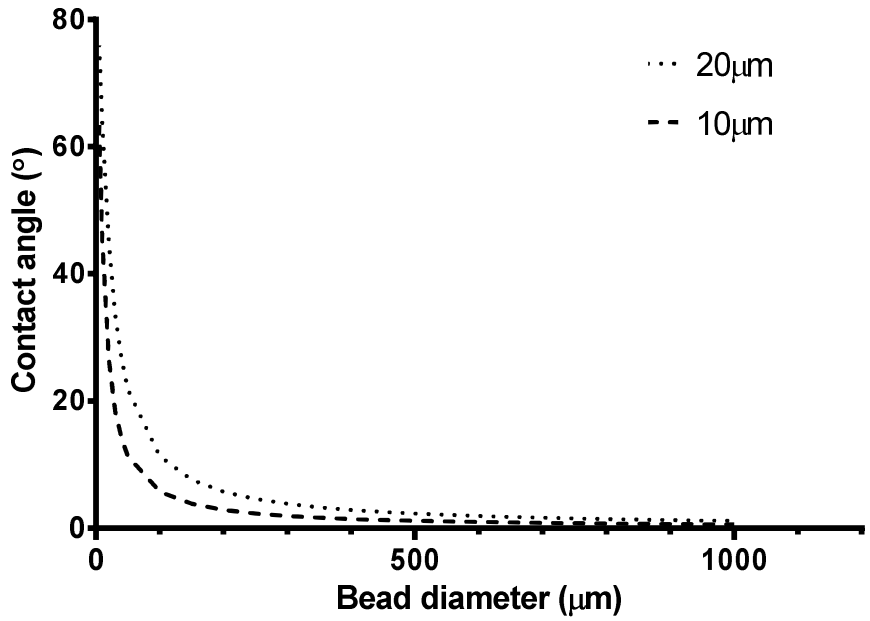
Appendix A

Cost assumptions associated with different purification technologies, upstream processing, and miscellaneous components of the bioprocess. Where possible, values have been obtained directly from vendors.

Parameter	Item (unit)	Cost per unit
MACS costs		
Consumable Costs		
	Consumable costs (per run)	£3,179
	Tubing Set	£1,178
	Tubing Rack	£81
Reagents		
	CliniMACS Buffer (per L)	£1,423
	CliniMACS reagent (per mL)	£320
Fixed Equipment		
	CliniMACS Plus Cell Separator	£29,999
Labour		
	Operator wage (per annum)	£46,000
FACS costs		
Consumable Costs		
	Microfluidic Chip	£260
	Tubing set	£16
	Cell Strainer	£1.50
Reagents		
	FACS reagent costs (per 100 tests)	£1,720
	PBS buffer (per L)	£800
	Accutase (per L)	£2,920
	Staining Buffer (FBS) (per L)	£2,302
	Staining Buffer (BSA) (per L)	£287
Fixed Equipment		
	SH800	£129,617
Labour		
	Operators wage (per annum)	£57,500
Upstream process costs		
	Reprogramming costs (per patient)	£4,700
	iPSC culture costs (per patient)	£2,360
	Differentiation costs (per 10^7 cells)	£2,226
Miscellaneous		
Fixed Equipment		
	Biosafety Cabinet (BSC)	£17,100
	Incubator	£17,835
QC & QA Costs	Per dose	£3,250

Appendix B

Contact angle modelled for 10μm and 20μm diameter cells binding to SpheriTech beads with diameters between 0 and 1000μm. For simplification, cells were assumed to be a planar discs and beads to be spherical.



The calculation for contact angle was:

$A = [TAN (D_c/2)/(D_b/2)] * (180/\pi)$

Where A is the contact angle, D_c is the cell diameter and D_b is the bead diameter.