

Supplementary Table S1: Defining the operational ranges of the manufacturing process using the non-responder rate in relation to cell cultivation time. Patient IDs in red, marked with 'N' correspond to non-responder patients (KOOS<8)

Patient ID	R/N	PO (days)	non-responder (%)	
All patients:		7-28	31.7%	
Patients new OR:		≤16	28%	
2253	N	28	} 80%	
2205	R	20		
2207	N	20		
2427	N	20		
2204	N	19		
1101	N	18	} 61.5%	
2277	R	18		
1113	N	17		
1305	N	17		} 50%
1804	R	17		
2220	N	17	}	
2434	R	17		
2440	R	17		
2103	R	16		
1322	R	15		
2104	R	15		
2417	N	15		
1104	N	14		
1321	N	14		
2102	N	14		
2216	R	14		
2217	N	14		
2219	R	14		
2223	R	14		
2286	R	14		
2294	R	14		
2301	R	14		
2418	R	14		
2420	R	14		
2423	N	14		
2431	N	14		
1102	R	13		
1114	R	13		
1201	R	13		

Patient ID	R/N	P0 (days)	non-responder (%)
All patients:		7-28	31.7%
Patients new OR:		≤16	28%
1205	N	13	
1802	R	13	
1808	R	13	
2231	R	13	
2235	N	13	
2246	N	13	
2265	N	13	
2283	N	13	
2412	N	13	
2435	R	13	
2441	R	13	
2601	R	13	
2709	R	13	
1118	R	12	
1120	R	12	
1311	N	12	
1603	R	12	
1607	N	12	
1609	N	12	
1702	N	12	
1707	R	12	
2251	R	12	
2275	N	12	
2409	R	12	
2410	R	12	
2411	N	12	
2439	R	12	
2805	N	12	
1105	R	11	
1107	R	11	
1108	R	11	
1116	N	11	
1122	R	11	
1126	R	11	
1207	N	11	
1304	R	11	
1306	N	11	
1309	R	11	
1310	N	11	

Patient ID	R/N	PO (days)	non-responder (%)
All patients:		7-28	31.7%
Patients new OR:		≤16	28%
2201	R	11	
2203	R	11	
2209	R	11	
2221	R	11	
2222	R	11	
2224	R	11	
2226	R	11	
2244	N	11	
2254	R	11	
2255	R	11	
2257	R	11	
2263	R	11	
2269	N	11	
2402	R	11	
2408	R	11	
2424	R	11	
2701	N	11	
1106	R	10	
1109	R	10	
1117	R	10	
1301	R	10	
1312	R	10	
1602	R	10	
1803	R	10	
2202	R	10	
2229	R	10	
2238	R	10	
2239	R	10	
2240	R	10	
2241	R	10	
2248	R	10	
2249	R	10	
2252	R	10	
2260	N	10	
2261	R	10	
2273	R	10	
2284	R	10	
2287	R	10	
2413	N	10	

Patient ID	R/N	PO (days)	non-responder (%)
All patients:		7-28	31.7%
Patients new OR:		≤16	28%
1112	R	9	
1123	R	9	
1204	R	9	
2407	N	9	
1307	R	8	
2706	R	8	
2256	R	7	
2259	R	7	

R: responder. N: non-responder. OR: operational ranges.

Supplementary Table S2: Defining the operational ranges of the manufacturing process using the non-responder rate in relation to spheroid cultivation time. Patient IDs in red, marked with 'N' correspond to non-responder patients (KOOS<8).

Patient ID	R/N	3D cultivation time (days)	non-responder (%)
All patients:		15-42	31.7%
Patients new OR:		≤28	26.6%
1201	R	42	}
2269	N	41	
1207	N	39	}
1312	R	39	
1804	R	38	}
2235	N	38	
2248	R	35	}
2287	R	35	
2402	R	35	}
2221	R	34	
2407	N	34	}
2417	N	33	
2423	N	33	}
2246	N	32	
2253	N	32	}
2265	N	32	
2283	N	32	}
1107	R	31	
2104	R	31	}
2217	N	31	
2256	R	31	}
2263	R	31	
2434	R	31	}
1101	N	30	
2701	N	30	}
2418	R	29	
1120	R	28	}
1310	N	28	
2220	N	28	}
2229	R	28	
2238	R	28	}
2239	R	28	

2249	R	28
2273	R	28
2439	R	28
1102	R	27
1306	N	27
2224	R	27
2241	R	27
2251	R	27
2254	R	27
2257	R	27
2277	R	27
2441	R	27
2805	N	27
1113	N	26
1609	N	26
2240	R	26
2252	R	26
2408	R	26
1123	R	25
1205	N	25
2205	R	25
2207	N	25
2244	N	25
2260	N	25
2261	R	25
2420	R	25
2435	R	25
2440	R	25
1126	R	24
1307	R	24
1322	R	24
1808	R	24
2103	R	24
2223	R	24
2231	R	24
2259	R	24
2286	R	24
2294	R	24
2427	N	24
2706	R	24
1105	R	23
1108	R	23
1116	N	23
1122	R	23
1204	R	23
1309	R	23

2410	R	23
2424	R	23
1109	R	22
1112	R	22
1304	R	22
1305	N	22
1603	R	22
1607	N	22
2301	R	22
1114	R	21
1707	R	21
1802	R	21
2202	R	21
2204	N	21
2255	R	21
2275	N	21
2409	R	21
1106	R	20
1117	R	20
1311	N	20
1702	N	20
1803	R	20
2201	R	20
2203	R	20
2209	R	20
2222	R	20
2226	R	20
2284	R	20
2413	N	20
2431	N	20
2601	R	20
2709	R	20
1118	R	19
2102	N	19
2411	N	19
2412	N	19
1104	N	18
1321	N	18
2216	R	17
2219	R	17
1301	R	16
1602	R	15

R: responder. N: non-responder. OR: operational ranges.

Supplementary Table S3: Defining the operational ranges of the manufacturing process using the non-responder rate in relation to total cultivation time (monolayer and 3D). Patient IDs in red, marked with 'N' correspond to non-responder patients (KOOS<8).

Patient ID	R/N	ML+3D cultivation time (days)	non-responder (%)
All patients:		39-76	31.7%
Patients new OR:		≤55	26%
1804	R	76	} 50%
2253	N	74	
1201	R	73	
1312	R	68	
1207	N	67	
2235	N	66	
2269	N	66	
2434	R	65	
2417	N	64	
1101	N	62	
2423	N	62	
2104	R	61	
2402	R	61	
2418	R	60	
2217	N	59	
2220	N	59	
2221	R	59	
2246	N	59	
2248	R	59	
2263	R	59	
2265	N	59	
2277	R	59	
2283	N	59	
2287	R	59	
2427	N	58	
1107	R	56	
2407	N	56	
2440	R	56	
1120	R	55	
1322	R	55	
2701	N	55	
1102	R	54	

1310	N	54
2408	R	54
2420	R	54
2441	R	54
2805	N	54
1104	N	53
1113	N	53
1306	N	53
1808	R	53
2103	R	53
2251	R	53
2439	R	53
1205	N	52
2204	N	52
2205	R	52
2207	N	52
2223	R	52
2224	R	52
2229	R	52
2231	R	52
2238	R	52
2239	R	52
2240	R	52
2241	R	52
2244	N	52
2249	R	52
2252	R	52
2254	R	52
2256	R	52
2257	R	52
2273	R	52
2286	R	52
2294	R	52
2435	R	52
1126	R	49
1603	R	49
1609	N	49
1105	R	48
1108	R	48
1114	R	48
1116	N	48
1122	R	48
1309	R	48
1607	N	48
1802	R	48
1803	R	48

2410	R	48
2424	R	48
1112	R	47
1117	R	47
1118	R	47
1304	R	47
1311	N	47
1321	N	47
1707	R	47
2102	N	47
2409	R	47
2411	N	47
2431	N	47
2706	R	47
2709	R	47
1204	R	46
1305	N	46
1307	R	46
1702	N	46
2412	N	46
2601	R	46
1109	R	45
1123	R	45
2201	R	45
2202	R	45
2203	R	45
2209	R	45
2216	R	45
2219	R	45
2222	R	45
2226	R	45
2255	R	45
2259	R	45
2260	N	45
2261	R	45
2275	N	45
2284	R	44
2413	N	44
1106	R	43
1301	R	40
1602	R	40
2301	R	39

R: responder. N: non-responder. OR: operational ranges.