

ID	time (min)	ntot	area (μm^2)	minor (μm)	major (μm)	vol (fl)	Cratio	Cfft	psf
18	30	13	133.14	3.295	4.763	34.480	0.132	0.146	0.635
18	90	13	178.08	3.440	6.604	45.058	0.438	0.342	0.632
22	30	13	127.68	3.568	4.757	34.781	0.080	0.111	0.638
22	90	13	167.16	3.267	6.534	44.310	0.264	0.242	0.637
23	30	13	154.56	3.995	5.046	46.640	0.050	0.081	0.631
23	90	13	208.32	3.976	6.692	63.519	0.206	0.210	0.630
25	30	13	102.48	3.278	4.161	25.678	0.062	0.104	0.630
25	90	13	152.46	3.221	6.056	38.221	0.295	0.261	0.630
26	30	13	130.62	3.674	4.592	37.129	0.067	0.078	0.638
26	90	13	163.38	3.453	6.155	44.673	0.212	0.223	0.638
28	30	13	165.9	4.325	4.980	54.387	0.051	0.064	0.613
28	90	13	181.86	4.546	5.416	55.973	0.171	0.094	0.628
29	30	13	152.04	3.785	4.993	44.475	0.056	0.097	0.635
29	90	13	154.98	3.902	5.412	44.608	0.121	0.134	0.637
31	30	13	109.2	3.498	3.998	28.775	0.026	0.064	0.637
31	90	13	160.86	3.730	5.968	44.274	0.208	0.194	0.639
32	30	13	199.92	4.353	5.855	66.556	0.076	0.103	0.608
32	90	13	237.3	4.734	7.569	75.183	0.393	0.247	0.622
33	30	13	121.8	3.628	4.246	32.999	0.049	0.063	0.638
33	90	13	149.1	3.950	5.597	40.987	0.283	0.192	0.639
35	30	13	124.32	3.569	4.487	34.808	0.068	0.080	0.638
35	90	13	178.08	3.720	6.280	48.439	0.335	0.243	0.638
36	30	13	118.86	3.539	4.238	31.974	0.052	0.080	0.638
36	90	13	153.72	3.377	5.696	39.789	0.305	0.240	0.635
37	30	13	170.52	4.133	5.489	51.384	0.120	0.113	0.632
37	90	13	189	4.421	5.495	63.473	0.087	0.075	0.605
38	30	13	187.32	4.524	5.409	63.246	0.050	0.075	0.604
38	90	13	196.56	4.705	5.567	65.272	0.086	0.086	0.609
39	30	13	144.48	3.798	5.056	42.131	0.070	0.104	0.636
39	90	13	173.88	4.068	5.353	55.728	0.077	0.087	0.619
40	30	13	152.88	3.929	5.139	45.502	0.067	0.101	0.633
40	90	13	139.44	3.683	5.029	38.414	0.121	0.110	0.639

ID	time (min)	ntot	area (μm^2)	minor (μm^2)	major (μm^2)	vol (fl)	circ1	circ2	psf
41	30	13	116.34	3.661	4.220	31.907	0.055	0.062	0.639
41	90	13	133.14	3.463	4.804	35.583	0.131	0.128	0.638
43	30	13	110.88	3.586	4.088	29.260	0.029	0.069	0.637
43	90	13	166.32	3.114	6.110	43.267	0.283	0.240	0.636
44	30	13	94.08	3.244	3.620	23.666	0.036	0.059	0.631
44	90	13	102.06	3.574	3.765	25.813	0.043	0.042	0.632
46	30	13	183.54	4.203	5.704	59.012	0.072	0.107	0.618
46	90	13	215.04	4.836	5.887	73.532	0.098	0.107	0.599
47	30	13	210.42	3.932	7.137	56.997	0.913	0.370	0.638
47	90	13	193.62	4.389	5.706	62.731	0.064	0.101	0.616
48	30	13	81.06	3.020	3.448	18.641	0.015	0.047	0.609
48	90	13	136.5	3.137	5.586	33.840	0.237	0.223	0.628
50	30	13	143.64	3.878	4.763	41.381	0.055	0.093	0.637
50	90	13	182.7	4.246	5.581	55.621	0.140	0.107	0.630
51	30	13	72.66	2.792	3.324	16.005	0.095	0.075	0.593
51	90	13	140.28	3.042	6.068	34.054	0.316	0.282	0.624
34	30	12	113.4	3.568	4.203	30.362	0.044	0.070	0.638
34	90	12	145.74	3.346	5.774	38.267	0.215	0.214	0.636
45	30	12	61.74	2.428	2.993	12.254	0.052	0.075	0.543
45	90	12	94.92	2.760	4.246	20.788	0.179	0.161	0.591
27	30	12	63	2.574	3.006	12.966	0.000	0.058	0.562
27	90	12	105	3.364	4.128	26.180	0.067	0.093	0.629
21	30	12	163.8	4.246	5.304	52.123	0.060	0.072	0.621
21	90	12	205.38	4.247	6.613	62.120	0.303	0.231	0.631
42	30	9	91.98	2.984	3.990	21.789	0.065	0.113	0.618
42	90	9	120.96	3.216	4.590	31.773	0.088	0.127	0.636
14	30	8	198.66	3.903	6.904	58.084	0.228	0.219	0.636
14	90	8	260.82	3.267	9.800	70.312	0.666	0.449	0.638
30	30	1	44.52	1.892	2.508	7.278	0.124	0.106	0.404
N/A	90	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
75	90	12	149.94	4.162	4.854	45.110	0.044	0.086	0.632
N/A	30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
76	90	12	135.66	3.364	5.011	36.386	0.102	0.131	0.638
N/A	30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
82	90	12	68.04	2.532	3.165	14.616	0.024	0.067	0.583
N/A	30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
96	90	10	73.08	2.896	3.314	16.267	0.035	0.071	0.597
N/A	30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
97	90	1	128.1	3.253	5.439	31.289	0.233	0.193	0.625
N/A	30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
98	90	1	228.06	4.534	6.938	69.341	0.323	0.229	0.630

ID	y(no psf)	c(no psf)	y(psf)	c(psf)	y0	y1	y2	y3	c0	c1	c2	c3
18	70581	79085	111149	124540	10365	8004	10237	41975	10153	8439	11036	49456
18	520026	167850	822946	265625	63800	56459	58530	341238	19179	17879	18481	112310
22	63863	67329	100034	105464	8208	8701	8728	38225	7381	8859	9679	41409
22	582794	168009	914694	263690	64736	64785	76043	377231	17897	18484	21551	110076
23	93120	95032	147471	150499	10884	10579	13073	58585	9859	9896	12701	62576
23	688626	247777	1093520	393463	66075	61602	75574	485376	23167	22175	27156	175279
25	21974	19546	34863	31010	4132	3211	3590	11041	2710	2768	3173	10894
25	305338	88569	484352	140495	39208	36351	38020	191760	10644	10066	10735	57124
26	57994	65046	90937	101995	7788	7323	9292	33590	7930	8329	10331	38455
26	549228	169909	860212	266114	66023	63335	73154	346717	20003	19485	22389	108031
28	73367	89633	119717	146258	8942	8606	9865	45955	9603	10007	11458	58564
28	681362	221899	1084920	353325	80112	79167	91743	430341	25477	25288	29399	141734
29	71904	96236	113147	151436	8865	8553	9332	45154	11081	10906	12361	61888
29	605248	189715	950253	297856	78060	72719	89908	364562	23977	22536	28431	114770
31	45851	60288	72013	94688	7367	7181	7771	23531	8831	9231	10282	31943
31	490217	149754	767713	234524	60373	65244	58043	306558	17967	19748	17496	94543
32	86279	114474	141864	188223	10155	9890	10793	55441	12468	12831	14288	74887
32	719610	256496	1157200	412470	76111	67646	76158	499696	26008	23064	26774	180650
33	63769	80106	99910	125506	10698	8777	9051	35244	12113	10685	11143	46165
33	454843	137463	712320	215278	67068	61111	60697	265967	20471	18739	18207	80045
35	50928	65584	79781	102741	7880	6657	9092	27298	9157	8760	11731	35935
35	618953	180046	969574	282038	82551	69411	72253	394739	23657	19995	20845	115550
36	69266	96960	108568	151977	10717	10180	10407	37962	14263	14173	14705	53818
36	667878	211435	1051850	332993	87396	85892	88742	405849	27433	27120	27952	128931
37	92962	144068	147170	228076	12250	11322	11905	57485	17730	17223	18268	90846
37	772304	270304	1275730	446501	81505	83241	98123	509436	29231	28866	33926	178280
38	54147	58528	89705	96964	5550	5877	6541	36179	3535	5350	6829	42814
38	454146	152983	745753	251213	50261	51653	62519	289714	15401	16455	20608	100519
39	94320	122220	148347	192228	13947	11402	15090	53882	18064	14849	19330	69976
39	842539	254128	1361080	410531	106882	95971	110828	528859	33123	28934	33405	158665
40	59660	76837	94183	121301	7911	6836	8600	36313	8596	8174	10646	49421
40	547981	167448	858171	262234	77364	76019	85832	308766	23156	22962	25934	95396

ID	y(no psf)	c(no psf)	y(psf)	c(psf)	y0	y1	y2	y3	c0	c1	c2	c3
41	65211	78510	102128	122957	10432	9063	10413	35303	11839	10864	12365	43441
41	575976	172419	903255	270391	78110	77930	83857	336079	23623	23581	25613	99602
43	38884	39948	61061	62731	5341	5634	6518	21392	4370	5454	6849	23274
43	438093	109033	689368	171571	50245	49551	57431	280867	11085	11477	13956	72516
44	55768	70519	88383	111761	10046	8079	9890	27753	12090	10513	12512	35405
44	452173	137133	715639	217036	78532	71898	80673	221071	24350	21578	24125	67080
46	108264	156135	175128	252566	13549	13157	14204	67353	19010	18112	19788	99225
46	829010	302130	1383450	504195	86117	89238	97963	555693	31645	31685	35710	203090
47	94180	138158	147558	216462	11374	8933	10005	63868	15300	12694	14377	95787
47	704056	263276	1142650	427286	78239	71876	87948	465994	29523	26960	33034	173759
48	39521	57420	64896	94286	7878	6938	8064	16641	10562	9741	12092	25025
48	410830	155991	653785	248241	52375	49750	56401	252304	19859	19131	21593	95409
50	48723	87238	76505	136979	5991	6235	7057	29441	8939	10534	12607	55157
50	569349	202864	903728	322006	58568	68593	68089	374100	19959	23968	24108	134829
51	22817	30806	38452	51914	5073	4266	4317	9161	6646	5836	5756	12568
51	389211	127989	623756	205118	49795	45483	55030	238903	16199	14831	17913	79047
34	66498	80251	104268	125831	10331	8908	11330	35929	11517	10793	13610	44329
34	580456	168021	912102	264020	75439	71015	80730	353272	22152	20632	23144	102092
45	29986	38737	55253	71377	7052	5482	6216	11237	9013	7046	8036	14642
45	337444	105357	570904	178249	58709	58538	49930	170268	18353	18418	15681	52905
27	21974	25784	39075	45850	4888	3939	4495	8653	4943	4705	5690	10446
27	282768	89324	449231	141908	46529	39867	49237	147136	14145	12420	15789	46969
21	73307	79051	118084	127336	9441	8653	10212	45001	8349	8397	10907	51397
21	604321	203810	957595	322954	76426	62337	72266	393293	24180	20181	23884	135565
42	36509	40536	59091	65608	6116	6267	6645	17481	5952	6590	7717	20276
42	325754	101422	511847	159361	47324	46481	50331	181618	14110	14526	15785	57000
14	81433	76368	128131	120162	7538	8803	8276	56816	5409	7567	7539	55852
14	680302	214600	1066160	336319	60041	64406	52525	503331	17739	19932	15964	160965
30	-2104	-9631	-5207	-23834	-641	-499	-526	-439	-3186	-2149	-2213	-2082
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
75	394616	130823	624477	207026	48580	50724	61122	234190	14100	16312	20546	79865
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
76	356326	120696	558631	189222	46118	48702	49222	212284	14379	16282	16775	73260
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
82	137047	46053	235138	79015	26999	24749	27516	57784	8965	8278	9115	19695
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
96	116421	44005	194848	73649	26673	22557	22514	44678	9961	8694	8504	16845
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
97	356479	107439	570046	171806	50418	49191	50388	206482	14865	14732	15373	62470
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
98	734609	222630	1165640	353256	65632	71449	79099	518430	20373	21770	23406	157081

Supplementary Table 1. Some of the variables that we calculated for every cell using Cell-ID, for the cells shown in Figure 1 of the main text. Figure 1 shows two time points (30 minutes and 90 minutes), and if the cell appears in both it is listed twice in the table. “N/A” indicates that the cell was absent in that specific time point. The variables shown correspond to the following variables. "**ntot**": the number of frames in the time course in which the cell was tracked, (maximum 13 for this experiment); "**area**": the cross sectional area of the cell as measured in the bright field image; "**minor**": the length of the minor axis of the cell; "**major**": the length of the major axis of the cell; "**vol**": the union of spheres calculated cell volume in femtoliters; "**Cratio**": the circularity measure determined from a comparison of the cross sectional area of the cell to the perimeter, as discussed in the supplementary material; "**Cfft**": the circularity measure determined from a fourier transform of the radius of the cell as a function of the angle, as discussed in the supplementary material; "**psf**": the evaluation of the function f_{cor} described in the supplementary material that is used to correct the fluorescence for out-of-focus regions of the cells, and which is calculated with the aid of PAW as are variables that depend on this quantity; "**y(no psf)**": the total background subtracted fluorescence before correcting for the out-of-focus regions of the cell, for the YFP signal; "**c(no psf)**": same as y(no psf) but for the CFP signal; "**y(psf)**": the total background subtracted fluorescence after dividing by psf to correct for out-of-focus regions of the cell, for the YFP signal; "**c(psf)**": same as y(psf) but for the CFP signal; "**y0**": the background subtracted fluorescence located along the boundary pixels for the YFP signal; "**y1**": the background subtracted fluorescence located one pixel in from the boundary pixels for the YFP signal; "**y2**": the background subtracted fluorescence located two pixels in from the boundary pixels for the YFP signal; "**y3**": the background subtracted fluorescence located three or more pixels from the boundary pixels for the YFP signal; "**c0**", "**c1**", "**c2**", and "**c3**": same as y0, y1, y2, y3 but for the CFP signal. Cell #30 is a spurious cell whose fluorescence is slightly below the measured background and thus has negative values for the background subtracted fluorescence signals.