

**Supplementary material S2: The details of the computational analysis and the exact values of the norm  $L^p$  calculated for  $p = 2.5$ , within the definition interval  $[0; 1]$**

**Table S1.** Computational results for image analysis of fibroblasts migration, with respect to statistical factor “*Sample*” (means  $\pm$  SD,  $n = 12$ ).

Factor: Sample	Wound Closure by Width (%)	Wound Closure by Area (%)	Normalized Cell Density (%)	$L^p$ -norm
C50	71.17a $\pm 41.578$	73.56a $\pm 40.344$	76.60a $\pm 43.933$	0.74a $\pm$ 0.413
CTRL	70.88a $\pm 41.567$	69.03b $\pm 39.561$	62.79b $\pm 35.559$	0.68b $\pm$ 0.381
CTRL0	57.30b $\pm 43.414$	52.96c $\pm 42.350$	30.64c $\pm 23.673$	0.49c $\pm$ 0.379

Note: different letters mean statistically significant different. Multiple comparisons test results were done with *post-hoc* Duncan ( $P = 0.05$ ).

**Table S2.** Computer results for image analysis of fibroblasts migration by “*Time*” factor levels (means  $\pm$  SD,  $n = 22$ ).

Factor: time	Wound Closure by Width (%)	Wound Closure by Area (%)	Normalized Cell Density (%)	$L^p$ -norm
T00	0.00d $\pm 0.000$	0.00d $\pm 0.000$	0.00d $\pm 0.000$	0.00d $\pm$ 0.000
T12	24.31c $\pm 6.060$	27.86c $\pm 18.813$	31.13c $\pm 22.445$	0.29c $\pm$ 0.159
T24	74.40b $\pm 35.582$	69.33b $\pm 34.210$	52.09b $\pm 29.705$	0.67b $\pm$ 0.327
T36	100.00a $\pm 0.000$	96.86a $\pm 3.927$	81.76a $\pm 29.084$	0.95a $\pm$ 0.087
T48	100.00a $\pm 0.000$	97.09a $\pm 3.340$	85.72a $\pm 24.476$	0.96a $\pm$ 0.081
T60	100.00a $\pm 0.000$	99.97a $\pm 0.054$	89.35a $\pm 21.853$	0.97a $\pm$ 0.062

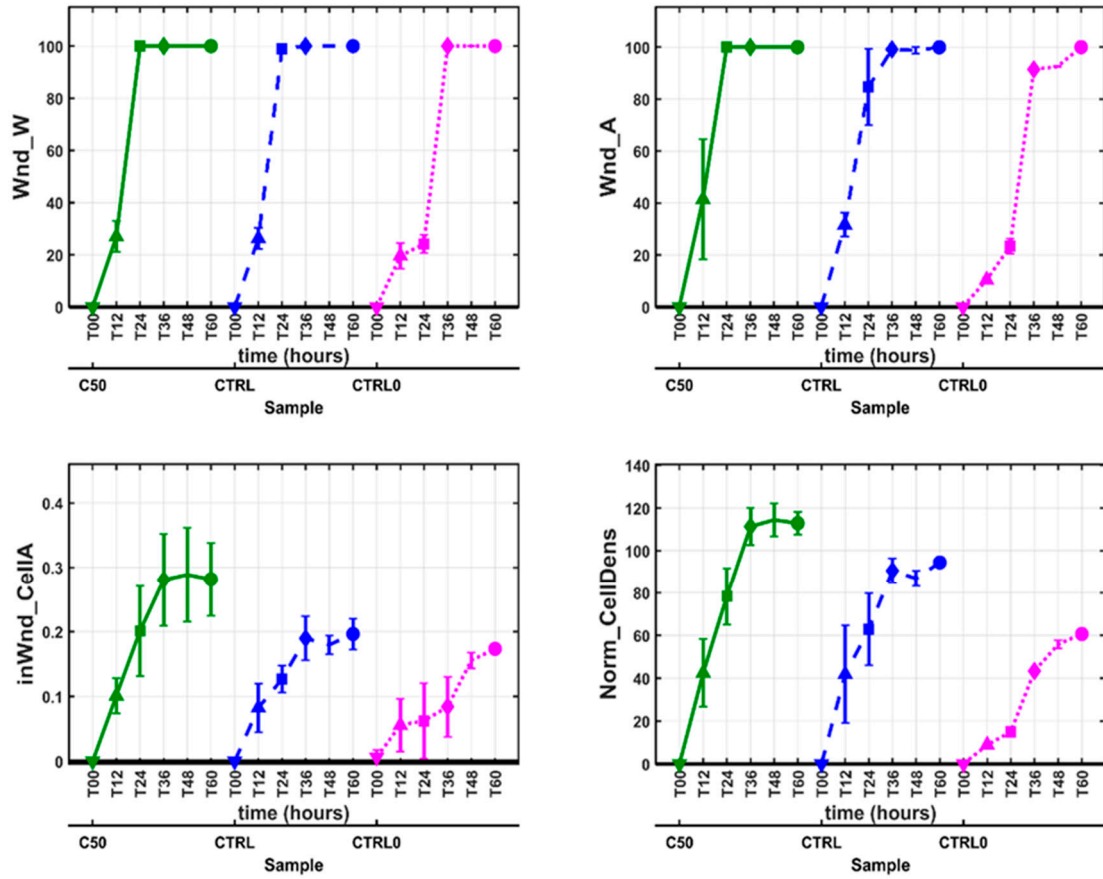
Note: different letters mean statistically significant different. Multiple comparisons test results were done with *post-hoc* Duncan ( $P = 0.05$ ).

**Table S3.** Computer results for image analysis of fibroblasts migration, by “*Sample\*Time*” factor levels (means  $\pm$  SD,  $n = 2$ ).

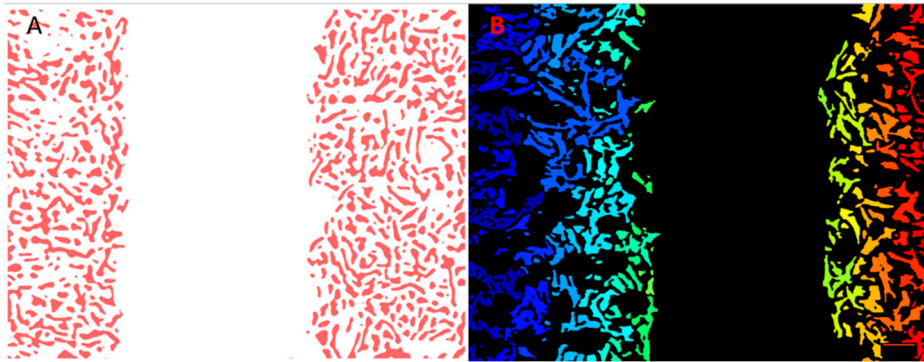
Factor: Sample*Time	Wound Closure by Width (%)	Wound Closure by Area (%)	Normalized Cell Density (%)	$L^p$ -norm
C50_T00	0.00d $\pm 0.000$	0.00e $\pm 0.000$	0.00ab $\pm 0.000$	0.00h $\pm 0.000$
C50_T12	27.05b $\pm 5.980$	41.48c $\pm 23.126$	42.52a $\pm 15.807$	0.39f $\pm 0.157$
C50_T24	100.00a $\pm 0.000$	99.93a $\pm 0.119$	78.37a $\pm 13.286$	0.94bcd $\pm 0.036$
C50_T36	100.00a $\pm 0.000$	99.98a $\pm 0.030$	111.34a $\pm 8.741$	1.04a $\pm 0.033$
C50_T48	100.00a	100.00a	114.47a	1.05a

<b>Factor: Sample*Time</b>	<b>Wound Closure by Width (%)</b>	<b>Wound Closure by Area (%)</b>	<b>Normalized Cell Density (%)</b>	<b><i>L<sup>p</sup></i>-norm</b>
	± 0.000	± 0.000	± 7.722	± 0.030
<b>C50_T60</b>	100.00a	99.99a	112.88a	1.05a
	± 0.000	± 0.020	± 5.304	± 0.020
<b>CTRL_T00</b>	0.00d	0.00e	0.00b	0.00h
	± 0.000	± 0.000	± 0.000	± 0.000
<b>CTRL_T12</b>	26.28b	31.69cd	41.94a	0.35f
	± 4.048	± 4.661	± 22.845	± 0.127
<b>CTRL_T24</b>	99.03a	84.69b	62.92a	0.85de
	± 0.980	± 14.738	± 16.875	± 0.089
<b>CTRL_T36</b>	100.00a	99.15a	90.57a	0.97ab
	± 0.000	± 1.291	± 5.800	± 0.015
<b>CTRL_T48</b>	100.00a	98.72a	86.84a	0.95abc
	± 0.000	± 1.280	± 3.676	± 0.015
<b>CTRL_T60</b>	100.00a	99.92a	94.46a	0.98ab
	± 0.000	± 0.070	± 1.667	± 0.005
<b>CTRL0_T00</b>	0.00d	0.00e	0.00b	0.00h
	± 0.000	± 0.000	± 0.000	± 0.000
<b>CTRL0_T12</b>	19.60c	10.41e	8.93ab	0.14g
	± 4.949	± 0.920	± 0.231	± 0.025
<b>CTRL0_T24</b>	24.17b	23.36d	14.97ab	0.21g
	± 3.474	± 2.867	± 0.057	± 0.025
<b>CTRL0_T36</b>	100.00a	91.44ab	43.36a	0.84e
	± 0.000	± 0.475	± 0.621	± 0.003
<b>CTRL0_T48</b>	100.00a	92.55ab	55.85a	0.86cde
	± 0.000	± 0.222	± 1.966	± 0.004
<b>CTRL0_T60</b>	100.00a	100.00a	60.70a	0.90bcde
	± 0.000	± 0.000	± 1.118	± 0.002

Note: different letters mean statistically significant different. Multiple comparisons test results were done with post-hoc Duncan (P = 0.05).



**Figure S11.** Interval plots representing the percentage of wound closure by width, area, cells inside the wound and  $L^p$  norm.



**Figure S12.** Processing the image of C50 sample at T00, by pointing out the exact position of the cells inside, outside or at the edge of the wound area.