Supplementary Material, Statistics for arrays representing the data for individual cells

New arrays representing the data with chronic exposure obtained from each individual cell were obtained and analyzed with factorial ANOVA. The factors were the date when exposure begun and the type of exposure (shams, 915 MHz, 905 MHz, UMTS). The analysis has shown that the arrays did not depend on the exposure date while dependence on the exposure type has been seen at high significance level, p<0.0001. All MW exposures differed from sham-exposures at the 0.95 confidence level. The Kruskal-Wallis ANOVA by ranks and the Median test have also shown the effects of MW exposure, p<0.0001. Multiple comparisons by the Kruskal-Wallis ANOVA by ranks has shown that exposure at 915MHz/UMTS resulted in the effects at p<0.000001. In addition, these comparisons revealed the effect of 905 MHz exposure, p<0.00005, and that the effect of UMTS exposure was stronger then the effects of 915 MHz GSM and 905 MHz GSM, p<0.005 and p<0.000001, respectively. As expected, comparison of the data arrays representing measurements in individual cells provided much higher significance level for the MW exposure effects than comparison of mean values because of larger statistics.

Similarly, all our conclusions for short, 1-3 h, exposures have been strengthened by the analysis of the individual cell arrays. In addition, this analysis revealed that short exposure of stem cells at 905 MHz resulted in statistically significant effects.

Of note, measurements in individual cells within experiments may be considered as not fully independent if they represent specific arrays that may differ between experiments. However, ANOVA analysis has shown that the individual cell counts in sham-exposed cells, which were obtained from different experiments, belong to the same array. Therefore, individual cell counts within experiments may be considered the same independent as between experiments.
Supplemental Material, Figure 1

MSC 2 h post-irradiation with 3 Gy
Supplemental Material, Figure 2

Untreated VH-10 fibroblasts
Supplemental Material, Figure 3

Untreated MSC
Supplemental Material, Figure 4

Untreated MSC