

Supplementary Materials for

**Chemoattraction of neoplastic glial cells with CXCL10, CCL2 and CCL11 as a paradigm for a promising therapeutic approach for primary brain tumors**

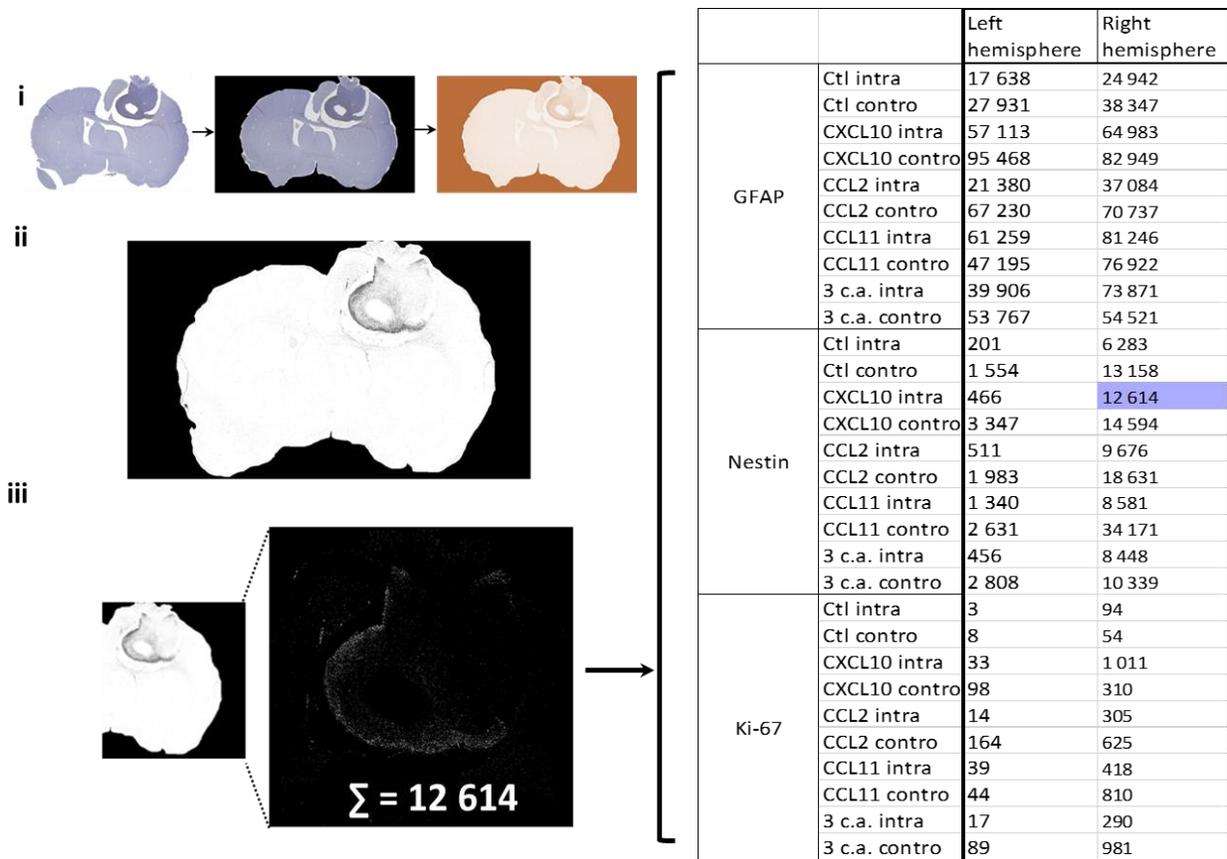
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**This PDF file includes:**

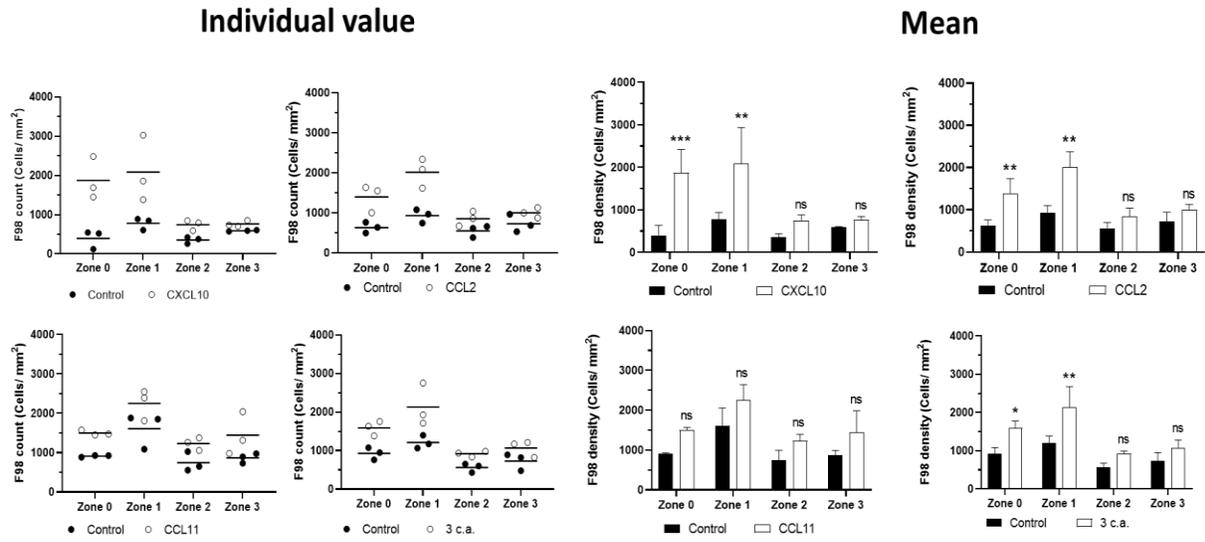
Figures. S1 to S4

Table S1



**Figure S1.**

IHC image quantification procedure in Image J/ Fiji software. (i) The outline of the immunohistochemical image was freehand selected and deleted, making it black and an image deconvolution was performed in H&E/ DAB; (ii) Threshold was applied according to the marker, for GFAP: value < 125 = 0; if not = 1, Nestin: value < 145 = 0; if not = 1 and ki67: value < 175 = 0; if not =1; (iii) the resulting image was split to separate each hemisphere. Then, each image was inverted to obtain IHC staining in white pixel. Finally, the sum of the points of each image has been carried out.



**Figure S2A.**

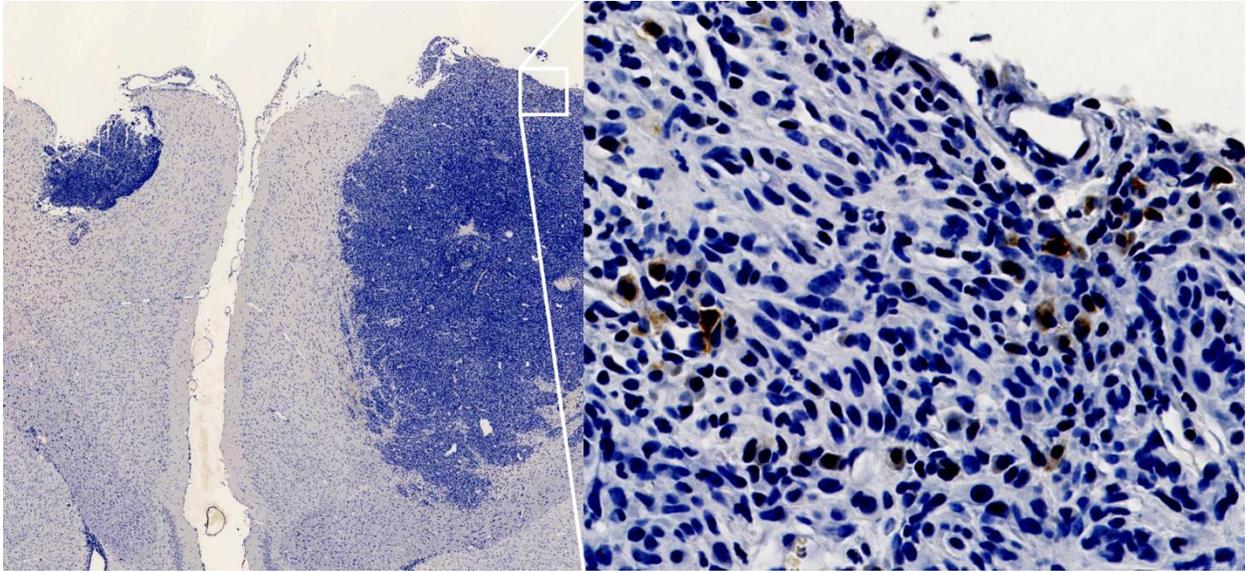
Individual and mean values for chemoattraction potential of each ligand with F98 tumor cells.

\*,  $p < 0.05$ , \*\*,  $p < 0.01$ , \*\*\*,  $p < 0.001$ , ns = not significant.









**Figure S4.**

Immunohistochemical labeling of CD68 on controlateral implantation of Gliogel containing a combination of the three chemoattractants. Unusual intracellular cell marking, mostly at the superficial periphery of the tumor implantation site.

|                                  |      | Controlateral      |                               | Intratumoral       |      |                                  |  |
|----------------------------------|------|--------------------|-------------------------------|--------------------|------|----------------------------------|--|
| Control<br>44 ± 7.483<br>(n = 8) | *    | 65 ± 19.07 (n = 7) | CXCL10<br>***                 | 7 ± 2.340 (n = 7)  | **** | Control<br>37 ± 5.855<br>(n = 8) |  |
|                                  | **** | 84 ± 14.24 (n = 8) | CCL2<br>****                  | 28 ± 8.064 (n = 9) | *    |                                  |  |
|                                  | *    | 61 ± 16.06 (n = 8) | CCL11<br>***                  | 25 ± 4.086 (n = 8) | ***  |                                  |  |
|                                  | ns   | 53 ± 16.01 (n = 7) | Combination<br>(3 c.a.)<br>** | 24 ± 10.15 (n = 7) | **   |                                  |  |

**Table S1.**

Mean values of peritumoral cluster with respective standard deviation and significance level for each data set. \*, p < 0.05, \*\*, p < 0.01, \*\*\*, p < 0.001, \*\*\*\*, p < 0.0001, ns = not significant.