Online resource 1: Animals used in the current study

The mice used in this study were part of 4 experimental replicates used in Rey et al. 2016.

The mice that were not euthanized for histological analyses in the previous study were maintained alive for up to 23 months post injection, and used for this study.

In addition, we reassessed some animals that were used in our previous study (for the experiments indicated

in the table), and included an additional group, 9 months post injection, that we did not presented previously.

| | | | Animala | Animals use | Figures including | |
|-----------|--------------------|----------|-----------|---------------------|-----------------------------------|----------------------|
| Timepoint | Experimental group | n= | Animais | Reused for heatmap | Reused for quantifications | these animals |
| 1 mo | Ctl | 4 | | | | |
| | PBS | 4 | | Simple scoring, | | |
| | mMs | 3 | Revisited | | | Fig 4 |
| | mPFFs | 4 | | average score value | | |
| | huPFFs | 4 | | (continuous data) | | |
| 3 mo | Ctl | 3 | | Simple cooring | | |
| | PBS | 4 | | Simple scoring, | | |
| | mMs | 5 | Revisited | | | Fig 4 |
| | mPFFs | 4 | | average score value | | |
| | huPFFs | 3 | | (Continuous uata) | | |
| 6 mo | Ctl | 4 | | Simple scoring | | |
| | PBS | 4 | | simple scoring, | New cresyl violet staining | |
| | mMs | 5 | Revisited | | and stereology | Fig 4, Fig 6 |
| | mPFFs | 5 | | (continuous data) | quantification | |
| | huPFFs | 4 | | | | |
| 9 mo | Ctl | - | | | | |
| | PBS | 4 | | | | |
| | mMs | 5 | New | | | Fig 4 |
| | mPFFs | 5 | | | | |
| L | huPFFs | 5 | | | | |
| 12 mo | Ctl | 4 | | Simple scoring | | |
| | PBS | 4 | | calculation of | Pser129 slides from Rey et | |
| | mMs | 9 | Revisited | | al. newly analysed by | Fig 4, Fig 5 |
| | mPFFs | 5 | | (continuous data) | ImageJ for quantifications | |
| | huPFFs | 5 | | | | |
| 18 mo | Ctl | 3 | | | | |
| | PBS | 3 | | | | |
| | mMs | 4 | New | | | Fig 4, Fig 5, Fig 5, |
| | mPFFs | 3 | | | | |
| | huPFFs | 5 | | | | |
| 23 mo | Ctl | 3 | | | | |
| | PBS | - | | | | |
| | mMs | 4 | New | | | Fig 1, Fig 3, Fig 4 |
| | mPFFs | - | | | | |
| | huPFFs | 4 | | | | |

Online resource 2 : Flow-chart of macros for pser129 analysis by ImageJ

Images were acquired at 20x magnification with condenser on for OB (a), and without condenser for other brain regions (b). Images were then processed on ImageJ64 as described in a and b.



a. Analysis of OB images

b. Analysis of images from other brain regions



Online resource 3 : Pser129 staining does not lead to unspecific staining in white matter tracts in control animals, and no TDP-43 or Tau pathologies are observed in PFFs injected mice. (a) Pser129 staining is not detected in white matter tracts (aca: anterior part of the anterior commissure, fmi: anterior forceps of corpus callosum, cc: corpus callosum, and cerebellum) of mice injected with mMs 18 months-post injection (ipsilateral) and in age-matched non-injected mice (Ctl). Analysis was performed in 3 animals per group. Scale bar: 100 μ m (b) Tau and TDP-43 pathologies were assessed by immunohistochemistry against hyperphosphorylated tau (AT8) (pS202/T205) and hyperphosphorylated TDP-43 (1D3) (pS409/410) (b). Tau and TDP-43 pathologies are detected respectively in post-mortem brain tissue from patients with AD (AD Brain, angular gyrus) and FTLD (FTLD Brain, cingulate cortex), but are absent from mice 18 months after injection of PBS, huPFFs or mPFFs (a-b; images from the ipsilateral anterior olfactory nucleus). Histochemical analysis was performed in the ipsilateral olfactory bulb and ipsilateral anterior olfactory nucleus of mice 18-months post-injection of mPFFs, HuPFFs and PBS (mPFFs 18 months: n=3; HuPFFs 18 months: n=5, PBS 18 months: n=1). Additional brain regions were assessed in one animal per group (hippocampus, orbitofrontal cortex, motor cortex, striatum, piriform cortex; data not shown). Scale bar: 20 μ m.



| • 1 | | | | |
|-----|--------------------------------|------|--------|--|
| b | AD Brain | PBS | HuPFFs | mPFFs |
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| | AT8 | | | |
| | FTI D Brain | PBS | HuPFFs | mPFFs |
| | - TEB Brain | . 20 | | |
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Online resource 4

List of the abbreviations used in the figures

| Abbreviation | Structure name |
|--------------------------------|---|
| AA | Anterior amygdaloid area |
| AcbNu | Accumbens Nucleus Core and Shell |
| аса | Anterior part of the anterior commissure |
| aci | Anterior part of the anterior commissure, intrabulbar part |
| ACo | Anterior cortical nucleus of the amygdala |
| AHIPM, AHIAL | Amygdalohippocampal area posteromedial, part anterolateral part |
| APir | Amygdalopiriform transition area |
| AON | Anterior olfactory nucleus |
| AOB | Accessory olfactory bulb |
| | Secondary auditory cortex |
| BAOT | Bed nucleus of accessory olfactory tract |
| | Bacal amygdaloid nucleus |
| BMA BMP BMI | Accessory basal amygdaloid nucleus (Amygdala) |
| | Corny Ammonis of the hinnocompus |
| | Contral amygdaloid nuclous (Amygdala) |
| | Central amygdaloid nucleus (Amygdala) |
| | Cingulate cortex |
| | |
| CGb | Central gray, beta part |
| Ср | Cerebral crus |
| СРи | Caudate putamen |
| СхА | Cortex amygdala transition area |
| DEn, IEn | Dorsal endopiriform nucleus, Immediate endopiriform Nucleus |
| DG | Dentate Gyrus |
| DMX | Dorsal motor nucleus of the vagus nerve |
| DP | Dorsal peduncular cortex |
| Ect | Ectorhinal cortex |
| Ent, DiEnt, MiEnt, CEnt, ViEnt | Entorhinal cortex |
| E/OV | Ependymal and subependymal layer/olfactory ventricle |
| FC | Frontal cortex and orbital cortex |
| HDB | Magnocellular preoptic nucleus |
| GP | Globus pallidus |
| Нірр | Hippocampus |
| IC | Internal capsule |
| Ins | Insular cortex |
| IL | Infra-limbic cortex |
| IPR | Interpeduncular nucleus |
| iRt, 7SH | Intermediate reticular nucleus; facial motor nucleus, stylohyoid part |
| LC | Locus Coeruleus |
| LH | Lateral hypothalamic area |
| LPO | Lateral preoptic nucleus |
| LSI | Lateral septal nucleus |
| M2 | Secondary motor cortex |
| MeAD, MePV | Medial Nucleus of the amygdala |
| Med | Medial cerebellar nucleus |
| mPtA | Medial parietal association cortex |
| Mol | Molecular layer of the hippocampus |
| MoDG | Molecular laver, dentate gyrus |
| mVeMC, mVePC | Medial vestibular nucleus, magnocellular part, parvicellular part |
| nLOT | Nucleus of the lateral olfactory tract |
| ОВ | Olfactory bulb |
| Or | Oriens layer of the hippocampus |
| ОТ | Olfactory tubercle |
| PBP | Parabrachial pigmented nucleus |
| PC | Piriform cortex |
| PLCo | Posterolateral cortical amygdaloid area |
| РІН | Peduncular part of the lateral hypothalamic area |
| 1 611 | |

| РМСо | Posteromedial cortical amygdaloid area |
|---------------|--|
| PoDG | Pyramidal layer, dentate gyrus |
| PRh | Perirhinal cortex |
| PVA | Paraventricular thalamic nucleus, anterior part |
| PVP | Paraventricular thalamic nucleus, posterior part |
| Pyr | Pyramidal layer of the hippocampus |
| REth | Retroethmoid nucleus |
| Rad | Radial layer of the hippocampus |
| rmx, RML | Retromammillary decussation, retromammillary nucleus, lateral part |
| RN | Dorsal and medial raphe nuclei |
| S1 | Primary somatosensory cortex |
| S2 | Secondary somatosensory cortex |
| SC | Superior colliculus |
| SFi | Septofimbrial nucleus |
| SN, SNR, SNpc | Substantia nigra, reticulata, pars compacta |
| STMAM, STMPM | Antero medial part of the bed nucleus of the stria terminalis |
| STr | Subiculum transition area |
| TeA | Temporal cortex association area |
| TT | Tenia tecta |
| V2 | Secondary visual cortex |
| VS | Ventral subiculum |
| VP | Ventral pallidum |
| VTA | Ventral tegmental area |

Online resource 5: Linear mixed effect model analysis of pser129 quantifications

a. Comparison of ipsilateral versus contralateral sides, within the same experimental groups and delays post-injection.

Analyses for each brain regions were performed separately, but are presented in the same table for easier reading. p p<0.05, n p<0.01, nn p< 0.001. M. estim. = Model estimate

| Brain | Linear mixed | | 12 mo | | | 18 mo | |
|--------|--------------|------------|---------------|---------------|------------|---------------|----------------|
| region | effect model | mMs | HuPFFs | mPFFs | mMs | HuPFFs | mPFFs |
| | M. Estim. | -0.2415421 | -2.1282153 | -2.4606963 | -0.0988964 | -1.4449104 | 2.5365672 |
| ОВ | SE | 0.6318344 | 0.6318344 | 0.7064124 | 0.7064124 | 0.6318344 | 0.8156947 |
| | p-value | 0.8426982 | 0.0022689 ^^ | 0.0022689 ^^ | 0.8886615 | 0.0333069 ^ | 0.0037455 ^^ |
| | M. Estim. | 0.2698275 | -1.4503223 | -1.0137230 | -0.4571813 | -1.6265008 | -0.7691579 |
| AON | SE | 0.4722032 | 0.4722032 | 0.4722032 | 0.5279392 | 0.4722032 | 0.6096117 |
| | p-value | 0.5677133 | 0.0063918 ^^ | 0.0636193 | 0.4638057 | 0.0034328 ^^ | 0.3105755 |
| | M. Estim. | 0.1276413 | -1.8216912 | -1.7025134 | 0.8088221 | -2.0827230 | -2.7913161 |
| aPC | SE | 0.3923716 | 0.3923716 | 0.3923716 | 0.5065496 | 0.4530717 | 0.5849131 |
| | p-value | 0.7449487 | 0.0000086 ^^^ | 0.0000215 ^^^ | 0.1323915 | 0.0000086 ^^^ | 0.0000086b ^^^ |
| | M. Estim. | 0.2237275 | -2.1453953 | -1.8106423 | -0.6666596 | -3.6460458 | -1.8887278 |
| pPC | SE | 0.5569773 | 0.5569773 | 0.5569773 | 0.6227195 | 0.5569773 | 0.7190546 |
| | p-value | 0.6879184 | 0.0003517 ^^^ | 0.0023013 ^^ | 0.3412399 | 0.0000000 ^^^ | 0.0129333 ^ |
| | M. Estim. | 0.1813210 | -1.9837258 | -1.7828835 | 0.0710812 | -2.8643844 | -2.3400220 |
| PC | SE | 0.3162032 | 0.3162032 | 0.3162032 | 0.3872683 | 0.3463833 | 0.4471789 |
| | p-value | 0.6796228 | 0.0000000 ^^^ | 0.0000000 ^^^ | 0.8543703 | 0.0000000 ^^^ | 0.0000003 ^^^ |
| | M. Estim. | 0.0461447 | -2.3131974 | -1.5910613 | -0.0927822 | -2.6742402 | -3.0255354 |
| Ent | SE | 0.4498931 | 0.4498931 | 0.5029958 | 0.5029958 | 0.4498931 | 0.5808095 |
| | p-value | 0.9183058 | 0.0000005 ^^^ | 0.0023409 ^^ | 0.9183058 | 0.0000000 ^^^ | 0.000005 ^^^ |

b. Comparison between experimental groups, within same side of the brain and same delay. Analyses for each brain regions were performed separately, but are presented in the same table for easier reading. * p<0.05, ** p<0.01, *** p<0.001 for comparisons to mMs; # p<0.05, ## p<0.01, ### p<0.001 for comparisons between mPFFs and huPFFs. M. estim. = Model estimate

| Dunin | | Linear | | 12 mo | | | 18 mo | |
|-------|--------------------|-----------|---------------|---------------|---------------|---------------|---------------|--------------|
| Brain | Side | effect | | | | | | |
| | | model | huPFFs/ mMs | mPFFs/mMs | huPFFs/mPFFs | huPFFs/ mMs | mPFFs/mMs | huPFFs/mPFFs |
| | | M. estim. | 4.9647172 | -6.9911420 | -2.0264248 | 2.4860425 | -0.0516132 | 2.4344292 |
| | Ipsi- | SE | 0.7505855 | 0.7961162 | 0.7961162 | 0.7961162 | 0.9064182 | 0.8667015 |
| | lateral | p-value | 0.000000 *** | 0.000000 *** | 0.0130988 # | 0.0035838 ** | 0.9545914 | 0.007458 ## |
| 08 | | M. estim. | 3.0780440 | -4.7719880 | -1.6939440 | 1.1400280 | -2.6870770 | -1.5470480 |
| | Contra- | SE | 0.7505855 | 0.7961162 | 0.7961162 | 0.7961162 | 0.9064182 | 0.8667015 |
| | lateral | p-value | 0.0001235 *** | 0.000000 *** | 0.0500355 | 0.1521474 | 0.0060635 ** | 0.0891167 |
| | Incel | M. estim. | 4.6859919 | -5.9153911 | -1.2293992 | 3.0398960 | -2.3964439 | 0.6434521 |
| | Ipsi- latoral | SE | 0.5596034 | 0.5596034 | 0.5596034 | 0.5935490 | 0.6757853 | 0.6461743 |
| | lateral | p-value | 0.000000 *** | 0.000000 *** | 0.0336321 # | 0.0000006 *** | 0.0005863 *** | 0.3193536 |
| AON | C | M. estim. | 2.9658421 | -4.6318407 | -1.6659985 | 1.8705765 | -2.0844673 | -0.2138908 |
| | Lateral | SE | 0.5596034 | 0.5596034 | 0.5596034 | 0.5935490 | 0.6757853 | 0.6461743 |
| | lateral | p-value | 0.000003 *** | 0.000000 *** | 0.0034918 ## | 0.0030583 ** | 0.0030583 ** | 0.7406362 |
| | lpsi- lateral | M. estim. | 2.7881870 | -4.4508940 | -1.6627070 | 3.1702950 | -2.8222260 | 0.3480690 |
| | | SE | 0.3870358 | 0.3870358 | 0.3870358 | 0.5329051 | 0.6067392 | 0.5801536 |
| 280 | | p-value | 0.000000 *** | 0.000000 *** | 0.0000209 ### | 0.000000 *** | 0.0000049 *** | 0.5485328 |
| arc | Contra- lateral | M. estim. | 0.8388548 | -2.6207396 | -1.7818848 | 0.2787496 | 0.7779126 | 1.0566622 |
| | | SE | 0.5024278 | 0.5024278 | 0.5024278 | 0.5329051 | 0.6067392 | 0.5801536 |
| | | p-value | 0.1424970 | 0.0000011 *** | 0.0011709 ## | 0.6009218 | 0.2397606 | 0.1371077 |
| | Inci | M. estim. | 2.7532726 | -4.2592406 | -1.5059680 | 3.6456037 | -3.0675061 | 0.5780976 |
| | lateral | SE | 0.5569773 | 0.5569773 | 0.5569773 | 0.5907636 | 0.6726140 | 0.6431420 |
| nPC | | p-value | 0.0000015 *** | 0.000000 *** | 0.0082256 ## | 0.000000 *** | 0.0000077 *** | 0.3687247 |
| pre | Contra- | M. estim. | 0.3841498 | -2.2248709 | -1.8407210 | 0.6662176 | -1.8454379 | -1.1792204 |
| | | SE | 0.5569773 | 0.5569773 | 0.5569773 | 0.5907636 | 0.6726140 | 0.6431420 |
| | lateral | p-value | 0.4903799 | 0.0003889 ** | 0.0028509 ## | 0.3113244 | 0.0121509 *** | 0.1000856 |
| | Inci | M. estim. | 2.7765490 | -4.3870097 | -1.6104606 | 3.4079492 | -2.9448659 | 0.4630833 |
| | lateral | SE | 0.3883009 | 0.3883009 | 0.3883009 | 0.4632686 | 0.4987108 | 0.4742004 |
| PC | lateral | p-value | 0.000000 *** | 0.000000 *** | 0.0000403 ### | 0.000000 *** | 0.000000 *** | 0.3287889 |
| | Contra | M. estim. | 0.6115023 | -2.4228052 | -1.8113029 | 0.4724836 | -0.5337627 | -0.0612791 |
| | lateral | SE | 0.4367738 | 0.4367738 | 0.4367738 | 0.4632686 | 0.4987108 | 0.4742004 |
| | lateral | p-value | 0.3230007 | 0.000002 *** | 0.0001011 ### | 0.3693361 | 0.3693361 | 0.8971787 |
| | Inci | M. estim. | 4.3141972 | -7.2342055 | -2.9200083 | 4.8852957 | -4.2210985 | 0.6641973 |
| | lateral | SE | 0.5303450 | 0.5625158 | 0.5625158 | 0.5625158 | 0.6404524 | 0.6123896 |
| Ent | | p-value | 0.000000 *** | 0.000000 *** | 0.0000003 ### | 0.000000 *** | 0.000000 *** | 0.2780992 |
| LIIL | Contro | M. estim. | 1.9548550 | -5.5969990 | -3.6421440 | 2.3038380 | -1.2883450 | 1.0154920 |
| | lateral | SE | 0.5303450 | 0.5625158 | 0.5625158 | 0.5625158 | 0.6404524 | 0.6123896 |
| | lateral | p-value | 0.0003417 *** | 0.000000 *** | 0.000000 ### | 0.0000842 *** | 0.0531123 | 0.0972679 |

c. Comparison of 12 mo versus 18 mo delays, within same experimental groups and same side of the brain.

Analyses for each brain regions were performed separately, but are presented in the same table for easier reading. \$ p<0.05, \$\$ p<0.01, \$\$\$ p<0.001. M. estimate= Model estimate

| Brain region | Side | Linear mixed effect model | mMs | huPFFs | mPFFs |
|-----------------|--------------------|------------------------------------|------------------|--------------|------------------|
| ОВ | lu el | M. estim. | -1.2572934 | 1.2213813 | 5.6822353 |
| | Ipsi- lateral | SE | 0.7961162 | 0.7505855 | 0.9064182 |
| | lateral | p-value | 0.1714064 | 0.1714064 | 0.0000000 \$\$\$ |
| | Contro | M. estim. | -1.3999392 | 0.5380763 | 0.6849719 |
| | lateral | SE | 0.7961162 | 0.7505855 | 0.9064182 |
| | lateral | p-value | 0.1714064 | 0.4734510 | 0.4734510 |
| | Inci | M. estim. | -2.3096783 | -0.6635824 | 1.2092689 |
| | lateral | SE | 0.5935490 | 0.5596034 | 0.6461743 |
| AON | | p-value | 0.0005982 \$\$\$ | 0.2828375 | 0.1225715 |
| Aon | Contra | M. estim. | -1.5826695 | -0.4874039 | 0.9647038 |
| | lateral | SE | 0.5935490 | 0.5596034 | 0.6461743 |
| | | p-value | 0.022997 \$ | 0.3837645 | 0.2031767 |
| | Ipsi- lateral | M. estim. | 1.2148021 | 0.8326947 | 2.8434706 |
| | | SE | 0.4823581 | 0.4484587 | 0.5340971 |
| aPC | | p-value | 0.0235735 \$ | 0.0760088 | 0.0000003 \$\$\$ |
| ui e | Contra- lateral | M. estim. | 0.5336212 | 1.0937265 | 3.9322734 |
| | | SE | 0.5329051 | 0.5024278 | 0.5801536 |
| | | p-value | 0.3166606 | 0.0442339 \$ | 0.000000 \$\$\$ |
| | lpsi- lateral | M. estim. | 0.5282631 | -0.3640680 | 1.7199976 |
| | | SE | 0.5907636 | 0.5569773 | 0.6431420 |
| pPC | | p-value | 0.4454554 | 0.5133375 | 0.0224611\$ |
| pre | Contra- | M. estim. | 1.4186502 | 1.1365825 | 1.7980831 |
| | lateral | SE | 0.5907636 | 0.5569773 | 0.6431420 |
| | | p-value | 0.0326664 \$ | 0.0619320 | 0.0224611 |
| | Inci- | M. estim. | 0.8658960 | 0.2344958 | 2.3080398 |
| | lateral | SE | 0.4411586 | 0.4132487 | 0.4526247 |
| PC | | p-value | 0.0596065 | 0.5704120 | 0.000001 \$\$\$ |
| | Contra- | M. estim. | 0.9761357 | 1.1151545 | 2.8651783 |
| | lateral | SE | 0.4632686 | 0.4367738 | 0.4742004 |
| | | p-value | 0.0526683 | 0.02135 \$ | 0.0000000 \$\$\$ |
| | Insi- | M. estim. | 0.8401741 | 0.2690756 | 3.8532811 |
| | lateral | SE | 0.5625158 | 0.5303450 | 0.6404524 |
| Ent | | p-value | 0.2029200 | 0.6119026 | 0.000000 \$\$\$ |
| | Contra- | M. estim. | 0.9791010 | 0.6301184 | 5.2877552 |
| | lateral | SE | 0.5625158 | 0.5303450 | 0.6404524 |
| | ateral | p-value | 0.1635162 | 0.2817390 | 0.0000000 \$\$\$ |

d. Comparison between quantifications in aPC and pPC

| | aPC vs pPC |
|-----------|------------|
| M. estim. | 0.0426258 |
| SE | 0.1344211 |
| p-value | 0.7511627 |

Online resource 6: Linear mixed effect model analysis of cresyl-positive cells quantifications

| Delay | Cell type | Linear mixed effect model | Ctl | mMs | HuPFFs | mPFFs |
|-------|------------------|------------------------------|------------|-----------|---------------|------------|
| | | M. Estim. | 0.1273718 | 0.0932906 | -0.0660213 | -0.0457503 |
| | All | SE | 0.1048393 | 0.0813596 | 0.0910254 | 0.0814151 |
| | | p-value | 0.6707416 | 0.6707416 | 0.9186515 | 0.9186515 |
| | Dark | M. Estim. | 0.1303246 | 0.1123022 | -0.1992801 | -0.0124842 |
| 6 mo | Dark | SE | 0.1390759 | 0.1078551 | 0.1210392 | 0.1081838 |
| | stameu | p-value | 0.9081295 | 0.9081295 | 0.7974361 | 0.9081295 |
| | Light stained | M. Estim. | 0.1273563 | 0.0908026 | 0.0487940 | -0.0652603 |
| | | SE | 0.1518321 | 0.1179213 | 0.1318078 | 0.1178177 |
| | | p-value | 0.7710894 | 0.7710894 | 0.8128464 | 0.7728550 |
| | | M. Estim. | 0.0233055 | 0.1347899 | 0.0048061 | -0.0301928 |
| | All | SE | 0.1049368 | 0.0913747 | 0.0822450 | 0.1049764 |
| | | p-value | 0.9419926 | 0.6707416 | 0.9534006 | 0.9419926 |
| | Dark | M. Estim. | -0.0645168 | 0.0877502 | 0.0236020 | -0.0544401 |
| 18 mo | Dark | SE | 0.1391695 | 0.1223140 | 0.1104617 | 0.1394721 |
| | staineu | p-value | 0.9081295 | 0.9081295 | 0.9081295 | 0.9081295 |
| | Light | M. Estim. | 0.1069331 | 0.1256423 | 0.5736342 | -0.0139157 |
| | stained | SE | 0.1520664 | 0.1319961 | 0.1206111 | 0.1519505 |
| | stained | p-value | 0.7710894 | 0.7710894 | 0.0000158 ^^^ | 0.9270315 |

a. Comparison of ipsilateral versus contralateral sides for each experimental group and delay. ^ p<0.05, ^^ p<0.01, ^^^ p<0.001. M. estim. = Model estimate

b. Comparison between experimental groups within same side of the AON and the same delay.

* p<0.05, ** p<0.01, *** p<0.001 for comparisons to mMs and to Ctl; # p<0.05, ## p<0.01, ### p<0.001 for comparisons between mPFFs and huPFFs. M. estim. = Model estimate

| | | | Linear | | | | | | huPFFs/ mPFFs |
|-------|---------|-------------------------|-------------|-------------|---------------|---------------|---------------|---------------|---------------|
| Delav | Cell | Side | mixed | Ctl/ mMs | Ctl/ huPFFs | Ctl / mPFFs | mMs/ huPFFs | mMs/ mPFFs | |
| | type | | effect | - | | • | • | | • |
| | | | M Latim | 0.0217992 | 0 9904965 | 0 5960463 | 0 9576092 | 0 5551590 | 0 2025 402 |
| | | Ipsi- | | 0.0317885 | 0.8834803 | 0.3803403 | 0.1695634 | 0.5551580 | 0.1696043 |
| | | lateral | SE | 0.1843031 | 0.1930231 | 0.1843404 | 0.000051 *** | 0.1338474 | 0.1030043 |
| | | | p-value | 0.8632101 | 1.0929706 | 0.0044109 | 1.0170102 | 0.0020583 | 0.1276390 |
| | Cells | Contra- | IVI. Estim. | 0.0658694 | 1.0828796 | 0.7600685 | -1.01/0102 | 0.6941990 | -0.3228112 |
| | | lateral | SE . | 0.1844927 | 0.1929744 | 0.1845418 | 0.1695465 | 0.1598824 | 0.1695989 |
| | | | p-value | 0.7210693 | 0.0000001 *** | 0.0001143 *** | 0.000000 *** | 0.0000565 *** | 0.1139819 |
| | | lpsi- | M. Estim. | -0.0622179 | 0.8512679 | 0.4428020 | -0.9134858 | 0.5050199 | -0.4084659 |
| | | lateral | SE | 0.3086262 | 0.3229035 | 0.3087010 | 0.2831354 | 0.2668252 | 0.2832155 |
| 6 mo | Dark | | p-value | 0.8402323 | 0.0502905 | 0.2596405 | 0.0150471 * | 0.1401547 | 0.2596405 |
| | stained | Contra- | M. Estim. | -0.0441954 | 1.1808727 | 0.5856109 | -1.2250681 | 0.6298063 | -0.5952618 |
| | | lateral | SE | 0.3085971 | 0.3228471 | 0.3086641 | 0.2831266 | 0.2668408 | 0.2831988 |
| | | | p-value | 0.9047783 | 0.001527 ** | 0.0990786 | 0.0001814 *** | 0.0730540 | 0.0990786 |
| | | Inci | M. Estim. | 0.1177756 | 1.0155376 | 0.6841849 | -0.8977620 | 0.5664093 | -0.3313527 |
| | | lateral | SE | 0.1864471 | 0.1950463 | 0.1865344 | 0.1713428 | 0.1615703 | 0.1714054 |
| | Light | | p-value | 0.5755566 | 0.0000012 *** | 0.000587 *** | 0.0000012 *** | 0.000911 *** | 0.0798263 |
| | stained | Contra- lateral | M. Estim. | 0.1543293 | 1.0940999 | 0.8768015 | -0.9397706 | 0.7224722 | -0.2172985 |
| | | | SE | 0.1863414 | 0.1948616 | 0.1865573 | 0.1711917 | 0.1616636 | 0.1714330 |
| | | | p-value | 0.5434042 | 0.0000002 *** | 0.0000104 *** | 0.0000002 *** | 0.0000236 *** | 0.4099234 |
| | | lpsi- lateral All | M. Estim. | 0.4599798 | 0.3981126 | 0.1454395 | 0.0618672 | -0.3145402 | -0.2526730 |
| | | | SE | 0.1930503 | 0.1846292 | 0.2063084 | 0.1697449 | 0.1931022 | 0.1846836 |
| | All | | p-value | 0.0412475 * | 0.0621234 | 0.5770008 | 0.7805517 | 0.1550077 | 0.2283578 |
| | cells | cells | M. Estim. | 0.3484953 | 0.4166119 | 0.1989378 | -0.0681166 | -0.1495575 | -0.2176740 |
| | | Contra- | SE | 0.1930554 | 0.1846798 | 0.2063090 | 0.1698052 | 0.1931074 | 0.1847353 |
| | | laterai | p-value | 0.1218002 | 0.0577905 | 0.4465465 | 0.7210693 | 0.5263778 | 0.3580141 |
| | | | M. Estim. | 0.7901024 | 0.6920332 | 0.3837566 | 0.0980692 | -0.4063458 | -0.3082766 |
| | | lpsi- | SE | 0.3229044 | 0.3088852 | 0.3449538 | 0.2834357 | 0.3223640 | 0.3083203 |
| 18 | Dark | lateral | p-value | 0.0576425 | 0.0751906 | 0.3545718 | 0.7956454 | 0.3112235 | 0.3808550 |
| mo | stained | | M. Estim. | 0.6378355 | 0.6039144 | 0.3736800 | 0.0339210 | -0.2641555 | -0.2302345 |
| | | Contra- | SE | 0.3230084 | 0.3088963 | 0.3449653 | 0.2835555 | 0.3224726 | 0.3083361 |
| | | lateral | p-value | 0.0990786 | 0.0990786 | 0.4180533 | 0.9047783 | 0.5462939 | 0.5462939 |
| | | | M. Estim. | 0.2382181 | 0.7460466 | -0.0315631 | -0.5078285 | -0.2697812 | -0.7776097 |
| | | lpsi- | SE | 0.1950609 | 0.1870274 | 0.2084143 | 0.1719291 | 0.1949954 | 0.1869467 |
| | Light | lateral | p-value | 0.2663896 | 0.0001991 *** | 0.8796255 | 0.0053825 ** | 0.2220048 | 0.0001276 ### |
| | stained | | M. Estim | 0.2195089 | 0.2793455 | 0.0892857 | -0.0598366 | -0.1302232 | -0.1900598 |
| | | Contra- | SF | 0.1950501 | 0.1869135 | 0.2084113 | 0.1717607 | 0.1949313 | 0.1867961 |
| | | lateral | p-value | 0.4464353 | 0.3240967 | 0.7275608 | 0.7275608 | 0.6049246 | 0.4633932 |

c. Comparison of 6 months versus 18 months delays, within same experimental groups and same side of the brain.

Analyses for each brain regions were performed separately, but are presented in the same table for easier reading. \$ p<0.05, \$\$ p<0.01, \$\$\$ p<0.001. M. estim. = Model estimate

| Cell type | Side | Linear mixed effect model | Ctl | mMs | huPFFs | mPFFs |
|----------------|--------------------|---------------------------------|------------------|------------------|------------------|-----------|
| | | M. Estim. | 0.6897681 | 1.1179596 | 0.1983941 | 0.2482613 |
| | Ipsi- lateral | SE | 0.1050046 | 0.1696019 | 0.1697091 | 0.1845937 |
| | lateral | p-value | 0.000000 \$\$\$ | 0.000000 \$\$\$ | 0.2770214 | 0.2766555 |
| All Cells | Contra | M. Estim. | 0.7938344 | 1.0764603 | 0.1275667 | 0.2327038 |
| | Contra- lateral | SE | 0.1049088 | 0.1696201 | 0.1697314 | 0.1846134 |
| | lateral | p-value | 0.000000 \$\$\$ | 0.0000000 \$\$\$ | 0.4523038 | 0.2766555 |
| | lpsi- lateral | M. Estim. | 0.4596734 | 1.3119937 | 0.3004387 | 0.4006280 |
| | | SE | 0.1392783 | 0.2831452 | 0.2834250 | 0.3081286 |
| Dark | | p-value | 0.001931 \$\$ | 0.0000096 \$\$\$ | 0.3304358 | 0.2580444 |
| cells | Contra- lateral | M. Estim. | 0.6545148 | 1.3365457 | 0.0775566 | 0.4425839 |
| | | SE | 0.1392119 | 0.2832711 | 0.2834119 | 0.3081401 |
| | | p-value | 0.0000096 \$\$\$ | 0.0000096 \$\$\$ | 0.7843511 | 0.2414639 |
| | Ipsi- | Model estimate | 0.8696058 | 0.9900483 | 0.6001149 | 0.1538579 |
| | lateral | SE | 0.1520737 | 0.1713408 | 0.1719170 | 0.1864867 |
| Light cells | | p-value | 0.000000 \$\$\$ | 0.0000000 \$\$\$ | 0.0007707 \$\$\$ | 0.5458032 |
| | Contro | M. Estim. | 0.8900290 | 0.9552086 | 0.0752746 | 0.1025133 |
| | lateral | SE | 0.1518788 | 0.1712700 | 0.1716826 | 0.1865726 |
| | lateral | p-value | 0.000000 \$\$\$ | 0.000000 \$\$\$ | 0.6610584 | 0.6610584 |