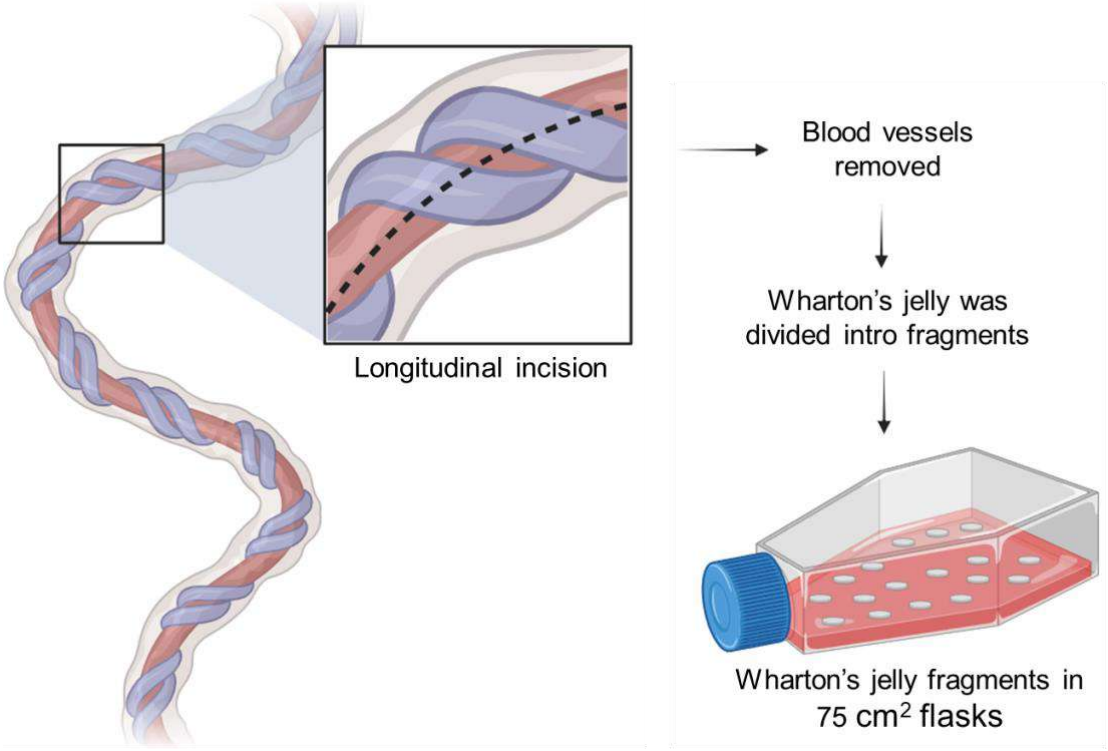
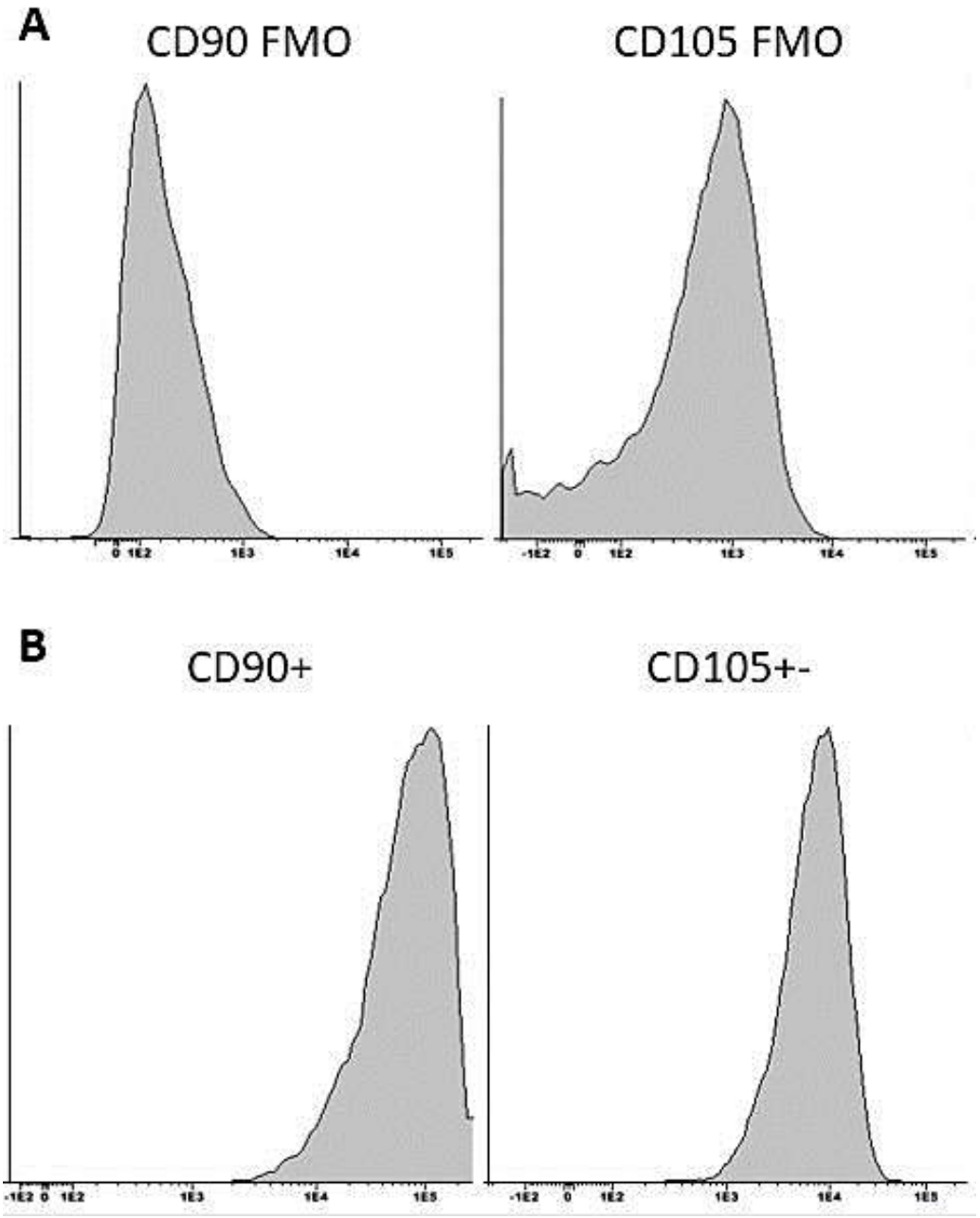
# *Cellular Therapy in Experimental Autoimmune Encephalomyelitis as Adjuvant Treatment to Translate for Multiple Sclerosis.*

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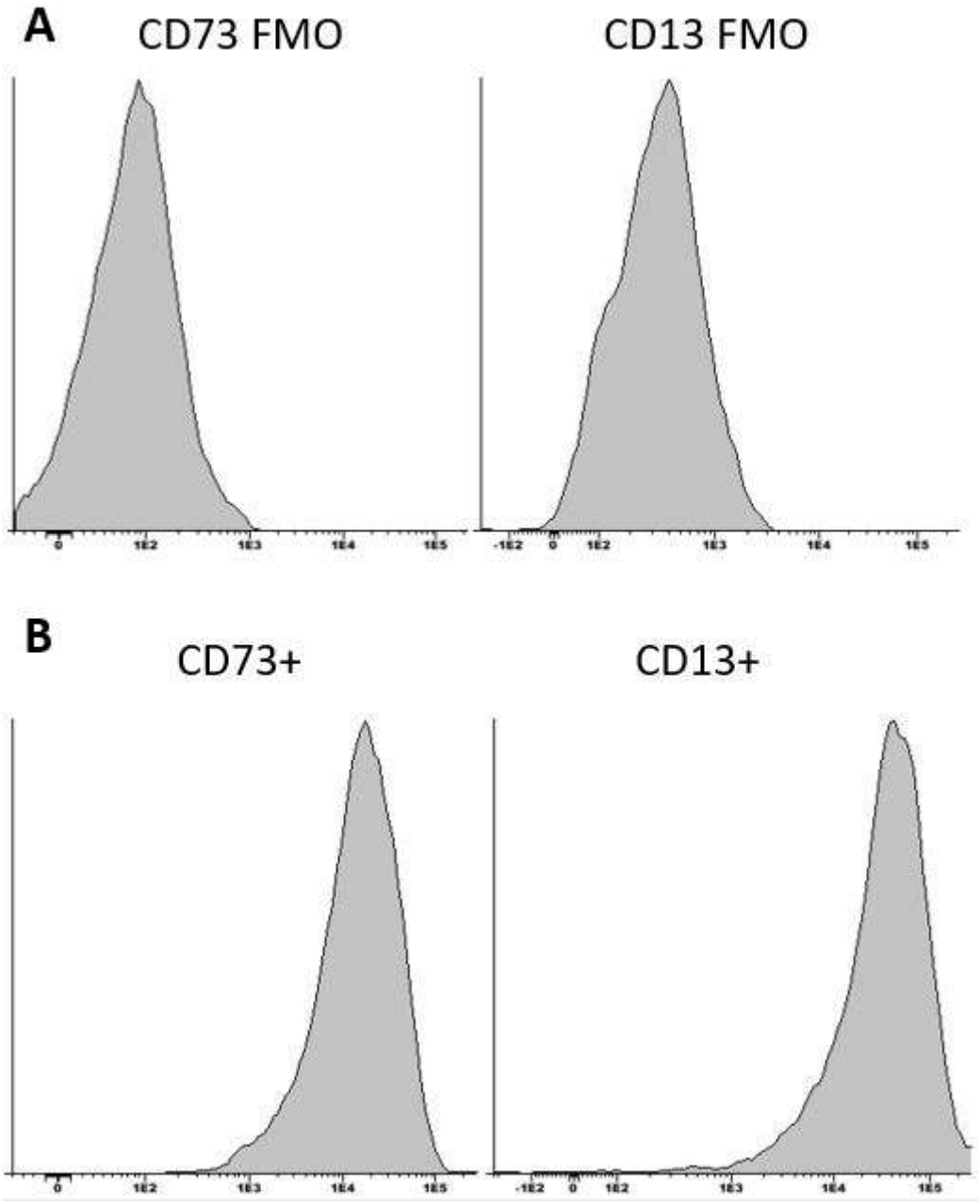
## Appendix material



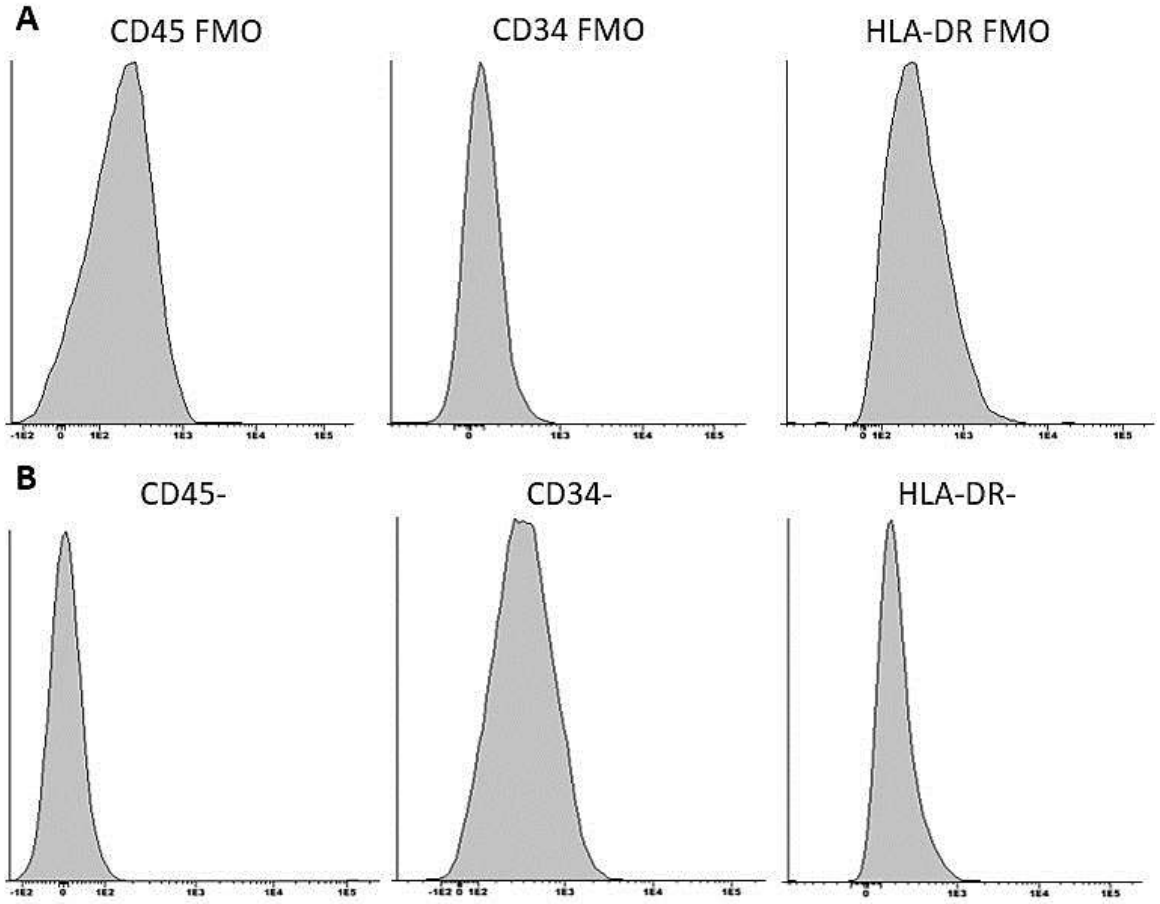

**Supplementary Figure S1.** Explant technique for WJ-MSC isolation. PBS was used to wash the collected umbilical cord, and the vessels were removed. Following this, fragments of the cord were placed in 75 $cm^2$ flasks. Created with BioRender.



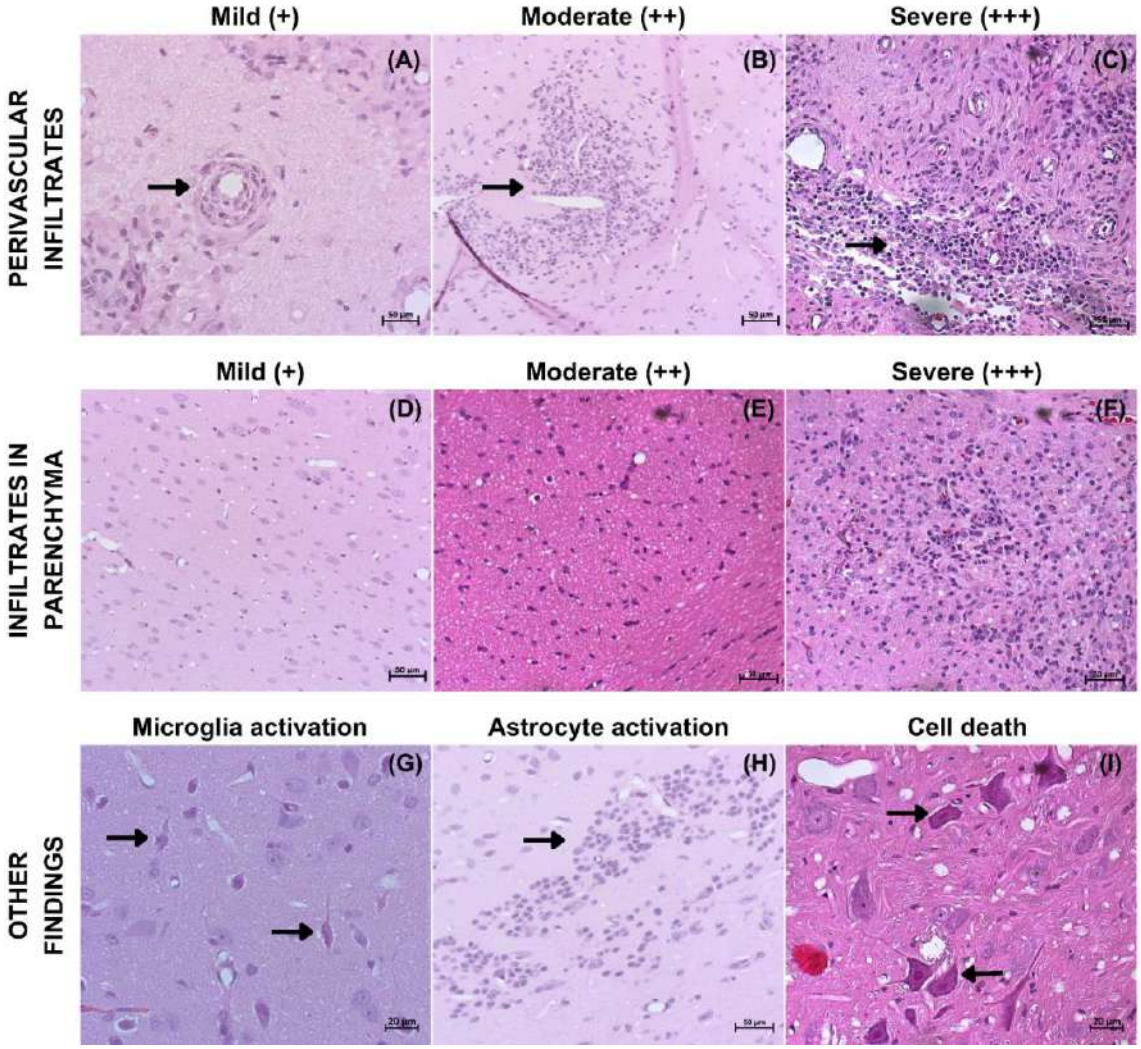

**Supplementary Figure S2.** Flow cytometry histograms. (A) FMO of the markers CD90, and CD105; (B) Flow cytometry of WJ-MSC showing positive staining for the same markers.




**Supplementary Figure S3.** Flow cytometry histograms. (A) FMO of the markers CD73, and CD13; (B) Flow cytometry of WJ-MSC showing positive staining for the same markers.




**Supplementary Figure S4.** Flow cytometry histograms. (A) FMO of the markers CD45, CD34, and HLA-DR; (B) Flow cytometry of WJ-MSC showing negative staining for the same markers.

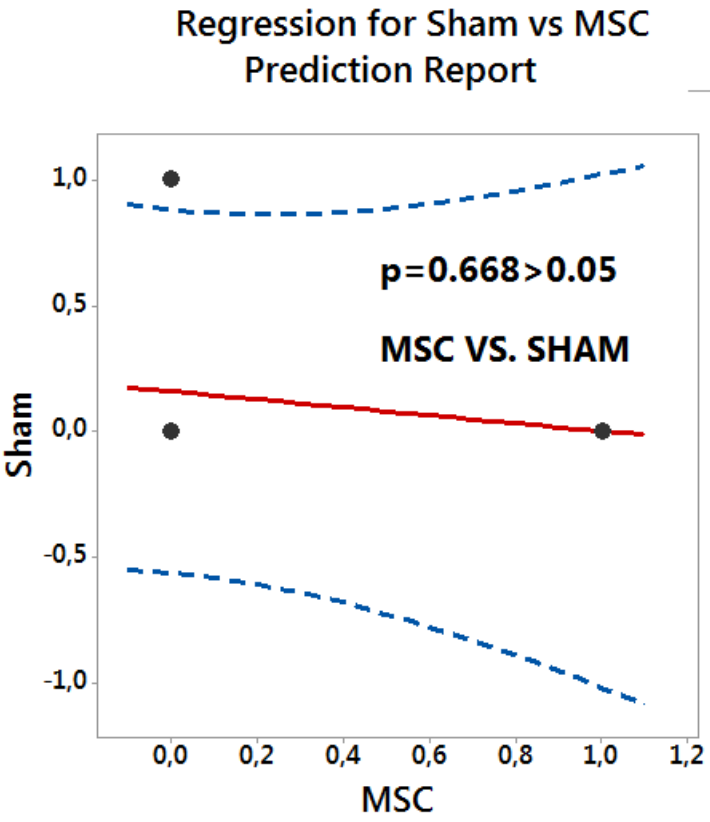



**Supplementary Figure S5.** Histopathological findings for neuroinflammation analysis. Considered were perivascular leukocyte infiltration as mild (A), moderate (B), and severe (C); Presence of parenchymal leukocyte infiltration as mild (D), moderate (E), and severe (F); Microglial activation (G); Astrocytic activation (H); and cell death (I), highlighted by the presence of pyknotic neurons. Images were captured using optical microscopy (Carl Zeiss Microscopy, Zeiss, Jena, Germany).

**Supplementary Table S1.** *Flow Cytometry Markers*

| *Antibody* | *Volume (µL)* | *Clone* | *Fluorochrome* | *Manufacturer* |
|---|---|---|---|---|
| *CD34* | *3* | *581* | *PE-Cy7* | *BD® Biosciences, CA, USA* |
| *CD45* | *3* | *2D1* | *APC-Cy7* | *BD® Biosciences, CA, USA* |
| *CD73* | *3* | *AD2* | *APC* | *BD® Biosciences, CA, USA* |
| *CD90* | *3* | *5E10* | *FITC* | *Biolegend®, CA, USA* |
| *CD105* | *3* | *266* | *PE* | *BD® Biosciences, CA, USA* |
| *CD13* | *5* | *WM15* | *PE* | *IO Test – Beckman Coulter®, CA, USA* |
| *HLA-DR* | *5* | *L243* | *FITC* | *BD® Biosciences, CA, USA* |

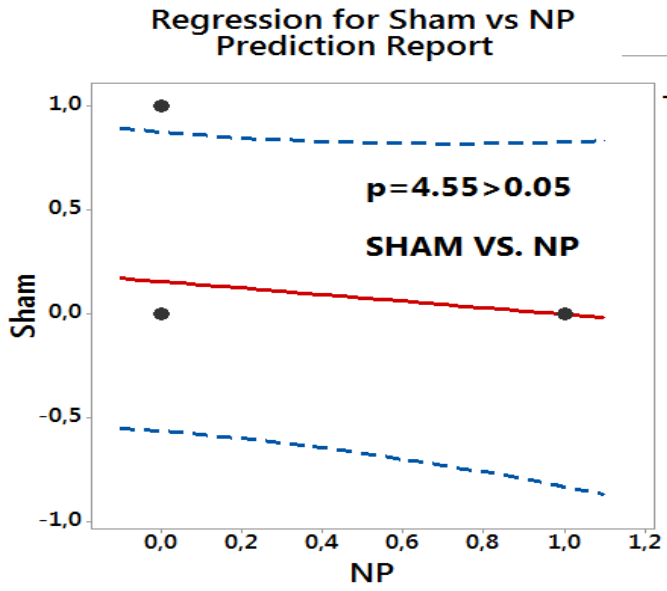
**Supplementary Graphic S1.** Predictive binary logistic regression analysis of animals in the MSC group vs. Sham, with p>0.05 with a statistical difference in the 95% CI.




| X | Predicted Y | 95% PI |
|---|---|---|
| -0,1 | 0,17310 | (-0,55266; 0,89885) |
| -0,05 | 0,16523 | (-0,55765; 0,88810) |
| 0 | 0,15736 | (-0,56443; 0,87915) |
| 0,05 | 0,14949 | (-0,57302; 0,87200) |
| 0,1 | 0,14162 | (-0,58340; 0,86665) |
| 0,15 | 0,13376 | (-0,59557; 0,86308) |
| 0,2 | 0,12589 | (-0,60948; 0,86126) |
| 0,25 | 0,11802 | (-0,62510; 0,86114) |
| 0,3 | 0,11015 | (-0,64237; 0,86268) |
| 0,35 | 0,10228 | (-0,66123; 0,86580) |
| 0,4 | 0,094416 | (-0,68162; 0,87045) |
| 0,45 | 0,086548 | (-0,70346; 0,87656) |
| 0,5 | 0,078680 | (-0,72667; 0,88403) |
| 0,55 | 0,070812 | (-0,75119; 0,89281) |
| 0,6 | 0,062944 | (-0,77692; 0,90281) |
| 0,65 | 0,055076 | (-0,80380; 0,91396) |
| 0,7 | 0,047208 | (-0,83176; 0,92617) |
| 0,75 | 0,039340 | (-0,86071; 0,93939) |
| 0,8 | 0,031472 | (-0,89059; 0,95354) |
| 0,85 | 0,023604 | (-0,92134; 0,96855) |
| 0,9 | 0,015736 | (-0,95289; 0,98436) |
| 0,95 | 0,007868 | (-0,98519; 1,0009) |
| 1 | 0 | (-1,0182; 1,0182) |
| 1,05 | -0,00787 | (-1,0518; 1,0361) |

Source: Own Authorship.

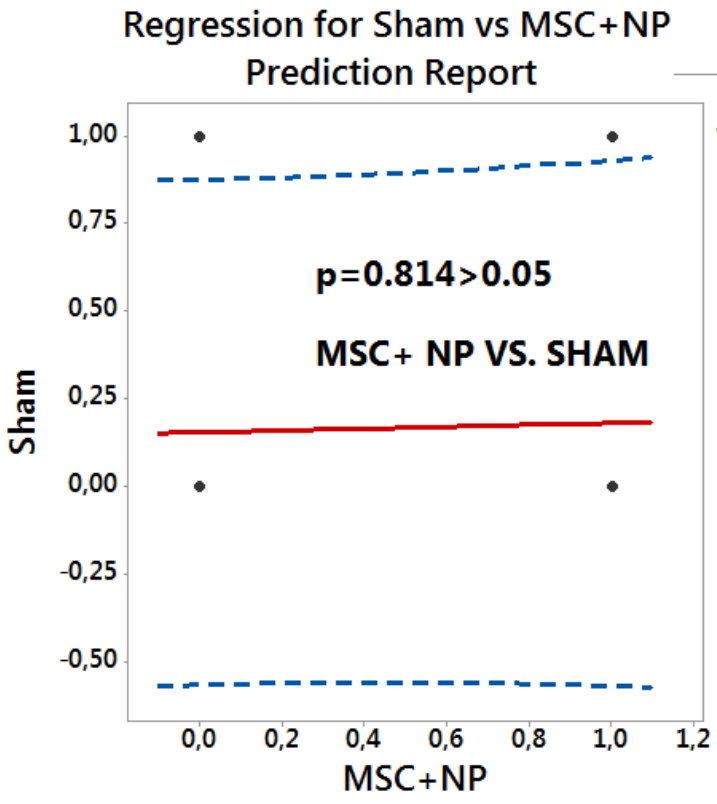
**Supplementary Graphic S2.** Predictive binary logistic regression analysis of animals in the Sham vs. NP, with p>0.05 with a statistical difference in the 95% CI.




| X | Predicted Y | 95% PI |
|---|---|---|
| -0,1 | 0,17487 | (-0,54783; 0,89757) |
| -0,05 | 0,16692 | (-0,55468; 0,88853) |
| 0 | 0,15897 | (-0,56214; 0,88009) |
| 0,05 | 0,15103 | (-0,57021; 0,87226) |
| 0,1 | 0,14308 | (-0,57889; 0,86504) |
| 0,15 | 0,13513 | (-0,58817; 0,85842) |
| 0,2 | 0,12718 | (-0,59805; 0,85241) |
| 0,25 | 0,11923 | (-0,60852; 0,84699) |
| 0,3 | 0,11128 | (-0,61959; 0,84216) |
| 0,35 | 0,10333 | (-0,63124; 0,83791) |
| 0,4 | 0,095385 | (-0,64347; 0,83424) |
| 0,45 | 0,087436 | (-0,65626; 0,83113) |
| 0,5 | 0,079487 | (-0,66960; 0,82858) |
| 0,55 | 0,071538 | (-0,68349; 0,82656) |
| 0,6 | 0,063590 | (-0,69790; 0,82508) |
| 0,65 | 0,055641 | (-0,71283; 0,82411) |
| 0,7 | 0,047692 | (-0,72826; 0,82364) |
| 0,75 | 0,039744 | (-0,74417; 0,82366) |
| 0,8 | 0,031795 | (-0,76056; 0,82415) |
| 0,85 | 0,023846 | (-0,77741; 0,82510) |
| 0,9 | 0,015897 | (-0,79470; 0,82650) |
| 0,95 | 0,007949 | (-0,81242; 0,82832) |
| 1 | 3,33E-16 | (-0,83055; 0,83055) |
| 1,05 | -0,00795 | (-0,84907; 0,83318) |

Source: Own Authorship.

**Supplementary Graphic S3.** Predictive binary logistic regression analysis of animals in the MSC + NP vs. Sham, with p>0.05 with a statistical difference in the 95% CI.




| X | Predicted Y | 95% PI |
|---|---|---|
| -0,1 | 0,15241 | (-0,57045; 0,87526) |
| -0,05 | 0,15374 | (-0,56866; 0,87615) |
| 0 | 0,15508 | (-0,56705; 0,87721) |
| 0,05 | 0,15642 | (-0,56560; 0,87844) |
| 0,1 | 0,15775 | (-0,56433; 0,87984) |
| 0,15 | 0,15909 | (-0,56324; 0,88142) |
| 0,2 | 0,16043 | (-0,56231; 0,88317) |
| 0,25 | 0,16176 | (-0,56156; 0,88509) |
| 0,3 | 0,16310 | (-0,56098; 0,88718) |
| 0,35 | 0,16444 | (-0,56057; 0,88945) |
| 0,4 | 0,16578 | (-0,56033; 0,89189) |
| 0,45 | 0,16711 | (-0,56027; 0,89449) |
| 0,5 | 0,16845 | (-0,56037; 0,89727) |
| 0,55 | 0,16979 | (-0,56064; 0,90021) |
| 0,6 | 0,17112 | (-0,56107; 0,90332) |
| 0,65 | 0,17246 | (-0,56168; 0,90659) |
| 0,7 | 0,17380 | (-0,56244; 0,91004) |
| 0,75 | 0,17513 | (-0,56337; 0,91364) |
| 0,8 | 0,17647 | (-0,56446; 0,91740) |
| 0,85 | 0,17781 | (-0,56571; 0,92133) |
| 0,9 | 0,17914 | (-0,56712; 0,92541) |
| 0,95 | 0,18048 | (-0,56869; 0,92965) |
| 1 | 0,18182 | (-0,57041; 0,93405) |
| 1,05 | 0,18316 | (-0,57228; 0,93859) |

Source: Own Authorship.