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(71) Applicants: **HEMERA S.R.L.** [IT/IT]; Via Giovanni della Casa, 26, 37122 Verona (IT). **HUMANITAS MIRASOLE S.P.A.** [IT/IT]; Via Manzoni, 56, 20089 Rozzano (MI) (IT).(72) Inventors: **DECIMO, Ilaria**; Via G. della Casa 26, 37122 Verona (VR) (IT). **BIFARI, Francesco**; Via G. della Casa 26, 37122 Verona (VR) (IT). **DOLCI, Sissi**; Via Roma n.9, 37060 Castel D'Azzano (VR) (IT). **FUMAGALLI, Guido Francesco**; Via Raimondo Franchetti 4/B, 37138 Verona (VR) (IT). **LOCATI, Massimo**; Vicolo Brunelleschi 80, 21042 Caronno Pertusella (VA) (IT).(74) Agent: **TURRI, Elisa** et al.; De Simone and Partners S.r.l., Via Vincenzo Bellini 20, 00198 Rome (IT).

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(54) Title: METHOD FOR OBTAINING TUMOR-HYPOXIA EDUCATED REGENERATIVE MACROPHAGES AND USE THEREOF IN REGENERATIVE MEDICINE

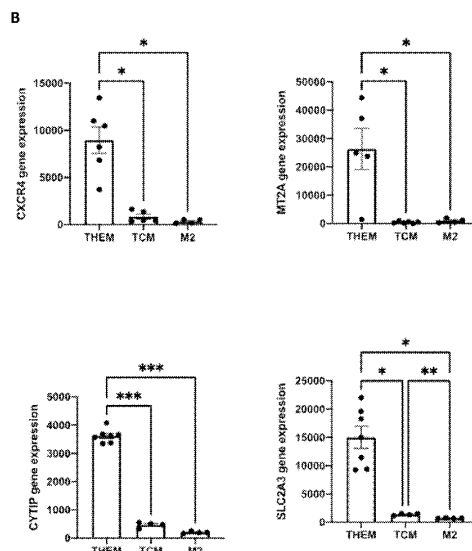


Figure 22

(57) Abstract: The present invention relates to an in vitro or ex vivo method for inducing a phenotypic and/or functional change in a population of mononuclear phagocytes isolated from biological samples comprising the incubation of said population in a culture medium comprising factors released from tumor cultures or explants, wherein the incubation takes place under hypoxic conditions and wherein said incubation induces a phenotypic and / or functional change in the mononuclear phagocytes of the population. The macrophages thus obtained assume a unique regenerative phenotype not present in other polarized phenotypes, including M2 macrophages. In addition, the invention relates to the use of the bioreactor thus produced for the regeneration of tissues, including neural tissue.

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