

appropriate controls. The CMV IL-10-treated monocyte supernatant increased gCSC migration in a chemotaxis assay compared with those grown in control medium. This experiment was done in duplicate. * $P=0.013$

Fig. 6. Schema demonstrating the interrelationship between the gCSC and the monocyte.

CMV infects the neural progenitor cell, the precursor to the gCSC, by surface attachment to the PDGF- α receptor. The CMV may possibly integrate into the host genome or interact with the STAT3 pathway to induce gliomagenesis. Viral activity, including the production of CMV IL-10, together with monocyte chemokines elaborated by the gCSC result in the preferential migration and conversion of the monocyte to an immunosuppressive, tumor-supportive M2 M Φ /microglia (M2; tumor-associated M Φ).

Supplementary Fig. 1. CMV antigens are expressed in glioma cell lines. (A) U251 is shown staining positive for CMV pp65, IE1, and gB. Identical data was obtained for U87 and D54 (data not shown). (B) HL-60 is shown staining negative for CMV antigens.