Imprime PGG, a systemically administered PAMP, mobilizes monocytes in the periphery, facilitating their trafficking to the tumor site and polarizes the tumor microenvironment (TME) to an immuno-active state

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**Abstract**

Imprime PGG (Imprime), in combination with both tumor-targeting and anti-angiogenic antibodies, has shown promising efficacy in multiple phase 2 clinical trials. Imprime is currently being tested in combination with the anti-VEGF efficacy enhancer imatinib (Gleevec, Novartis) in a phase 2 trial in metastatic melanoma and triple negative breast cancer (TNBC). Mechanistic and translational studies for monocytes/macrophages (M1-M2 transition) have shown that Imprime synergistically modulates the myeloid compartment of the TME, triggering a coordinated anti-tumor immune response. In human or in vivo, Imprime has been shown to enhance maturation of monocytes-derived dendritic cells (DC) and polarize monocytes-derived macrophages toward an anti-tumor, pro-inflammatory M1 phenotype and functionality. The frequency of classical monocytes in patients could be a predictive factor for harnessing the immune activating ability of myeloid cells in the TME is a topic of interest in the 2 trial in metastatic melanoma and triple negative breast cancer (TNBC).

**Background**

- Imprime PGG, a tumor-derived glycated soluble 1,3/1,6-glucan is being developed for the treatment of cancer in conjunction with tumor targeting and immunomodulatory antibodies (Abs).
- Imprime has shown promising results in multiple Phase 2 clinical trials in non-small cell lung cancer (NSCLC) and chronic lymphocytic leukemia (CLL) and is currently in Phase 2 clinical trials in combination with anti-VEGFR in TNBC, melanoma and HDL.
- Glycans are conserved microbial structures found in the cell wall of bacteria and are frequently present on tumor cells.