**ABSTRACT**

**IMMUNE CELL PRIMING AND POTENTIATION OF ANTI-TUMOR EFFECTS BY IMPRIME PGG**

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**DETERMINE THE IN VIVO KINETICS OF IMPRIME PGG BINDING AND FUNCTION IN C57/L6 WILD-TYPE MICE**

**RESULTS**

**In Vivo Kinetics of Imprime PGG**

- **Binding:** Imprime PGG is bound to neutrophils and macrophages at various time points. Maximum binding is observed at 3 days post injection.
- **Tumor cytotoxicity:** Imprime PGG enhances tumor cytotoxicity in wild-type mice. This effect is observed in vivo and is dependent on the presence of multiple cytokines.
- **Cytokine induction:** Imprime PGG induces the production of cytokines such as TNFα and IL-6, which are involved in tumor regression.

**IN VIVO CHARACTERISTICS OF IMPRIME PGG BINDING AND CYTOTOXICITY IN WILD-TYPE AND IMMUNODEFICIENT NUDE MICE**

**RESULTS**

**Imprime PGG Effects on the Tumor Microenvironment**

- **Imprime PGG Augments the Antitumor Ability of Splenic Cytotoxic Cells**
- **Imprime PGG Modulates the Antitumor Potential of Tumor Infiltrating Immune Effector Cells**
- **Imprime PGG Accelerates the Regression of Tumor Infiltrating Immune Effector Cells**

**CONCLUSIONS**

- Imprime PGG administration in mice results in a significant enhancement of the antitumor response.
- Imprime PGG primes immune effector cells for improved antitumor activity.
- Imprime PGG promotes the secretion of antitumor cytokines, leading to enhanced tumor regression.

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**MECHANISM OF ACTION**

**IMMUNE CELL PRIMING AND POTENTIATION OF ANTI-TUMOR EFFECTS BY IMPRIME PGG**

**RESULTS**

**Imprime PGG binding to neutrophils and macrophages is complement- and CR3-dependent.**

**IMPRIME PGG EFFECTS ON THE TUMOR MICROENVIRONMENT**

**RESULTS**

**Imprime PGG enhances the antitumor potential of cytotoxic immune cells.**

**CONCLUSIONS**

- Imprime PGG administration enhances the antitumor potential of cytotoxic immune cells.
- Imprime PGG promotes the secretion of antitumor cytokines, leading to enhanced tumor regression.

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**OBJECTIVES**

- To determine the in vivo kinetics of Imprime PGG binding and function in C57/L6 wild-type mice.
- To evaluate the in vivo characteristics of Imprime PGG binding and cytotoxicity in wild-type and immunodeficient nude mice.
- To investigate the effect of Imprime PGG on the tumor microenvironment.

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**REFERENCES**


