



## GVAX<sup>®</sup> Cancer Immunotherapies

### Select Publications

The following is a list of select publications relating to Cell Genesys' GVAX cancer immunotherapy platform. To view the abstracts of these articles and to learn how to obtain a copy of the complete article, please visit PubMed at [www.pubmed.gov](http://www.pubmed.gov).

Small EJ, Sacks N, Nemunaitis J, Urba WJ, Dula E, Centeno AS, Nelson WG, Ando D, Howard C, Borellini F, Nguyen M, Hege K, Simons JW. Granulocyte macrophage colony-stimulating factor--secreting allogeneic cellular immunotherapy for hormone-refractory prostate cancer. *Clin Cancer Res*. Jul 1;13(13):3883-91 (2007).

Simmons AD, Li B, Gonzalez-Edick M, Lin C, Moskalenko M, Du T, Creson J, VanRoey MJ, Jooss K. GM-CSF-secreting cancer immunotherapies: preclinical analysis of the mechanism of action. *Cancer Immunol Immunother*;Oct;56(10):1653-65 (2007).

Li B, VanRoey MJ, Jooss K. Recombinant IL-7 enhances the potency of GM-CSF-secreting tumor cell immunotherapy. *Clin Immunol*;123: 155-65 (2007).

Li B, Lalani AS, Harding TC, Luan B, Koprivnikar K, Huan Tu G, Prell R, VanRoey MJ, Simmons AD, Jooss K. Vascular endothelial growth factor blockade reduces intratumoral regulatory T cells and enhances the efficacy of a GM-CSF-secreting cancer immunotherapy. *Clin Cancer Res*. 12: 6808-16 (2006).

Chu Y, Wang LX, Yang G, Ross HJ, Urba WJ, Prell R, Jooss K, Xiong S, Hu HM. Efficacy of GM-CSF-producing tumor vaccine after docetaxel chemotherapy in mice bearing established Lewis lung carcinoma. *J Immunother* 29:367-80 (2006).

Prell RA, Gearn L, Simmons A, VanRoey M, Jooss K. The anti-tumor efficacy of a GM-CSF-secreting tumor cell vaccine is not inhibited by docetaxel administration. *Cancer Immunol Immunother* 55:1285-93 (2006).

Hege KM, Jooss K, Pardoll D. GM-CSF Gene-Modified Cancer Cell Immunotherapies: Of Mice and Men. *International Reviews of Immunology*, Vol. 25, pp: 321-352 (2006).

Simons JW, Sacks N. Granulocyte-Macrophage Colony-Stimulating Factor-Transduced Allogeneic Cancer Cellular Immunotherapy: The GVAX<sup>™</sup> Vaccine for Prostate Cancer. *Urologic Oncology: Seminars and Original Investigations*, Vol. 24, pp: 419-424 (2006).

Simons JW, Carducci MA, Mikhak B, Lim M, Biedrzycki B, Borellini F, Clift SM, Hege KM, Ando DG, Piantadosi S, Mulligan R, Nelson WG. Phase I/II Trial of an Allogeneic Cellular Immunotherapy in Hormone-Naïve Prostate Cancer. *Clinical Cancer Research*, Vol. 12, No. 11, pp: 3394-3401 (2006).

J Nemunaitis, T Jahan, H Ross, D Serman, D Richards, B Fox, D Jablons, J Aimi, A Lin, K Hege. Phase 1/2 Trial of Autologous Tumor mixed with an Allogeneic GVAX<sup>□</sup> Vaccine in Advanced Stage Non-Small Cell Lung Cancer. *Cancer Gene Therapy*, 13:555-562 (2006).

Prell RA, Li B, Lin JM, VanRoey M, Jooss K. Administration of IFN-alpha enhances the efficacy of a granulocyte macrophage colony stimulating factor-secreting tumor cell vaccine. *Cancer Res* 2449-56 (2005).

Luiten, RM et al. Immunogenicity, including vitiligo, and feasibility of vaccination with autologous GM-CSF-transduced tumor cells in metastatic melanoma patients. *J Clin Oncol* 23:8978-8991 (2005).

- Morck Thomas A, Santarsiero LM, Lutz ER, Armstrong TD, Chen Y-C, Huang L-Q, Laheru DA, Goggin M, Hruban RH, Jaffee EM. Mesothelin-specific CD8<sup>+</sup>T Cell Responses Provide Evidence of In Vivo Cross-Priming by Antigen-Presenting Cells in Vaccinated Pancreatic Cancer Patients. *The Journal of Experimental Medicine*, Vol. 200, No. 3, pp: 297-306 (2004).
- Nemunaitis J, Sterman D, Jablons D, Smith II J, Fox B, Maples P, Hamilton S, Borellini F, Lin A, Morali S, Hege K. Granulocyte-Macrophage Colony-Stimulating Factor Gene-Modified Autologous Tumor Vaccines in Non-Small-Cell Lung Cancer. *Journal of the National Cancer Institute*, Vol. 96, No. 4, pp: 326-331 (2004).
- Soiffer R, Hodi FS, Haluska F, Jung K, Gillessen S, Singer S, Tanabe K, Duda R, Mentzer S, Jaklitsch M, Bueno R, Clift S, Hardy S, Neuberger D, Mulligan R, Webb I, Mihm M, Dranoff G. Vaccination with irradiated, autologous melanoma cells engineered to secrete granulocyte-macrophage colony-stimulating factor by adenoviral-mediated gene transfer augments antitumor immunity in patients with metastatic melanoma. *Journal of Clinical Oncology*, Vol. 21, No. 17, pp: 3343-3350 (2003).
- Hodi FS, Mihm MC, Soiffer RJ, Haluska FG, Butler M, Seiden MV, Davis T, Henry-Spires R, MacRae S, Willman A, Padera R, Jaklitsch MT, Shankar S, Chen TC, Korman A, Allison JP, Dranoff G. Biologic activity of cytotoxic T lymphocyte-associated antigen 4 antibody blockade in previously vaccinated metastatic melanoma and ovarian carcinoma patients. *Proceedings of the National Academy of Sciences*, Vol. 100, No. 8, pp: 4712-4717 (2003).
- Salgia R, Lynch T, Skarin A, Lucca J, Lynch C, Jung K, Hodi FS, Jaklitsch M, Mentzer S, Swanson S, Lukanich J, Bueno R, Wain J, Mathisen D, Wright C, Fidiyas P, Donahue D, Clift S, Hardy S, Neuberger D, Mulligan R, Webb I, Sugarbaker D, Mihm M, Dranoff G. Vaccination with irradiated autologous tumor cells engineered to secrete granulocyte-macrophage colony-stimulating factor augments antitumor immunity in some patients with metastatic non-small-cell lung carcinoma. *Journal of Clinical Oncology*, 21(4), pp: 624-30 (2003).
- Jaffee E, Hruban R, Biedrzycki B, Laheru D, Schepers K, Sauter P, Goemann M, Coleman J, Grochow L, Donehower R, Lillemo K, O'Reilly S, Abrams R, Pardoll D, Cameron J, Yeo C. Novel allogeneic granulocyte-macrophage colony stimulating factor-secreting tumor vaccine for pancreatic cancer: A Phase I trial of safety and immune activation. *Journal of Clinical Oncology*, Vol. 19, No. 1, pp: 145-156 (2001).
- Borrello I, Sotomayor E, Rattis FM, Cooke S, Gu L, Levitsky H. Sustaining the graft-versus-tumor effect through posttransplant immunization with granulocyte-macrophage colony-stimulating factor (GM-CSF)-producing tumor vaccines. *Blood*, Vol. 95, No. 10, pp: 3011-3019 (2000).
- Simons J, Mikhak B, Chang J, DeMarzo A, Carducci M, Lim M, Weber C, Baccala A, Goemann M, Clift S, Ando D, Levitsky H, Cohen L, Sanda M, Mulligan R, Partin A, Carter H, Piantadosi S, Marshall F, Nelson W. Induction of immunity to prostate cancer antigens: Results of a clinical trial of vaccination with irradiated autologous prostate tumor cells engineered to secrete granulocyte-macrophage colony-stimulating factor using *ex vivo* gene transfer. *Cancer Research*, No. 59, pp: 5160-5168 (1999).
- Soiffer R, Lynch T, Mihm M, Jung K, Rhuda C, Schmollinger J, Hodi F, Liebster L, Lam P, Mentzer S, Singer S, Tanabe K, Cosimi B, Duda R, Sober A, Bhan A, Daley J, Neuberger D, Parry G, Rokovich J, Richards L, Drayer J, Berns A, Clift S, Cohen L, Mulligan R, Dranoff G. Vaccination with irradiated autologous melanoma cells engineered to secrete human granulocyte-macrophage colony-stimulating factor generates potent antitumor immunity in patients with metastatic melanoma. *Proceedings of the National Academy of Sciences*, Vol. 95, pp: 13141-13146 (1998).