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T-cell responses in vaccinated melanoma patientsThierry Boon^{1,2*}, Pierre Coulie^{1,2}, Vaios Karanikas^{1,2}, Christophe Lurquin^{1,2}, Bernard Lethé^{1,2}, Wenbin Ma^{1,2}, and Catherine Germeau^{1,2}¹Ludwig Institute for Cancer Research, Brussels, Belgium²Unit of Cellular Genetics, University of Louvain, Louvain, Belgium

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Abstract

Vaccination of melanoma patients with tumor-specific antigens, such as the Mage-3.A1 antigen, appears to elicit some degree of tumor regression in about 20% of the patients. About half of these patients, i.e. 10% of the total, show tumor responses that are clinically significant. There is no clear evidence indicating that the regression rate is influenced by the vaccination modalities, such as peptide alone, peptide + adjuvant, proteins, recombinant viruses, or peptide-pulsed dendritic cells. We observe a degree of correlation between tumor regression and CTL responses against the vaccine's antigens as described by Coulie *et al.* (1) and Karanikas *et al.* (2), even though we failed to detect a CTL response in about 40% of the regressing patients. T lymphocytes directed against tumor antigens appear to be abundant in most patients, before as well as after vaccination. In a melanoma patient, who showed tumor regression following vaccination with recombinant ALVAC Mage-3.A1, we observed in tumor metastases an extremely high concentration of anti-tumoral CTLs which were directed against several different antigens encoded by cancer-germline gene Mage-C2. It appears that a new set of such anti-tumor CTLs appeared following vaccination.

References

1. Coulie PG, Karanikas V, Colau D, Lurquin C, Landry C, Marchand M, Dorval T, Brichard V, Boon T. A monoclonal cytolytic T-lymphocyte response observed in a melanoma patient vaccinated with a tumor-specific antigenic peptide encoded by gene MAGE-3. *Proc Natl Acad Sci USA* 2001; **98**: 10290-5. (PMID: 11517302)
2. Karanikas V, Lurquin C, Colau D, Van Baren N, De Smet C, Lethe B, Connerotte T, Corbiere V, Demoitie MA, Lienard D, Dreno B, Velu T, Boon T, Coulie PG. Monoclonal Anti-MAGE-3 CTL Responses in Melanoma Patients Displaying Tumor Regression after Vaccination with a Recombinant Canarypox Virus. *J Immunol* 2003; **171**: 4898-904. (PMID: 14568971)

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