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MONOCLONAL ANTIBODIES TO HUMAN MELANOMA ASSOCIATED ANTIGENS WITH SPECIAL EMPHASIS ON THEIR CLINICAL RELEVANCE.

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INTRODUCTION

Transformation of human melanocytes is associated with quantitative changes in the expression and cellular distribution of histocompatibility antigens and with the appearance of melanoma associated antigens (MAA). The latter have been identified with a variety of serological assays utilizing sera from patients with melanoma, antisera elicited in animals and more recently monoclonal antibodies (for review, see 1,2). We have extensively applied the hybridoma methodology to develop anti MAA monoclonal antibodies with special emphasis on those recognizing markers useful for clinical purposes. In this paper we will review our own work on the preparation, characterization and applications of anti MAA monoclonal antibodies.

CONCLUSION

The data we have summarized indicates that by utilizing a variety of immunogens we have elicited monoclonal antibodies to MAAs with distinct structural profiles and tissue distributions. At least one of them appears to be useful for developing immunodiagnostic and immunotherapeutic approaches to the detection and treatment of malignant melanoma. The extensive application of anti MAA monoclonal antibodies in clinical investigations will assess the impact of these reagents on the clinical management of melanoma.