Preface

The work embedded in this thesis is an attempt towards unraveling the impact of obesity and adipokines on the progression of melanoma, and the outcome of cancer chemotherapy. Employing innovative strategies and with the aid of appropriate *in vivo* and *in vitro* models of adiposity and cancer, the study describes the impact of obesity and obesity-associated adipokines on melanoma progression, and the outcome of dacarbazine (DTIC) therapy in melanoma. A part of the study illustrates the influence of controlling obesity by pharmacological and dietary interventions on rapid progression of melanoma. The second part of the study depicts the role of obesity and its management on the outcome of chemotherapy in melanoma. The third and last part of the thesis exemplifies the role of obesity-associated adipokines (leptin and resistin) in melanoma cell growth and proliferation, and in the sensitivity of melanoma cells to chemotherapy. Necessary background literature is provided on metabolic diseases, obesity and its management options, adipokines, cancer, melanoma and its treatment options, interrelation between obesity/obesity-associated adipokines and cancer, outcome of cancer therapy under obese state, and the relevant *in vivo* and *in vitro* models in these fields.