The incidence of melanoma has increased since the 1980s at a faster rate than that observed with any other cancer (Ries et al., 2007), and an expected 70,230 new cases of melanoma will be diagnosed and 8,790 deaths will be attributed to melanoma in the United States in 2011 (Siegel, Ward, Brawley, & Jemal, 2010). Patients with metastatic melanoma (stage IV) have an extremely poor prognosis, with one-year survival rates ranging from 41%–59%, depending on the extent of metastases (Balch et al., 2001).

In the face of limited efficacy with conventional cytotoxic therapy for advanced melanoma, much effort has been made to develop new therapeutic options for this disease. With increased understanding of the complex factors and pathways involved in tumor biology, targeted therapies against specific molecules...