The first in vivo tumor models were developed in the mid-1960s. These models were mouse leukemia models grown as ascites. The growth pattern was like that of bacteria in vivo and therefore it was possible to apply similar mathematics of growth and response to these tumors as had been worked out for bacteria. Since the development of the murine leukemia models, investigators have devoted a large effort to modeling solid tumors in mice. There are now a variety of models including syngeneic mouse tumors and human tumor xenografts grown as s.c. nodules, syngeneic mouse tumors and human tumor xenografts grown in orthotopic sites, models of disseminated disease, “labeled” tumor models that can be visualized using varied technologies, and transgenic tumor models. Each of these types of models has advantages and disadvantages to the “drug hunter” searching for improved treatments [1)].

1)
Teicher BA. Tumor models for efficacy determination. Mol Cancer Ther. 2006 Oct;5(10):2435-43. Review. PubMed PMID: 17041086.