Flavonoid-containing extract of the Chamerion angustifolium herb does not exhibit antitumor activity against transplantable rat liver cancer PC-1. According to our data the enhancement of the growth in this tumor type occurs under the action of the flavonoid-containing extract of Chamerion. The cytotoxic activity of the Chamerion extract against normal animal cells was established. For comparison, the antitumor drug «Hanerol» that obtained from the Chamerion flowers contains active oligomeric compounds belonging to hydrolysable tannins group but not bioflavonoids group, as in the present study. Consequently, the flavonoid-containing fractions of the Chamerion herb are unpromising for further antitumor activity investigations.