ABSTRACT

ANTITUMOR MITOXANTRONE POLYMERIC COMPOSITIONS

An antitumor polymeric composition comprising an anthracene antitumor compound, particularly mitoxantrone, covalently conjugated to, or admixed with, a divinyl ether-maleic anhydride (MVE) copolymer and methods of treating solid tumors and inducing regression of leukemia cell growth in mammals by administering such compositions.

Fig. 1

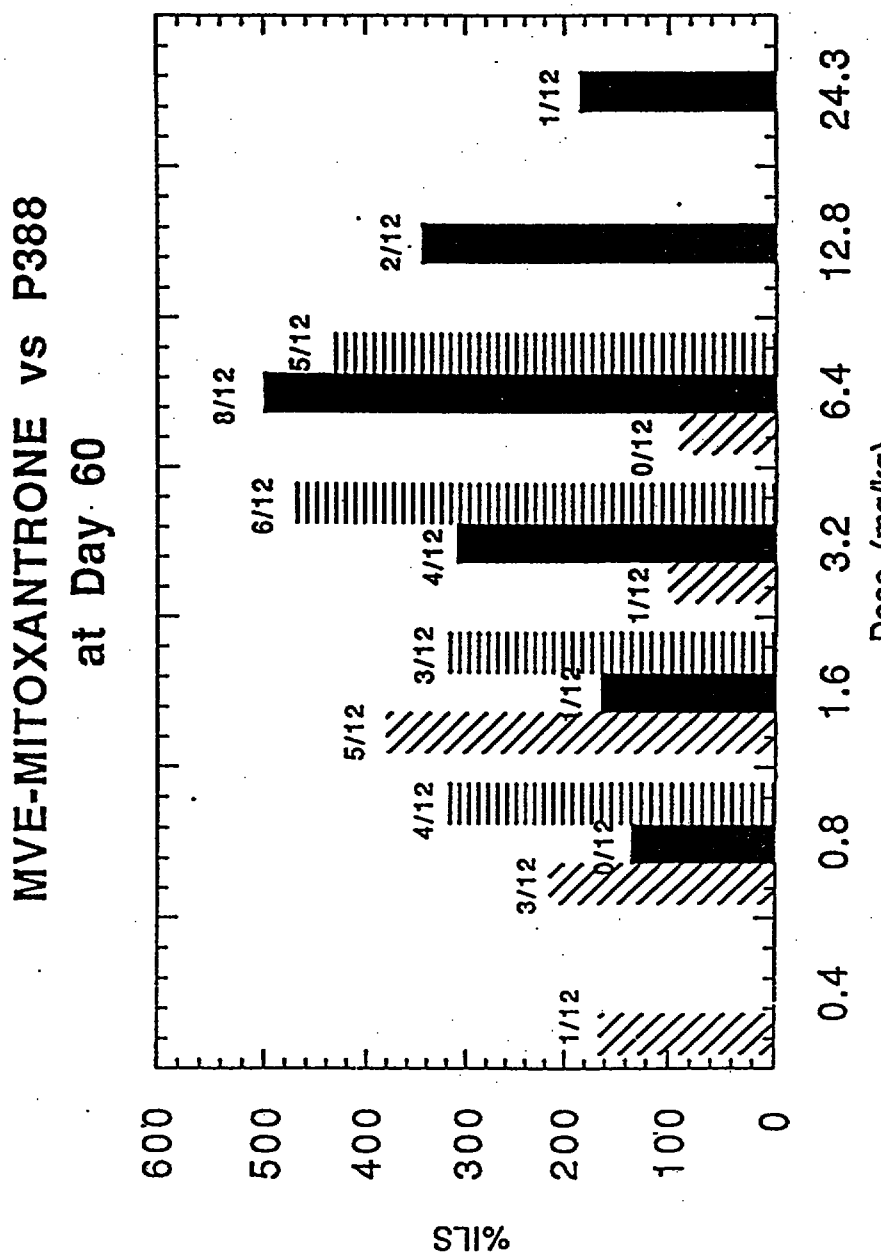

MVE-MITOXANTRONE vs P388
at Day 60
%ILS
600
500
400
300
200
100
0
0.4
0.8
1.6
3.2
6.4
12.8
24.3
Dose (mg/kg)
MITO
MVE-MITO
MVE+MITO
1/12
2/12
5/12
8/12
0/12
6/12
4/12
1/12
3/12
1/12
5/12
4/12
0/12
3/12
1/12

FIG. 1

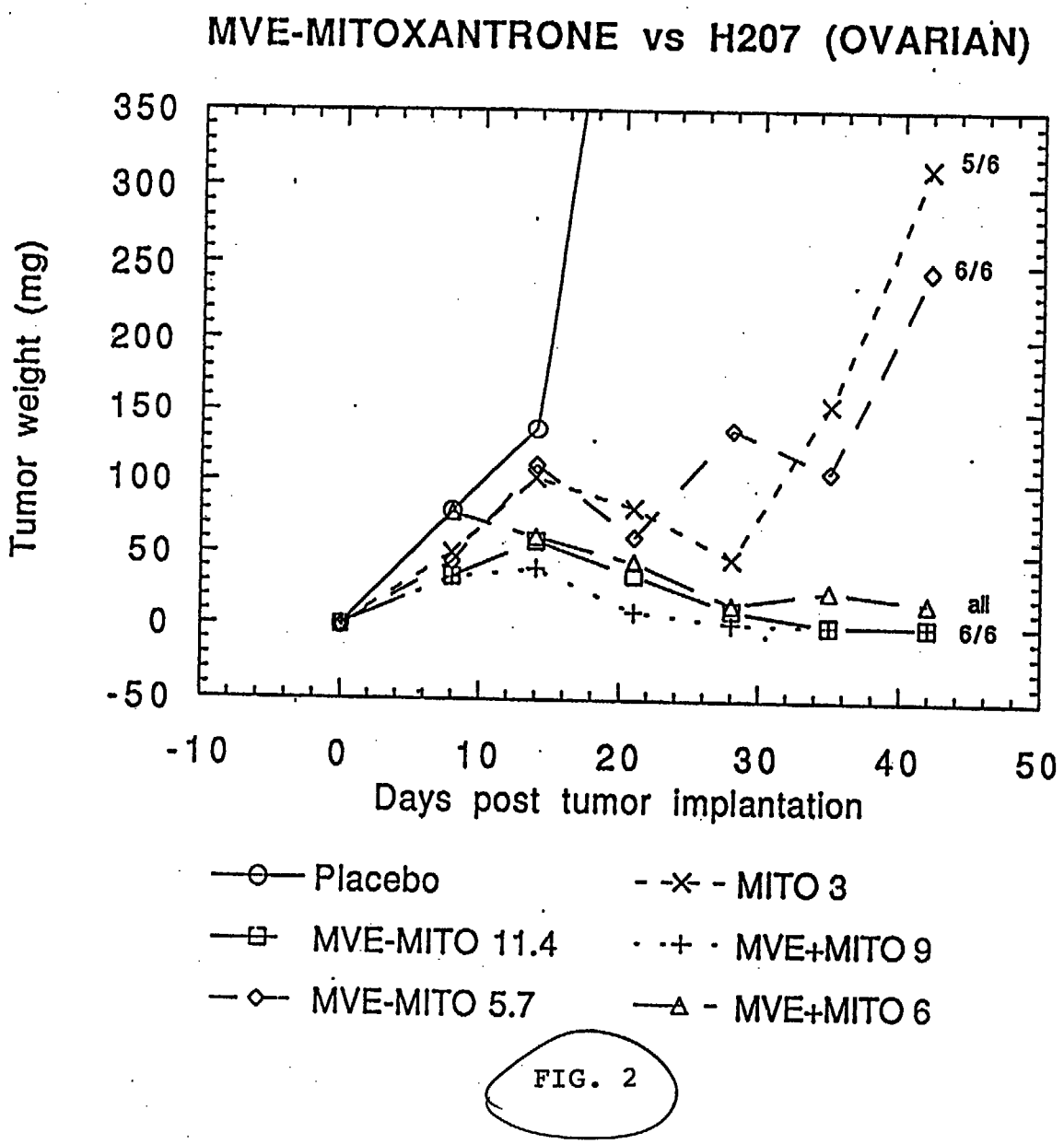

MVE-MITOXANTRONE vs H207 (OVARIAN)
Tumor weight (mg)
350
300
250
200
150
100
50
0
-50
-10
0
10
20
30
40
50
Days post tumor implantation
5/6
6/6
all
6/6
Placebo
MITO 3
MVE-MITO 11.4
MVE+MITO 9
MVE-MITO 5.7
MVE+MITO 6

FIG. 2