

NCI is involved in phase I studies of a prodrug of AS2-1, phenylbutyrate.^[128]

Adverse events occurred sporadically during the course of therapy in fewer than 5% of patients treated with AS2-1, A10 and A10-1 (administered as monotherapy or simultaneously). These included weakness, drowsiness, febrile reaction, nausea, vomiting, skin rash, and decrease of white blood cells and platelet count. Most patients required daily administration of 0.3 g/kg of AS2-1 infusions, 0.12 g/kg of AS2-1 capsules, 1.5 g/kg of A10-1 and 0.1 g/kg of A10 capsules. In some cases complete response was confirmed during the first 2 months of treatment, but usually a longer treatment period was needed before the emergence of beneficial effects was observed.

Daily infusions required placement of an intravenous (IV) catheter and patients had to carry an ambulatory infusion pump. Treatment was given

on an outpatient basis and infusions programmed for administration 3 to 6 times a day.

2.2 Treatment of Brain Tumours

Objective responses in primary and metastatic brain tumours were observed in phase I trials.^[19,37,38,119,121-127,129-133]

Two phase II trials in astrocytoma and high grade glioma were conducted by BRI with IV infusions of AS2-1 and A10-1.^[134,135] Approximately 30% of the patients in both studies obtained complete or partial response to therapy which was administered for up to 6 years.^[134,135] The objective responses observed were confirmed by the NCI.^[136] AS2-1 and A10-1 have been submitted to 6 studies sponsored by NCI and BRI.^[128,136]

2.3 Treatment of Prostate Cancer

Laboratory testing and phase I trials conducted at NCI and BRI produced promising re-

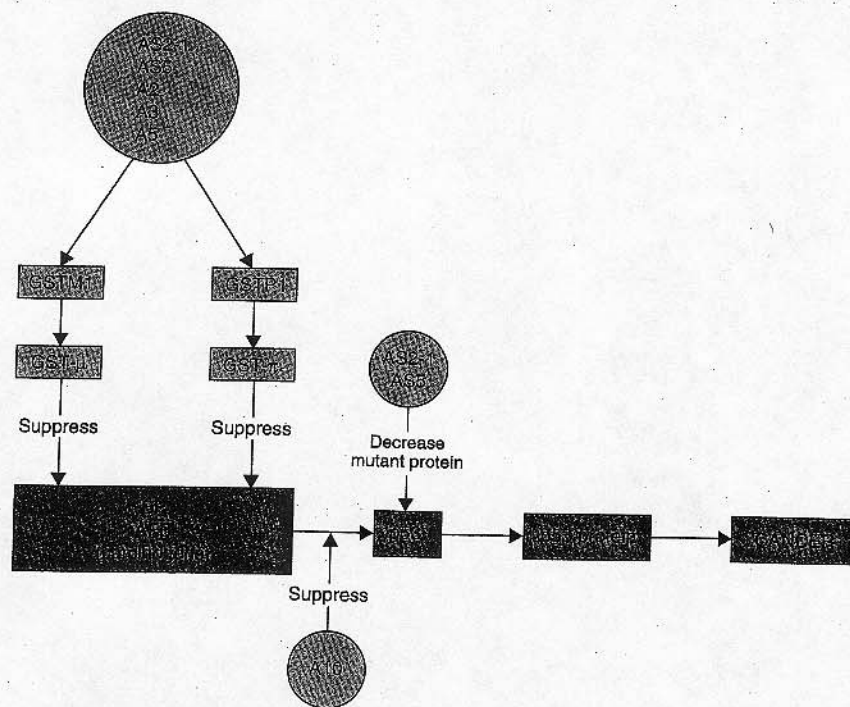


Fig. 2. Activation of tumour suppressor genes by antineoplastons. Abbreviations: see Glossary.