

Current & Ongoing Research with Poly-MVA

I. The recent and continuing research on Poly-MVA and what it can accomplish with cancer and other diseases is solid and includes the following:

- Dr. James Forsythe M.D., H.M.D., has completed an outcome-based investigation on various Stage IV Cancers with Poly-MVA which began in January of 2004. Summarized, 207 patients enlisted in the study and to date a **56 percent overall positive response rate** has been presented.
- KGK Synergize Inc., an independent laboratory in Canada, examined the effects of Poly-MVA on 8 different cell lines to confirm research findings that it is effective on the following lines:
 - Skin melanoma, human (SKMel-5)
 - Liver, hepatocellular carcinoma, human (Hep G2)
 - Lung, malignant melanoma, human (Malme-3M)
 - Mammary gland, ductal carcinoma, human (MDA-MB 435)
 - Prostate, left supraclavicular lymph node carcinoma, human (LNCaP)
 - Colon, colorectal adenocarcinoma, human (HT-29)
 - Human brain, glioblastoma; astrocytoma (U87)
 - Glioblastoma (HT-80)
- Studies at a U.S. research university examined the non-toxic chemotherapeutic effects of Poly-MVA on brain and breast tumors. Separately, ischemia studies in animals demonstrated that acute, post-ischemic and prophylactic administration of Poly-MVA limits ischemic damage.
- Preclinical studies with Poly-MVA were performed independently at Calvert Laboratories, Inc. to determine its effectiveness in halting the growth of glioblastoma cells in vivo. Significantly reduced growth of the glioblastoma (50% or greater reduction in tumor size) was noted.
- The first phase (human safety) of the LAPd Ischemia Study (PUNCH: Poly-MVA Utilized as Neuroprotection against Chronic Hypertension) was completed in the Department of Neurology at a prominent US research university. The 13 patients that were administered Poly-MVA (10 mL/day) exhibited no reported SAEs (Severe Adverse Effects) and minor AEs (Adverse Effects; e.g. aversion to the taste) attributed to the product.

