Bryostatin-1 enhances cancer immunotherapy efficacy by increasing tumor antigen density and activating T-cells

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BryoLogyx is developing bryostatin-1, a synthesized natural product that improves the efficacy of cancer immunotherapies. Bryostatin-1 increases the expression of tumor antigen targets (tumor side) and activates T-cells (immune system, effector side). We show here evidence for increased cell surface expression of various tumor antigen targets as well as tantalizing evidence of T-cell activation and reactivation. Notably, bryostatin-1 has been studied in over 60 clinical trials (sponsored by NCI, Cancer Research UK, and Synaptogenix) with over 1400 patients, so it has a known and documented safety profile, and these novel effects can be studied in the clinic in short order. BryoLogyx has collaborations with various companies and institutions (including NCI) to pursue these pharmacological effects and their role in enhancing cancer immunotherapy efficacy.