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NMR Spectroscopic Investigation of the Effect of Lithium on Neuroblastoma Metabolism CODY LARSEN, LLOYD LUMATA, ASIYE ASAADZADE, University of Texas at Dallas — Neuroblastoma is a cancer typically found in the adrenal glands that impacts early nerve cells with a majority of cases occurring in children and infants. Previous work has shown that lithium has been utilized with other neurological ailments to block phosphofructokinase pathways in glycolysis. This work seeks to investigate the impact that lithium has upon the metabolic pathways of neuroblastoma, specifically in regard to lithium's influence on lactate production via glycolysis and pentose phosphate pathway. Preliminary results on the metabolic effects of lithium on [U-^{13}C]D-glucose will be discussed along with other supporting data. This study is supported by the Welch Foundation grant AT-1877, DOD grants W81XWH-21-1-0176 and W81XWH-19-1-0741, CPRIT grant RP180716, and the UTD CoBRA and SPIRE grants.

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