Rider,

Now examine some very good animal studies including the radioactive tracer studies of incorporation into the brain of dha including studies in the pons and cerebellum.

Prostaglandins Leukot Essent Fatty Acids. 2010 Aug;83(2):89-96. doi: 10.1016/j.plefa.2010.05.004

pay particular attention to table 2 because there is an effect with age. There is also an effect on males versus females but we have not sent you those studies yet.

The omega-3 fatty acid docosahexaenoic acid (DHA) accounts for 10% of fatty acids in human brain and is critical for neuronal function and brain development. Mechanisms of transport, accumulation and conservation of DHA in the brain are unclear. The objective of the study was to quantify the age dependent DHA incorporation into the brain of 2-, 4- or 10-week-old rats after a bolus dose of different DHA-esters.

Rats were gavaged with (14)C-DHA-TAG, (14)C-DHA-PL or (14)C-DHA-TAG+PL at 2 mg DHA/kg BW. After 24h the distribution of radioactivity in body and brain regions was determined using quantitative whole body autoradiography (QWBA). Radiolabeled compounds were extracted from the brains to determine the identity of the radiolabeled compounds.

Accumulation of orally ingested (14)C-DHA in rat brain was less than 1% of the dose and decreased with age. Ester specific differences were seen only in 10-week-old rats, where oral (14)C-DHA-PL delivered a 2-fold higher accretion of radioactivity in the brain.

Fenofibrate is a good ppar alpha agonist but it does not cross the blood brain barrier. DHA can inhibit cyclooxygenase 2 a bit more but it is probably not necessary for that purpose. You must Dr. Mueller whether they wish to have a the effects a a ppar alpha agonist functioning at the level of the tumor in addition to the celecoxib effects on cyclooxygenase 2 preferably prior to the start of the TTI621 trial and you and Errol must agree.