Methods

Irinotecan vs Etirinotecan Pegol

Figure 1. Background – From 25-46% of TNBC subtype

Figure 2. Blood-Brain Barrier is Difficult to Penetrate

Figure 3. BEACON Phase 3 Trial

Figure 4. Perioperative Survival in Patients With History of Brain Metastases (m.o.7)

Figure 5. Comparison of Irinotecan and EP

Figure 6. Etirinotecan Pegol Has Higher Tumor Permeability Compared to Irinotecan in Brain Metastases

Figure 7. Exploratory Endpoints

Figure 8. Conclusions

Conclusions

- Etirinotecan pegol preserves brain metastases, is retained and serves as a reservoir for continued release of SN38 in CNS tumors
- Etirinotecan pegol prolongs survival of animals due to higher brain tumor SN38 exposure
- Standard of care chemotherapy agents for metastatic breast cancer used as TPC in BEACON lacked efficacy in this murine model of breast cancer brain metastases
- Pharmacokinetic and efficacy results in the murine model of breast cancer brain metastases provide biologic rationale for doubling of overall survival observed in a subset of BEACON patients with history of brain metastases
- Etirinotecan pegol is currently under review in the EU for conditional approval in breast cancer brain metastases

- A confirmatory phase 3 trial, ATNIN, is ongoing in this population (NCT02915744)

Table 1. Physical-Chemical Properties of Small Molecule Chemotherapies for Metastatic Breast Cancer Compared to Etirinotecan Pegol

Table 2. Results of Exploratory Endpoints

Table 3. Results of Perioperative Survival in Patients With History of Brain Metastases (m.o.7)

Table 4. Results of In Vitro Metabolite SN38

Table 5. Results of Pharmacokinetic and Efficacy Results in the Murine Model of Breast Cancer Brain Metastases