Pancreatic cancer remains one of the deadliest cancers with survival described in months and weeks. Recent advances in the treatment of pancreatic cancer include the recent approval of a novel agent (EphA2-targeted docetaxel nanoliposomes (MM-310)) in the United States. MM-310 demonstrates greater activity to nab-paclitaxel (Gem 100 mpk+MM 50), with dosing at 50% maximum tolerated dose (MM 50 vs. Standard of Care agents in tumor models, at 35 mpk). Additional dosing with 50% maximum tolerated dose tolerated for each agent, MM-310/gemcitabine showed greater effect than nab-paclitaxel (Gem 100 mpk+MM), suggesting that lower dose Paclitaxel might be sufficient to mediate activity and that Paclitaxel dosage might be the rate limiting step. Additional biomarker analysis will be conducted.

In conclusion, MM-310 is highly active in several patient derived models of pancreatic cancer and its activity was equal or greater than standard of care agents. Future studies will aim at identifying markers for differentiating response to MM-310 (EphA2-targeted docetaxel nanoliposome) and MM-310/Gemcitabine (less invasive laparoscopic injection).

We found MM-310 to be highly active in tumor models derived from pancreatic patients.

- MM-310 demonstrates superior activity compared to standard of care monotherapy, tested at two dose levels, in pancreatic PDX models.
- The combination of MM-310 and gemcitabine was more potent than each drug alone and more potent than Gemcitabine/Nab-Paclitaxel in pancreatic PDX models.
- A Phase I trial planned for late 2016.

References