**Lay Description of Important Outcomes**

During the first year of funding, we were able to make tremendous progress in understanding regarding the effect of the small molecule inhibitor SU056 on inhibiting TNBC progression and metastasis, both in in vitro assays, but also in small animal models for TNBC tumors.

More importantly, we found that SU056 exerted a protective effect against the toxicity associated with the treatment with CDK-inhibitors, such as Palbociclib. Furthermore, the combination of SU056 with Palbociclib resulted in inhibition of TNBC tumor progression and metastasis in levels that that were significantly higher than when each drug was used alone to treat mice with metastatic TNBC tumors.

The data generated so far during the first year of funding was presented in the form of oral presentations or posters in several regional and national meetings. The data will also be presented at the 2024 AACR meeting later this year.We are also preparing a major manuscript to be submitted to a high impact journal by the summer of this year.

We are always seeking more funding opportunities from both federal and private sources. The data generated form this METAvivor grant will be of a significant help.

Given the very strong data supporting the use of SU056/Palbociclib combination for the treatment of metastatic TNBC tumors, we envision the initiation of clinical trials in the future.