Cabozantinib (XL184), a Dual MET-VEGFR2 Inhibitor, Blocks Osteoblastic and Osteolytic Progression of Human Prostate Cancer Xenograft Tumors in Mouse Bone

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RESULTS (In Vivo Study)

Figure 1. Cabozantinib inhibits in vivo osteoclast (OC) differentiation in a dose-dependent manner, but does not affect theability of mature OCs to resorb bone.

Figure 2. Cabozantinib shows biphasic effects on osteoblast (OB) differentiation and activity in vitro.

METHODS

• Data are expressed as mean ± SEM. n = 3 for all experiments.

• Statistical differences were determined with Student’s t-test.

• P < 0.05 was considered statistically significant.

• These unique effects may help explain the bone scan effects observed in most CRPC patients

INTRODUCTION

• Cabozantinib is a dual MET-VEGFR2 inhibitor that targets both cancer cell proliferation and tumor stroma

• Increased osteoblastic and decreased osteolytic activity are observed in ARCaPM cells

• The in vitro effects of cabozantinib were similar to those of MTD-200, a dual MET-VEGFR2 inhibitor that targets both cancer cell proliferation and tumor stroma

REFERENCES


2. Sagittal Section Micro-CT of Human Prostate Cancer Xenograft Tumors in Mouse Bone

CONCLUSIONS

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ACKNOWLEDGEMENTS

• Exelixis is thankful to the Prostate Cancer Foundation for support of this work.

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