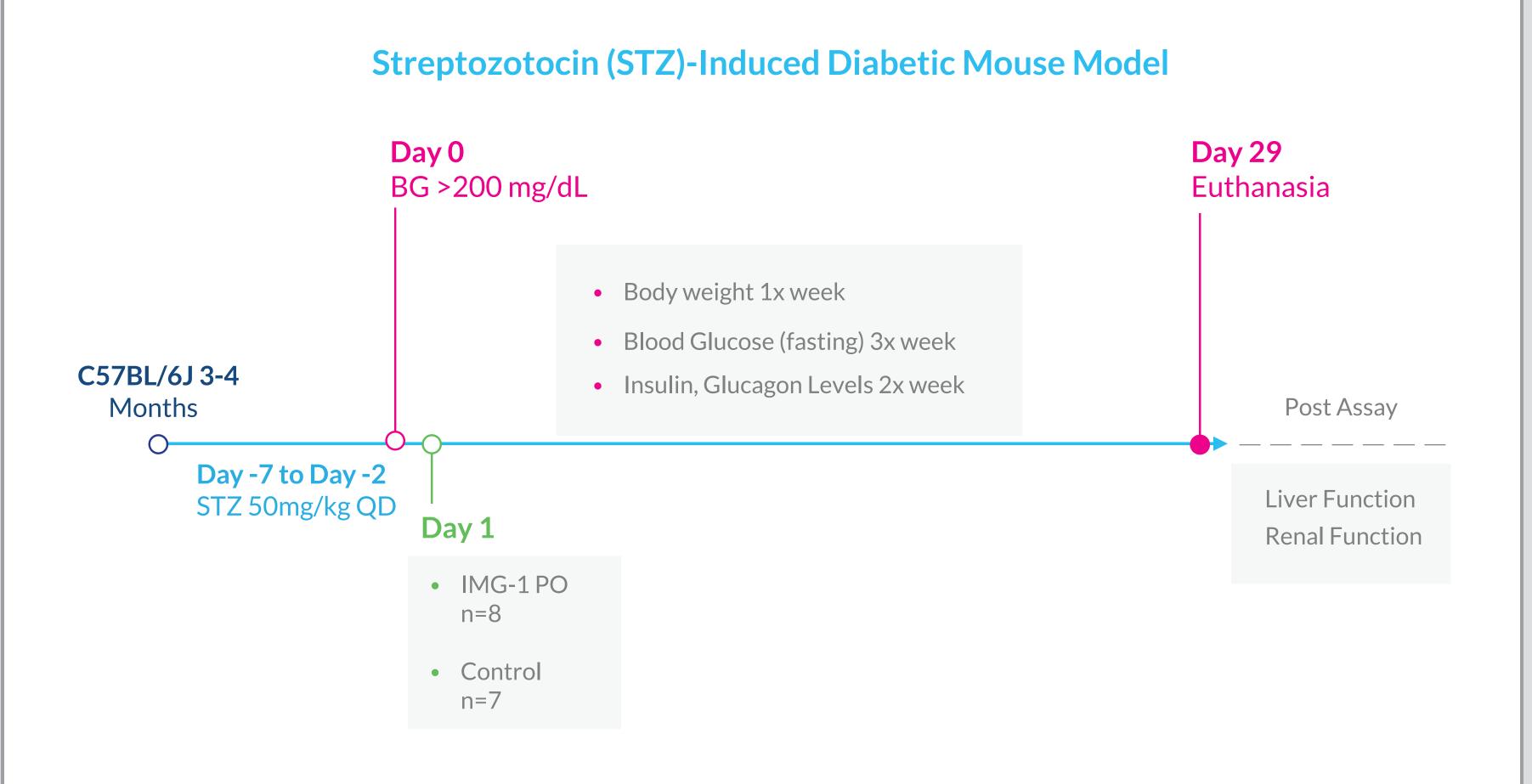


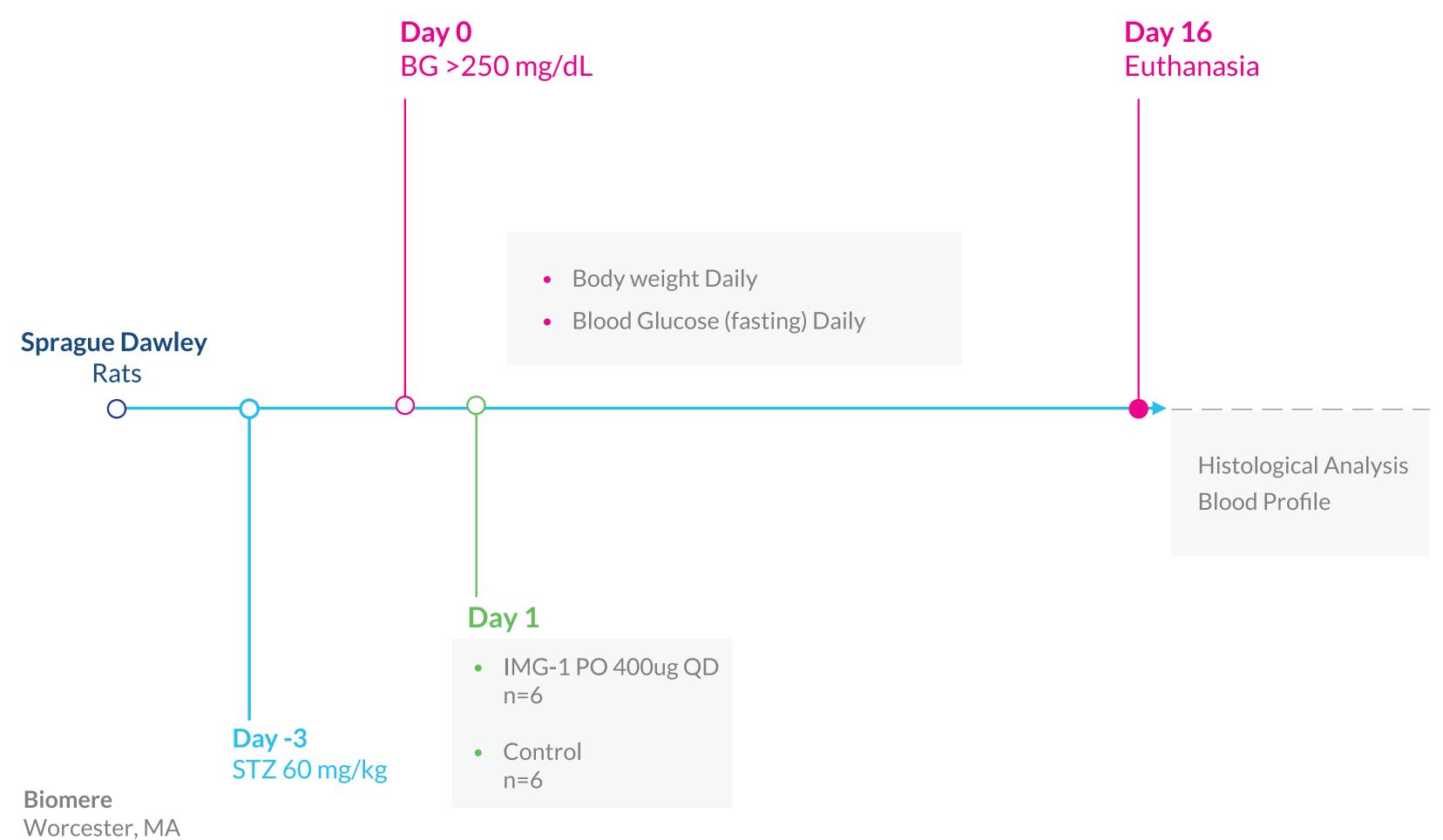
Introduction and Experiment Design

- IMG-1 is a novel biologic therapeutic for the treatment of diabetes and its associated complications.
- IMG-1 has been shown to successfully treat Type II diabetes in animal models by decreasing insulin resistance and lowering glucagon (see poster 1115-P) and suppress hepatic glucose production and lower insulin resistance in a diet-Induced Obese mouse model using in a hyperinsulinemic-euglycemic clamp assay (see poster 1214-P).
- To test the efficacy of IMG-1 to treat type I diabetes a Streptozotocin (STZ)-induced diabetic animal models were employed.



- C57BL/6J mice were treated with STZ (50mg/kg) for 5 days to induce diabetes.
- Animals were either administered IMG-1 or PBS via oral gavage daily for 29 days
- Fasting Blood Glucose was measured 3x week and Insulin and Glucagon Levels were measured 2x week





- Sprague-Dawley rats were given a single injection of STZ (60mg/kg) to induce diabetes
- Animals were either administered IMG-1 or PBS via oral gavage daily for 16 days
- Fasting Blood Glucose and body weight were measured daily

IMG-1 Reduces Blood Glucose Levels in Rat and Mouse STZ Models

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IMG-1 Anti-Diabetic Affect



Figure. In the mouse model after 17 days of treatment, IMG-1 treated animals displayed a significant decrease in BG levels that persisted for the remainder of the study, while the control animals had continuously high BG levels (A). This finding was mimicked in a second experiment where a STZ rat model was used where Sprague-Dawley rats IMG-1 treated animals had

significantly lower BG levels by day 9 (B). Total bilirubin, ALP, ALT, AST, BUN and creatinine levels were assessed following the 29-day study to determine liver and kidney toxicity (C). Bilirubin, BUN and creatinine levels were within the normal range, while the ALP, ALT and AST levels were elevated with the STZ treatment (common in this model) but these levels

were unaffected with IMG-1 treatment. Furthermore, IMG-1 treated rats appeared generally healthier and gained more weight than their PBS treated counterparts (D).

Summary

- IMG-1 represents a novel therapeutic for Diabetes
- IMG-1 has been show to effectively treat Type II Diabetic ZDF rats and its associated cardiovascular complications (see poster 1115-P).
- IMG-1 has been shown to Decreases Insulin Resistance and Inhibit Hepatic Glucose Production in Diet-Induced Obese Mice (see poster 1214-P)
- IMG-1 Decreases FBG Levels in STZ animal models
- IMG-1 Improves Health of STZ Treated Rats
- IMG-1 does Not Appear to be Toxic To The Liver or Kidneys

Acknowledgments

he authors would like to acknowledge Biom Models. Inc., Worcester MA for their with the extensive animal work, and Kristen Nevins for her editorial assistance.