1. No.
   2019Y012

2. Title
   The impact of nicotine on glomerular injury in diabetic mice fed high fat high protein or high salt diet

3. Period
   2019-2021

4. Summary
   The objective of this research project was to elucidate the effects of nicotine with a high salt, high fat and high protein diet on the onset and progression of diabetic kidney disease (DKD) using a mouse model of type 2 diabetes mellitus. The results suggest that administration of nicotine to HC-loaded *db/db* type 2 diabetic model mice may increase albuminuria despite improvement in body weight and blood glucose, and addition of NaCl tended to further increase albuminuria. Furthermore, albuminuria tended to increase by HF and HP loading even under nicotine administration. In contrast, no apparent difference was observed between NaCl added groups. These results suggest that nicotine and salt administration to *db/db* mice may improve glucose tolerance but worsen DKD.