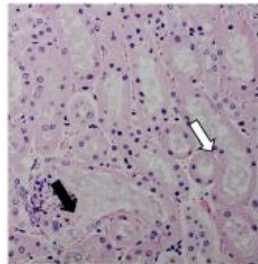


Pathological observations in response to intra-renal administration method

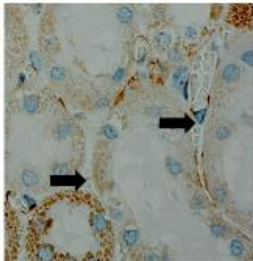
- Previous experiments by MedImmune/Moderna in rat and pig using intrarenal administration of KL10 VEGF-A mRNA did not reveal any pathological findings in kidney. However, no tissue blocks or raw data can be found to do comparative studies of cell specific markers.
- In collaboration with Jane Stubbe (University of Southern Denmark) a PBS control experiment was done (late April) to understand possible impact of method on kidney structures.

H&E 180 min post i.r. PBS administration

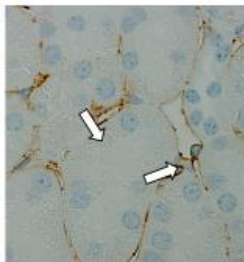


Black arrow: Glomerular injury
White arrow: Tubular injury

CD31

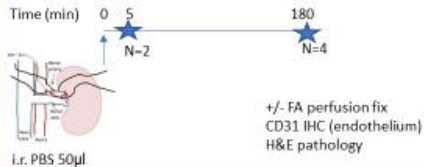


Kidney from 180 min post PBS i.r. with loss of or patchy CD31 in peritubular capillaries (PTC) (black arrows)



Normal kidney with linear CD31 in PTC (white arrows)

Experimental design acute studies



Conclusions

1. Glomerular and tubular damage identified with PBS at same severity/degree as in a previous experiment
2. CD31 signal is disrupted, compatible with endothelial damage
3. No damage identified at 5 min time point
4. Pathology findings likely related to method of administration