

## Online Supplementary Material

### Development of orthotopic tumour models using ultrasound-guided intrahepatic injection

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### Online Resource 1 (Video)

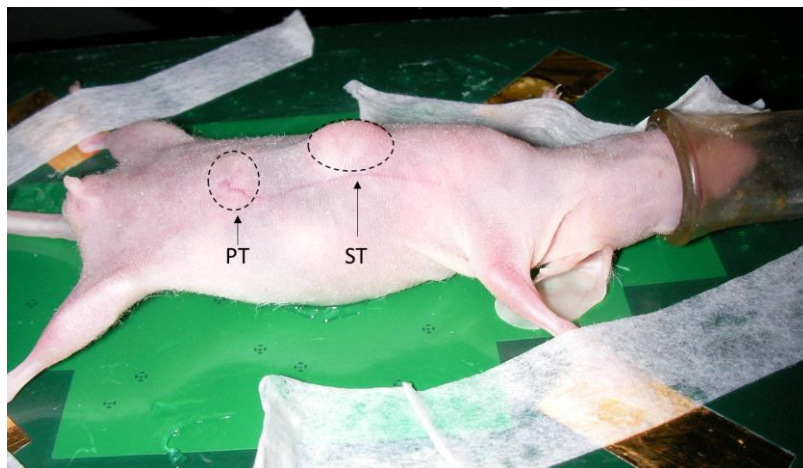
HF-US guided intrahepatic injection of human CRC cells. A BALB/c nude mouse was injected with a 40µl bolus of 20,000 SW620 human CRC cells in PBS:Matrigel (1:1 v/v) using HF-US. A needle tip can be seen penetrating the skin and liver, cells injected, and the needle removed. Taken in B-mode using a 40 MHz transducer. Video in real-time.

### Online Resource 2 (Video)

HF-US guided intrahepatic injection of human CCA cells. A BALB/c nude mouse was injected with a 50µl bolus of 5 million TFKLuc2B2 cells in PBS using HF-US. The gallbladder (centre screen) was used as a landmark for HF-US guided percutaneous injection into the liver. A needle tip can be seen penetrating the skin and liver, cells injected, and the needle removed. Taken in B-mode using a 40 MHz transducer. Video in real-time.

### Online Resource 3 (Image)

BALB/c nude mouse with human CCA orthotopic tumour, 19-days post inoculation. Out of the 9 mice with orthotopic tumours, one animal (shown) also had a discrete intra-peritoneal tumour (PT) and subcutaneous tumour (ST) at the injection site (tumours circled with dashed line).



### Online Resource 4 (Video)

HFUS video of an intrahepatic human CRC tumour (SW620), 20-days post inoculation. Taken in B-mode using a 40 MHz transducer. Video in real-time.