MATERIAL AND METHODS
32 year old male patient with suspicion of recurrent paraganglioma showed 2 focal uptakes of I123 MIBG (173 MBq) next to left renal vein in a diagnostic scan (planar images and abdominal SPECT/CT) confirming the indication for open resection. 2 days before surgery a dose of I123 MIBG (105 MBq) was applied. Freehand SPECT images were acquired during the operation using declipseSPECT (SurgicEye). The freehand SPECT system combines a gamma probe with an infrared optical spatial localization system using infrared referencing markers attached to the probe and the patient. A data processing unit generates a real time 3D image in the operating room based on the readings of the probe and its position. The region of interest (area of the expected paragangliomas) was scanned moving the gamma probe in different angles and directions. Then the freehand SPECT image was generated and image visualization parameters were set to visualize hottest uptake.

RESULTS
At the operating room and using the freehand SPECT system (61s scan), one lesion (max. 17 mm) was found. The other lesion (max. 11 mm) was also visualized, but could only be tracked with the gamma probe due to strong breathing motion. Both lesions were successfully resected, confirmed to be radioactive and identified as paragangliomas by histology. The freehand SPECT system was of additional value in planning the operative access to the region of interest, since the lesions were located retroperitoneal and in determining the depth of the first lesion for precise and faster exstirpation.

CONCLUSION
Freehand SPECT may be of benefit in planning the operative access to the region of interest, in determining the depth of lesions for precise and faster exstirpation and in controlling the area of operation for residues. In summary freehand SPECT has high potential to optimize surgical procedures.