Table 2: Phase distribution after error analysis (both left and mid picture: blue voxels < 45Gy); right: difference of planned and simulated dose distribution (blue voxels: higher simulated dose; green-brown voxels: lower simulated dose).

Table 1: Analysis of 5 patient dataset of 17 fractions; Patient 3 was treated in 5, all other in 3 fractions.

Table 2: Rotation and Translation error over the 10 phases; left: patient 3 fraction 2 showing the largest alignment errors over all datasets; right: patient 1 fraction 2 showing the smallest alignment errors over all datasets.

Figure 1: Implant Fiducials in the Liver (patient 3); the red dot marks the center of mass of the fiducials and the rotation and translation center; with the simulated mean translation and rotation errors the volumes of interest are transformed and the dose is re-calculated.

Figure 2: 3D dose distributions of the PTV for patient 3; left: planned dose distribution; mid: simulated dose distribution after error analysis (both left and mid picture: blue voxels < 45Gy); right: difference of planned and simulated dose distribution (blue voxels: higher simulated dose; green-brown voxels: lower simulated dose).