**Supplementary Tables**

**Supplementary Table 1.** Primers, TaqMan probes and amplification protocols for PCR and ddPCR assays

**Supplementary Table 2.** Basic mate pair and WES characteristics

**Supplementary Table 3.** Somatic structural variants and point mutations identified in primary tumor and profiled in plasma

**Supplementary Table 4.** Clinicopathological patient characteristics

**Supplementary Table 5.** Relapse detection by standard-of-care CT imaging, ctDNA and CEA analysis

**Supplementary Table 6.** Summary of plasma samples for DNA purification