**Supplemental Data.**

Custom quantitative PCR (qPCR) probes were used to validate fusion events from DNA and mRNA extracted from formalin-fixed tissue taken at the time of the tissue biopsy in selected cases. The sequence information of the fusion contigs generated (Hg19 archival Ensembl 75 Feb2014) were used to develop probes. The fusion event(s) of *SLC4A2-AGAP3* was confirmed in both DNA and RNA in case 7. DNA fusion of TACC3-FGFR3 in the same tumor was confirmed in the DNA but the qPCR signal was borderline for RNA. The fusion event of *TACC3-FGFR3* from case 8 was unable to be validated in the RNA using one iteration of probe design.