

Supplementary Table 1: Concordance of select genomic mutations in tissue and cfDNA. Agreement between cfDNA and tissue was defined as the concordance of presence and absence of mutations both in cfDNA and matched tissue samples.

Tissue <i>MEN1</i>			
cfDNA <i>MEN1</i>	Not detected	Detected	Total
Not detected	11	7	18
Detected	0	5	5
Total	11	12	23

Agreement between cfDNA and tissue: 69.6%

Tissue <i>ARID1A</i>			
cfDNA <i>ARID1A</i>	Not detected	Detected	Total
Not detected	18	3	20
Detected	0	3	3
Total	18	6	23

Agreement between cfDNA and tissue: 91.3%

Tissue <i>ATM</i>			
cfDNA <i>ATM</i>	Not detected	Detected	Total
Not detected	21	1	22
Detected	0	1	1
Total	21	2	23

Agreement between cfDNA and tissue: 95.7%

Tissue <i>TSC2</i>			
cfDNA <i>TSC2</i>	Not detected	Detected	Total
Not detected	16	2	19
Detected	1	4	4
Total	17	6	23

Agreement between cfDNA and tissue: 82.6%

Tissue <i>DAXX</i>			
cfDNA <i>DAXX</i>	Not detected	Detected	Total
Not detected	17	1	18
Detected	0	5	5
Total	17	6	23

Agreement between cfDNA and tissue: 95.7%

Tissue <i>TP53</i>			
cfDNA <i>TP53</i>	Not detected	Detected	Total
Not detected	18	2	20
Detected	0	3	3
Total	18	5	23

Agreement between cfDNA and tissue: 91.3%

Tissue <i>ATRX</i>			
cfDNA <i>ATRX</i>	Not detected	Detected	Total
Not detected	17	3	20
Detected	0	3	3
Total	17	6	23

Agreement between cfDNA and tissue: 87%

Supplementary Table 2: Novel mutations identified in cfDNA not observed in matched tissue samples

Patient	Novel mutations in cfDNA
1	<i>TP53, Aik</i>
2	<i>KEAP1, ARID1B, MGA, EGFR, TEK</i>
3	<i>INNPP1</i>
4	<i>TSC2, NOTCH2, MUTYH, PAK1, VHL, PALB2, TGFBR1, CDK12</i>
5	<i>XRCC2, PTPRD, BRCA2, SMARCA2, BCL6,</i>
6	<i>KDR, NTRK3, CASP8, PTPRS, RET, TSC2, ARID1B, BRD4</i>
7	<i>RECQL4</i>
8	<i>ARID1B, AXL</i>
9	<i>MGA</i>
10	<i>TSC2</i>
11	<i>ZFX3</i>

Supplementary figure 1: frequency of OncoKB potentially actionable alterations identified in cfDNA.

