Supplementary Table 1:
Number of somatic regions (variants) called in each 2nd primary cancer (pink), and, for each corresponding patient, the number of these regions that were detected with at least 10 reads in each liquid biopsy sample (blue) and in the prostate cancer itself (green). The regions are classified by their location on the DNA as exonal vs non-exonal. The results from the PC tissue NGS are presented at the top of the list for each patient, even for those patients (#7 and #9) that had the PC tissue collection a few days after their first liquid biopsy.

Pt#1	Number of regions with at least 10 reads	Number of exonal regions with at least 10 reads	Number of non-exonal regions with at least 10 reads	# of days sample was collected prior to 2nd primary diagnosis
PC tissue NGS	0	0	0	-3558
ctDNA NGS	1	0	1	-539
ctDNA NGS	7	0	7	-280
ctDNA NGS	0	0	0	-161
ctDNA NGS	5	0	5	-105
ctDNA NGS	9	0	9	-42
ctDNA NGS	1	0	1	-14
ctDNA NGS	4	0	4	0
2nd Primary tissue NGS	78	7	71	0

Pt#2	Number of regions with at least 10 reads	Number of exonal regions with at least 10 reads	Number of non-exonal regions with at least 10 reads	# of days sample was collected prior to 2nd primary diagnosis
PC tissue NGS	1	0	1	-1525
ctDNA NGS	4	2	2	-984
ctDNA NGS	7	3	4	-697
ctDNA NGS	7	2	5	-515
ctDNA NGS	3	1	2	-424
ctDNA NGS	4	1	3	-326
ctDNA NGS	5	2	3	-235
ctDNA NGS	2	0	2	-151
ctDNA NGS	6	2	4	-67
ctDNA NGS	16	4	12	-4
2nd Primary tissue NGS	104	13	91	0

Pt#3	Number of regions with at least 10 reads	Number of exonal regions with at least 10 reads	Number of non-exonal regions with at least 10 reads	# of days sample was collected prior to 2nd primary diagnosis
PC tissue NGS	2	0	2	-2828
ctDNA NGS	9	3	6	-707
ctDNA NGS	8	2	6	-371
ctDNA NGS	17	6	11	-245
2nd Primary tissue NGS	3734	463	3271	0

Pt#4	Number of regions with at least 10 reads	Number of exonal regions with at least 10 reads	Number of non-exonal regions with at least 10 reads	# of days sample was collected prior to 2nd primary diagnosis
PC tissue NGS	0	0	0	-69
ctDNA NGS	3	0	3	-62
ctDNA NGS	2	0	2	-47
ctDNA NGS	2	0	2	-19
2nd Primary tissue NGS	35	1	34	0

Pt#5	Number of regions with at least 10 reads	Number of exonal regions with at least 10 reads	Number of non-exonal regions with at least 10 reads	# of days sample was collected prior to 2nd primary diagnosis
PC tissue NGS	0	0	0	-125

ctDNA NGS	1	0	1	-111
ctDNA NGS	1	0	1	-83
ctDNA NGS	1	0	1	-55
2nd Primary tissue NGS	41	3	38	0

Pt#6	Number of regions with at least 10 reads	Number of exonal regions with at least 10 reads	Number of non-exonal regions with at least 10 reads	# of days sample was collected prior to 2nd primary diagnosis
PC tissue NGS	0	0	0	-1239
ctDNA NGS	4	0	4	-488
ctDNA NGS	7	1	6	-264
ctDNA NGS	7	0	7	-166
2nd Primary tissue NGS	67	8	59	0

Pt#7	Number of regions with at least 10 reads	Number of exonal regions with at least 10 reads	Number of non-exonal regions with at least 10 reads	# of days sample was collected prior to 2nd primary diagnosis
PC tissue NGS	0	0	0	-231
ctDNA NGS	1	0	1	-241
ctDNA NGS	2	0	2	-116
ctDNA NGS	5	0	5	-60
ctDNA NGS	3	0	3	-4
2nd Primary tissue NGS	38	3	35	0

Pt#8	Number of regions with at least 10 reads	Number of exonal regions with at least 10 reads	Number of non-exonal regions with at least 10 reads	# of days sample was collected prior to 2nd primary diagnosis
PC tissue NGS	0	0	0	-2393
ctDNA NGS	1	0	1	-433
ctDNA NGS	6	0	6	-188
ctDNA NGS	4	0	4	-97
ctDNA NGS	2	0	2	-62
2nd Primary tissue NGS	90	10	80	0

Pt#9	Number of regions with at least 10 reads	Number of exonal regions with at least 10 reads	Number of non-exonal regions with at least 10 reads	# of days sample was collected prior to 2nd primary diagnosis
PC tissue NGS	1	0	1	-492
ctDNA NGS	8	0	8	-497
ctDNA NGS	10	0	10	-455
ctDNA NGS	6	0	6	-441
ctDNA NGS	8	0	8	-427
ctDNA NGS	10	0	10	-413
ctDNA NGS	5	0	5	-322
ctDNA NGS	5	0	5	-294
ctDNA NGS	6	0	6	-266
ctDNA NGS	7	0	7	-238
ctDNA NGS	5	0	5	-210
ctDNA NGS	5	0	5	-182
ctDNA NGS	3	0	3	-147
ctDNA NGS	8	0	8	-126
ctDNA NGS	13	0	13	-70
ctDNA NGS	10	0	10	-42
ctDNA NGS	16	0	16	-14
2nd Primary tissue NGS	70	2	68	0