

**Supplementary Table 1.** Somatic high-stringency parameters used during the analysis of next-generation sequencing data for the solid biopsy part of OncoSTRAT&GO™

<b>Torrent suite variant caller parameters</b>			
<b>Parameter</b>	<b>SNP</b>	<b>INDEL</b>	<b>Description</b>
min_allele_freq	0.02	0.02	Minimum allele frequency
min_variant_score	6	6	Minimum quality
min_coverage	100	100	Minimum coverage
min_cov_each_strand	4	4	Minimum coverage on either strand
strand_bias	0.95	0.9	Maximum strand bias
data_quality_stringency	10		Minimum relative read quality
filter_unusual_predictions	0.12		Maximum common signal shift
filter_insertion_predictions		0.2	Maximum reference/variant signal shift (insertions)
filter_deletion_predictions		0.2	Maximum reference/variant signal shift (deletions)
<b>Torrent suite variant caller advanced parameters</b>			
<b>Parameter</b>	<b>Value</b>		
snp_strand_bias_pval	0.01		
position_bias	0.75		
mnp_min_allele_freq	0.02		
mnp_min_variant_score	6		
hp_max_length	8		
heavy_tailed	3		
outlier_probability	0.01		
mnp_strand_bias_pval	0.01		
indel_strand_bias_pval	1		
indel_as_hpindel	0		
mnp_strand_bias	0.95		
position_bias_ref_fraction	0.05		
hotspot_strand_bias_pval	0.01		
sse_prob_threshold	1		
do_mnp_realignment	0		

downsample_to_coverage	2000
do_snp_realignment	0
mnp_min_cov_each_strand	4
mnp_min_coverage	100
prediction_precision	1
realignment_threshold	0
suppress_recalibration	0
position_bias_pval	0.05
use_position_bias	0
min_indel_size	4
short_suffix_match	5
min_var_count	5
min_var_freq	0.15
output_mnv	0
max_hp_length	8
relative_strand_bias	0.8
kmer_len	19
gen_min_coverage	6
allow_mnps	1
allow_complex	0
min_mapping_qv	4
read_snp_limit	10
allow_indels	1
read_max_mismatch_fraction	1
gen_min_alt_allele_freq	0.01
allow_snps	1
gen_min_indel_alt_allele_freq	0.01

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**OncoDNA parameters**

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output_filtered	TRUE
filter_splice_variant	TRUE
filter_synonymous	TRUE
min_variant_frequency	5
minimum_coverage	100

minimum_variant_coverage	30
minimum_variant_strand_frequency	10
minimum_InDel_strand_frequency	10

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