

Supplementary Table 4: Reference examples of hotspot, actionable and disease-focused panels.

Company	KIT	n. of genes	Mutation type	Pathology	Instrument
Illumina	AmpliSeq for Illumina BRCA Panel	2	Somatic and germline	Breast and ovarian cancer	iSeq 100 System MiniSeq System MiSeq System
	Cancer Hotspot Panel v2	50	Somatic	Lung, colon, breast, ovarian, melanoma and prostate cancer	iSeq 100 System MiniSeq System MiSeq System
	AmpliSeq for Illumina Comprehensive Panel v3	161	Somatic	Lung, colon, breast, bladder, pancreatic, ovarian, melanoma and prostate cancer	NextSeq 550 System
	AmpliSeq for Illumina Comprehensive Cancer Panel	409	Somatic	Lung, colon, breast, ovarian, melanoma, and prostate cancer	NextSeq 550 System
	TruSight® Tumor 170	170	Somatic	Lung, colon, breast, bladder, pancreatic, gastric, ovarian, melanoma and prostate cancer	HiSeq 2500 System NextSeq 550 System
	TruSight Oncology 500	523	Somatic	Colon, endometrium, gastric, lung, melanoma and uterine cancer	NextSeq 550 System
	AmpliSeq for Illumina Myeloid Panel	24	Germline	Myeloid disorders	MiniSeq System MiSeq System
	TargetRich™ PGxComplete	43	Germline	Antidepressants, ADHD, statins, platelet aggregation inhibitors, anticoagulents drug classes	MiniSeq System MiSeq System HiSeq 2500 System NextSeq 550 System
ThermoFisher	Oncomine BRCA Research Assay	2	Somatic and germline	Breast and ovarian cancer	Ion PGM System Ion S5 System Ion S5 System
	Oncomine Focus Assay	52	Somatic	Lung, colon, breast, bladder, pancreatic, ovarian, melanoma and prostate cancer	Ion S5 System
	Oncomine Comprehensive Assay v3	161	Somatic	Lung, colon, breast, bladder, pancreatic, gastric, ovarian, melanoma and prostate cancer	Ion S5 System
	Oncomine Myeloid Research Assay	29	Germline	Myeloid disorders	Ion PGM System Ion S5 System Ion S5 System
	Ion AmpliSeq Pharmacogenomics Research Panel	40	Germline	Antidepressants, ADHD, statins, platelet aggregation inhibitors, anticoagulents drug classes	Ion S5 System