















Cancers & Cell-Surface Vimentin CTC Clinical Applications



Cancers	Abnova Antibody	mutaFISH™	CTC Clinical Applications
Brain Cancer (Glioblastoma)	 CSV CSV+ CD45- DAPI+ EGFRvIII+/GFAP+ CSV CSV+ CD45- DAPI+	IDH1 & IDH2 mutations	Surrogate Diagnosis Treatment Response, Recurrence, Metastasis
Head & Neck Cancer	 CSV EpCAM CSV+ EpCAM+ CD45- DAPI+ PD-L1+ CSV EpCAM CSV+ EpCAM+ CD45- DAPI+		PD1 Mab Immunotherapy Treatment Response, Recurrence, Metastasis
Esophageal Cancer	 CSV EpCAM CSV+ EpCAM+ CD45- DAPI+ HER2+ CSV EpCAM CSV+ EpCAM CD45- DAPI+ PD-L1+ CSV EpCAM CSV+ EpCAM CD45- DAPI+ PD-L1+	HER2 Gene Amplification	Herceptin Therapy PD1/PD-L1 Mab Immunotherapy Treatment Response, Recurrence, Metastasis
NON-SMALL CELL LUNG CANCER	 CSV FOLR1 CSV+ FOLR1+ CD45- DAPI+ TTF1/CK7+ CSV FOLR1 CSV+ FOLR1+ CD45- DAPI+ CSV FOLR1 CSV+ FOLR1+ CD45- DAPI+ CSV FOLR1 CSV+ FOLR1+ CD45- DAPI+ PD-L1+ CSV FOLR1 CSV+ FOLR1+ CD45- DAPI+ PD-L1+	Ex19del, L858R mutations T790M mutation	Surrogate Diagnosis 1st Gen TKI 1st & 2nd Gen TKI Resistance PD1/PD-L1 Mab Immunotherap Treatment Response, Recurrence, Metastasis
BREAST CANCER	 CSV MCAM CSV+ MCAM+ CD45- DAPI+ ER CSV MCAM CSV+ MCAM+ CD45- DAPI+ HER2+ CSV MCAM CSV+ MCAM+ CD45- DAPI+ CSV MCAM CSV+ MCAM+ CD45- DAPI+	HER2 Gene Amplification	Surrogate Diagnosis Herceptin Therapy Target Therapy (Olaparib) Treatment Response, Recurrence, Metastasis
Neuroblastoma	 CSV CSV+ CD45- DAPI+ CSV CSV+ CD45- DAPI+ GD2+ CSV CSV+ CD45- DAPI+ CSV CSV+ CD45- DAPI+	Myc-N Gene Amplification	Surrogate Diagnosis GD2 Mab (Dinutuximab) Therapy Treatment Response, Recurrence, Metastasis Prognosis
Liver Cancer	 ASGPR PanCK+ CD45- DAPI+ ASGPR PanCK+ CD45- DAPI+ ASGPR PanCK+ CD45- DAPI+		Surrogate Diagnosis Surgical Guidance (Early Cancer Nodules Resection) Treatment Response, Recurrence, Metastasis
PANCREATIC CANCER	 CSV CSV+ CD45- DAPI+ (Portal vs Peripheral) CSV CSV+ CD45- DAPI+ (Portal vs Peripheral)		Surgical Guidance (Whipple Operation) Treatment Response, Recurrence, Metastasis
Gastric Cancer	 CSV EpCAM CSV+ EpCAM+ CD45- DAPI+ HER2+ CSV EpCAM CSV+ EpCAM+ CD45- DAPI+ PD-L1+ CSV EpCAM CSV+ EpCAM+ CD45- DAPI+ PD-L1+	HER2 Gene Amplification	Herceptin Therapy PD1/PD-L1 Mab Immunotherapy Treatment Response, Recurrence, Metastasis
Bladder CANCER	 CSV PSCA CSV+ CD45- PSCA+ DAPI+ CSV PSCA CSV+ PSCA+ CD45 DAPI+ CSV PSCA CSV+ PSCA+ CD45- DAPI+ PD-L1+ CSV PSCA CSV+ PSCA+ CD45- DAPI+ PD-L1+	FGFR3 Mutations (Ex 7, 10, 15), FGFR3-TACC3 Fusion	Surrogate Diagnosis FGFR Kinase Inhibitors PD1/PD-L1 Mab Immunotherapy Treatment Response, Recurrence, Metastasis
Renal Cell Cancer	 CD276(B7-H3) CD105+ CD45- DAPI+ (Clear cell) CD276(B7-H3) CD105+ CD45- DAPI+ PD-L1+ CD276(B7-H3) CD105+ CD45- DAPI+ PD-L1+		Bevacizumab & Sunitinib Therapy PD1/PD-L1 Mab Immunotherapy Treatment Response, Recurrence, Metastasis
COLORECTAL CANCER	 CSV MCAM CSV+ MCAM+ CD45- DAPI+ CDX2+/CK20+ CSV MCAM CSV+ MCAM CD45- DAPI+ CSV MCAM CSV+ MCAM CD45- DAPI+ PD-L1+ CSV MCAM CSV+ MCAM CD45- DAPI+ PD-L1+	KRAS(wild)+	Surrogate Diagnosis Cetuximab & Panitumumab PD1/PD-L1 Mab Immunotherapy Treatment Response, Recurrence, Metastasis
Ovarian Cancer	 CSV FOLR1 CSV+ FOLR1+ CD45- DAPI+ Napsin A+ (Adeno) CSV FOLR1 CSV+ FOLR1+ CD45- DAPI+ CSV FORL1 CSV+ FOLR1+ CD45- DAPI+ CSV FOLR1 CSV+ FOLR1+ CD45- DAPI+	ERCC1 mRNA	Surrogate Diagnosis Target Therapy (Olaparib) Drug Resistance (TKI, Platinum Resistance) Treatment Response, Recurrence, Metastasis
PROSTATE CANCER	 CSV PSMA CSV+ CD45- DAPI+ PSMA+ CSV PSMA CSV+ PSMA+ CD45- DAPI+ EpCAM PanCK+ CD45- DAPI+ nAR-V7+ CSV PSMA CSV+ PSMA+ CD45- DAPI+	AR-V7 splice variant	Surrogate Diagnosis Enzalutamide & Abiaterone Resistance Taxane Sensitivity Treatment Response, Recurrence, Metastasis
Sarcoma	 CSV MCAM CSV+ MCAM+ CD45- DAPI+		Treatment Response, Recurrence, Metastasis