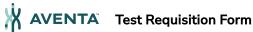


Patient Information														
First Name		MI Last Name				Medical Record #			DOB			Sex		
													O Male O Female	
Address			City			State	Postal Code		Countr	У		Primary P	hone	
Patient Medical Histo	orv			Dia	gnosis					Dis	ease St	atus		
Primary ICD-10		Stage	2		olorectal C	arcinoma	01	O NSCLC			/letastatio	:	O Recurrent	
				O B	reast	O Pro:	state OI				Refractory	,	O Relapse	
Prior / Current Therapies	(Optiona	l)		O Breast O Prosta O Ovarian O Other							•		·	
				0.0	varian	er	r			O None		O Progression		
Attachments														
O Copy of recent patholog	y/cytolog	y reports inclu	uding (if avai	lable),		-	O Test results fro	om all o	other Mol	lecular D	iagnostic	Assays by F	FISH, IHC, or	
CBC/differential, BMA diffe	erential, F	AB classificati	ion.			(	other genetic ass	says, e.g	g., ER, PR	R, HER2,	EGFR, KF	RAS, etc.		
Ordering Physician Info	ormatio	n					Dhuaisian Na							
Facility Name							Physician Name							
Address						Phone	Phone				Fax			
							siic			1 47				
City		State	P	ostal Co	de		Email							
Is the facility a hospital, ho				al O	No	, .	If yes, what is the facility's networ				•			
access hospital or ambulat	ory surgi	cal center? (se	ee back)	O No O Yes →			O In-Netwo	O In-Network			ut-of-Net	work	O Unknown	
Comornio Toot				Dane						Λ	under al Cu	i T.		
Genomic Test  O Aventa FusionPlus Test					ription	est with a cl	inical report cove	erina 3	61		Accepted Specimen Type  FFPE Tissue Block			
o / Wellta i asioni tas rese							mors across mult	_		or				
				types.						10 x	5 μm FFF	E Tissue Se	ctions (unbaked)	
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Submitting Pathologist Na	me	Pathology	y Lab Name		E	mail			Phone				Fax	
· · · · · · · · · · · · · · · · · ·											CI ·			
☐ I am requesting a specific Collection Date (MM/DD)			cimen ID			of Biopsy				Shipment:  □ I will arrange for specimen shipment				
Cottoction Butto (Fill 1) BB)	,	- Opo-			экс от вторзу					☐ Contact the pathology lab to obtain sp			·	
☐ I will let the pathologist		•												
☐ I am providing FFPE bloc	ck return	address on ba	ack of form											
Insurance Billing Infor	mation													
•			1	Medicare Policy ID			*Patient status at the time			☐ Office (non-hospital)		ospital)	☐ Not yet discharged	
	(If required, see back)			,			of specimen collectio				utpatient		, ,	
								☐ Inpatient:		-	Discharge date			
O Insurance: Plan Na		Name			Policy #		Group #				Pri	Prior Authorization #		
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Submission Checklist		Physician S	Signature a	and Let	tter of Me	edical Ned	essity							
☐ Demographic / Face Sheet My signature certifies that I ha				ave deteri	nd Letter of Medical Necessity /e determined that the test(s) being ordered is medically necessary for the patient, certifies that the results of this test will inform the						· · · · · · · · · · · · · · · · · · ·			
□ Most recent office note □ Pathology Report □ Copy of insurance cards □ Most recent office note □ read ongoing treatment plan, and certifies that I am the patient's treating physician. I have explained to the patient the nature and purpose of the test(s) to be performed obtained informed consent, to the extent required under applicable law, to permit Aventa Genomics, or any laboratory with which Aventa Genomics as contracted. The test(s) specified herein, (b) analyze and report on other genetic information generated during the testing process or conduct additional analyses of the patient for the test(s) specified herein, (b) analyze and report on other genetic information generated during the testing process or conduct additional analyses of the patient for the test(s) specified herein, (b) analyze and report on other genetic information generated during the testing process or conduct additional analyses of the patient for the test(s) to be performed obtained informed consent, to the extent required under applicable law, to permit Aventa Genomics, or any laboratory with which Aventa Genomics as contracted. The test(s) specified herein, (b) analyze and report on other genetic information generated during the testing process or conduct additional analyses of the patient for the test(s) to be performed obtained informed consent, to the extent required under applicable law, to permit Aventa Genomics, or any laboratory with which Aventa Genomics as contracted. The test (s) the test(s) to be performed obtained informed consent to the patient for the test(s) the test(s) that I am the patient's treating physician. I have explained to the patient the nature and purpose of the test(s) to be performed obtained informed consent to the patient for the test(s) that it is the patient for the test(s) the test(s) that it is the patient for the test(s) the test (s) that it is the patient for the test (s) the pati														
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	genetic material, including DNA and RNA information gene other purposes, and (e) release the test results and related					d during the testing process, and use or			disclose such information and ma					
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FFPE Block Return Information							
Return address		City	State		Postal Code	Country	
Email	Phone			Fax			

Additional Case Information	

## The Aventa FusionPlus test utilizes a method known as HiC sequencing which is designed specifically to capture a genome's sequence and structure (three-dimensional conformation). FFPE tissue sections are dewaxed and rehydrated. Then the cross-linked chromatin is digested using a restriction enzyme (RE) cocktail. The 5'-overhangs are then filled in with a biotinylated nucleotide. Next, spatially proximal digested ends of DNA are ligated, capturing the sequence and structure of the genome. The ligated DNA is then purified, producing pure proximally-ligated DNA. The proximally-ligated DNA is then fragmented, and the biotinylated fragments are enriched. DNA libraries are then prepared from these enriched

Secondary Analysis Methods: The resulting data is processed using the Arima-SV Pipeline. The pipeline is used for calling and visualizing Structural Variants (SV). This pipeline preprocesses the data using HiCUP (Wingett et al. 2015) and calls SV's using hic\_breakfinder (Dixon et al. 2018). The SV's are manually curated and processed to create a single VCF file that is directly ingested into CGW.

libraries. Finally, libraries are sequenced in a "paired-end" mode.

## Sample Requirements

This testing service requires unbaked  $10 \times 5 \mu m$  FFPE tissue sections or tissue block and an H&E stained tissue section.

## For information on ICD codes

Visit this website: <a href="https://icd10cmtool.cdc.gov/">https://icd10cmtool.cdc.gov/</a>