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SPECIMEN INFORMATION

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**CANCER TYPE** 

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Facility specimen collected at						REQUESTING ENTITY NAME & ADDRESS														
Collection Date Collection Time						Block(s), submitted stained slides and report will be returned to the <b>Ordering Phys</b> the address/FAX listed below (unless otherwise requested):							sician at							
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IMMUNOTHERAP	Y BIOMA G I) IHC	RKEF TC N/A	RS PD-L1 ( (Opdivo	(28-8) IHC )) (SP142) IHC riq)	LL G	JNG TC N/A	CARCINOMA Watson Genomic from Quest, Core NGS* PD-L1 (22C3) IH0	G S	TC N/A	Oncomine D: Test NGS PD-L1 (28-8)	) IHC	LY G	NCH TC	MLH1 I MSH6 I MMR IF	HC HC HC HC HC	COLC G D MLH1	<b>DN</b> TC	MS PN SH2,	CINOM H2 IHC IS2 IHC MSH6, F	PMS2)
IMMUNOTHERAP'       G     TC       D     PD-L1 (22C3)       (Keytruda)       D     PD-L1 (E1L3)       IHC (generic       MLH1 IHC	Y BIOMA G ) IHC N) C	RKEF TC N/A N/A	PD-L1 ( (Opdivo PD-L1 ( (Tecent MSH2 I	b) (SP142) IHC riq) IHC	LL G	N/A N/A	CARCINOMA Watson Genomic from Quest, Core NGS* PD-L1 (22C3) IH( (Keytruda) PD-L1 (SP142)	G S	TC N/A	Oncomine D Test NGS PD-L1 (28-8) (Opdivo) PD-L1 (E1L3	) IHC	LY G D D	NCH TC	MLH1 I MSH6 I MMR IF	rp)/ TC=Tec ROME & HC IHC	COLC G MLH1 colon	<b>DN</b> TC , MS	MS PN SH2,	CINOM H2 IHC IS2 IHC MSH6, F	PMS2)
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IMMUNOTHERAP         G       TC         D-L1 (22C3)         (Keytruda)         D-D-L1 (E1L3)         IHC (generic         MLH1 IHC         MRLH1 IHC         MMR IHC pa         (MLH1, MSH         MSH6, and         PMS2)	Y         BIOMA           G         G           i) IHC            N)            nel            2,	RKEF TC N/A N/A	PD-L1 ( (Opdivo PD-L1 ( (Tecent MSH2 I PMS2 I MSH6 I	) (SP142) IHC riq) HC HC IHC		ING TC N/A N/A N/A N/A	CARCINOMA Watson Genomic from Quest, Core NGS* PD-L1 (22C3) IHC (Keytruda) PD-L1 (SP142) IHC (Tecentriq) ALK (for lung ca) IH ALK (for lung ca) IH Ca) IHC (if + or	G S C C C C C C C C C C C C C	TC N/A N/A N/A	Oncomine D Test NGS PD-L1 (28-8) (Opdivo) PD-L1 (E1L3 (generic) ROS1 IHC ROS1 IHC (if	) IHC N) IHC + or		NCH TC	MLH1 I MSH6 I MMR IH MMR IH PMS2, rtt MMR IH and PMS	HC HC HC HC Danel ( HC panel ( un BRAF V6 HC panel ( 52, run MLH	COLC G MLH1 colon 00 by F endon 1 prom	, MS , MS ) (if 1 PCR) oter	CAR MS PN SH2, there ial) (i meth	CINOM H2 IHC IS2 IHC MSH6, F is loss of f there is ylation ar	PMS2) MLH1 and loss of MLH1 nalysis *) od PMS2
IMMUNOTHERAP         G       TC         N/A       PD-L1 (22C3)         PD-L1 (22C3)       Id         PD-L1 (Carried and the second and the secon	Y BIOMA G D IHC N) C N) C N) C N) C C C C C C C C C C	RKEF TC N/A N/A	PD-L1 ( (Opdivc) PD-L1 ( (Tecent) MSH2 I PMS2 I MSH6 I and norma	b) (SP142) IHC iriq) HC HC IHC al tissue specimens	G	JNG           TC           N/A           N/A           N/A           N/A	CARCINOMA Watson Genomic from Quest, Core NGS* PD-L1 (22C3) IHC (Keytruda) PD-L1 (SP142) IHC (Tecentria) ALK (for lung ca) IH ALK (for lung ca) IHC (if + or equivocal, run ALK by EISH)		TC N/A N/A □ N/A N/A	Oncomine D: Test NGS PD-L1 (28-8) (Opdivo) PD-L1 (E1L3 (generic) ROS1 IHC ROS1 IHC (if equivocal, run FISH)	) IHC N) IHC + or ROS1 by		NCH TC	MLH1 I MSH6 I MMR IF MMR IF PMS2, rt MMR IF and PMS MMR IF run BRA promote	HC HC HC HC AC panel ( 4C panel ( 4C panel ( 52, run MLH HC panel ( 54, run MLH) HC panel ( 54, run MLH) H	COLC G MLH1 Colon 00 by F endon 1 prom if there CCR, and on ana	, MS ) (if 1 PCR) oter e is le d if E lysis	CAR MS PN SH2, there ial) (i meth oss of BRAF ; *)	CINOM H2 IHC IS2 IHC MSH6, F is loss of f there is ylation ar MLH1 an is negativ	PMS2) MLH1 and loss of MLH1 alysis *) id PMS2, re, run MLH1
IMMUNOTHERAP         G       TC         N/A       PD-L1 (22C3)         W/A       PD-L1 (2C3)         Image: Description of the stress	Y BIOMA G D IHC N) C N) C N) C N) C C C C C C C C C C	RKEF TC N/A N/A	PD-L1 ( (Opdivc) PD-L1 ( (Tecent) MSH2 I PMS2 I MSH6 I and norma	b) (SP142) IHC iriq) HC HC IHC al tissue specimens		Image           TC           N/A           N/A           N/A           N/A           N/A           N/A	CARCINOMA Watson Genomic from Quest, Core NGS* PD-L1 (22C3) IHC (Keytruda) PD-L1 (SP142) IHC (Tecentriq) ALK (for lung ca) IH ALK (for lung ca) IH ALK (for lung ca) IHC (if + or equivocal, run ALK by FISH) ALK by FISH		TC N/A N/A □ N/A N/A	Oncomine D Test NGS PD-L1 (28-8; (Opdivo) PD-L1 (ELL3 (generic) ROS1 IHC (R ROS1 IHC (R ROS1 IHC (r ISH) ROS1 by FIS	) IHC N) IHC + or ROS1 by H		N/A	I SYND MLH1 I MSH6 I MMR II PMS2, ru MMR II and PMS2 MMR II run BRA promote MSI by P specime	rp)/TC=Ter ROME & HC HC HC panel ( HC panel ( HC panel ( S2, run MLH HC panel ( F V600 by F r methylati PCR (require nos (periphe	COLC G MLH1 colon 00 by F endon 1 prom if there CR, and on ana es sepa	DN TC , MS , MS (if f PCR) ) (if f PCR) (if f PCR) ) (if f PCR) (if	CAR MS PN SH2, there ial) (i meth oss of BRAF ; *) tumo	CINOM H2 IHC IS2 IHC MSH6, F is loss of f there is ylation ar MLH1 ar is negativ r and nor	PMS2) MLH1 and loss of MLH1 nalysis *) od PMS2
IMMUNOTHERAP         G       TC         N/A       PD-L1 (22C3)         (Keytruda)         PD-L1 (E1L3)         IHC (generic         MLH1 IHC         MR IHC particle         MMR IHC particle         MMSH6, and         PMS2)         N/A         MSI PCR (requipheral bloo         BREAST CARCINO         G       TC         ER IHC	Y BIOMA G ) IHC N) net Z, irres separate d is acceptab MA G Q	TC     N/A     N/A     Image: state stat	PD-L1 ( (Opdivc PD-L1 ( (Tecent MSH2 I MSH6 I and normal PR IHC	) (SP142) IHC rirq) HC HC al tissue specimens specimen))		Image           TC           N/A           N/A           N/A           N/A           N/A           N/A           N/A	CARCINOMA Watson Genomic from Quest, Core NGS* PD-L1 (22C3) IHC (Keytruda) PD-L1 (SP142) IHC (Tecentriq) ALK (for lung ca) IH ALK (for lung ca) IHC (if + or equivocal, run ALK by FISH MET by FISH RET by FISH		TC         N/A         N/A         N/A         N/A         N/A         N/A         N/A         N/A         N/A	Oncomine D Test NGS PD-L1 (28-8) (Opdivo) PD-L1 (E1L3 (generic) ROS1 IHC (ROS1 IHC (ROS1 IHC (RIS)) ROS1 IHC (RIS) ROS1 by FIS EGFR by PCF BRAF V600 t	) IHC N) IHC + or ROS1 by H R		N/A N/A N/A	MLH1 I MSH6 I MMR IF MMR IF PMS2, ru MMR IF MMR IF run BRA promote MSI by P specime specime KRAS E	rp)/TC=Tet ROME & HC HC HC panel ( HC panel ( HC panel ( S2, run MLH HC panel ( F V600 by F r methylati PCR (requipt PCR (	COLC G CMLH1 colon 00 by F endon 1 prom if there CCR, and on ana es sepa eral blo A-app	DN TC , MS ) (if f PCR) oter e is lo d if E lysis rrate od is orov	CAR MS PN SH2, there ial) (i meth DSS of SRAF s*) tumos s acces ed) b	CINOM GH2 IHC IS2 IHC MSH6, F is loss of f there is ylation ar MLH1 ar is negativ rr and nor ptable fo y PCR	PMS2) MLH1 and loss of MLH1 alysis *) ad PMS2, re, run MLH1 rmal tissue r the normal
IMMUNOTHERAP         G       TC         N/A       PD-L1 (22C3 (Keytruda))         PD-L1 (E1L3 IHC (generic         HHC (generic         MLH1 IHC         MR IHC pa         MKH1, MSH MSH6, and         PMS2)         N/A         MSIPCR (requine)         BREAST CARCINO         G       TC         ER IHC         HER2 IHC	Y BIOMA G ) IHC N) C N) C N) C C C C C C C C C C C C C	TC     N/A     N/A     Image: state stat	PD-L1 ( (Opdivc PD-L1 ( (Tecent MSH2 I MSH6 I and normal PR IHC	) (SP142) IHC rird) HC HC al tissue specimens specimen))		JNG TC N/A N/A N/A N/A N/A N/A N/A	CARCINOMA Watson Genomic from Quest, Core NGS* PD-L1 (22C3) IHC (Keytruda) PD-L1 (SP142) IHC (Tecentriq) ALK (for lung ca) IH ALK by FISH MET by FISH EGFR PCR (if negg	G S C C C C C C C C C C C C C C C C C C	TC         N/A	Oncomine D Test NGS PD-L1 (28-8; (Opdivo) PD-L1 (E1L3 (generic) ROS1 IHC ROS1 IHC ROS1 IHC ROS1 IHC ROS1 IHC ROS1 by FIS EGFR by PCF BRAF V600 b K FISH)	) IHC N) IHC + or ROS1 by H ROS1 by PCR		N/A N/A N/A	MLH1 I MSH6 I MMR II MMR II MMR II MMR II MMR II mu BRA promote MSI by P specime kRAS E Extend exons 2,	HC HC HC HC C panel ( HC panel ( HC panel ( HC panel ( C	COLC G MLH1 colon 00 by F endon 1 prom if there CCR, and CCR, and on ana es sepa eral blo	) (if 1 CR) CR) OCR)	CAR MS PM SH2, there iial) (i meth oss of BRAF ; *) tumos a acce ed) b AS ex	CINOM CH2 IHC IS2 IHC MSH6, F is loss of f there is yuation ar MLH1 ar is negativ rr and nor ptable fo y PCR ons 3, 4 a	PMS2) MLH1 and loss of MLH1 halysis *) d PMS2, re, run MLH1 mal tissue r the normal
IMMUNOTHERAP         G       TC         N/A       PD-L1 (2CC3)         W/A       Keytruda)         PD-L1 (E1L3)       IHC (generic         IHC (generic)       MLH1 IHC         MLH1 IHC       (MLH1, MSH         MSH6, and       PMS2)         N/A       MSI PCR (requipering)         IN/A       MSI PCR (requipering)         BREAST CARCINO       G         TC       ER IHC         IHC       HER2 IHC         IHC       D53 IHC         IHC       Basal-like bit	Y BIOMA G ) IHC N) nel res separate d is acceptab MA G C reast (nes	RKEF TC N/A N/A N/A U U U U U U U U U U U U U U U U U U U	PD-L1 ( (Opdivc PD-L1 ( (Tecent MSH2 I PMS2 I MSH6 I and normal PR IHC Ki-67 (I	) (SP142) IHC rriq) HC HC al tissue specimens specimen)) MIB-1) IHC		JNG TC N/A N/A N/A N/A N/A N/A N/A N/A	CARCINOMA Watson Genomic from Quest, Core NGS* PD-L1 (22C3) IHC (Keytruda) PD-L1 (SP142) IHC (Tecentriq) ALK (for lung ca) IH ALK by FISH MET by FISH RET by FISH EGFR PCR (if negative, run ROS1 EGFR PCR (if negative, run ROS1	G S S C C C C C C C C C C C C C C C C C	TC N/A N/A N/A N/A N/A N/A N/A N/A N/A ALK F	Oncomine D Test NGS PD-L1 (28-8; (Opdivo) PD-L1 (E1L3) ROS1 IHC (if equivocal, run FISH) ROS1 by FIS EGFR by PCF BRAF V600 b K FISH, and if A ISH; if ALK is neg	) IHC IN) IHC + or ROS1 by H R py PCR LK is gative, run		NCH TC	MLH1 I MSH6 I MMR II- MMR II- PMS2, ru MMR II- PMS2, ru MMR II- run BRAI promote Specime specime kRAS E Extend exons 2, KRAS E	rp)/TC=Tet ROME & HC HC HC panel ( HC panel ( HC panel ( HC panel ( F V600 by F r methylati PCR (require rom (periphe in)) Exon 2 (FD ed KRAS/ 3,4)	COLC G G MLH1 colon, 00 by F endon 1 prom if there CCR, and on ana es sepa eral blo NRAS A-app	) (if 1 CR) CR) OCR)	CAR MS PM SH2, there iial) (i meth oss of BRAF ; *) tumos a acce ed) b AS ex	CINOM CH2 IHC IS2 IHC MSH6, F is loss of f there is yuation ar MLH1 ar is negativ rr and nor ptable fo y PCR ons 3, 4 a	PMS2) MLH1 and loss of MLH1 halysis *) d PMS2, re, run MLH1 mal tissue r the normal
IMMUNOTHERAP         G       TC         N/A       PD-L1 (2CC3)         W/A       Keytruda)         PD-L1 (E1L3)       IHC (generic         IHC       MLH1 IHC         MLH1 IHC       MMR IHC pa         (MLH1, MSH         MSI PCR (requiperal blood         BREAST CARCINO         G       TC         IHC       ER IHC         IHC       Basal-like blocd	Y BIOMA G ) IHC C N) nel 2, ires separate d is acceptab MA G reast (nes gative, run P	RKEF TC N/A N/A U U U U U U U U U U U U U U U U U U U	PD-L1 ( (Opdive PD-L1 ( (Tecent MSH2 I PMS2 I MSH6 I and normal PR IHC Ki-67 (I VPP4B) I	)) (SP142) IHC rriq) HC HC al tissue specimens specimen)) MIB-1) IHC		ING TC N/A N/A N/A N/A N/A N/A N/A N/A	CARCINOMA Watson Genomic from Quest, Core NGS* PD-L1 (22C3) IHC (Keytruda) PD-L1 (SP142) IHC (Ifecentriq) ALK (for lung ca) IH ALK (for lung ca) IHC (if + or equivocal, run ALK by FISH MET by FISH MET by FISH RET by FISH EGFR PCR (if nega negative, run ROS1 EGFR PCR (if nega ROS1 FISH; and if RO EGFR PCR (if negat ROS1 FISH; and if RO EGFR PCR (if negat ROS1 FISH; and if RO EGFR PCR (if negat ROS1 FISH; and if RO	G	TC N/A N/A N/A N/A N/A N/A N/A N/A N/A LIK F egatives un ALL	Oncomine D Test NGS PD-L1 (28-8; (Opdivo) PD-L1 (E112) ROS1 IHC (if equivocal, run FISH) ROS1 by FIS EGFR by PCI BRAF V600 b K FISH, and if A iSH; if ALK is neg e, run MET FISH is	) IHC N) IHC + or ROS1 by H R py PCR LK is gative, run and RET FISH) LK is		NCH TC N/A N/A N/A N/A N/A N/A N/A	MLH1 I MSH6 I MMR II- MMR II- PMS2, ru MMR II- PMS2, ru MMR II- run BRAI promote Specime specime kRAS E Extend exons 2, KRAS E	HC HC HC HC C panel ( HC panel ( HC panel ( HC panel ( C	COLC G G MLH1 colon, 00 by F endon 1 prom if there CCR, and on ana es sepa eral blo NRAS A-app	) (if 1 CR) CR) OCR)	CAR MS PN SH2, there ial) (( meth oss of sBAF s *) tumos acce ed) b AS ex	CINOM H2 IHC IS2 IHC MSH6, F is loss of f there is ylation ar MLH1 an is negativ r and nor ptable fo y PCR ons 3, 4 a y PCR (if	PMS2) MLH1 and loss of MLH1 halysis *) nd PMS2, re, run MLH1 rmal tissue or the normal ind NRAS f negative,
IMMUNOTHERAP         G       TC         N/A       PD-L1 (22C3)         W/A       Keytruda)         PD-L1 (E1L3)       IHC (generic         IHC (generic)       MLH1 IHC         MKR IHC pa       (MLH1, MSH         MSH6, and       PMS2)         N/A       MSI PCR (requiperal bloo)         BREAST CARCINO       G         TC       ER IHC         D       HER2 IHC         N/A       RS1 PCR (requiperal bloo)         BREAST CARCINO       G         MAR       HER2 IHC         N/A       HER2 IHC         N/A       HER2 IHC (if neg	Y BIOMA G ) IHC C N) nel 2, ires separate d is acceptab MA G reast (nes gative, run P equivocal, r include you	RKEF TC N/A N/A N/A U U U U U U U U U U U U U U U U U U U	PD-L1 ( (Opdive PD-L1 ( (Tecent MSH2 I PMS2 I MSH6 I and normal PR IHC Ki-67 (I IPP4B) I CR2 FISH) 2 IHC slid	a) (SP142) IHC (SP142) IHC (SP142) IHC (SP142) IHC (HC (HC (HC (SP142) IHC (SP142) IHC		ING           TC           N/A	CARCINOMA Watson Genomic from Quest, Core NGS* PD-L1 (22C3) IHC (Keytruda) PD-L1 (SP142) IHC (IEcentriq) ALK (for lung ca) IH ALK (for lung ca) IH ALK (for lung ca) IH ALK (for lung ca) IH ALK (by FISH) ALK by FISH MET by FISH MET by FISH RET by FISH EGFR PCR (if negat ROS1 FISH: and if ROS1 EGFR PCR (if negat ROS1 FISH: and if ROS1 PD-L1 (22C3) IHC,	G	TC N/A N/A N/A N/A N/A N/A N/A N/A Un ALL F Eggative Batter F PCR, <i>f</i> , F	Oncomine D: Test NGS PD-L1 (28-8; (Opdivo) PD-L1 (E1L3; (generic) ROS1 IHC ROS1 IHC ROS1 IHC ROS1 by FIS EGFR by PCC BRAF V600 E K FISH, and if A ISH;if ALK is nege ,run MET FISH is K FISH; and if A ISH;if ALK is nege ,run MET FISH is K FISH, and if A	) IHC N) IHC + or ROS1 by H R by PCR LLK is gative, run and RET FISH) LK is SH) ROS1 FISH		NCH TC N/A N/A N/A N/A N/A N/A N/A	MLH1 I MSH6 I MMR II- MMR II- PMS2, rt MMR II- and PMS MMR II- run BRAN MMR II- run BRAN KRAS E Extend exons 2, KRAS E Extend exons 2, KRAS E	rp)/TC=Tet ROME & HC HC HC panel ( HC panel ( HC panel ( FV600 by F FV600 by F PCR (require rom (periphen) Exon 2 (FD ed KRAS/ 3.4) Exon 2 (FD inded KRAS/ 600 by PC	COLC G MLH1 colon 00 by F endon 1 prom if there CR, an- on ana eral blo A-app NRAS A-app ZR	) (if 1 CR) CR) OCR)	CAR MS PM SH2, there ial) (i meth oss of BRAF * *) tumos s acce ed) b AS ex	CINOM CH2 IHC IS2 IHC MSH6, F is loss of f there is yuation ar MLH1 ar is negativ rr and nor ptable fo y PCR ons 3, 4 a	PMS2) MLH1 and loss of MLH1 halysis *) nd PMS2, re, run MLH1 rmal tissue or the normal ind NRAS f negative,
IMMUNOTHERAP         G       TC         N/A       PD-L1 (22C3)         W/A       PD-L1 (2C3)         PD-L1 (2C3)       PC (PD-L1 (2C3)         PMS2)       PS1PC (PD-L1 (2C3)         PMS2)       PS1PC (2C3)         PMS2)       PS1PC (2C3)         PMS2)       PS1PC (2C3)         PMS2)       PS1PC (2C3) </td <td>Y BIOMA G ) IHC C N) nel 2, C irres separate d is acceptab MA G C reast (nes stative, run P requivocal, run include you run HER2 II-</td> <td>RKEF TC N/A N/A</td> <td>PD-L1 ( (Opdivc) PD-L1 ( (Tecent MSH2 I PMS2 I MSH6 I and normal PR IHC Ki-67 (I IPP4B) I ) R2 FISH) 2 IHC slid equired by</td> <td>a) (SP142) IHC (SP142) IHC (SP142) IHC (SP142) IHC (IHC (IHC (IHC (IHC (IHC)</td> <td></td> <td>JNG           TC           N/A           N/A</td> <td>CARCINOMA Watson Genomic from Quest, Core NGS* PD-L1 (22C3) IHC (Keytruda) PD-L1 (SP142) IHC (Tecentriq) ALK (for lung ca) IH ALK (for lung ca) IH C (for lung ca) IH GEN PCR (if negat NET by FISH EGFR PCR (if negat RoS1 FISH: and if RO EGFR PCR (if negat RoS1 FISH: and if RO EGFR PCR (if negat RoS1 FISH: and if RO</td> <td>G</td> <td>TC N/A N/A N/A N/A N/A N/A N/A N/A N/A Un ALL H MET F PCR, / egative</td> <td>Oncomine D: Test NGS PD-L1 (28-8; (Opdivo) PD-L1 (E1L3 (generic) ROS1 IHC (if equivocal, run FISH) ROS1 by FIS EGFR by PCF BRAF V600 t K FISH, and if A ISH;if ALK is neg e, run MET ISH at ALK FISH, and FISH at ALK FISH, and FISH at</td> <td>) IHC IN) IHC + or ROS1 by H R Dy PCR LK is rative, run and RET FISH) LK is SH) ROS1 FISH and RET FISH)</td> <td></td> <td>N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A</td> <td>MLH1 I MSH6 I MMR IH MMR IH PMS2, rr MMR IH PMS2, rr MMR IH run BRAI promote MSI by P specime specime KRAS E Extend exons 2, KRAS E Extend exons 2, KRAS E Extend (exons 2, KRAS E Extend (exons 2, KRAS E Extend (exons 2, KRAS E) Extend (exons 2, KRAS E) (exons 2,</td> <td>rp)/TC=Ter ROME &amp; HC HC panel ( HC panel ( HC panel ( HC panel ( HC panel ( Care and the HC panel ( S2, run MLH HC panel ( FV600 by F romethylati CR (require roms (periphe roms (periphe) roms (periphe) roms (periphe roms (periphe) roms (</td> <td>COLC G G MLH1 colon 00 by F endon 1 prom if there CCR, ann if there CCR, ann A-app NRAS R A-app NRAS</td> <td>N//</td> <td>CAR MS PM SH2, there iial) (i meth oss of s acce s acce s acce s acce ed) b AS ex ed) b AS ex ed) b</td> <td>CINOM BH2 IHC IS2 IHC MSH6, F is loss of f there is ylation ar MLH1 an is negativ ir and nor ptable fo y PCR ons 3, 4 a y PCR (if -L1 (28- bdivo)</td> <td>PMS2) MLH1 and loss of MLH1 nalysis *) dd PMS2, re, run MLH1 mal tissue r the normal and NRAS f negative, 8) IHC</td>	Y BIOMA G ) IHC C N) nel 2, C irres separate d is acceptab MA G C reast (nes stative, run P requivocal, run include you run HER2 II-	RKEF TC N/A N/A	PD-L1 ( (Opdivc) PD-L1 ( (Tecent MSH2 I PMS2 I MSH6 I and normal PR IHC Ki-67 (I IPP4B) I ) R2 FISH) 2 IHC slid equired by	a) (SP142) IHC (SP142) IHC (SP142) IHC (SP142) IHC (IHC (IHC (IHC (IHC (IHC)		JNG           TC           N/A	CARCINOMA Watson Genomic from Quest, Core NGS* PD-L1 (22C3) IHC (Keytruda) PD-L1 (SP142) IHC (Tecentriq) ALK (for lung ca) IH ALK (for lung ca) IH C (for lung ca) IH GEN PCR (if negat NET by FISH EGFR PCR (if negat RoS1 FISH: and if RO EGFR PCR (if negat RoS1 FISH: and if RO EGFR PCR (if negat RoS1 FISH: and if RO	G	TC N/A N/A N/A N/A N/A N/A N/A N/A N/A Un ALL H MET F PCR, / egative	Oncomine D: Test NGS PD-L1 (28-8; (Opdivo) PD-L1 (E1L3 (generic) ROS1 IHC (if equivocal, run FISH) ROS1 by FIS EGFR by PCF BRAF V600 t K FISH, and if A ISH;if ALK is neg e, run MET ISH at ALK FISH, and FISH at ALK FISH, and FISH at	) IHC IN) IHC + or ROS1 by H R Dy PCR LK is rative, run and RET FISH) LK is SH) ROS1 FISH and RET FISH)		N/A	MLH1 I MSH6 I MMR IH MMR IH PMS2, rr MMR IH PMS2, rr MMR IH run BRAI promote MSI by P specime specime KRAS E Extend exons 2, KRAS E Extend exons 2, KRAS E Extend (exons 2, KRAS E Extend (exons 2, KRAS E Extend (exons 2, KRAS E) Extend (exons 2, KRAS E) (exons 2,	rp)/TC=Ter ROME & HC HC panel ( HC panel ( HC panel ( HC panel ( HC panel ( Care and the HC panel ( S2, run MLH HC panel ( FV600 by F romethylati CR (require roms (periphe roms (periphe) roms (periphe) roms (periphe roms (periphe) roms (	COLC G G MLH1 colon 00 by F endon 1 prom if there CCR, ann if there CCR, ann A-app NRAS R A-app NRAS	N//	CAR MS PM SH2, there iial) (i meth oss of s acce s acce s acce s acce ed) b AS ex ed) b AS ex ed) b	CINOM BH2 IHC IS2 IHC MSH6, F is loss of f there is ylation ar MLH1 an is negativ ir and nor ptable fo y PCR ons 3, 4 a y PCR (if -L1 (28- bdivo)	PMS2) MLH1 and loss of MLH1 nalysis *) dd PMS2, re, run MLH1 mal tissue r the normal and NRAS f negative, 8) IHC
IMMUNOTHERAP         G       TC         N/A       PD-L1 (22C3)         W/A       PD-L1 (22C3)         PD-L1 (22C3)       PD-L1 (22C3)         MRINC (ML11, MSH MSH6, and PMS2)       MSI PCR (requiperson (ML11, MSH MSH6, and PMS2)         N/A       MSI PCR (requiperson (ML11, MSH MSH6, and PMS2)         BREAST CARCINO       G         G       TC         BREAST CARCINO       G         G       TC         Basal-like bios       P53 IHC         N/A ER IHC (if neg       N/A HER2 IHC (if neg         N/A HER2 FISH (       N/A HER2 FISH (         N/A HER2 FISH (       N/A HER2 FISH (         N/A ER, PR, HER2       N/A PD-L1 (SP14)	Y BIOMA G ) IHC C N) nel 2, ires separate d is acceptab MA G C reast (nes gative, run P equivocal, r include you run HER2 II- 2. IHC (if HEF 2.) IHC (Te	RKEF TC N/A N/A I I I I I I I I I I I I I I I I I I I	PD-L1 ( (Opdivc) PD-L1 ( (Tecent MSH2 I PMS2 I MSH6 I and normal PR IHC Ki-67 (I IPP4B) I ) R2 FISH) 2 IHC stid quived by quivocal, r	a) (SP142) IHC (SP142) IHC (SP142) IHC (SP142) IHC (IHC (IHC (IHC (IHC (IHC)		JNG           TC           N/A	CARCINOMA Watson Genomic from Quest, Core NGS* PD-L1 (22C3) IHC (Keytruda) PD-L1 (SP142) IHC (IEcentriq) ALK (for lung ca) IH ALK (for lung ca) IH ALK (for lung ca) IH ALK (for lung ca) IH ALK (by FISH) ALK by FISH MET by FISH RET by FISH RET by FISH RET by FISH EGFR PCR (if negat ROS1 FISH:and if RO EGFR PCR (if negat ROS1 FISH:and if RO EGFR PCR (if negat PD-L1 (22C3) IHC, (if EGFR.ALK and ROS)	G S S C C C C C C C C C C C C C C C C C	TC N/A N/A N/A N/A N/A N/A N/A N/A N/A ALK Fegative egative egative CR <sub>4</sub> , egative CR A CE CE TC	Oncomine D: Test NGS PD-L1 (28-8; (Opdivo) PD-L1 (E1L3 (generic) ROS1 IHC (If equivocal, run FISH) ROS1 by FIS EGFR by PCF BRAF V600 It K FISH, and if A ISH; if ALK is nege, run MET FISH it K FISH; and if A ISH and RET FI SH and RET FISH it ALK FISH; and If A ISH and RET FISH it ALK FISH, and re, run MET FISH it ALK FISH, and If A ISH and RET FISH it ALK FISH AND	) IHC IN) IHC + or ROS1 by H R and RET FISH AND ROS1 FISH and RET FISH BNS	<u>                                     </u>	N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	MLH1 I MSH6 I MMR IF MMR IF PMS2, rr, MMR IF and PMS MMR IF run BRAI promote MSI by P specime kRAS E Extend exons 2, KRAS E Extend exons 2, KRAS E DEAL ( (Keytru PD-L1 ( BRAF V	rp)/TC=Ter ROME & HC HC panel ( HC panel ( HC panel ( HC panel ( HC panel ( Care and the HC panel ( S2, run MLH HC panel ( FV600 by F romethylati CR (require roms (periphe roms (periphe) roms (periphe) roms (periphe roms (periphe) roms (	COLC G MLH1 colon, Oo by F endon 1 prom if there: CR, annon aras sepa arablo A-appp NRAS CR 	N TC TC TC TC TC TC TC TC TC TC	CAR MS PM SH2, there iial) (i meth oss of s acce s acce s acce s acce ed) b AS ex ed) b AS ex ed) b	CINOM BH2 IHC IS2 IHC MSH6, F is loss of f there is ylation ar MLH1 an is negativ ir and nor ptable fo y PCR ons 3, 4 a y PCR (if -L1 (28- bdivo)	PMS2) MLH1 and loss of MLH1 halysis *) nd PMS2, re, run MLH1 rmal tissue or the normal ind NRAS f negative,
IMMUNOTHERAP         G       TC         PD-L1 (2CC3         N/A       PD-L1 (2CC3         PD-L1 (E1L3         IHC (generic         MKH1HC pa         MMR IHC pa         MMR IHC pa         MMR IHC pa         MSIPCR (requiption)         BREAST CARCINO         G       TC         Basal-Like b         N/A       HER2 IHC         Basal-Like b         N/A       HER2 IHC (frieg)         N/A       HER2 IHC (frieg)         N/A       HER2 IHC (frieg)         N/A       HER2 IHC (frieg)         N/A       HER2 FISH (         N/A       PO-L1 (SP14         AMYLOID TYPE AI	Y BIOMA G ) IHC C N) C res separate d is acceptab MA G C C C C C C C C C C C C C	RKEF TC N/A N/A Lumor r Lumor r Lumor r TC TC TC TC TC TC C I I I I I I I I I I	PD-L1 ( (Opdivc) PD-L1 ( (Tecent MSH2 I MSH6 I MSH6 I and normal PR IHC Ki-67 (I IPP4B) I ) R2 FISH) 2 IHC slid squired by quivocal, r iq)	a) (SP142) IHC (SP142) IHC (IRC IHC IHC IHC IHC IHC IHC IHC IH		JNG           TC           N/A	CARCINOMA Watson Genomic from Quest, Core NGS* PD-L1 (22C3) IHC (Keytruda) PD-L1 (SP142) IHC (Tecentriq) ALK (for lung ca) IHC (if + or equivocal, run ALK by FISH MET by FISH MET by FISH RET by FISH RET by FISH EGFR PCR (if nega negative, run ROS1 EGFR PCR (if negative, run ROS1 EGFR PCR (if negativ	G S S C C C C C C C C C C C C C C C C C	TC N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	Oncomine D: Test NGS PD-L1 (28-8; (Opdivo) PD-L1 (E1L3 (generic) ROS1 IHC (if equivocal, run FISH) ROS1 by FIS EGFR by PCF BRAF V600 t K FISH, and if A ISH;if ALK is neg e, run MET ISH at ALK FISH, and FISH at ALK FISH, and FISH at	) IHC IN) IHC + or ROS1 by H R and RET FISH AND ROS1 FISH and RET FISH BNS	$\frac{2}{2}$	NCH           TC           N/A	MLH1 I MSH6 I MMR IF MMR IF MMR IF PMS2, rr, MMR IF and PMS MMR IF and PMS MMR IF and PMS MMR IF and PMS MMR IF and PMS MMR IF and PMS MMR IF Specime specime specime specime specime SPAC V NOMA PD-L1 ( (Keytru PD-L1 ( (Keytru PD-L1 ( (Keytru BRAF V NRAS n KIT (c-k	rp)/TC=Tet ROME & HC HC HC panel ( HC	COLC G G MLH1 colon, Oo by F endon 1 prom if there CR, annon ana ass sepa aral blo NRAS CR d- appp NRAS CR d- app CR d- app CR d- anon d- app CR d- anon d- anon d- app CR d- anon d-	N/A N/A N/A N/A N/A N/A N/A N/A	CAR MS PN SH2, there ial) (i) meth oss of b BRAF *) tumcet b BRAF *) tumcet ed) b AS ex ed) b Cop (op (c) (FDA	CINOM BH2 IHC IS2 IHC MSH6, F is loss of f there is ylation ar MLH1 an is negativ ir and nor ptable fo y PCR ons 3, 4 a y PCR (if -L1 (28- bdivo)	PMS2) MLH1 and loss of MLH1 nalysis *) dd PMS2, re, run MLH1 mal tissue r the normal and NRAS f negative, 8) IHC
IMMUNOTHERAP         G       TC         Q       PD-L1 (22C3)         W/A       PD-L1 (22C3)         PD-L1 (22C3)       PD-L1 (22C3)         MLH1 IHC       MMR IHC page         MLH1, MSH       MSH6, and         PMS2)       N/A MSI PCR (requidering)         PMS2)       N/A MSI PCR (requidering)         PMS2       ER IHC         BREAST CARCINO       BREAST CARCINO         G       TC         D       ER IHC         D       HER2 IHC         D       Sasal-like bi         N/A       ER, PR, HER2         N/A       HER2 FISH (120)         N/A       PD-L1 (SP14         AMYLOID TYPE AI         Congo Red       Amyloid P IH	Y BIOMA G ) IHC C N) nel 2, ires separate is acceptab MA G G C C C C C C C C C C C C C	RKEF TC N/A N/A N/A U U U U U U U U U U U U U U U U U U U	PD-L1 ( (Opdivc) PD-L1 ( (Tecent MSH2 I PMS2 I MSH6 I and normal PR IHC Ki-67 (I IPP4B) I ) R2 FISH) 2 IHC stid quived by quivocal, r	a) (SP142) IHC (SP142) IHC (IC HC HC al tissue specimens specimen)) MIB-1) IHC IHC IHC e) y guidetines) run HER2 by FISH) d A IHC		JNG           TC           N/A	CARCINOMA Watson Genomic from Quest, Core NGS* PD-L1 (22C3) IHC (Keytruda) PD-L1 (SP142) IHC (IEcentriq) ALK (for lung ca) IH ALK (for lung ca) IH ALK (for lung ca) IH ALK (for lung ca) IH ALK (by FISH) ALK by FISH MET by FISH RET by FISH RET by FISH EGFR PCR (if nega negative, run ROS1 EGFR PCR (if nega negative, run ROS1 EGFR PCR (if nega negative, run ROS1 PD-L1 (22C3) IHC (if EGFR, ALK and ROS RC/GASTROESI PD-L1 (22C3) IHC (Keytruda) HER2 by IHC	G S C C C C C C C C C C C C C C C C C C	TC N/A N/A N/A N/A N/A N/A N/A N/A N/A JIN ALI JIN ALI	Oncomine D Test NGS PD-L1 (28-8; (Opdivo) PD-L1 (E1L3 (generic) ROS1 IHC ROS1 IHC ROS1 IHC ROS1 by FIS EGFR by PCF BRAF V600 b K FISH, K FISH, and if A K FISH, and if A K FISH, and If A K FISH, and If A L NEOPLAS PD-L1 (E1L3 (generic) RCS FISH)	) IHC IN) IHC + or ROS1 by H R and RET FISH AND ROS1 FISH and RET FISH BNS	<u>zaada o zada ta ata ta ta alaban</u> z	NCH           TC           N/A	MLH1 I MSH6 I MMR IF MMR IF PMS2, ru MMR IF and PMS MMR IF and PMS MMR IF and PMS MMR IF and PMS MMR IF and PMS MMR IF and PMS Specime specime specime specime specime specime SPAC V NOMA PD-L1 ( (Keytru PD-L1 ( (Keytru PD-L1 ( KEAS F NAS N NAS N KIT (c-F R PREG	rp)/TC=Tee ROME & HC HC HC panel ( HC	COLC G G MLH1 colon; Oo by F endon 1 prom 1 prom 1 prom on ana ss separate NRAS P A-app NRAS SR A-app R HC (ge elanoi analys ion an	N/A N/A N/A N/A N/A N/A N/A N/A	CAR MS PM SH2, there iial) (if meth oss of BRAF s *) ic ed) b AS ex ed) b AS ex ed) b cos ic (FDA	CINOM SH2 IHC IS2 IHC MSH6, F is loss of f there is ylation ar MLH1 an MLH1 an MLH1 an y PCR ons 3, 4 a y PCR (iff -L1 (28- odivo) approv	PMS2) MLH1 and loss of MLH1 halysis *) nd PMS2, re, run MLH1 mal tissue r the normal ind NRAS f negative, 8) IHC red) by PCR
IMMUNOTHERAP         G TC         PD-L1 (2CC3         MLH1 IHC         MMR IHC pa         MMR IHC pa         MMR IHC pa         MMR IHC pa         PMS2)         N/A         BREAST CARCINO         G         C         P53 IHC         Basal-like b         N/A ER IHC (if neg         N/A HER2 IHC (if neg         N/A HER2 IHC (if neg         N/A HER2 FISH (         N/A PD-L1 (SP14         AMYLOID TYPE AI         Congo Red         Amyloid P IH         Lambda IHC         Amyloid t pus	Y BIOMA G ) IHC C N) nel 2, ires separate d is acceptab MA G G ires separate d is acceptab MA C P equivocal, r include you run HER2 IH 2 IHC (if HER 2) IHC (Te MALYSIS C C C C C C C C C C C C C	RKEF TC N/A N/A N/A U U U U U U U U U U U U U U U U U U U	PD-L1 ( (Opdivc) PD-L1 ( (Tecent MSH2 I PMS2 I MSH6 I and normal PR IHC Ki-67 (I IPP4B) I (R2 FISH) 2 IHC stid quivocal, r iq) Amyloii Kappa Transth	a) (SP142) IHC (SP142) IHC (SP142) IHC (SP142) IHC (SP142) IHC (HC (HC (HC (SP142) IHC (HC (SP142) IHC (SP142)		JNG           TC           N/A           N/A	CARCINOMA Watson Genomic from Quest, Core NGS* PD-L1 (22C3) IHC (Keytruda) PD-L1 (SP142) IHC (Iecentriq) ALK (for lung ca) IH ALK (by FISH MET by FISH MET by FISH RET by FISH EGFR PCR (if negat negative, run ROS1 EGFR PCR (if negat ROS1 FISH; and If RO EGFR PCR (if negat ROS1 FISH; and If RO EGFR PCR (if negat ROS1 FISH; and If RO EGFR PCR (if negat ROS1 FISH; and If RO EGFR, ALK and ROS PD-L1 (22C3) IHC, (if EGFR, ALK and ROS PD-L1 (22C3) IHC (Keytruda) HER2 by IHC	G S S C C C C C C C C C C C C C C C C C	TC N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	Oncomine D: Test NGS PD-L1 (28-8) (Opdivo) PD-L1 (E1L3 (generic) ROS1 IHC ROS1 IHC ROS1 IHC (if equivocal, run FISH) ROS1 by FIS EGFR by PCF BRAF V600 t K FISH, and if A SH; if ALK is nege e,run MET FISH: ALK FISH, and if A SH; if ALK is nege e,run MET FISH: ALK FISH, and if A C, run MET FISH: C, run MET	) IHC IN) IHC + or ROS1 by H R Dy PCR LK is gative, run and RET FISH) LK is SH) ROS1 FISH and RET FISH) SMS N) IHC	$\frac{1}{2} \frac{1}{2} \frac{1}$	NCH           I           N/A           N/A	I SYND MLH1 I MSR II MMR II MMR II PMS2, rr MMR II PMS2, rr MM	rp)/TC=Ter ROME & ROME & HC HC HC C panel ( HC panel ( HC panel ( HC panel ( HC panel ( F V600 by Fr remethylati PCR (require remethylati PCR (remethylati PCR (remethy	COLC G G MLH1 Ccolon, 00 by F endon 1 prom Frifthere CCR, an on ana eral blo NRAS A-app NRAS R C L C C C C R C C C C C C C C C C C C	N// N// N// N// N// N// N// N//	CAR MS PM SH2, there ial) (i meth poss of of s acce ed) b AS ex ed) b AS ex ed) b (Op (Op (C) (FDA	CINOM H2 IHC IS2 IHC MSH6, F is loss of f there is ylation ar MLH1 an s negativ r and nor ptable fo y PCR ons 3, 4 a y PCR (iff -L1 (28- odivo) -L1 (28- odivo) -CAPPOR -CAPOR -CAPPOR -CAPOR -CAPPOR -CAPOR -CAPOR -CAPOR -	PMS2) MLH1 and loss of MLH1 nalysis *) nd PMS2, re, run MLH1 rmal tissue r the normal and NRAS f negative, 8) IHC red) by PCR
IMMUNOTHERAP         G       TC         Q       TC         PD-L1 (2CC3         (Keytruda)         PD-L1 (E1L3         IHC (generic         MLH1 IHC         MKR IHC pa         MKH6, and         PMS2)         N/A         MSIPCR (requiption)         BREAST CARCINO         G         TC         BREAST CARCINO         G         MAR IHC (if neg         N/A         Basal-like b         N/A HER2 IHC         Basal-like b         N/A HER2 FISH (         N/A HER2 FISH (         N/A PD-L1 (SP14         AMYLOID TYPE AI         Congo Red         Amyloid PIH         Lambda IHC         N/A         N/A         N/A	Y BIOMA G ) IHC C N) C res separate d is acceptab MA G C C C C C C C C C C C C C	RKEF TC N/A N/A N/A N/A U U U U U U U U U U U U U U U U U U U	PD-L1 ( (Opdivc) PD-L1 ( (Tecent MSH2 I PMS2 I MSH6 I and normal PR IHC Ki-67 (I IPP4B) I ) R2 FISH) 2 IHC slid squired by quivecal, r iq) Amyloi Kappa Transtr I (congo a, and tr	a) (SP142) IHC (SP142) IHC (SP142) IHC (SP142) IHC (IHC (IHC (IHC (IHC (IHC)		JNG           TC           N/A	CARCINOMA Watson Genomic from Quest, Core NGS* PD-L1 (22C3) IHC (Keytruda) PD-L1 (SP142) IHC (Ifecentriq) ALK (for lung ca) IHC (Ife or lung ca) IHC (If roug ca) MET by FISH MET by FISH MET by FISH RET by FISH CGFR PCR (If negative, run ROS1 EGFR PCR (If negative, run ROS1 FD-L1 (22C3) IHC, (If EGFR.ALK and ROS1 REC/GASTROESC PD-L1 (22C3) IHC (Keytruda) HER2 FISH (inclu HER2 FISH (inclu HER2 FISH (inclu	G S S C C C C C C C C C C C C C C C C C	TC N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	Oncomine D Test NGS PD-L1 (28-8; (Opdivo) PD-L1 (28-8; (Condivo) PD-L1 (28-8; (Condivo) ROS1 IHC (If equivocal, run FISH) ROS1 by FIS EGFR by PCF BRAF V600 b K FISH, and IFA SHSH; If ALK is nege e, run MET FISH, ALK FISH, and IFA FISH and RET FISH. ALK FISH; and IFA FISH and RET FISH. ALK FISH; and IFA SH AN RET FISH. ALK FISH; and IFA FISH AN RET FISH. ALK FISH; and IFA SH AN RET FISH. ALK FISH; and IFA SH AN RET FISH. ALK FISH; and IFA SH AN RET FISH. ALK FISH; AN RET FISH. ALK FISH. AL	) IHC IN) IHC + or ROS1 by H R Dy PCR LK is gative, run and RET FISH) LK is SH) ROS1 FISH and RET FISH) SMS N) IHC		NCH           I           N/A	MLH11 MSH61 MMR1H MMR1H PMS2, rc MMR1H PMS2, rc MMR1H PSPC Extend exons 2, KRAS E Extend exons 2, KRAS E Extend exons 2, KRAS E Extend exons 2, KRAS E EXtend (Keytru PD-L1 ( BRAF V NRAS M NOMA PD-L1 ( BRAF V NRAS M NCH PD-L1 ( BRAF V NRAS M CEP17 p57 by I	rp)/TC=Ter ROME & ROME & HC HC HC C panel ( HC panel ( HC panel ( HC panel ( HC panel ( F V600 by Fr remethylati PCR (require remethylati PCR (remethylati PCR (remethy	COLC G G MLH1 Ccolon, 00 by F endon 1 prom Frifthere CCR, an on ana eral blo NRAS A-app NRAS R 	N// N// N// N// N// N// N// N//	CAR MS PM SH2, there ial) (i meth poss of of s acce ed) b AS ex ed) b AS ex ed) b (Op (Op (C) (FDA	CINOM H2 IHC IS2 IHC MSH6, F is loss of f there is ylation ar MLH1 an s negativ r and nor ptable fo y PCR ons 3, 4 a y PCR (iff -L1 (28- odivo) -L1 (28- odivo) -CAPPOR -CAPOR -CAPPOR -CAPOR -CAPPOR -CAPOR -CAPOR -CAPOR -	PMS2) MLH1 and loss of MLH1 halysis *) nd PMS2, re, run MLH1 mal tissue r the normal ind NRAS f negative, 8) IHC red) by PCR
IMMUNOTHERAP         G       TC         Q       PD-L1 (2CC3)         N/A       PD-L1 (2CC3)         PD-L1 (2CC3)       PD-L1 (2CC3)         PD-L1 (E1L3)       IHC (generic         MLH1 IHC       MLH1, MSH         MKRIHC pag       (MLH1, MSH         MSI PCR (requiper in the state of the s	Y BIOMA G ) IHC C N) nel 2, irres separate d is acceptab MA G c reast (nes gative, run P equivocal, r include you run HER2 II- 21 HC (Te VALYSIS 21 HC (Te C C C C C C C C C C C C C	RKEF TC N/A N/A N/A U U U U U U U U U U U U U U U U U U U	PD-L1 ( (Opdivc) PD-L1 ( (Tecent MSH2 I PMS2 I MSH6 I and normal PR IHC Ki-67 (I IPP4B) I R2 FISH) 2 IHC slid gquired by quivocal, r iq) Amyloin Kappa Transttr I (congo a, and tr w/o cora, a, lambd	a) (SP142) IHC (SP142) IHC (SP142) IHC (SP142) IHC (SP142) IHC (HC (IHC (IHC (IHC)	<b>1</b> 9 0 10 10 10 10 10 10 10 10 10 <b>6</b> 90 00000	ING           TC           N/A	CARCINOMA Watson Genomic from Quest, Core NGS* PD-L1 (22C3) IHC (Keytruda) PD-L1 (SP142) IHC (Ifecentriq) ALK (for lung ca) IH ALK (for lung ca) IHC (if + or equivocal, run ALK by FISH MET by FISH MET by FISH RET by FISH RET by FISH RET by FISH RET by FISH EGFR PCR (if negation of the	G S S C C C C C C C C C C C C C C C C C	TC N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	Oncomine D Test NGS PD-L1 (28-8; (Opdivo) PD-L1 (28-8; (Condivo) PD-L1 (28-8; (Condivo) ROS1 IHC (If equivocal, run FISH) ROS1 by FIS EGFR by PCF BRAF V600 b K FISH, and IFA SHSH; If ALK is nege e, run MET FISH, ALK FISH, and IFA FISH and RET FISH. ALK FISH; and IFA FISH and RET FISH. ALK FISH; and IFA SH AN RET FISH. ALK FISH; and IFA FISH AN RET FISH. ALK FISH; and IFA SH AN RET FISH. ALK FISH; and IFA SH AN RET FISH. ALK FISH; and IFA SH AN RET FISH. ALK FISH; AN RET FISH. ALK FISH. AL	) IHC IN) IHC + or ROS1 by H R Dy PCR LK is gative, run and RET FISH) LK is SH) ROS1 FISH and RET FISH) SMS N) IHC		NCH           I           N/A           N/A	MLH11 MSH61 MMR1H MMR1H PMS2, rc MMR1H PMS2, rc MMR1H PSPC Extend exons 2, KRAS E Extend exons 2, KRAS E Extend exons 2, KRAS E Extend exons 2, KRAS E EXtend (Keytru PD-L1 ( BRAF V NRAS M NOMA PD-L1 ( BRAF V NRAS M NCH PD-L1 ( BRAF V NRAS M CEP17 p57 by I	rp)/TC=Ter ROME & ROME & HC HC HC C panel ( HC panel ( HC panel ( HC panel ( HC panel ( F V600 by Fr remethylati PCR (require remethylati PCR (remethylati PCR (remethy	COLC G G MLH1 Ccolon, 00 by F endon 1 prom Frifthere CCR, an on ana eral blo NRAS A-app NRAS R 	N// N// N// N// N// N// N// N//	CAR MS PM SH2, there ial) (i meth poss of of s acce ed) b AS ex ed) b AS ex ed) b (Op (Op (C) (FDA	CINOM H2 IHC IS2 IHC MSH6, F is loss of f there is ylation ar MLH1 an s negativ r and nor ptable fo y PCR ons 3, 4 a y PCR (iff -L1 (28- odivo) -L1 (28- odivo) -CAPPOR -CAPOR -CAPPOR -CAPOR -CAPPOR -CAPOR -CAPOR -CAPOR -	PMS2) MLH1 and loss of MLH1 nalysis *) nd PMS2, re, run MLH1 rmal tissue r the normal and NRAS f negative, 8) IHC red) by PCR
IMMUNOTHERAP         G       TC         Q       PD-L1 (2CC3         N/A       PD-L1 (2CC3         PD-L1 (2CC3       PD-L1 (2CC3         PD-L1 (E1L3       IHC (generic         IHC (generic       MLH1 IHC         MKRIHC pa       (MLH1, MSH         MSI PCR (requiper in the state of the stat	Y BIOMA G ) IHC C N) nel 2, irres separate d is acceptab MA G C C C C C C C C C C C C C	RKEF TC N/A N/A N/A U U U U U U U U U U U U U U U U U U U	PD-L1 ( (Opdivc) PD-L1 ( (Tecent MSH2 I PMS2 I MSH6 I and normal PR IHC Ki-67 (I IPP4B) I R2 FISH) 2 IHC slid gquired by quivocal, r iq) Amyloin Kappa Transttr I (congo a, and tr w/o cora, a, lambd	a) (SP142) IHC (SP142) IHC (SP142) IHC (SP142) IHC (SP142) IHC (HC (IHC (IHC (IHC)	<u> </u>	JNG           TC           N/A	CARCINOMA Watson Genomic from Quest, Core NGS* PD-L1 (22C3) IHC (Keytruda) PD-L1 (SP142) IHC (Tecentriq) ALK (for lung ca) IH ALK (for lung ca) IH C (fer long ca) IH MET by FISH MET by FISH EGFR PCR (if nega negative, run ROS1 EGFR PCR (if nega negative, run ROS1 ID-L1 (22C3) IHC, (Keytruda) HER2 by IHC HER2 FISH (netu) HER2 FISH (perfor KIT (c-KIT) mutai PDGFRa mutatio NANT GLIOMA: IDH1 by IHC	G G C C C C C C C C C C C C C	TC N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	Oncomine D Test NGS PD-L1 (28-8; (Opdivo) PD-L1 (28-8; (Condivo) PD-L1 (28-8; (Condivo) ROS1 IHC (If equivocal, run FISH) ROS1 by FIS EGFR by PCF BRAF V600 b K FISH, and IFA SHSH; If ALK is nege e, run MET FISH, ALK FISH, and IFA FISH and RET FISH. ALK FISH; and IFA FISH and RET FISH. ALK FISH; and IFA SH AN RET FISH. ALK FISH; and IFA FISH AN RET FISH. ALK FISH; and IFA SH AN RET FISH. ALK FISH; and IFA SH AN RET FISH. ALK FISH; and IFA SH AN RET FISH. ALK FISH; AN RET FISH. ALK FISH. AL	) IHC IN) IHC + or ROS1 by H R Dy PCR LK is gative, run and RET FISH) LK is SH) ROS1 FISH and RET FISH) SMS N) IHC		NCH           I           N/A	MLH11 MSH61 MMR1H MMR1H PMS2, rc MMR1H PMS2, rc MMR1H PSPC Extend exons 2, KRAS E Extend exons 2, KRAS E Extend exons 2, KRAS E Extend exons 2, KRAS E EXtend (Keytru PD-L1 ( BRAF V NRAS M NOMA PD-L1 ( BRAF V NRAS M NCH PD-L1 ( BRAF V NRAS M CEP17 p57 by I	rp)/TC=Ter ROME & ROME & HC HC HC C panel ( HC panel ( HC panel ( HC panel ( HC panel ( F V600 by Fr remethylati PCR (require remethylati PCR (remethylati PCR (remethy	COLC G G MLH1 Ccolon, 00 by F endon 1 prom Frifthere CCR, an on ana eral blo NRAS A-app NRAS R 	N// N// N// N// N// N// N// N//	CAR MS PM SH2, there ial) (i meth poss of of s acce ed) b AS ex ed) b AS ex ed) b (Op (Op (C) (FDA	CINOM H2 IHC IS2 IHC MSH6, F is loss of f there is ylation ar MLH1 an s negativ r and nor ptable fo y PCR ons 3, 4 a y PCR (iff -L1 (28- odivo) -L1 (28- odivo) -CAPPOR -CAPOR -CAPPOR -CAPOR -CAPPOR -CAPOR -CAPOR -CAPOR -	PMS2) MLH1 and loss of MLH1 nalysis *) nd PMS2, re, run MLH1 rmal tissue r the normal and NRAS f negative, 8) IHC red) by PCR
IMMUNOTHERAP         G       TC         Q       PD-L1 (2CC3)         N/A       PD-L1 (2CC3)         PD-L1 (2CC3)       PD-L1 (2CC3)         PD-L1 (E1L3)       IHC (generic         MLH1 IHC       MLH1, MSH         MKRIHC pag       (MLH1, MSH         MSI PCR (requiper in the state of the s	Y BIOMA G ) IHC C N) nel 2, irres separate d is acceptab MA G C C C C C C C C C C C C C	RKEF TC N/A N/A N/A U U U U U U U U U U U U U U U U U U U	PD-L1 ( (Opdivc) PD-L1 ( (Tecent MSH2 I PMS2 I MSH6 I and normal PR IHC Ki-67 (I IPP4B) I R2 FISH) 2 IHC slid gquired by quivocal, r iq) Amyloin Kappa Transttr I (congo a, and tr w/o cora, a, lambd	a) (SP142) IHC (SP142) IHC (SP142) IHC (SP142) IHC (SP142) IHC (HC (IHC (IHC (IHC)	<u> </u>	ING TC N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	CARCINOMA Watson Genomic from Quest, Core NGS* PD-L1 (22C3) IHC (Keytruda) PD-L1 (SP142) IHC (Tecentriq) ALK (for lung ca) IH ALK (for lung ca) IH C (ff + or equivocal, run ALK by FISH MET by FISH RET by FISH RET by FISH RET by FISH EGFR PCR (if negat ROS1 FISH: and if ROS EGFR PCR (if negat ROS1 FISH: and if ROS EGFR PCR (if negat ROS1 FISH: and if ROS EGFR PCR (if negat ROS1 FISH: and right) HER2 by IHC HER2 IHC (if equit) HER2 FISH (inclu HER2 FISH (inclu HER2 FISH (inclu MET C-KIT) mutatio NANT GLIOMA	G	TC N/A	Oncomine D Test NGS PD-L1 (28-8; (Opdivo) PD-L1 (E1L3; (generic) ROS1 IHC ROS1 IHC ROS1 IHC ROS1 IHC ROS1 by FIS EGFR by PCF BRAF V600 b K FISH) K FISH, and if A SH; if ALK is nege e, run MET FISH: K FISH, and if A SH; if ALK is nege e, run MET FISH: AL NEOPLAS (generic) PD-L1 (E1L3) (generic) ER2 FISH) slide) C if required by sis* (GIST)	) IHC IN) IHC + or ROS1 by H R Dy PCR LK is gative, run and RET FISH) LK is SH) ROS1 FISH and RET FISH) SMS N) IHC		NCH           I           N/A	MLH11 MSH61 MMR1H MMR1H PMS2, rc MMR1H PMS2, rc MMR1H PSPC Extend exons 2, KRAS E Extend exons 2, KRAS E Extend exons 2, KRAS E Extend exons 2, KRAS E EXtend (Keytru PD-L1 ( BRAF V NRAS M NOMA PD-L1 ( BRAF V NRAS M NCH PD-L1 ( BRAF V NRAS M CEP17 p57 by I	rp)/TC=Ter ROME & ROME & HC HC HC C panel ( HC panel ( HC panel ( HC panel ( HC panel ( F V600 by Fr remethylati PCR (require remethylati PCR (remethylati PCR (remethy	COLC G G MLH1 Ccolon, 00 by F endon 1 prom Frifthere CCR, an on ana eral blo NRAS A-app NRAS R 	N// N// N// N// N// N// N// N//	CAR MS PM SH2, there ial) (i meth poss of of s acce ed) b AS ex ed) b AS ex ed) b (Op (Op (C) (FDA	CINOM H2 IHC IS2 IHC MSH6, F is loss of f there is ylation ar MLH1 an s negativ r and nor ptable fo y PCR ons 3, 4 a y PCR (iff -L1 (28- odivo) -L1 (28- odivo) -CAPPOR -CAPOR -CAPPOR -CAPOR -CAPPOR -CAPOR -CAPOR -CAPOR -	PMS2) MLH1 and loss of MLH1 nalysis *) nd PMS2, re, run MLH1 rmal tissue r the normal and NRAS f negative, 8) IHC red) by PCR
IMMUNOTHERAP'         G       TC         Q       TC         PD-L1 (2CC3         (Keytruda)         PD-L1 (E1L3         IHC (generic         MLH1 IHC         MKH6, and         PMS2)         N/A         MSIPCR (requipteral blood)         BREAST CARCINO         G         TC         BREAST CARCINO         G         MSIPCR (requipteral blood)         N/A         MSIPCR (requipteral blood)         BREAST CARCINO         G         TC         Basal-like bl         N/A         MA ER IHC (if neg         N/A HER2 IHC (if neg         N/A HER2 FISH (if         N/A HER2 FISH (if         N/A PD-L1 (SP14         AMYLOID TYPE AI         Congo Red         Amyloid Type         N/A         Amyloid Type         N/A         MANDIOI TYPE AI         N/A AMNUOID TYPE AI         MANDIOID TYPE AI         MANDIOID TYPE AI         MANDIOID TYPE         N/A AMNUOID TYPE         MANUOID TYPE         <	Y BIOMA G ) IHC C N) C res separate d is acceptab MA G C C C C C C C C C C C C C	RKEF TC N/A N/A N/A N/A N/A C C C C C C C C C C C C C C C C C C C	PD-L1 ( (Opdivc) PD-L1 ( (Tecent MSH2 I PMS2 I MSH6 I and normal PR IHC Ki-67 (I IPP4B) I R2 FISH) 2 IHC slid gquired by quivocal, r iq) Amyloi Kappa Transth I (congo a, and tr w/o cor a, lambd mrit you	a) (SP142) IHC (SP142) IHC (SP142) IHC (SP142) IHC (SP142) IHC (IHC (IHC (IHC (IHC)		ING TC N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	CARCINOMA Watson Genomic from Quest, Core NGS* PD-L1 (22C3) IHC (Keytruda) PD-L1 (SP142) IHC (Ifecentriq) ALK (for lung ca) IH ALK (for lung ca) IH ALK (for lung ca) IHC (If + or equivocal, run ALK by FISH MET by FISH MET by FISH RET by FISH RET by FISH EGFR PCR (if nega negative, run ROS1 EGFR PCR (if negative) HER2 FISH (inclu HER2 FISH (perfor KIT (c-KIT) mutative) DGFRa mutatio NANT GLIOMA IDH1 by IHC 1p/19q by FISH MGMT promoter idually (use "directed test	G S S C C C C C C C C C C C C C C C C C	TC N/A	Oncomine D Test NGS PD-L1 (28-8; (Opdivo) PD-L1 (28-8; (Generic) ROS1 IHC (if equivocal, run FISH) ROS1 by FIS EGFR by PCI BRAF V600 b K FISH, and if A iSH; if ALK is nege e, run MET FISH. ALK FISH, and if A iSH; if ALK is nege e, run MET FISH. ALK FISH, and if A iSH; and if A iSH and RET FI ALK FISH, and if A iSH and RET FISH. ALK FISH; (generic) ER2 FISH) side) C if required by sis* (GIST) ATRX by IHC on analysis * ite-in request if not	) IHC IN) IHC + or ROS1 by H R by PCR LK is sative, run and RET FISH) LK is SH) ROS1 FISH and RET FISH) SMS IN) IHC guidelines) listed);tests			MLH1 I MSH6 I MMR II- PMS2, ru MMR II- PMS2, ru MMR II- run BRA promote MMR II- run BRA promote KRAS E Extend exons 2, KRAS E Extend exons 2, KRAS E BRAF V NOMA PD-L1 ( (Keytru PD-L1 ( BRAF V NOMA PD-L1 ( BRAF V NOMA PD-L1 ( BRAF V NOMA PD-L1 ( CEP17 p57 by I	rp)/TC=Ter ROME & HC HC HC C panel ( HC panel (	COLC G G MLH1 Ccolon 00 by F endon 1 prom if therer CCR, anno cCR, anno S sepa aral blo A-appp NRAS A-app NRAS A-app NRAS CR C C C C C C C C C C C C C C C C C C	N// N// N// N// N// N// N// N//	CAR MS PN SH2, there iial) (i) mething soss of Des soss of Des sos of De	CINOM SH2 IHC IS2 IHC MSH6, F is loss of f there is ylation ar MSH6, F is loss of f there is ylation ar MLH1 an is negativ r and nor ptable fo y PCR ons 3, 4 a y PCR (if -L1 (28- odivo) approv 67 (MIB and CEF ordering th	PMS2) MLH1 and loss of MLH1 halysis *) id PMS2, re, run MLH1 mal tissue r the normal ind NRAS f negative, 
IMMUNOTHERAP         G       TC         Q       PD-L1 (2CC3         W/A       PD-L1 (2LC3         PD-L1 (E1L3       IHC (generic         WILH1 HIC       MLH1 HIC         MLH1 SHC       (MLH1, MSH         MSI PCR (requiperation)       PMS2)         N/A       MSI PCR (requiperation)         BREAST CARCINO       G         G       TC         D       ER IHC         D       P53 IHC         D       Basal-like bit         N/A       HER2 IHC (if neging)         N/A       HER2 FISH (if neging)         N/A       HEAD & NC         MYLOID TYPE AI         D       Congo Red         N/A       Amyloid type         N/A       Amyloid type         N/A       Amyloid type         N/A       NECK CAI         D	Y BIOMA G ) IHC C N) nel 2, ires separate d is acceptab MA G C C C C C C C C C C C C C	RKEF TC N/A N/A N/A Lumor i le for th TC Lumor i le for th TC C if re tr HER2 IC if re tr HER2 IC if re tr HER2 IC if re the south of the south of t	PD-L1 ( (Opdivc) PD-L1 ( (Tecent MSH2 I PMS2 I MSH6 I and normal PR IHC Ki-67 (I IPP4B) I R2 FISH) 2 IHC slid gquired by quivocal, r iq) Amyloi Kappa Transth I (congo a, and tr w/o cor a, lambd mrit you	a) (SP142) IHC (SP142) IHC (SP142) IHC (SP142) IHC (IHC al tissue specimens specimen)) (IHC (IHC (IHC (IHC) (		ING TC N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	CARCINOMA Watson Genomic from Quest, Core NGS* PD-L1 (22C3) IHC (Keytruda) PD-L1 (SP142) IHC (Tecentriq) ALK (for lung ca) IH ALK (for lung ca) IH C (ff e Jor FISH) MET by FISH MET by FISH EGFR PCR (if nega negative, run ROS1 EGFR PCR (if negating ROS1 FISH; and if RO EGFR PCR (if negating ROS1 FISH; and if RO EGFR PCR (if negating ROS1 FISH; and IF ROS1 FD-L1 (22C3) IHC (Keytruda) HER2 by IHC HER2 FISH (inclu HER2 FISH (inclu	G S S C C C C C C C C C C C C C C C C C	TC N/A	Oncomine D Test NGS PD-L1 (28-8; (Opdivo) PD-L1 (28-8; (Generic) ROS1 IHC (if equivocal, run FISH) ROS1 by FIS EGFR by PCI BRAF V600 b K FISH, and if A iSH; if ALK is nege e, run MET FISH ALK FISH, and if A iSH; if ALK is nege e, run MET FISH ALK FISH, and if A iSH; if ALK is nege e, run MET FISH ALK FISH, and if A iSH and RET FI ALK FISH, and if A iSH and RET FISH alk FISH, and if A iSH and RET FISH alk (generic) ER2 FISH) slide) C if required by sis* (GIST) ATRX by IHC on analysis * ite-in request if not .927.4386 for more	) IHC IN) IHC + or ROS1 by H R by PCR LK is gative, run and RET FISH) LK is SH) ROS1 FISH and RET FISH) SMS N) IHC guidelines) listed); tests information.		NCH TC N/A N/A N/A N/A N/A N/A N/A N/A	MLH1 I MSR6 I MMR II- MMR II- MMR II- PMS2, rr MMR II- run BRAI promote MSI by P specime KRAS E Extend Extend Extend Extend Extend EXTEND FD-L1 ( (Keytru PD-L1 ( KRAS r NRAS r KIT (c-H R PD-L1 ( Keytru PD-L1 ( ST by CEP17 p57 by I	rp)/TC=Ter ROME & HC HC HC panel ( HC panel ( HC panel ( HC panel ( HC panel ( HC panel ( Car run MLH HC panel ( Strong L pane	COLC G G MLH1 colon, Oo by F endon 1 prome if there CR, an oon ana ass sepa aral blo A-appc NRAS CR 	N/Z N/Z N/Z N/Z N/Z N/Z N/Z N/Z	CAR MS PM SH2, there ial) (if methoss of BRAF s, *) tumcethoss of BRAF s, *) tumcethoss of sacce ed) b AS ex ed) b AS ex ed) b Ki- ic) ((FDA sis*	CINOM SH2 IHC IS2 IHC MSH6, F is loss of f there is ylation ar MSH6, F is loss of f there is ylation ar MLH1 an is negativ r and nor ptable fo y PCR ons 3, 4 a y PCR (if -L1 (28- odivo) approv 67 (MIB and CEF ordering th	PMS2) MLH1 and loss of MLH1 halysis *) id PMS2, re, run MLH1 mal tissue r the normal ind NRAS f negative, 

## By submitting a specimen with this requisition form, you agree:

- 1) The information provided on this form and accompanying paperwork is complete and accurate.
- 2) If the information is not accurate, and PhenoPath cannot obtain reimbursement for services that have been requested and provided, Client agrees to accept financial responsibility.
- 3) If the test order is ambiguous, PhenoPath may contact client to determine intent. Testing may be delayed.
- Requests for testing PhenoPath does NOT perform (for current test menu, consult PhenoPath's website www.phenopath.com or contact Client Services at 1.206.374.9000, or Toll-free at 1.888.92.PHENO (1.888.927.4366):
  - a) PhenoPath may forward specimens to an alternate facility for testing it does not perform, upon authorization by Client.
  - b) PhenoPath will manage return of applicable specimen to Client.
  - c) By signing the authorization form, Client agrees to pay for authorized services that are not paid for by a third party. PhenoPath can only bill for professional services provided by PhenoPath.

**ICD-10** – All providers, laboratories, institutions, hospitals, and other providers ordering laboratory testing to be performed by PhenoPath Laboratories must provide all clinically relevant ICD-10-CM diagnosis codes for all testing submitted.

**Direct Bill Law** – Washington is a "direct-bill" state for anatomic pathology services (http://apps.leg.wa.gov/rcw/default.aspx?cite=48.43.081, RCW 48.43.081). This means that for specimens originating in the State of Washington, PhenoPath can only send a bill to the entity that ordered the services (or to the patient or their insurance).

**MEDICARE COVERAGE DETERMINATIONS** – PhenoPath is a Medicare participating provider, and is subject to the local coverage determinations (LCD) of the Medicare Administrative Contractor (MAC) for Jurisdiction F, Noridian Healthcare Solutions, Contractor No. 02402. Additional information can be obtained online at: https://www.noridianmedicare.com/partb/coverage/active.html.

**MEDICARE MEDICAL NECESSITY REQUIREMENTS** – When ordering laboratory tests that are billed to Medicare/Medicaid or other federally funded programs, the following requirements may apply:

- 1) Only tests that are medically necessary for the diagnosis or treatment of the patient should be ordered. Medicare does not pay for screening tests, except for certain specifically approved procedures, and may not pay for non-FDA-approved tests or tests considered experimental.
- 2) If there is reason to believe that Medicare will not pay for a test, the patient should be informed, and asked to sign an Advanced Beneficiary Notice (ABN) to indicate whether he/she accepts responsibility for the cost of the test if Medicare denies payment.
- 3) The ordering physician must provide all clinically relevant ICD-10 diagnosis codes, not a narrative description, in order to support the medical necessity of each test ordered. Providing ICD-10 codes on the Requisition will avoid unnecessary phone calls to physician and client offices as well as delays in service to patients to obtain medical necessity documentation. PhenoPath may contact Client to obtain diagnosis information for reasons including, but not limited to the following:
  - A diagnosis code is not provided.
  - The provided diagnosis appears inconsistent with the patient's demographic, the patient's medical condition or the testing services being ordered.
  - The provided diagnosis does not meet the coverage criteria as supporting medical necessity for testing services covered by a Medicare LCD.
- 4) Organ- or disease-oriented panels should be billed to Medicare only when every component of the panel is medically necessary. The OIG takes the position that a physician who orders medically unnecessary tests for which Medicare reimbursement is claimed may be subject to civil penalties. PhenoPath- and client-customized panels should be billed to Medicare only when every component of the customized panel is medically necessary. PhenoPath offers groups of tests based on accepted clinical practice.

Advanced Beneficiary Notice ("ABN") – An ABN, Form CMS-R-131, is a standardized notice you must issue to a Medicare beneficiary before providing certain Medicare Part B (outpatient) or Part A (limited to hospice, home health agencies [HHAs], and Religious Nonmedical Healthcare Institutions only) items or services. You must issue the ABN when:

- You believe Medicare may not pay for an item or service;
- Medicare usually covers the item or service; and
- Medicare may not consider the item or service medically reasonable and necessary for this patient in this particular instance. You should only provide ABNs to beneficiaries enrolled in original (fee-for-service) Medicare. ABNs allow beneficiaries to make informed decisions about whether to get services and accept financial responsibility for those services if Medicare does not pay. The ABN serves as proof the beneficiary knew prior to getting the service that Medicare might not pay. If you do not issue a valid ABN to the beneficiary when Medicare requires it, you cannot bill the beneficiary for the service, and you may be financially liable if Medicare doesn't pay. You may also use the ABN as an optional (voluntary) notice to alert beneficiaries of their financial liability prior to providing care that Medicare never covers. ABN issuance is not required to bill a beneficiary for an item or service that is not a Medicare benefit and never covered.
- If you order a test that does not meet Medicare's medical necessity guidelines, it is important that you complete an ABN and have it signed by the patient at the time of service. This will allow you and PhenoPath to bill the patient for the services provided if Medicare does not reimburse us for the test(s) and if the patient has accepted the financial responsibility. Medicare defines medical necessity as services that are: reasonable and necessary, for the diagnosis or treatment of an illness or injury or to improve the functioning of a malformed body member, and not excluded under another provision of the Medicare Program. All services reported to the Medicare Program by healthcare professionals must demonstrate medical necessity through the use of International Classification of Diseases, 10th Revision, Clinical Modification (ICD-10-CM) diagnostic coding carried to the highest level of specificity for the date of service.

Physician Clinical Consultant: PhenoPath's pathologists are available to discuss appropriate testing and test ordering with ordering physicians.

