Path to Precision: My CANcer Code

For questions or more information about the program, please email:
Kalpita Reddiar: kalpita.reddiar@oncohelix.org or call +1 403 210 6974

To reach the Pancreatic Cancer North America team, please email:
Ayelet Borgida: aborgida@pancreaticcancerna.org

Path to Precision: My CANcer Code
Building the Foundation to Precision Care in Pancreatic Cancer

Pancreatic Cancer patients do not have the time to wait, yet many begin treatment without the critical information needed to understand their tumour or the therapies likely to extend their life. Pancreatic cancer is one of the deadliest cancers in Canada:

- Nearly 70% will not survive the first year after diagnosis
- Only 10% live longer than five years
- It has one of the lowest survival rates of all major cancers

Path to Precision: My CANcer Code, led by **Pancreatic Cancer North America (PCNA)** in partnership with **OncoHelix**, a Canadian leader in genomic diagnostics, is designed to change this reality, delivering comprehensive biomarker and genomic testing that decodes a patient's tumour and provides a clear roadmap for more precise and timely care.

Path to Precision: My CANcer Code launches May 1st, 2026 and is accessible to all pancreatic cancer patients across provinces.

Testing Offered

- **OncoHelix-3** 523 gene CGP Panel (Tissue-Based Testing)
- **OncoHelix-4** 146 gene ctDNA Panel (Liquid Biopsy – cfDNA)

Note: OncoHelix-3 & OncoHelix-4 cannot be ordered together.

Please note: If patients are initially enrolled for OncoHelix-3 (tissue testing) and the tissue fails quality control:

- An alternate tissue block will be requested (if available)
- If unavailable, testing will automatically transition to OncoHelix-4 (cfDNA)

Eligibility Criteria

- Age ≥18 years and confirmed pancreatic cancer diagnosis
- Registration with PCNA (PCNA will contact patients upon receipt of a completed requisition)

Additional Considerations:

- If patient has had prior NGS/ctDNA testing (U.S. commercial or Canadian public labs), the request will be reviewed on a case-by-case basis
- Previous reports must be submitted with the requisition

Please choose OncoHelix-4 if:

- Prior tumour tissue failed NGS testing (insufficient quantity/quality)
- Patient cannot tolerate an additional biopsy, or there is no viable tumour tissue available
- Rapid disease progression (biochemically or radiographically confirmed) where waiting is not feasible

Patient Registration Requirements

- First Name and Last Name
- Phone Number
- Email Address
- City and Province
- Clinical rationale: How will results impact patient management?
- Patient consent

PATIENT WILL NOT BE ELIGIBLE FOR TESTING IF THE ABOVE INFORMATION IS NOT PROVIDED

Please send the completed requisition and sample to:
Attn: Dr. Faisal Khan
Hematology Translational Lab (HTL)
HMRB 380, 3330 Hospital Drive NW
Calgary, AB, Canada T2N 4N1
Report is sent within 3 weeks of sample receipt.

Sample Requirements (Please see TRF for complete guidelines)

OncoHelix-3:

- Extracted nucleic acids and fresh frozen (FF) or formalin fixed paraffin embedded (FFPE) tissue samples are accepted. 1 H&E Slide must be sent along with the sample.

OncoHelix-4:

- 1 (full 10mL) STRECK blood tube. Extracted cfDNA from plasma is also accepted but must be accompanied by genomic DNA for paired testing.

Collection kits for OncoHelix-4 testing are available. Please ensure that physicians have kits available on hand to provide to patients at the time of consultation.

REQUISITION MUST BE ACCOMPANIED WITH A SAMPLE TO INITIATE TESTING.

PANCREATIC CANCER NORTH AMERICA

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Path to Precision: My CANcer Code

PLEASE FILL REQUISITION ELECTRONICALLY

Contact Us

HMRB 386, 3330 Hospital Dr. NW Calgary AB T2N 4N1

Phone: +1 (403) 210 6974 **Fax**: +1 (403) 210 8176

Email: precision.diagnostics@oncohelix.org

PATIENT INFORMATION

Name (Last, First Middle): .....

Medical Record #: ..... Date of Birth (dd-mm-yy):.....

Insurance Provider: (If Any).....

Sex Assigned At Birth: ◯ Male ◯ Female Gender: .....

Phone & Email:

City: ..... Province/State: .....

ORDER INFORMATION

Requesting Physician: ..... Location/Facility: .....

Address: ..... City: ..... Province/State: ..... Country: ..... Postal/Zip Code: .....

Phone: ..... Fax: ..... Email: .....

Secondary Contact (office assissant/nurse) Phone: ..... Email: .....

DIAGNOSIS & ELIGIBILITY

Diagnosis (from path report): .....

Patient 18 years or older? ◯ Yes ◯ No

Cancer Status: Metastatic? ◯ Yes ◯ No

Note: Patients located in New Brunswick will be contacted by PCNA to verify and confirm their eligibility for testing

Has had any previous molecular testing?

◯ Yes ◯ No (If yes, a copy of the report is required)

Other Details: *(ie known genomic variants)*

How will this test result potentially impact patient management? (select all that apply):

- ☐ A. Treatment Decision Making
- ☐ B. Familial Testing (if germline alteration positive)
- ☐ C. Prognostication
- ☐ D. Referral to Another Specialist (Specify) .....
- ☐ E. Trial Participation (Specify) .....
- ☐ F. All of the Above (A-E)
- ☐ G. Other (Specify) .....

NEXT GENERATION SEQUENCING - COMPREHENSIVE GENOMIC PANELS

☐ **OncoHelix-3** **523 gene CGP Panel**	CGP Assay uses the **Illumina TSO-500 Panel** **see pg.3 for details*	SNVs & Indels: 523 cancer-related genes Fusions: 55 genes; CNV: 514 targets MSI, TMB and HRD
☐ **OncoHelix-4** **146 gene ctDNA Panel**	CGP Assay uses the **MSK-ACCESS® ctDNA Panel** and Analysis. **see pg.4 for details*	SNVs & Indels: 146 cancer-related genes Fusions: 10 genes CNV: 38 targets

SAMPLE ACQUISTION

OncoHelix-3

Please send requisition to specimen holding facility to ensure that block/slides accompany requisition when sent to the lab.
A pathology report for this specimen must also be sent to the lab with the specimen or via fax or email.

OncoHelix-4

Please provide the patient with the requisition and direct them to a blood collection laboratory if STRECK tubes are available. If STRECK tubes are not available, please place an order with OncoHelix.
If a blood collection facility is not accessible, please contact OncoHelix to arrange alternative collection options.
**See pg.5 for collection details.*

Specimen ID: ..... Date of Collection: .....

OncoHelix-3 Only

Pathologist: ..... Pathology Lab: ..... Phone: .....

TEST AUTHORIZATION, CONSENT & SIGNATURES

I certify that I am the patient's treating physician and that results from this test/s may inform the patient's ongoing/future treatment. I have explained the nature and purpose of testing to the patient and have obtained informed consent, to the extent legally required, to permit OncoHelix to (a) perform the test/s specified herein, (b) retain de-identified test results as required or permitted by law for internal quality assurance/operational improvement, (c) use/disclose de-identified (without identifiable patient information) results and sequencing data for ongoing/future unspecified research and development purposes.

Ordering Physician Signature	Printed Name	Date
.....	.....	.....

I permit OncoHelix & partner lab HTL to (a) perform the test/s specified herein, that may include de-identified sequencing data analysis performed outside of Canada with final analysis and clinical interpretations by OncoHelix/HTL team in Canada (b) retain test results as required or permitted by law for internal quality assurance/operational improvement, reporting, submissions, publication, research or to improve the program (c) use/disclose de-identified results and sequencing data for ongoing/future unspecified research and development purposes and (d) I acknowledge and consent to Pancreatic Cancer North America (PCNA) using the above referenced information for registration with PCNA. I understand that registration is required for the cost of testing to be covered by PCNA. I permit PCNA to contact me once registration is complete.

Patient's Signature	Printed Name	Date
.....	.....	.....

SAMPLE REQUIREMENTS & GUIDELINES

Panel	DNA	RNA	Biopsy	FFPE	Blood	Guidelines
OncoHelix-3 523 gene CGP Panel	250 ng	150 ng	120 µm or 4 mm³	✓	--	• Extracted nucleic acids and fresh frozen (FF) or formalin fixed paraffin embedded (FFPE) tissue samples are accepted. **1 H&E slide must be sent along with the sample** • 120 µm of FFPE tissue section (4 scrolls of 30 µm thickness); or 2-4 FFPE cores of 1-2 mm³; or 4 mm³ FF tissue required. • Requires a minimum of 40% tissue content & 25% tumor cellularity.
OncoHelix-4 146 gene ctDNA Panel	✓ (cfDNA & Genomic)	--	--	--	✓	• Blood Collection: 1 (full 10mL) Streck blood tube collected within 7 days of delivery to lab. • Extracted cfDNA from plasma is also accepted (minimum concentration of 0.6ng/µL in 50µL). Must be accompanied by genomic DNA for paired testing (PB, Buccal Swab, or extracted DNA from either).

Specimen Type (select all that apply)

- Biopsy Type: ☐ FFPE Tissue ☐ FF Tissue ☐ Blood ☐ Other (specify) .....
  ☐ DNA ..... (ng) ☐ RNA ..... (ng) ☐ cfDNA ..... (ng)

General Notes and Quality Recommendations:

- Minimum required nucleic acid concentrations are based on fluorometric estimation with Qubit reagents. A spectrophotometric method (nanodrop) overestimates the amount of nucleic acid and may only be used for the determination of sample purity (260/280 ≥ 1.8 for DNA and ≥ 1.9 for RNA)
- Nucleic acids must be extracted from a minimum of 120 µm or of FFPE tissue or 4 mm³ of FF tissue
- All nucleic acids will be tested for quality as per laboratory thresholds prior to processing

FF and FFPE Tissue Recommendations

- For FF tissue, samples must be flash-frozen in liquid nitrogen as quickly as possible after removal from patients and immediately delivered to the laboratory. Samples must be kept in -80°C freezers until DNA and RNA extraction
- For both FF and FFPE samples, one H&E slide must be sent along with the sample. An estimation of tumor cellularity must be provided by the pathologist.

SPECIMEN TYPE	SHIPPING & HANDLING INSTRUCTIONS	REJECTION CRITERIA
DNA, RNA & cfDNA	• Ship at -20°C (use dry ice) • DNA only specimens may be shipped at 4 °C	• **Suboptimal quantity / quality** • **FFPE/FF: Tissue content < 40%** • **Tumor cellularity < 25%**
FF Tissue		
FFPE Tissue	• Ship at room temperature	
Peripheral Blood	• Ship at room temperature	• **Collected > 7 days ago**

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NGS PANEL DESCRIPTIONS

OncoHelix-3: 523 Gene Panel - Assay utilizes the Illumina TSO-500 panel*

Specimen compatibility: Genomic DNA & RNA extracted from fresh frozen and FFPE tissues

ABL1
AKT3
ALK
AR
AXL
BCL2
BRAF
BRCA1
BRCA2
CDK4
CSF1R
EGFR
EML4
ERBB2
ERG
ESR1
ETS1
ETV1
ETV4
ETV5
EWSR1
FGFR1
FGFR2
FGFR3
FGFR4
FLI1
FLT1
FLT3
JAK2
KDR
KIF5B
KIT
MET
MLL
MLLT3
MSH2
MYC
NOTCH1
NOTCH2
NOTCH3
NRG1
NTRK1
NTRK2
NTRK3
PAX3
PAX7
PDGFRA
PDGFRB
PIK3CA
PPARG
RAF1
RET
ROS1
RPS6KB1
TMPRSS2
ABL2
ACVR1
ACVR1B
AKT1
AKT2
ALOX12B
ANKRD11
ANKRD26
APC
ARAF
ARFRP1
ARID1A
ARID1B
ARID2
ARID5B
ASXL1
ASXL2
ATM
ATR
ATRX
AURKA
AURKB
AXIN1
AXIN2
B2M
BAP1
BARD1
BBC3
BCL10
BCL2L1
BCL2L11
BCL2L2
BCL6
BCOR
BCORL1
BCR
BIRC3
BLM
BMPR1A
BRD4
BRIP1
BTG1
BTK
C11orf30
CALR
CARD11
CASP8
CBFB
CBL
CCND1
CCND2
CCND3
CCNE1
CD274
CD276
CD74
CD79A
CD79B
CDC73
CDH1
CDK12
CDK6
CDK8
CDKN1A
CDKN1B
CDKN2A
CDKN2B
CDKN2C
CEBPA
CENPA
CHD2
CHD4
CHEK1
CHEK2
CIC
CREBBP
CRKL
CRLF2
CSF3R
CSNK1A1
CTCF
CTLA4
CTNNA1
CTNNB1
CUL3
CUX1
CXCR4
CYLD
DAXX
DCUN1D1
DDR2
DDX41
DHX15
DICER1
DIS3
DNAJB1
DNMT1
DNMT3A
DNMT3B
DOT1L
E2F3
EED
EGFL7
EIF1AX
EIF4A2
EIF4E
EP300
EPCAM
EPHA3
EPHA5
EPHA7
EPHB1
ERBB3
ERBB4
ERCC1
ERCC2
ERCC3
ERCC4
ERCC5
ERRFI1
ETV6
EZH2
FAM123B
FAM175A
FAM46C
FANCA
FANCC
FANCD2
FANCE
FANCF
FANCG
FANCI
FANCL
FAS
FAT1
FBXW7
FGF1
FGF10
FGF14
FGF19
FGF2
FGF23
FGF3
FGF4
FGF5
FGF6
FGF7
FGF8
FGF9
FH
FLCN
FLT4
FOXA1
FOXL2
FOXO1
FOXP1
FRS2
FUBP1
FYN
GABRA6
GATA1
GATA2
GATA3
GATA4
GATA6
GEN1
GID4
GLI1
GNA11
GNA13
GNAQ
GNAS
GPR124
GPS2
GREM1
GRIN2A
GRM3
GSK3B
H3F3A
H3F3B
H3F3C
HGF
HIST1H1C
HIST1H1BD
HIST1H3A
HIST1H3B
HIST1H3C
HIST1H3D
HIST1H3E
HIST1H3F
HIST1H3G
HIST1H3H
HIST1H3I
HIST1H3J
HIST2H3D
HIST2H3
HNF1A
HNRNPK
HOXB13
HRAS
HSD3B1
HSP90AA1
ICOSLG
ID3
IDH1
IDH2
IFNGR1
IGF1
IGF1R
IGF2
IKBKE
IKZF1
IL10
IL7R
INHA
INHBA
INPP4A
INPP4B
INSR
IRF2
IRF4
IRS1
JAK1
JAK3
JUN
KAT6A
KDM5A
KDM5C
KDM6A
KEAP1
KEL
KLF4
KLHL6
KRAS
LAMP1
LATS1
LTAS2
LMO1
LRP1B
LYN
LZTR1
MAGI2
MALT1
MAP2K1
MAP2K2
MAP2K4
MAP3K1
MAP3K13
MAP3K14
MAP3K4
MAPK1
MAPK3
MAX
MCL1
MDC1
MDM2
MDM4
MED12
MEF2B
MEN1
MGA
MITF
MLH1
MPL
MRE11A
MSH3
MSH6
MST1
MST1R
MTOR
MUTYH
MYB
MYCL1
MYCN
MYD88
MYOD1
NAB2
NBN
NCOA3
NCOR1
NEGR1
NF1
NF2
NFE2L2
NFKBIA
NKX2-1
NKX3-1
NOTCH4
NPM1
NRAS
NSD1
NUP93
NUTM1
PAK1
PAK3
PAK7
PALB2
PARK2
PARP1
PAX5
PAX8
PBRM1
PDCD1
PDCD1LG2
PDK1
PDPK1
PGR
PHF6
PHOX2B
PIK3C2B
PIK3C2G
PIK3C3
PIK3CB
PIK3CD
PIK3CG
PIK3R1
PIK3R2
PIK3R3
PIM1
PLCG2
PLK2
PMAIP1
PMS1
PMS2
PNRC1
POLD1
POLE
PPM1D
PPP2R1A
PPP2R2A
PPP6C
PRDM1
PREX2
PRKAR1A
PPKCI
PRKDC
PRSS8
PTCH1
PTEN
PTPN11
PTPRD
PTPRS
PTPRT
QKI
RAB35
RAC1
RAD21
RAD50
RAD51
RAD51B
RAD51C
RAD51D
RAD52
RAD54L
RANBP2
RARA
RASA1
RB1
RBM10
RECQL4
REL
RFWD2
RHEB
RHOA
RICTOR
RIT1
RNF43
RPS6KA4
RPS6KB2
RPTOR
RUNX1
RUNX1T1
RYBP
SDHA
SDHAF2
SDHB
SDHC
SDHD
SETBP1
SETD2
SF3B1
SH2B3
SH2D1A
SHQ1
SLIT2
SLX4
SMAD2
SMAD3
SMAD4
SMARCA4
SMARCB1
SMARCD1
SMC1A
SMC3
SMO
SNCAIP
SOCS1
SOX10
SOX17
SOX2
SOX9
SPEN
SPOP
SPTA1
SRC
SRSF2
STAG1
STAG2
STAT3
STAT4
STAT5A
STAT5B
STK11
STK40
SUFU
SUZ12
SYK
TAF1
TBX3
TCEB1
TCF3
TCF7L2
TERC
TET1
TET2
TFE3
TFRC
TGFBR1
TGFBR2
TMEM127
TNFAIP3
TNFRSF14
TOP1
TOP2A
TP53
TP63
TRAF2
TRAF7
TSC1
TSC2
TSHR
U2AF1
VEGFA
VHL
VTCN1
WISP3
WT1
XIAP
SPO1
XRCC2
YAP1
YES1
ZBTB2
ZBTB7A
ZFHX3
ZNF217
ZNF703
ZRSR2
HIST2H3A
HIST2H3C
*HLA-A
*HLA-B
*HLA-C
*KMT2B
*KMT2C
*KMT2D
TERT

*OncoHelix-3: 523 Gene CGP Panel uses the Illumina TSO500 panel to provide comprehensive genomic profiling. The research use only assay was validated and its performance characteristics were determined by OncoHelix and its partner lab – Hematology Translational Lab. The panel is not approved by Health Canada, as is the case for all cancer genomic panels. Both OncoHelix and HTL laboratories are clinically accredited by CPSA to perform high-complexity molecular testing. Any decisions related to patient care and treatment choices should be based on the independent judgment of the treating physician.

(* Small variants found in gVCF file only)

SNV and Indels Copy Number Variations Fusions Promoter

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NGS PANEL DESCRIPTIONS CONTINUED

OncoHelix-4: 146 Gene - ctDNA Panel Assay utilizes the MSK-ACCESS© Panel and Analysis

Specimen compatibility: cfDNA extracted from plasma and genomic DNA extracted from fresh blood sample

APC	FOXL2	RB1	RET	CIC	FOXA1	KIT	NPM1	PPP2R1A	SMARCB1
AR	GATA3	SMAD4	ROS1	CREBBP	FOXO1	KNSTRN	NRAS	PPP6C	SOS1
ARID1	HIST1H3B	STK11	RTV6	CTNNB1	FOXP1	MAP2K1	NTRK2	PRKCI	SRSF2
ASXL1	KDM6A	TET2	AKT1	CTCF	FUBP1	MAP2K2	NTRK3	PTPN11	STAT3
ATM	KEAP1	TP53	ARAF	DICER	GNA11	MAPK1	NUP93	RAC1	STK19
BAP1	KRAS	TSC1	ARID2	DIS3	GNAQ	MAX	PAK5	RAD54L	TCF7L2
BRCA1	MLH1	TSC2	B2M	EIF1AX	GNAS	MED12	PDGFRA	RAF1	TGFBR1
BRCA2	MSH2	VHL	BCL2	EP300	H3F3A	MSH3	PHF6	RHOA	TGFBR2
CDK12	MSH6	ALK	BCOR	ERBB2	HRAS	MTOR	PIK3CA	RIT1	TP63
CDK4	NF1	BRAF	CARD11	ERBB3	IDH1	MYC	PIK3CB	RRAS2	U2AF1
CDKN2A	PALB2	EGFR	CBFB	ESR1	IDH2	MYCN	PIK3R1	RXRA	XPO1
CHEK2	PMS2	FGFR2	CBL	EZH2	IKZF1	MYD88	PIK3R2	SETD2	TERT
DNMT3A	PPM1D	FGFR3	CCND1	FGFR1	INPPL1	MYOD1	PIM1	SF3B1	
ERCC2	PTCH1	MET	CD79B	FGFR4	JAK1	NFE2L2	POLE	SMAD3	

*OncoHelix-4: cfDNA comprehensive NGS profiling uses the MSK-ACCESS Panel. The assay was validated, and its performance characteristics were determined by OncoHelix and its partner lab – Hematology Translational Lab. The panel is not approved by Health Canada, as is the case for all cancer genomic panels. Both OncoHelix and HTL laboratories are clinically accredited by CPSA to perform high-complexity molecular testing. Any decisions related to patient care and treatment choices should be based on the independent judgement of the treating physician.

SNV and Indels Copy Number Variations Fusions Promoter

CHECKLIST

☐	A completed requisition has been sent with the specimen/s
☐	A pathology report has been sent with the specimen/s
☐	An H&E Slide has been sent along with the specimens
☐	Any available genomic (single gene or panel) profile report/s has been sent with the specimen/s
	Please provide the following information:

Tissue content:	**Tumor cellularity:**	**Pathologist's Name:**

SHIPPING ADDRESS

ATTN: Dr. Faisal Khan
Hematology Translational Laboratory (HTL)
HMRB 380, 3330 Hospital Dr NW Calgary, AB T2N 4N1
Phone: +1(403)220-7671, +1(403)210-3935
Fax: +1(403)210-8176, email: htl@ucalgary.ca

FOR LABORATORY USE ONLY

Date Sample Received (dd-mm-yy): .....
Time of Sample Receipt (hh:mm): .....
Specimen Type: .....
#Tubes/Amount of Tissue: .....
Lab ID: .....