

The Tempus Platform

We provide complimentary technology that allows providers safe and secure access to clinical reports and cutting-edge research apps. Powered by a rapidly growing library of clinical and genomic data, the Tempus platform is an easy and intuitive way to gain relevant insights by patient or by project.

In about two weeks physicians receive a comprehensive report for each patient that highlights key findings, including potentially actionable treatments and immunotherapy markers that can be immediately translated into cancer patient care.

Clinical Report Key Features:

- 1
Genomic Alterations
 An intuitive and concise presentation of clinically actionable somatic alterations, clinically significant germline variants, and pertinent negatives
- 2
Immunotherapy Markers
 Key decision drivers for immunotherapy including microsatellite instability (MSI), tumor mutational burden (TMB), and PD-L1 and MMR IHC when ordered.
- 3
Treatment Implications
 Therapy options matched to each patient's genomic profile and organized by level of clinical evidence from FDA approved to preclinical.

Dwayne Holder | Diagnosis: Pancreatic Ductal Adenocarcinoma | Report Date: 9/14/2018

Genomic Variants:

- SMAD4**: c.2281C>A p.A76N, Loss-of-Function. Variant Allele Fraction: 40.7%
- BRCA1**: c.2350T>G p.G52V, Gain-of-Function. Variant Allele Fraction: 22.0%
- BRCA2**: Copy Number Loss, Loss-of-Function.

Immunotherapy Markers:

- Tumor Mutational Burden**: 47 mut/Mb (7th percentile)
- Microsatellite Instability Status**: Stable

Treatment Implications:

- SMAD4**: FDA-approved off-label drug treatment for pancreatic cancer.
- BRCA1**: FDA-approved off-label drug treatment for breast cancer.
- BRCA2**: FDA-approved off-label drug treatment for breast cancer.
- TP53**: FDA-approved off-label drug treatment for pancreatic cancer.

TEMPUS | Electronically Signed by: Timothy Tucker, MD | CCL Number: N0274957 | Date Signed: 9/16/2018 | Laboratory Medical Director: Neil Bhowmik, MD, FRCR, MScP | Tempus ID #: ABC-034516 | Patient Version: 1.0

- 4
Clinical Trials
 Relevant clinical trials based on the patient's molecular profile and the provided clinical information that is pertinent to trial inclusion/exclusion criteria.
- 5
Gene Descriptions
 Additional clinical context for all reported variants.

VARIANTS OF UNKNOWN SIGNIFICANCE | Dwayne Holder | NW-12345-016

Somatic variant	Mutation effect	Variant allele fraction
ATM/GAP5	p.E487*	18.0%
ATM/GAP5	Δ5496	22.1%
CTSLA	Splice Donor	2%*

LOW COVERAGE AMPLIFIONS

CDKN2A	BRCA1	NOTCH1	FOXP1	RECQL4
FL14	MTAP	NOTCH2	PRK32	26AF3

CLINICAL TRIALS

- Genetically targeted therapy and cisplatin with or without veliparib or niraparib in treating patients with locally advanced or metastatic pancreatic cancer (NCT01983405) | Chicago, IL - 4/16
- Genetic analysis-guided dosing of FOLFIRI/ABX in treating patients with advanced gastrointestinal cancer (NCT02331588) | Chicago, IL - 5/6
- Study of PD-1 Blockade by Pembrolizumab With Stereotactic Body Radiotherapy in Advanced Solid Tumors (NCT02082883) | Chicago, IL - 5/6

SOMATIC VARIANT DETAILS - CLINICALLY ACTIONABLE

CDKN2A
 CDKN2A encodes two proteins, p16INK4A and p14ARF, which function in regulating cell growth. The p16INK4A protein regulates the cell cycle through the inhibition of CDK4 and CDK2, preventing them from stimulating cell proliferation. The p14ARF protein encodes MDM2 to keep p53 intact and promote the p53-dependent cell cycle arrest and apoptosis. Deleterious CDKN2A alterations, copy number loss and underexpression of CDKN2A are associated with cancer progression.
 c.2256C>A p.A76N, Frameshift - Loss of Function | Variant Allele Fraction: 40.7%

KRAS
 KRAS encodes a GTP-binding protein that acts as an intracellular signal transducer. KRAS is involved in several pathways that control cellular proliferation and survival, including the PI3K-AKT-mTOR pathway and the MAPK cascade. Activating mutations in KRAS are associated with cancer progression.
 c.3850T>G p.G52V, Gain of Function | Variant Allele Fraction: 22.0%

BRCA1
 BRCA1 encodes a nuclear phosphoprotein which helps maintain DNA stability through homologous recombination-based DNA double-strand break repair and involvement in DNA damage checkpoint control. Deleterious mutations and copy number loss in BRCA1 are associated with cancer progression.
 Copy Number Loss, Loss of Function

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GERMLINE VARIANT DETAILS Diagnostic Header | NR-12345-DNA

BRCA2

The patient has a pathogenic germline BRCA2 mutation. Genetic counseling and appropriate cancer screening is recommended for this patient and potentially affected family members.

chr15:50670747 : c.853C>A : p.S281*

Clinical Significance: Pathogenic

TPMT

Discovered has a pharmacogenomic variant in the TPMT gene which leads to reduced enzyme activity. People with this variant are at an increased risk for an adverse drug event when treated with azathioprine or other purine analogs.

chr6:3843955 : c.236G>C : p.A69*

Pharmacogenomic Variant: Adverse Event

CLINICAL HISTORY

2018

- Released from Northwestern ICU 10/10/2018

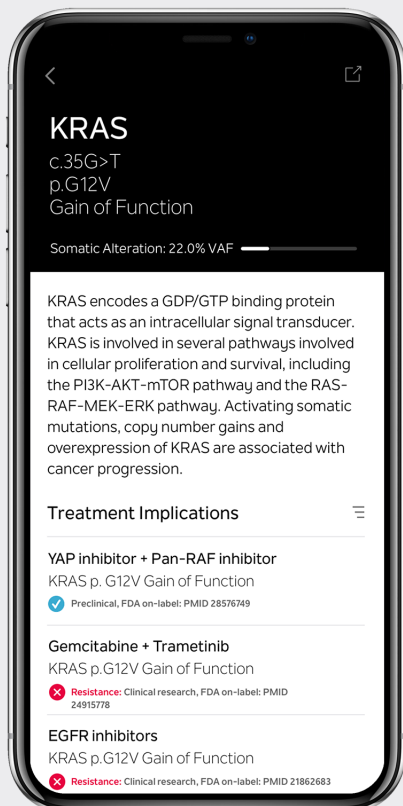
2017

- Widely Lung MRI: Abnormal 12/23/2017
- Admitted to Northwestern ICU 12/23/2017
- Started Pembrolizumab Endoxifen Escalation 12/23/2017
- CT Chest 12/22/2017
- Cancer diagnosis: BRCA2 12/21/2017
- Started Gemtacinib 12/21/2017
- Diagnosis: Pancreatic ductal adenocarcinoma T2 N0 M0
- CT Chest
- Partial resection Northwestern University Medical Center Community Clinics 12/18/2017

TEMPUS Electronically Signed By: Tonying Xie, MD. Cdt Number: 1402746037. Date Signed: 05/01/2017. Laboratory Medical Director: Nina Bevilacqua, MD, FACP, MGP. Tempus ID #: AEC-12345678. Patient History: 3/5.

6 Clinical History

Patient's clinical history organized into a sequential timeline with highlighted responses and adverse events.



Mobile Accessibility

We're focused on providing accessible and useful insights, so we deliver your results however you prefer — emailed PDF, interactive portal, and now, mobile app. Our app gives you an interactive and in-depth view of your patient's molecular and clinical data whenever convenient, not just when you have the PDF or printed report on hand.

- 1 Sortable and filterable therapies and trials
- 2 In-depth gene descriptions paired with matched therapies
- 3 Quick access to your patient's clinical timeline
- 4 Easy and secure access from anywhere