DATAR
CANCER GENETICS
UNITED KINGDOM | UNITED STATES | GERMANY | INDIA

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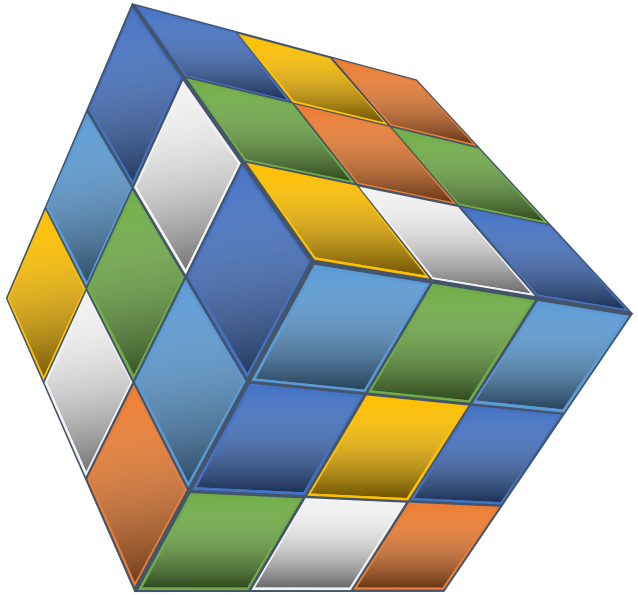
Wholesome Intelligence Against Cancer



A Paradigm Shift in Cancer Treatments

ai + ni + ei

Artificial Intelligence

Natural Intelligence

Emotional Intelligence

About

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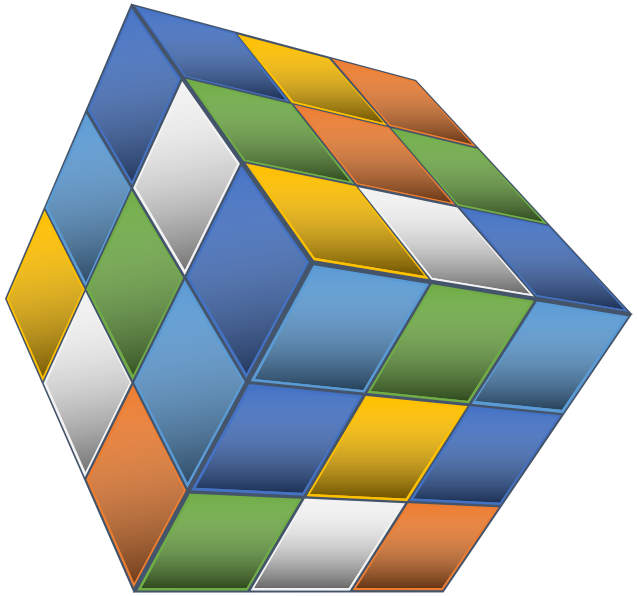
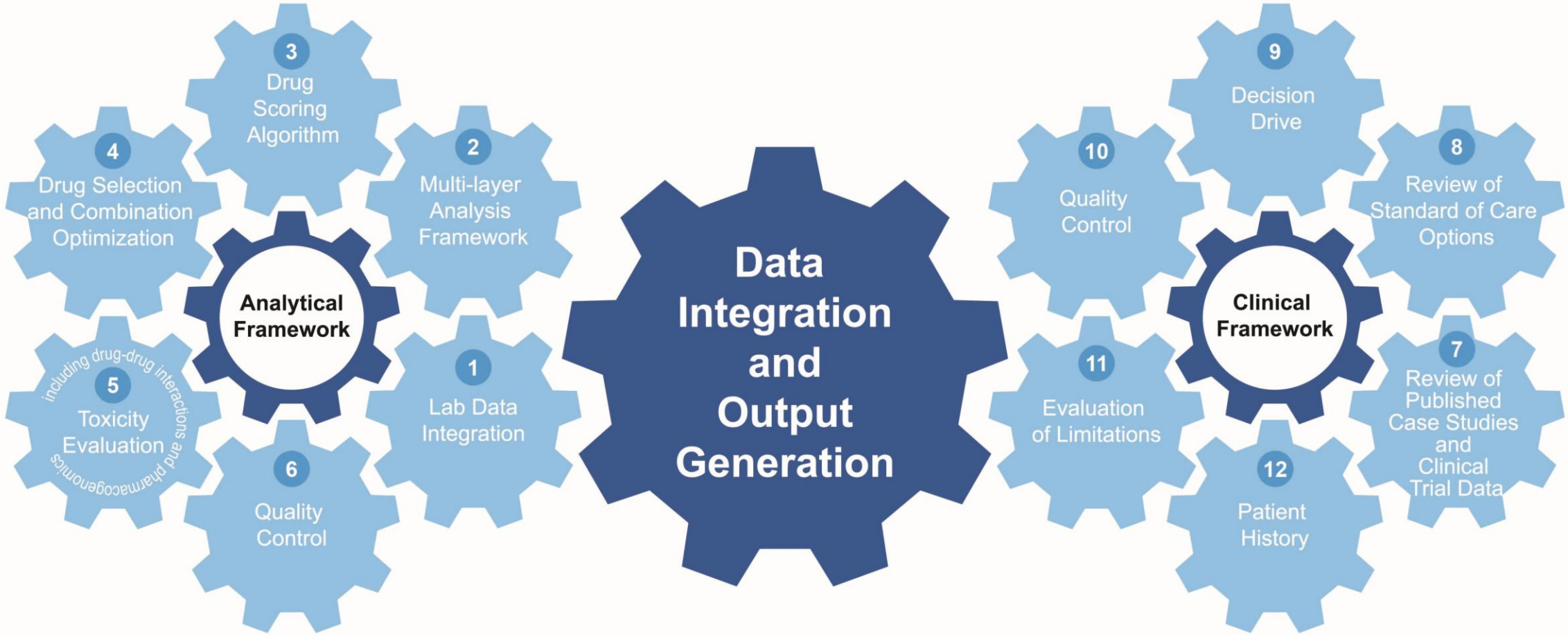
Wholesome Intelligence Against Cancer

Oncologists and Molecular Tumor Boards are facing an avalanche of new research, trial data, and molecular information which becomes humanly impossible to interpret and apply on a case-by-case basis.

Exacta-Ai is an advanced process, powered by advanced composite intelligence, that delivers multiple therapy combinations customized to each patient's profile, especially for those who have not responded to Standard of Care treatments. These options are rigorously evaluated for safety, side effects, and effectiveness, ensuring precision and personalized care. And there's more.



The Exacta-Ai Engine



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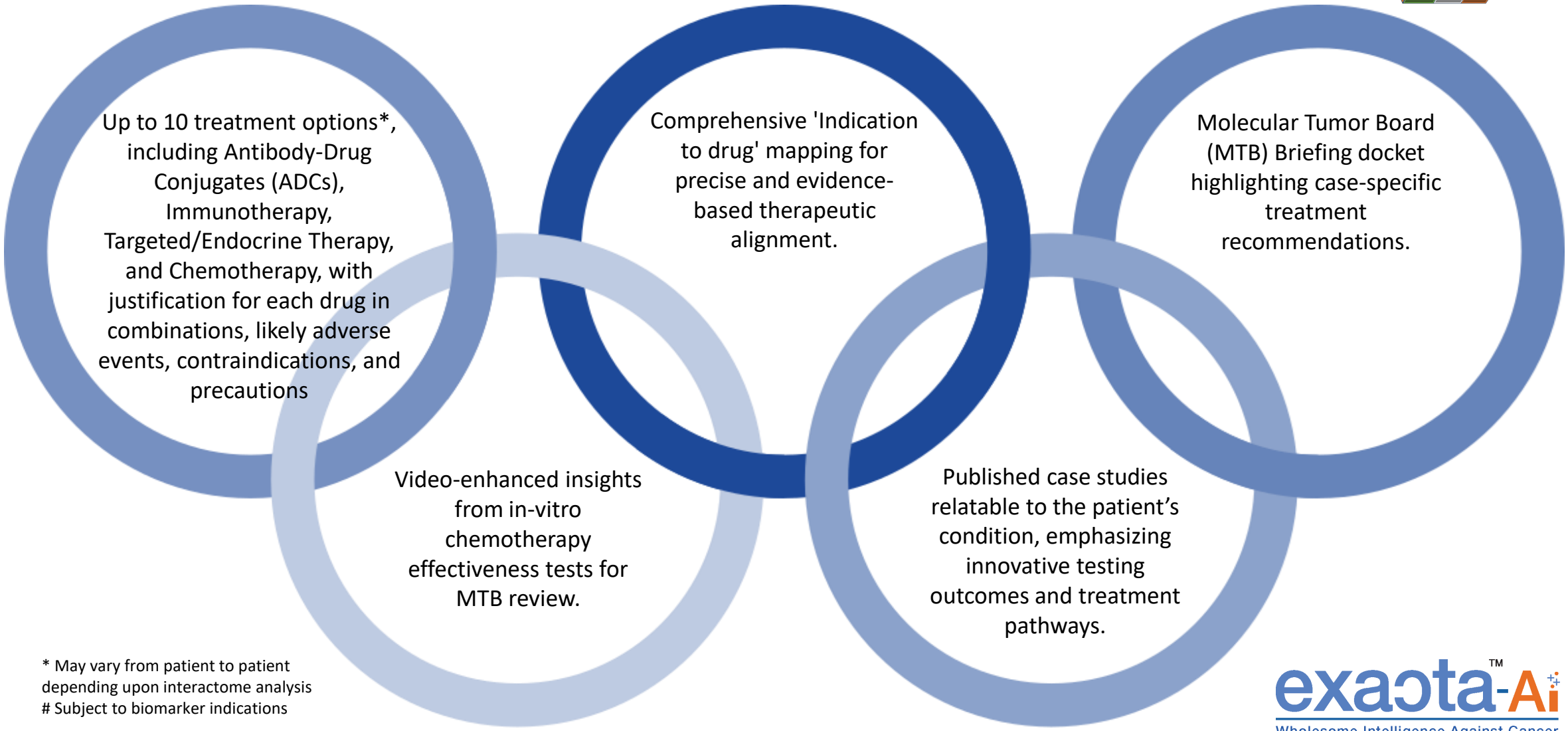
Deliverables



* May vary from patient to patient depending upon interactome analysis
# Subject to biomarker indications

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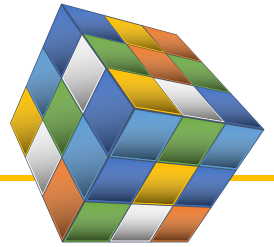
Building Smarter Solutions with Ai

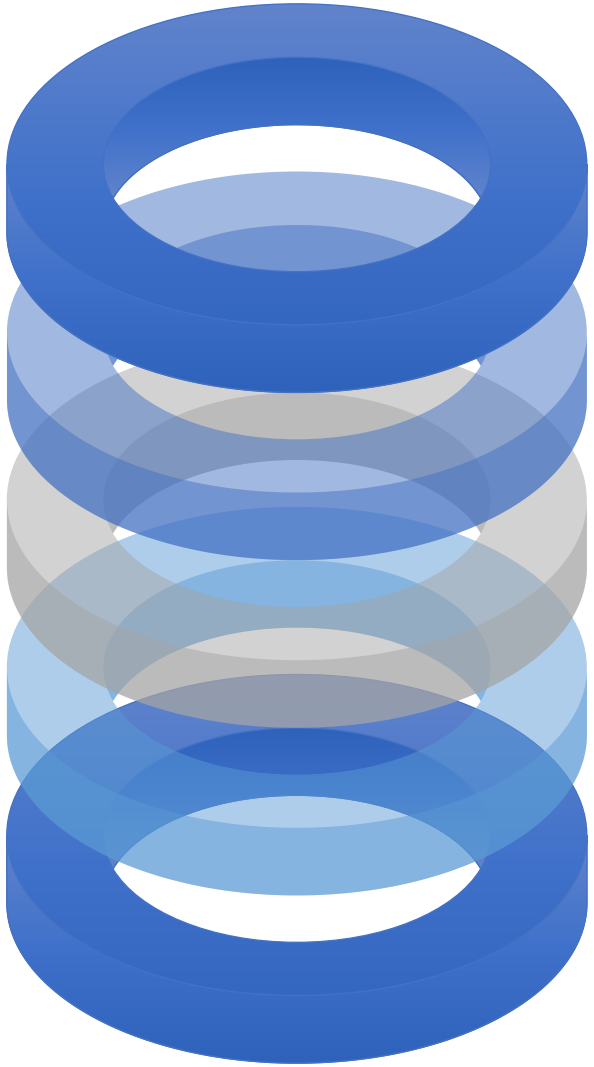


Comprehensive Data Integration

Intelligently unifying genomic, proteomic, functional cancer biology and clinical insights for a contextually complete picture.

Real-Time Sensitivity

Dynamic biomarker review ensures that therapies align with the evolving disease landscape in an individual patient.



Proactive Resistance Management

Modeling and addressing resistance to stay ahead in the fight against cancer.

Adaptive Strategies to Avoid Adverse Events

Customized treatment options to match an individual patients genomic lab results with clinical history to optimize adverse events management.

Evidence-Based Therapy

Harnessing multi-omic big data and AI-driven computational guidance for offering multiple options for treatments.

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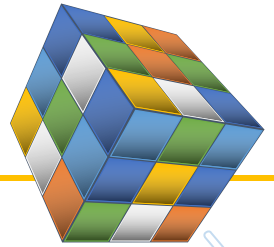
Coherent Insights: Ai Driven Data Integration



Next-Generation Sequencing

Decoding the genetic blueprint for targeted / immuno therapy.

Protein Expression Profiles

Analyzing proteomic signals to identify actionable markers.

Chemosensitivity Testing

Evaluating drug efficacy to personalize treatment strategies.

Resistance Mechanism Identification

Identifying causes of resistance for adaptive mitigations.

Transcriptomic Analysis

Incorporating transcriptome data for strengthening genomic, proteomic, and clinical insights for a contextually complete picture.

Pharmacogenomics

Pharmacogenomics based mitigation strategy to avoid potentially high-risk therapies.

Clinical Parameters

Contextualizing data with patient-specific clinical insights such as co-morbidities, accumulated toxicities and previously failed treatments.

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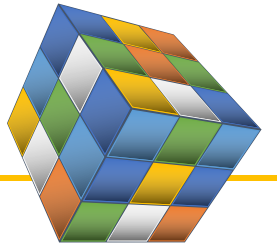
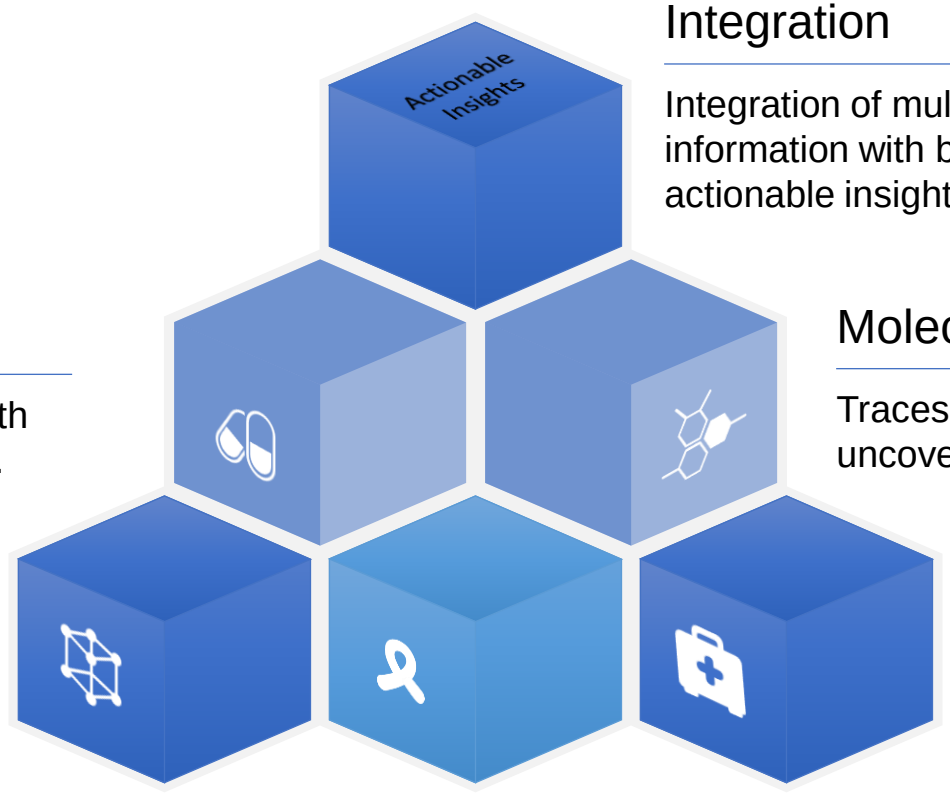
Cancer Interactome Analysis: Reinvented Through Ai



Integration

Integration of multi-analyte information with big data to deliver actionable insights



Drug Sensitivity

Identifies therapies that align with patient-specific drug responses.

Molecular Pathway Analysis

Traces cellular mechanisms to uncover therapy opportunities.

Protein Network Evaluation

Evaluates interactions between targets for enhanced precision.

Clinical Correlation

Links molecular data to real-world patient outcomes.

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Ai in Action: From Raw Data to Life-Saving Decisions

Patient Profiling

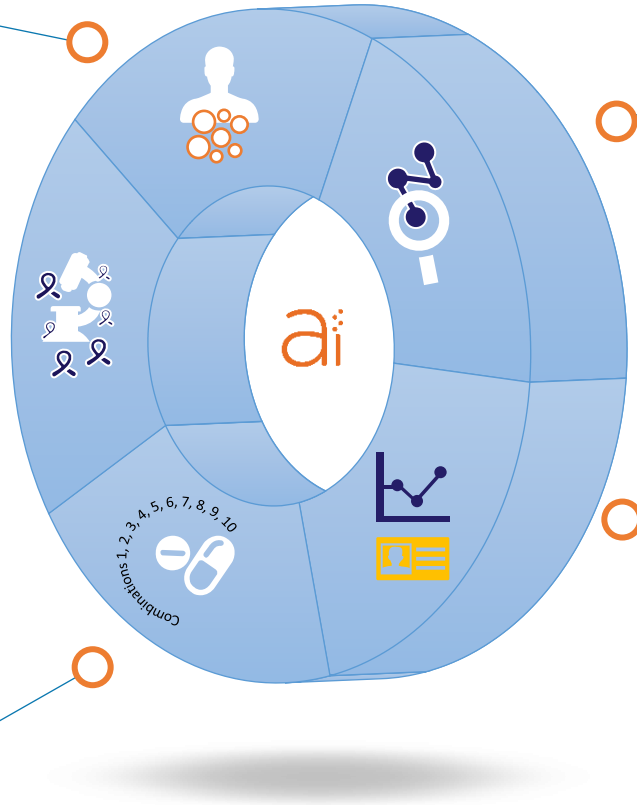
Exacta-AI creates a comprehensive patient profile by integrating clinical history, molecular data, genomic insights, real-time chemosensitivity and treatment response / toxicity patterns.

Data Analysis

Multi-analyte integration and advanced AI analytics uncover actionable insights from diverse data streams, including genomics, proteomics, and pharmacogenomics.

Multi-drug Combinations and Scoring

Upto 10 AI-driven evidence-based multi-drug combinations provide tailored therapy options, ensuring maximum efficacy and safety for each patient even in cases where options seem impossible.



Outcome Monitoring

Continuous tracking of biomarkers, treatment responses, and adverse events ensures therapies remain effective and safe.

Learning Points

Continuous updating of knowledge based by access to millions of published documents and case reports.

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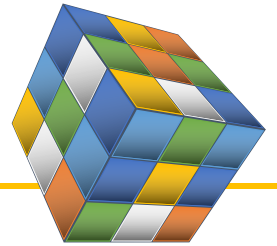
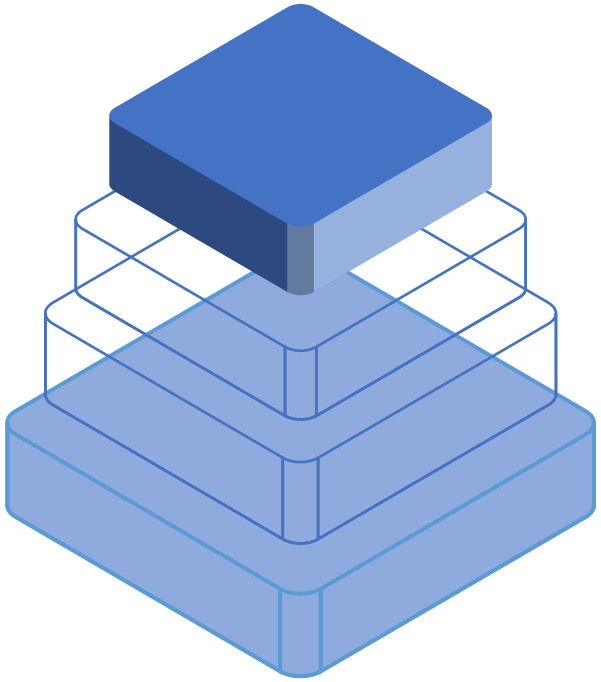
Smarter Risk Management Powered by Ai



Drug – Drug Interaction Analysis



Toxicity Overlap / Accumulation Analysis

Contraindications for Each Treatment Option

Monitoring and Risk Management Strategies

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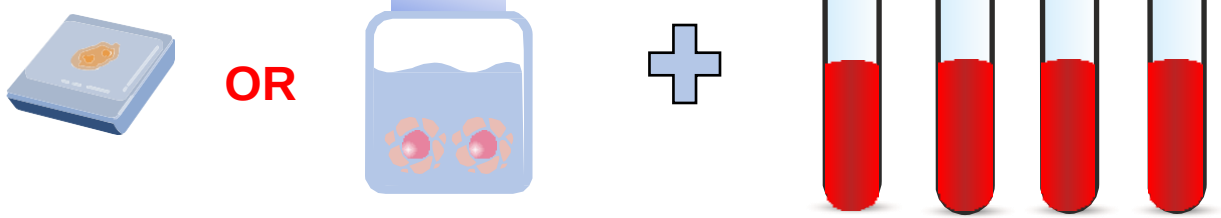
Smart Processes: Ai and Sample Needs



FFPE Block

OR

Fresh Tumor Tissue (Preferred)

Blood

Tumor Tissue (5 cores)	Blood
Fresh Tumor Tissue in DCGL Transport Media	2 x Whole Blood in DCGL Tubes – 16 to 20 mL
OR	2 x Whole Blood in EDTA Tubes – 16 to 20 mL
FFPE Tissue Block	

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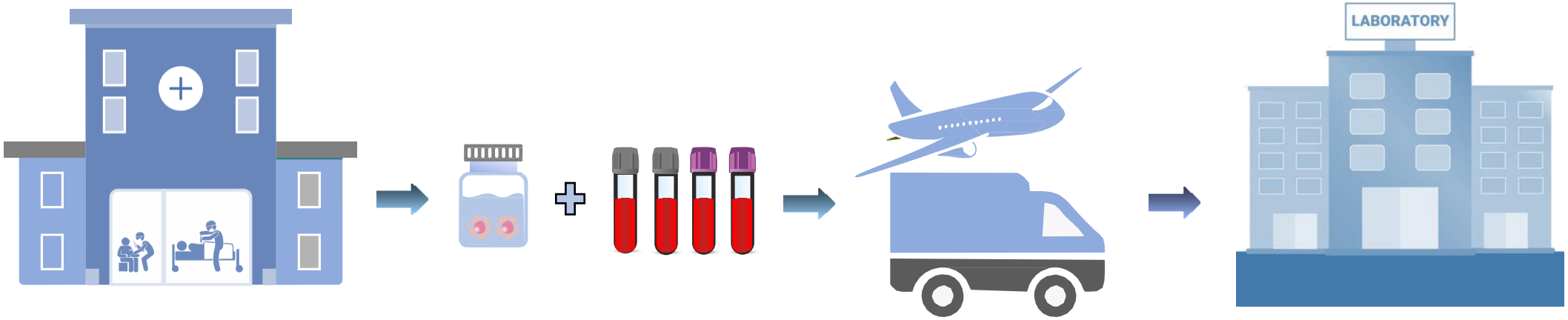
Transporting Samples



Blood Collection and Biopsy

Tumor Tissue

Blood

Transportation as per protocol

Process as per lab protocol

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Comprehensive Process Insights Powered by Ai

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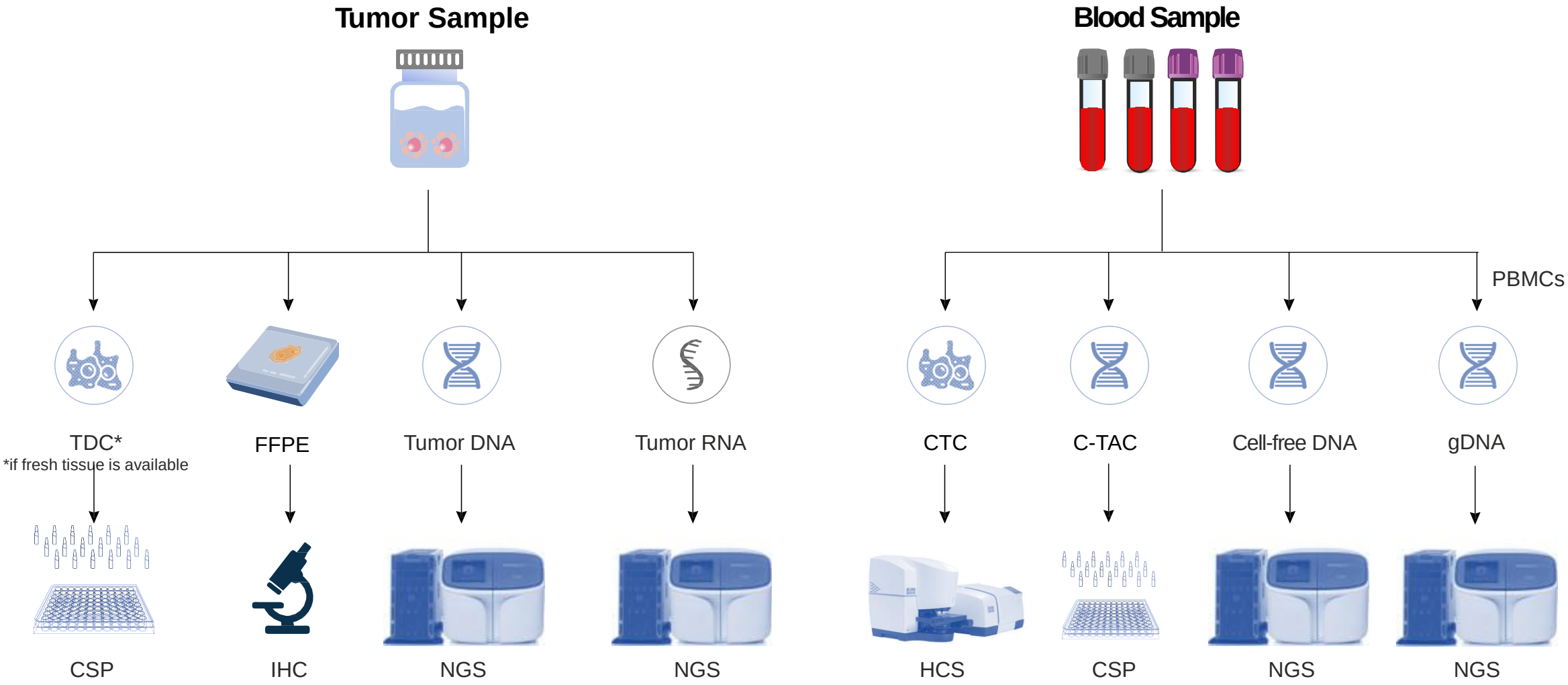
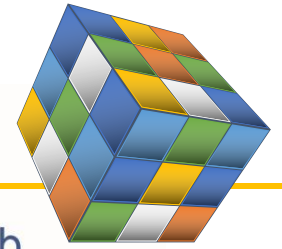
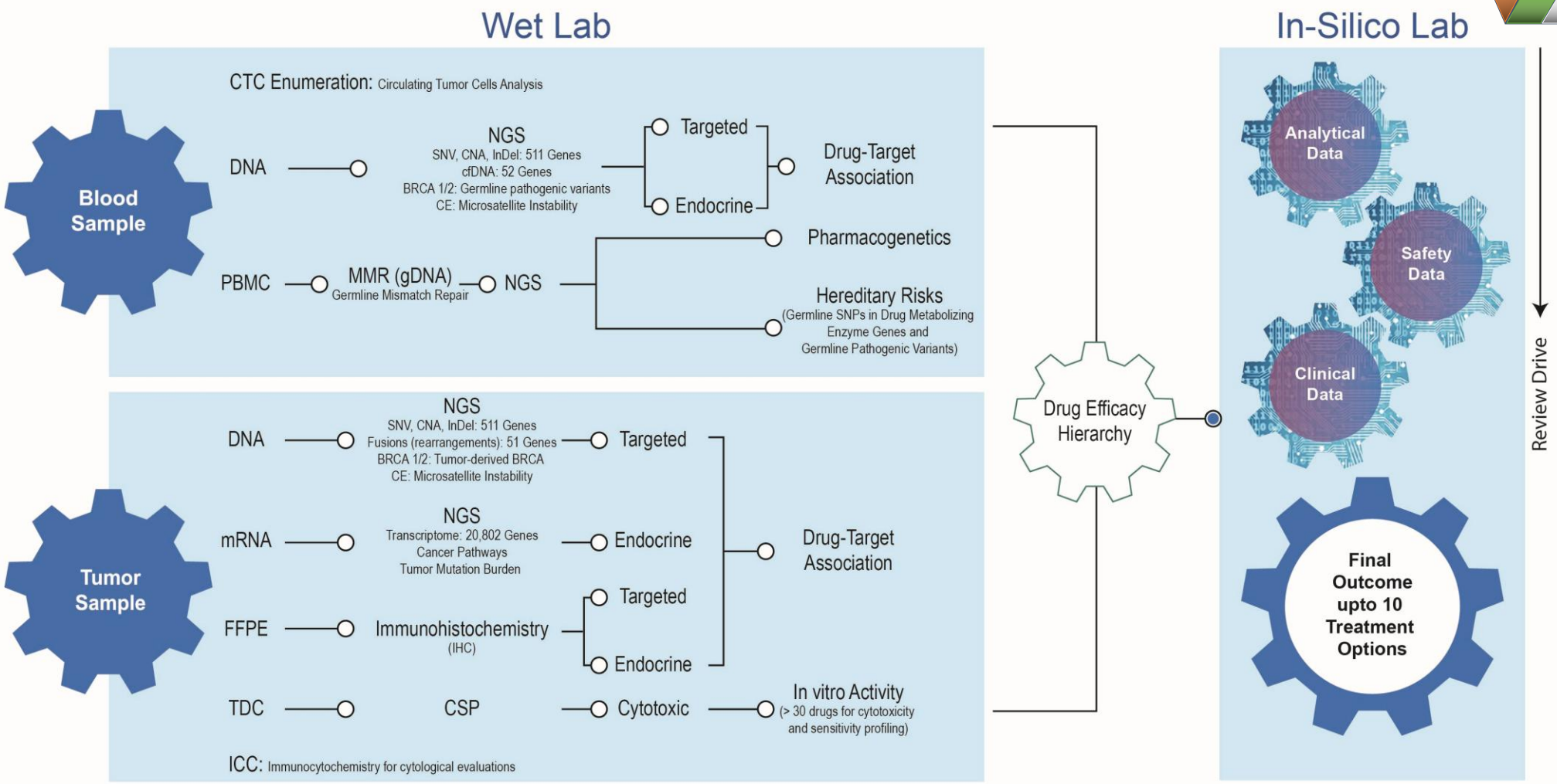


TDC: Tumor Derived Cells, CSP: (In vitro) Chemosensitivity Profiling, FFPE: Formalin Fixed Paraffin Embedded (Tissue Section); IHC: Immunohistochemistry; NGS: Next Generation Sequencing; CTC: Circulating Tumor Cell; ICC: Immunocytochemistry; HCS: High Content Screening; PBMC: Peripheral Blood Mononuclear Cells; gDNA: Genomic / PBMC DNA

Smarter Pathways: Ai in Drug Selection





CE: *Capillary Electrophoresis;* ***cfDNA****: cell free DNA;* ***CNAs****: copy number alterations;* ***CRSP****: Chemoresistance / Sensitivity Profiling;* ***CTCs****: circulating tumor(associated) cells;* ***Fus****: Fusions (Rearrangements);* ***gDNA****: genomic DNA;* ***HR****: hormone receptor;* ***ICC****: Immunocytochemistry;* ***IHC****: immunohistochemistry;* ***InDels:*** *Insertions and Deletions;* ***MLPA:*** *multi-ligand probe analysis;* ***MMR****: mismatch repair;* ***MSI****: microsatellite instability;* ***NGS****: Next Generation Sequencing;* ***PDL1****: programmed death ligand-1;* ***PGx****: pharmacogenomics;* ***SNPs****: single nucleotide polymorphisms;* ***SNVs****: single nucleotide variants;* ***TDCs****: tumor derived cells;* ***TMB****: tumor mutation burden;* ***ttDNA****: tumor tissue DNA;* ***ttRNA****: tumor tissue RNA;*

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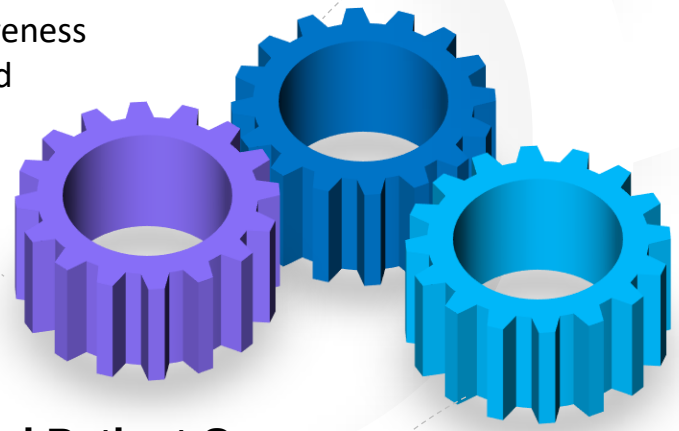
Video-Enhanced Results: Ai Driven Chemotherapy Effectiveness

Empowering Oncologists

Provides oncologists with precise, actionable insights on drug efficacy, aiding in the selection of the most effective chemotherapy treatments for each patient.

Cutting-Edge Innovation

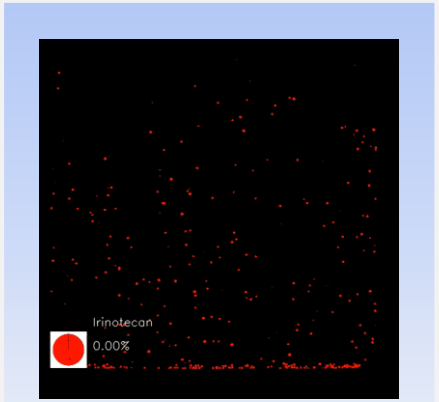
Groundbreaking video-enhanced results of in-vitro chemotherapy effectiveness tests, combining AI and advanced diagnostic technologies.

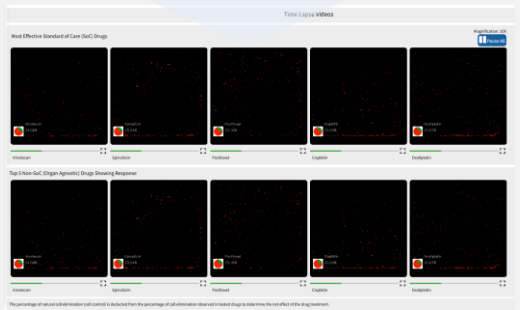


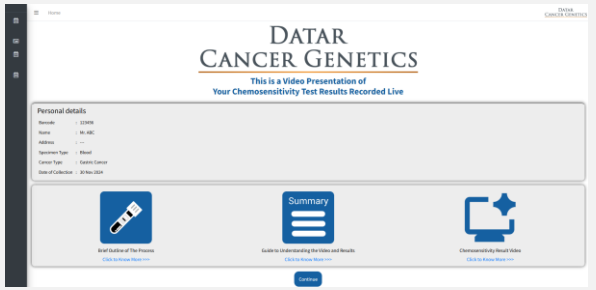
Enhanced Patient Care

A patient-centric approach that focuses on improving treatment success rates and quality of life through innovative, evidence-based solutions.

In-vitro Chemosensitivity Testing Video







Demonstration Video
https://tinyurl.com/3kzw9684

Press Release
https://shorturl.at/vforC

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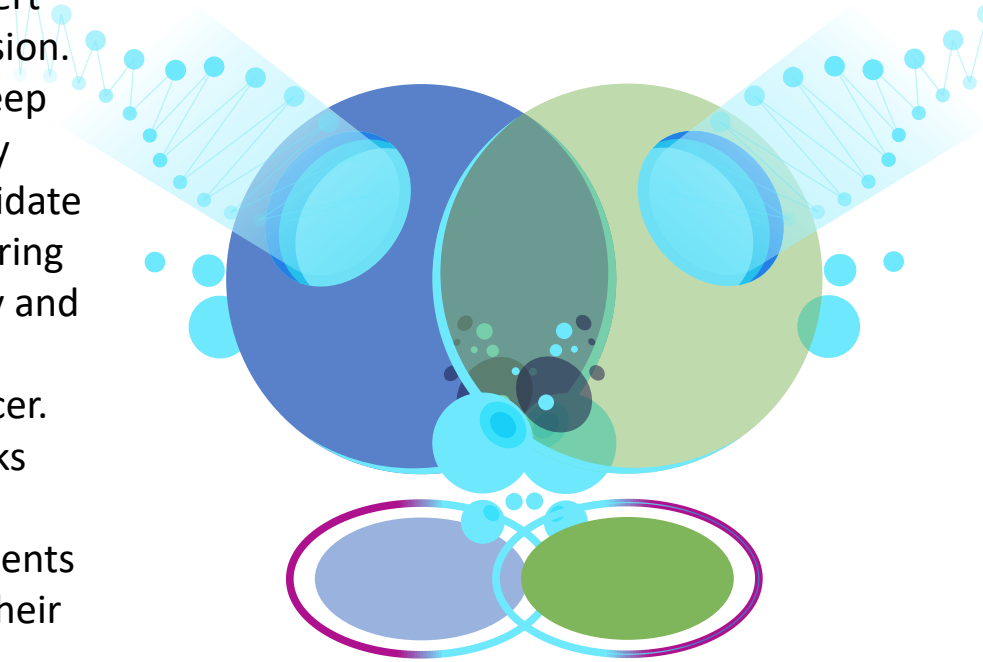
The Force Multipliers

ni
(Natural intelligence)

Natural Intelligence complements AI-based therapy guidance by integrating expert human insights and supervision. Skilled professionals with deep knowledge of cancer biology meticulously review and validate the AI-generated data, ensuring the highest level of accuracy and personalized solutions for patients with advanced cancer. This approach minimizes risks and enhances treatment effectiveness, providing patients with greater confidence in their care.



ei
(Emotional intelligence)

Emotional Intelligence is at the core of our commitment; we provide lifelong support by offering free Molecular Residual Disease (MRD) testing *once every quarter*, a breakthrough innovation which is indispensable for keeping a close watch on treatment response. This unwavering commitment reflects our continued support for the patient's well-being.

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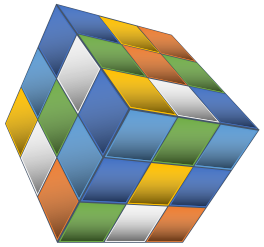

For Assistance Contact

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