TRISTAR TECHNOLOGY GROUP

Quality biospecimens, imaging & data for precision medicine

- **FFPE surgical samples** — Primary tumors, Mets, Normal (non-malignant) tissues
- **Clinical follow-up data** including treatment, response, OS & PFS
- **Mutations, fusions** and other diagnostic markers
- **Donors from UK, Italy, France** with informed consent & ethics approval
- **Responders & non-responders** to SOC treatment including CKI/IO
- **Expert IHC capabilities** — over 100 optimized assays

Imaging + Clinical Data.

Whole-slide imaging tied back to the matched surgical section and the clinical timeline behind every donor. Radiology coming soon.

RADIOLOGY **COMING SOON** Radiological images — capability in development.

PATHOLOGY

Whole-slide imaging (WSI)

CURRENT H&E REPOSITORY

30,000	>100,000
donors	H&E images

- **Aperio GT450 & AT2 scanners** — same platforms used in clinical practice
- **40× standard** scan resolution across the repository
- **.svs files** compatible with all major WSI viewers and AI pipelines
- **Scanned in-house** — no vendor coordination, no provenance gaps
- **Pathologist-reviewed** — every H&E and corresponding image checked by an experienced medical pathologist to confirm image quality is suitable for AI

LINKAGE

Every imaging asset is linked to

IMAGING
Whole-slide imaging

SURGICAL SECTION
Matched FFPE block & slides

Cohorts available

CLINICAL DATA
Treatment, response, OS/PFS, molecular

Donor Profiles

Breadth of donor profiles.

Specimen, treatment, outcomes, and molecular data — structured at the patient level.

PATIENT TRAJECTORY

- Primary & matched distant mets
- Matched normal tissue
- Neoadjuvant > adjuvant > SOC targeted & CKI/IO

OUTCOMES, STRUCTURED

- Overall Survival (months)
- Progression-Free Survival (months)
- Time to events (TTE months)
- Last follow-up
- Event flags (recurrence / death / composite)

MOLECULAR CHARACTERIZATION

- IHC
- FISH
- RNA-ISH
- NGS: SNV, CNV, Fusions

Records are fully anonymized. Not every patient has every field populated, and not every project needs every field. Cohorts are pulled to fit the project; populated fields reflect real-world clinical practice at the source center.

See an example record →

Cohorts available.

Tumor types by cohort designs we maintain.

JUMP TO COHORT DETAIL — Advanced (III/IV) → · Longitudinal → · Primary + matched mets → · Pre/Post SOC → · Pre/Post IO →

TUMOR TYPE	ADVANCED (III/IV)	LONGITUDINAL	PRIMARY + MATCHED METS	PRE / POST SOC	PRE / POST IO
NSCLC	✓	✓	✓	✓	✓
CRC	✓	✓	✓	✓	—
Ovarian	✓	✓	✓	✓	—
Breast	✓	✓	✓	✓	—
Gastric	✓	✓	✓	✓	—
Head & Neck SCC	✓	✓	✓	✓	✓
Prostate (mCRPC)	✓	✓	—	✓	—
Endometrial	✓	✓	✓	✓	—
Pancreatic ADC	✓	—	—	✓	—
Bladder (UC)	✓	✓	✓	✓	—
Melanoma	✓	✓	✓	✓	✓
RCC	✓	✓	✓	✓	✓
HCC	✓	✓	✓	✓	—
Esophageal	✓	✓	✓	✓	—

All cohorts are available as FFPE, TMA, or slides. Treatment, response, OS/PFS data and indication-specific molecular characterization (IHC and mutation panels) are linked at the patient level.

A core partner for translational programs.

Why top pharma and biotechs working on oncology therapeutics work with us.

- **The translational bar has moved.** Sponsors developing oncology therapeutics need high-quality samples paired with in-depth, standardized data across EHR and orthogonal sources.
- **Ethically sourced, quality samples and data.** Quality samples and data improve the reliability of results.
- **Validation for regulators.** Data derived from TriStar samples is frequently included in IND submissions — tissue quality and annotation rigor shape what is defensible.
- **Validation for the program.** Translational evidence is increasingly what investment committees and partnership negotiations anchor on.
- **Translational evidence is increasingly the rate-limiting step.** Tissue quality, annotation depth, and provenance decide whether downstream analysis withstands scientific and regulatory scrutiny.

Lab capabilities — validation, extension & characterization.

Run in-house on the same donors and samples behind every cohort — no vendor coordination, no provenance gaps.

100+

OPTIMIZED IHC ASSAYS

3

MEDICAL PATHOLOGISTS

15+ combined years in pharma

DEVELOPED FOR

- Ventana Benchmark
- Dako autostainers

SERVICES

- IHC
- NGS
- Digital Spatial Profiling
- RNAScope
- RNA-Seq
- Digital image analysis

Advanced disease (Stage III/IV) surgical samples

APPROXIMATE NUMBER OF DONORS **500–900 per tumor type**

TUMOR TYPES

NSCLC · CRC · Ovarian · Prostate (mCRPC) · Breast · Gastric · Endometrial · Pancreatic ADC · Bladder (UC) · Melanoma · RCC · HCC · Esophageal · Head & Neck SCC

FOLLOW-UP DATA

Treatment · Response · OS/PFS

MUTATIONS*

KRAS · NRAS · EGFR · ALK fusion · BRAF · BRCA · MET alteration · HRD status · MSI status

** as available from donor records*

IHC MARKERS

ER/PR · HER2 · MMR IHC · PD-L1 · TROP2 · Nectin-4 · B7-H3 · B7-H4 · DLL3 · p16 · p53

HBS FORMATS

FFPE · TMA · Slides

Example HBS Cohorts & Data Available

Sequentially collected (longitudinal) surgical samples from the same donor

APPROXIMATE NUMBER OF DONORS **20–70 sets per indication**

TUMOR TYPES

NSCLC | CRC | Ovarian | Head & Neck SCC | Breast | Gastric | Endometrial | RCC | Bladder (UC) | Melanoma

FOLLOW-UP DATA

Treatment | Response | OS/PFS

MUTATIONS*

KRAS | NRAS | EGFR | ALK fusion | BRAF | BRCA | MET alteration | HRD status | MSI status

** as available from donor records*

IHC MARKERS

ER/PR | HER2 | MMR IHC | PD-L1 | TROP2 | Nectin-4 | B7-H3 | B7-H4 | DLL3 | p16 | p53

HBS FORMATS

FFPE | TMA | Slides

Example HBS Cohorts & Data Available

Longitudinal Example: NSCLC.

Per-patient. Per matched metastasis. Treatment-line resolved. Examples below are anonymized records from the repository.

Patient #001

Immunotherapy: **No**

Treatment status: **Treatment naïve**

PRIMARY SPECIMEN

Surgery: Left lung upper lobectomy and lymph node sampling

Site: Lung, left upper lobe

MATCHED MET 1

Site: Superficial cerebrum and dura

Treatment: Immunotherapy naïve

Patient #002

Immunotherapy: **No**

Treatment status: **Treatment naïve**

PRIMARY SPECIMEN

Surgery: Left Thoracotomy and upper lobectomy with wedge of the lower lobe taken en bloc. Sleeve resection of PA

Site: Left lung, upper lobe

MATCHED MET 1

Site: Lymph node

Treatment: Treatment naïve

MATCHED MET 2

Site: Lymph node

Surgery date: Q1-2018

Treatment: Treatment naïve

Patient #007

Immunotherapy: **No**

MATCHED MET 1

Site: Lymph node

Treatment: Treatment naïve

MATCHED MET 2

Site: Lymph node

Treatment: Treatment naïve

MATCHED MET 3

Site: Hilar Lymph node

Surgery date: Q1-2022

Treatment: Treatment naive

Block #: C7

Example HBS Cohorts & Data Available

Primary & matched distant metastases (surgical samples)

— APPROXIMATE NUMBER OF DONORS **20–50 sets per indication**

— TUMOR TYPES

NSCLC | CRC | Ovarian | Head & Neck SCC | Breast | Gastric | Endometrial | Bladder (UC) | Melanoma | RCC

— EXAMPLES OF METASTATIC SITES

Lymph nodes | Bone | Liver | Lung | Brain | Peritoneal

**Mets only (without matched primary) samples available*

— FOLLOW-UP DATA

Treatment | Response | OS/PFS

— MUTATIONS*

KRAS | NRAS | EGFR | ALK fusion | BRAF | BRCA | MET alteration | HRD status | MSI status

**As available from donor records.*

— IHC MARKERS

ER/PR | HER2 | MMR IHC | PD-L1 | TROP2 | Nectin-4 | B7-H3 | B7-H4 | DLL3 | p16 | p53

— HBS FORMATS

FFPE Slides | TMA Block or slides

Example HBS Cohorts & Data Available

Pre & Post standard of care (SOC) treatment surgical samples

Includes a sub-set of donor matched sets.

APPROXIMATE NUMBER OF DONORS

25–150 per indication

TUMOR TYPES

NSCLC | CRC | Ovarian | Head & Neck SCC | Breast | Gastric | Endometrial | Pancreatic ADC | Bladder (UC) | Melanoma | RCC

FOLLOW-UP DATA

Treatment | Response | OS/PFS

MUTATIONS*

KRAS | NRAS | EGFR | ALK fusion | BRAF | BRCA | MET alteration | HRD status | MSI status

** as available from donor records*

IHC MARKERS

ER/PR | HER2 | MMR IHC | PD-L1 | TROP2 | Nectin-4 | B7-H3 | B7-H4 | DLL3 | p16 | p53

HBS FORMATS

FFPE | TMA | Slides

Example HBS Cohorts & Data Available

Pre & Post IO (Pembro/Nivo) treatment surgical samples

1st line SOC chemo, 2nd line IO. Includes a sub-set of donor matched sets.

APPROXIMATE NUMBER OF DONORS

10–25 per indication

TUMOR TYPES

- NSCLC
- RCC
- Head & Neck SCC
- Melanoma

FOLLOW-UP DATA

- Treatment
- Response
- OS/PFS

MUTATIONS*

- KRAS
- NRAS
- EGFR
- ALK fusion
- BRAF
- BRCA
- MET alteration
- HRD status
- MSI status

** as available from donor records*

IHC MARKERS

- ER/PR
- HER2
- MMR IHC
- PD-L1
- TROP2
- Nectin-4
- B7-H3
- B7-H4
- DLL3
- p16
- p53

HBS FORMATS

- FFPE Slides
- TMA Block or slides

Example HBS Cohorts & Data Available

FFPE blocks & TMAs with matched double-spun plasma.

FFPE block & 4ml matched double-spun plasma or whole blood.

~330	8	40 / 60	5–20 min
TOTAL SAMPLE SETS	INDICATIONS	STAGE I–II / III–IV (%)	ISCHEMIC TIME

INDICATION	FFPE BLOCKS	PLASMA / BLOOD	NGS-ELIGIBLE†
NSCLC	50	●	●
CRC	100	●	●
Gastric ADC	30	●	●
RCC	30	●	●
Esophageal cancer	40	●	●
Endometrial cancer	50	●	●
Ovarian cancer	20	●	●
Melanoma	10	●	●

COMPATIBLE ASSAYS — IHC · RNA-ISH · NGS (Oncomine)

† *NGS (Oncomine) panel can be ordered separately on any indication.*

Note — these sets do not have outcome data and were collected from Ukraine.

Quantities are approximate and subject to change.

Example HBS Cohorts & Data Available

GET IN TOUCH

Let's talk about your program.

Quality biospecimens, imaging & data for precision medicine — sourced, characterized, and delivered in-house.

HEAD OF PROJECTS & IO APPLICATIONS

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