



TXP
Medical

Introduction of TXP Medical

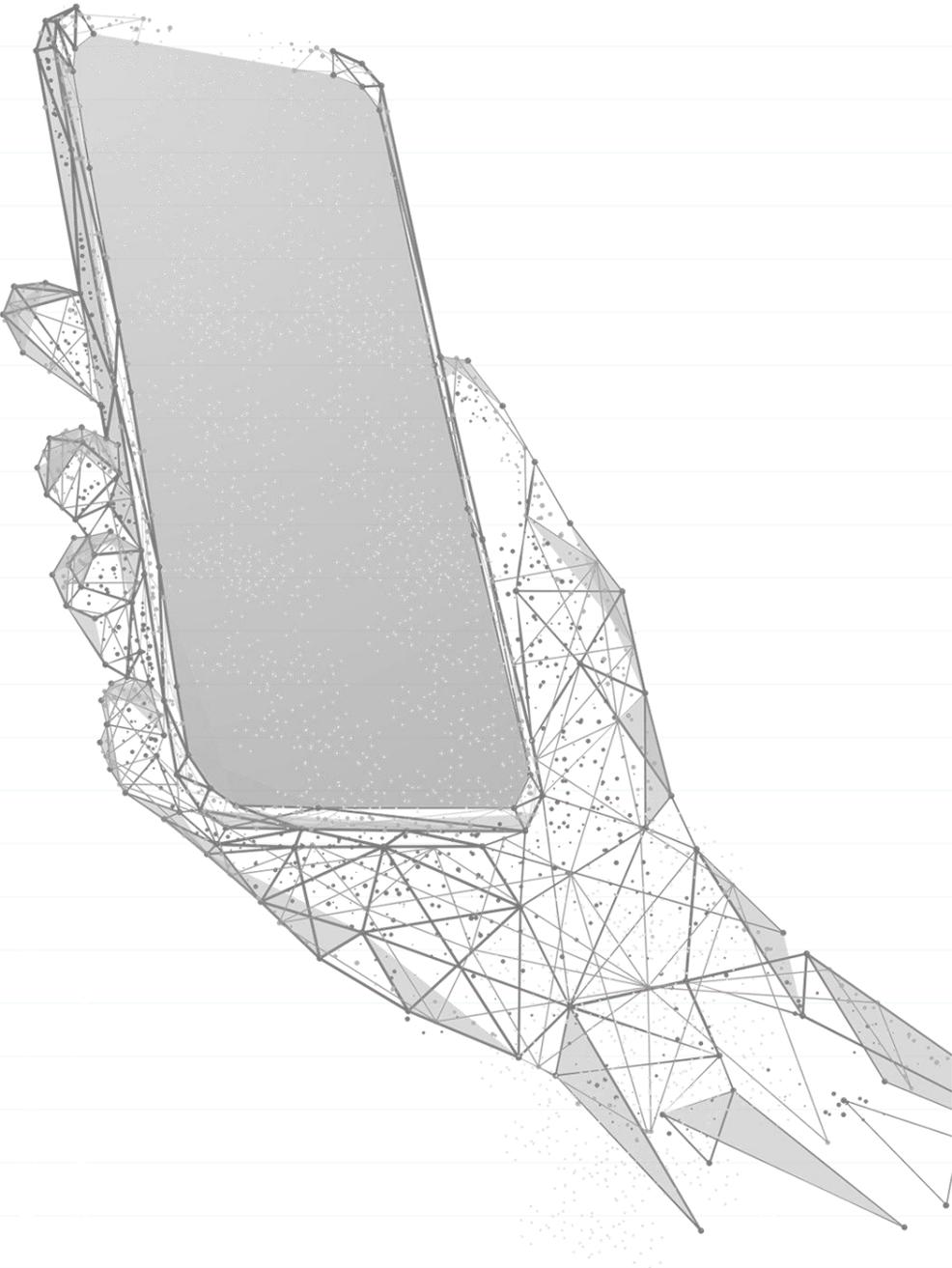
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01 Company overview

02 Medical Data Division

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01 Company overview

Introducing TXP Medical

About Us



To solve the challenge of “fragmented medical data”, we provide seamless services across the entire continuum of care — from pre-hospital emergency medicine to clinical research for pharmaceuticals — in collaboration with local governments and hospitals.

01 Platform Business

Providing AI-powered documentation and emergency care systems (NEXT Stage ER) to major hospitals (e.g., university hospitals)



Regional Referral

(E.g., Clinics)



Advanced Acute Care

(Emergency & Critical Care Centers)



Home

(Post-discharge)



02 Pharmaceutical Business

For diseases with high research demand at tertiary care institutions, utilizing data accumulated and structured by the NEXT Stage ER system, along with all-department data from research DWH construction, for pharmaceutical and medical device companies



03 Global Expansion

Providing NSER Mobile, NEXT Stage ER, and NEXT Stage ICU in Asian countries.



Emergency Transport

(E.g., Ambulance)



Recovery Sites

(Rehabilitation Hospitals, etc)



Walk-in



Acute Care

(Secondary Emergency Hospitals)



Chronic Care Sites

(Long-term Care Hospitals, etc)



Founding Story & Vision

About Us

Deeply committed to the clinical frontline —addressing the fundamental challenges of emergency medicine head-on.

When we founded TXP Medical, many questioned whether physicians should start a company. Yet, as we continued creating truly needed products for clinicians, more hospitals and users began to trust and support us.

Our mission was never to digitize emergency care for its own sake.

Unnecessary IT can make healthcare more complex. Instead, we aim to stand beside healthcare professionals and realize *meaningful digital transformation* that truly improves efficiency and patient outcomes.

- 2017/08 TXP Medical founded
- 2018/02 NSER OP launched
- 2018/06 First NEXT Stage ER installation
- 2018/10 Selected for SIP AI Hospital Project
- 2020/04 Supported national COVID-19 severe case database “CRISIS”
Launched COVID-19 online screening system
- 2020/07 Series A funding (UTECH – ¥250M)
- 2020/12 Emergency transport solution pilot in Fukuyama City
- 2021/06 Launched acute-phase clinical trial recruitment service
- 2022/01 Featured on NHK BS
- 2022/04 Series B funding
- 2024/10 Series C funding
- 2025/02 Released NEXT Stage Document Assist (DA)



**Sonoo
Tomohiro**

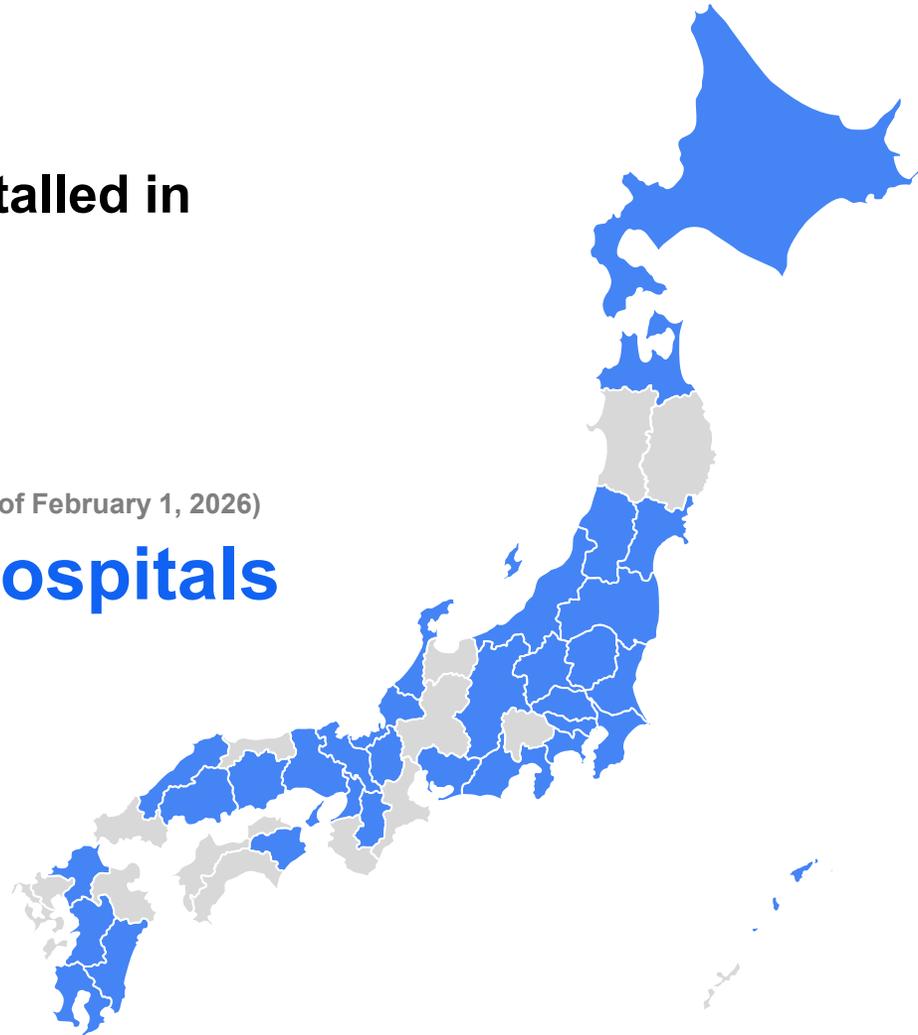
**CEO / Board-certified Emergency Medicine
Specialist and Intensive Care Specialist**

Geographic coverage of TXP partner facility



installed in

105 (as of February 1, 2026)
Hospitals



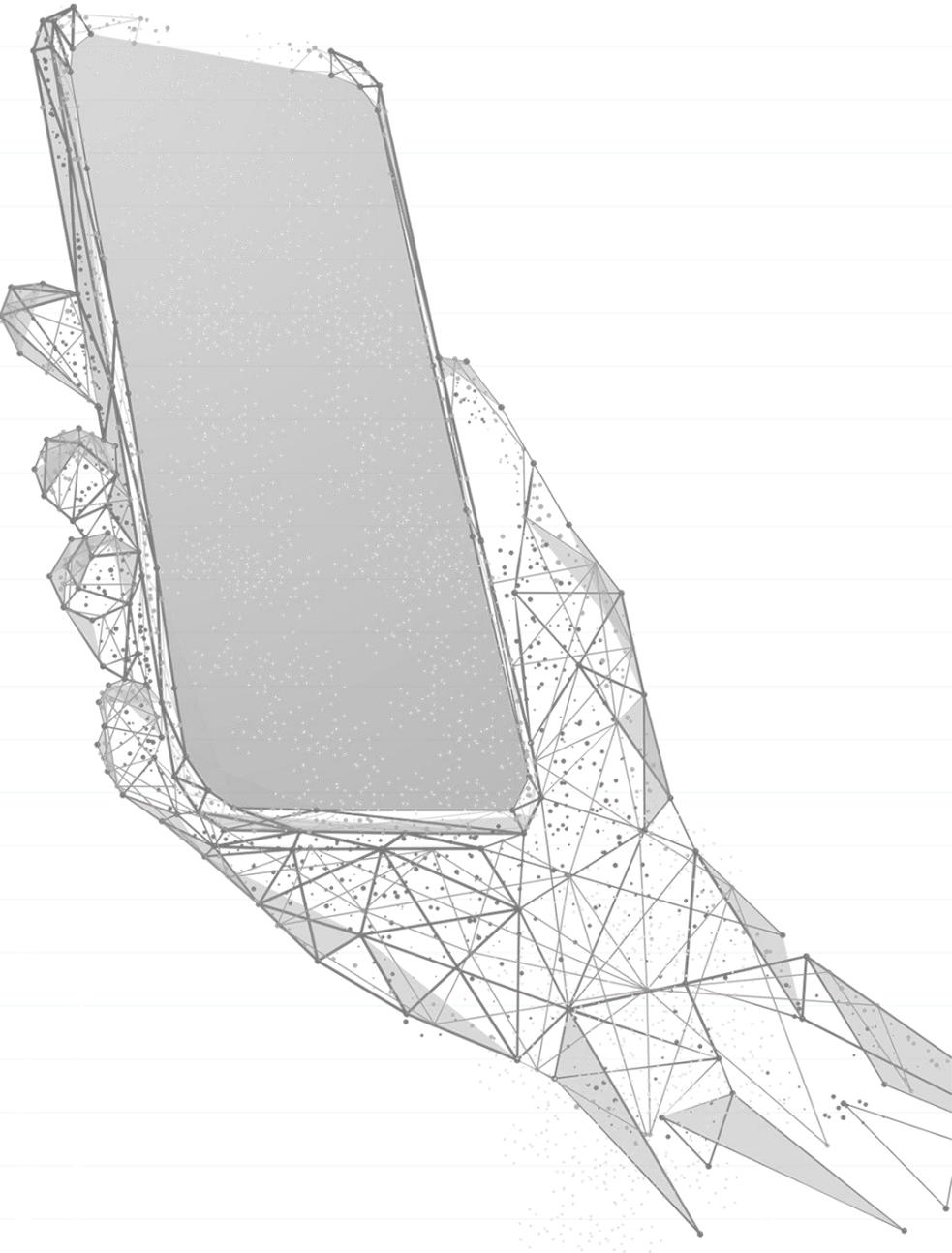
33 Prefectures

40 University Hospitals

50% among emergency and critical care centers

Media Recognition

Featured widely in major media outlets: NHK BS, JHeC 2022 Excellence Award, Nikkei Newspaper, Top 100 Startups, Monthly Project Design, etc.



02 Medical Data Division

The NEXT Stage series accumulates and structures data for diseases with high research demand at tertiary care hospitals, while the construction of research data warehouses enables utilization of data from all clinical departments across medical institutions.

Solving research challenges with data and medical expertise

Our team combines clinical, statistical, and public health expertise with proprietary data

Expert Team

30+ Medical Doctors with diverse specialties to support Oncology research

Example Oncology specialties of our physician team

- Gastroenterology
- Pulmonology
- Nephrology
- Pediatrics
- Gynecologic Oncology
- Hematology
- Dermatology

Other relevant specialties

- MPH(Master of Public Health)
- Biostatisticians

Track Record

Collaborated with 40+ pharmaceutical and medical device companies

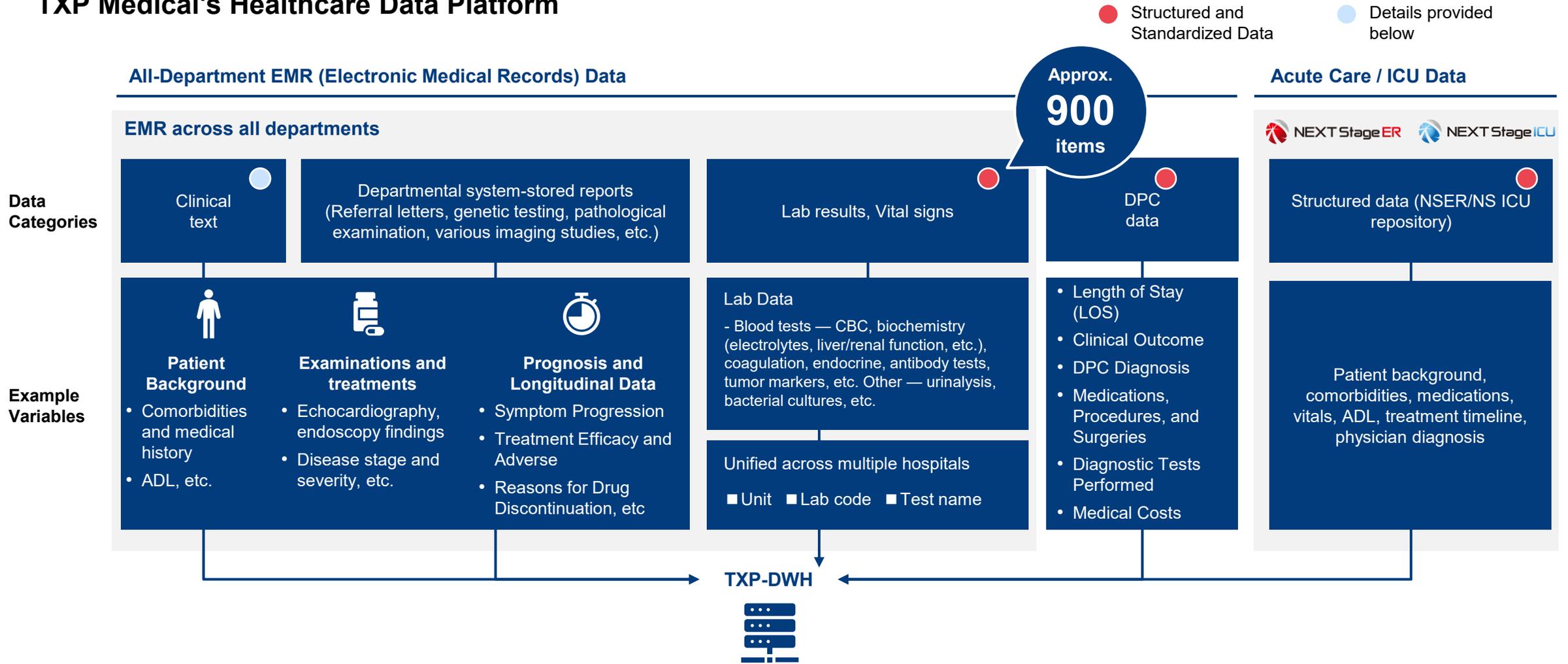
We have a track record of supporting a wide range of projects, including clinical research, data analysis, and market studies

Press Release Highlights

- **Target Clients:** Domestic & global pharmaceutical companies, medical device manufacturers
- **Services:** Data-driven research, real-world treatment analysis, and clinical trial support
- **Therapeutic Areas:** From acute care to rare diseases and oncology
 - AstraZeneca: NEXT Stage ER in acute care RWD study
 - Bayer: RWD research collaboration launched
 - Otsuka: Acute care RWD study supported
 - Rare Disease: Study using real-world data conducted
 - New Service: “Patient Journey” launched with EMR analytics

Unified Platform: All Platforms, All Patient Types, 900+ Standardized Parameters

TXP Medical's Healthcare Data Platform



Realizing diverse real-world data analysis through the exceptional depth of Electronic Medical Record (EMR)-derived data

Enabling Deep and Diverse Real-World Data (RWD) Analysis

Examples of Example Data Items



Patient Background

- Demographics (age, gender)
- Comorbidities and medical history
- Regular medications (including primary care prescriptions)
- Allergies, ADL
- Family history
- Referral details from primary physicians



Examinations and Diagnoses

- Symptoms and physical findings
- 900+ clinical lab parameters
- Genetic and pathological test results
- Echocardiography, endoscopy findings
- Imaging results (X-ray, CT, MRI)
- Physician diagnoses
- Disease stage and severity



Treatment and Outcomes (Including Long-term Data)

- Medications (inpatient/outpatient)
- Changes in diagnosis over time (e.g., recovery, tumor progression)
- Length of stay, discharge outcomes
- Long-term follow-up data over 15 years

Regimen Identification Program (1/2): Streamlined identification of treatment regimens using TXP's proprietary identification program.

This advanced program analyzes pharmacy records across facilities to identify patient-specific treatment regimens by integrating DPC data and EMR (Electronic Medical Record) information.

Regimen Identification Process



Data Input

Collection of DPC data, including medication logs, administration dates, and dosages from each facility.



Reference Mapping

Analysis of schedules and components through cross-referencing with publicly available regimen databases.



Regimen Identification

Identification of individual patient regimens powered by AI algorithms.

System Interface

streamlit app
basic statistics
data status

前処理設定

検索方法を選択
 疾患名で検索
 ICD-10コードで検索

疾患名を入力

乳癌

候補から選択

乳癌

疾患名: 乳癌

ICD-10: C509 (C50)

前処理開始

マスターデータ統計

TXPレジメン特定プログラム

バックエンドサーバーに接続されています

Preprocessing completed for C50

対象患者数	疾患名	ICD-10コード
2843	乳癌	C509

■ 処理詳細

■ 前処理が完了しました。各ページで詳細な分析が可能です。

▼ 使用方法

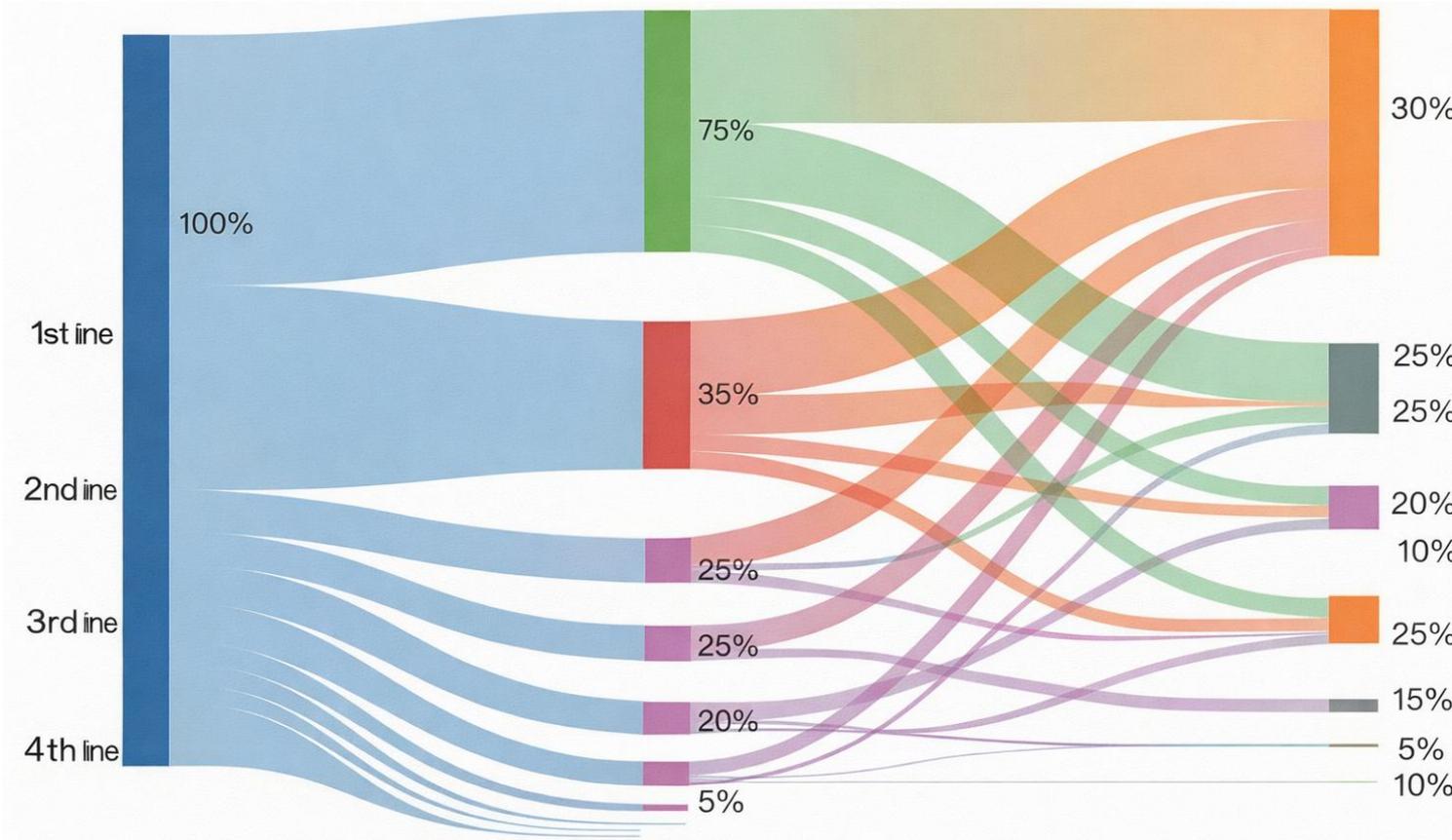
▼ システム情報

Validation of Identification Accuracy

Our advanced algorithm — validated via MD-led EMR reviews — integrates rule-based logic with outlier detection to ensure precise regimen identification, with case-level verification available pre-study.

Regimen Identification Program (2/2): Enhancing Strategic Precision through Data Structuring: Development, Indication Expansion, and Combination Strategies

Value Proposition: Insights from the Regimen Identification Program



Quantifying Treatment Transitions

Visualize specific switching patterns from prior therapies to subsequent lines of treatment.



Identifying Unmet Needs

Extract unmet needs from real-world non-response patterns of existing therapies, and define target populations for pipeline products.



Accelerated Evidence Generation

AI-driven structuring drastically reduces data cleaning efforts, enabling faster publication and congress presentations.

From “Shadows” to “Full-Color Video”: The Global Shift Toward EMR Utilization

Compared to traditional Japanese claims data, EMRs provide significantly more granular and detailed information.



EMR Data:

- **Definition** - Data from HIS/LIS and clinical systems.
- **Granularity** - Comprehensive clinical notes, lab results, and real-time outcomes.
- **Accuracy** - Reflects actual clinical diagnosis and daily records.

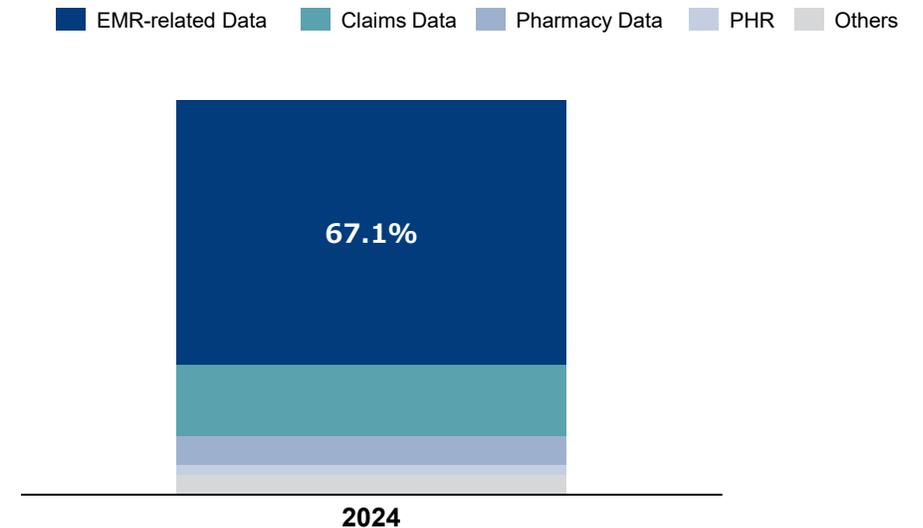


Claims Data:

- **Definition** - Billing-based records and DPC information.
- **Granularity** - Limited to billing codes and procedure/medication history.
- **Accuracy** - Contains "tentative" DPC codes that may differ from final diagnoses. ¹

Consequently, EMR-related data has already become the dominant standard in the global RWD market.

Global RWD Market Share by Data Source (2024)



Yusuke Tsugawa, MD, MPH, PhD, Associate Professor at UCLA

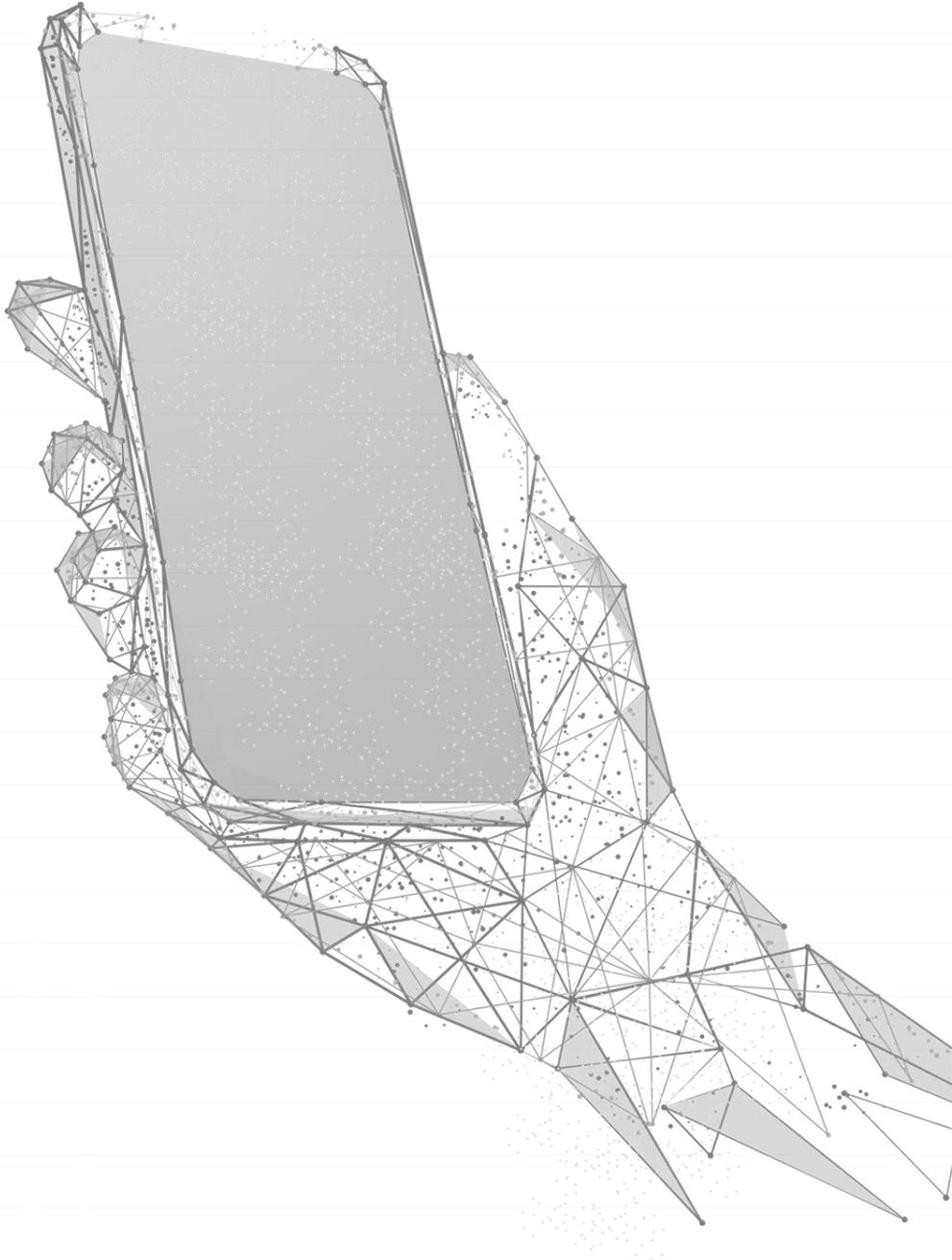
"Claims data are like 'shadows'—you can see the silhouette, but the details are obscured. In contrast, EMR data are like 'full-color video,' capturing the vivid reality and nuances of clinical practice."

"We are witnessing a tectonic shift in the U.S. where EMR has become the primary choice for data utilization, with claims data now serving only as a secondary alternative."

Source: Fortune Business Insights; TXP Medical “[「レセプト」から「電子カルテ」へ。UCLA津川先生と探る、医療データ新時代の幕開け（座談会シリーズVol.3）](#)”

1. Note on DPC Accuracy: DPC codes include 'tentative diagnoses' assigned for administrative convenience before testing is performed, which may differ from the actual clinical diagnosis. In a TXP Medical hematology project, ~30% of patients screened via DPC codes were found to have a different final diagnosis.

03 Use Cases



Unique services leveraging NEXT Stage structured acute care data combined with lab values, EMR text, and DPC data across therapeutic areas

Use Cases: Proven Partnerships with 40+ Pharmaceutical & Medical Device Companies

	Pre-Product Launch	Post-Product Launch (less than 3 years after launch)	Post-Product Launch (3 years after launch or later)
Medical Affairs	<ul style="list-style-type: none"> Detailed Treatment Flow Analysis – Time-series analysis from onset to discharge by hospital to identify care gaps A Current Treatment Analysis – Analyze efficacy and response of standard treatments in oncology Target Patient Assessment – Understand treatment patterns in patient populations for future therapy targeting Unmet Needs Identification – Calculate clinical scores to analyze mortality rates and patient characteristics 	<ul style="list-style-type: none"> Prospect Study – Evaluate efficacy through efficient data collection starting from emergency Treatment Course Analysis – Quantify treatment behaviors through integrated analysis of the entire process from transport to in-hospital care 	<ul style="list-style-type: none"> Prospective Study- Capture difficult-to-collect clinical indicators for quantitative efficacy evaluation Current treatment analysis– Analyze adverse events and regimen usage to inform trial design Prospective Study – Prospectively collect disease assessment tools to evaluate efficacy and safety International Study Replication – Reproduce international literature with Japanese data to validate clinical value
Market Access	<ul style="list-style-type: none"> Healthcare Cost Analysis – Integrate and analyze medical costs of existing treatments with clinical indicators Treatment Practice Analysis – Classify disease severity using echocardiography to identify inter-facility differences 	<ul style="list-style-type: none"> Patient Journey Mapping – Create detailed patient journeys and quantify target populations 	<ul style="list-style-type: none"> Cost-Effectiveness Analysis – Conduct multifaceted health economic evaluation including procedures and outcomes
Marketing	<ul style="list-style-type: none"> Disease Awareness Support – Implement testing promotion system in NEXT Stage ER to increase awareness 	<ul style="list-style-type: none"> Prescription Analysis – Visualize prescription trends by month and drug, evaluate at hospital level Rare Disease Patient Journey – Quantitative analysis of the patient journey from diagnosis through prescription discontinuation 	<ul style="list-style-type: none"> Disease Awareness Support – Deploy disease awareness programs in NEXT Stage ER to enhance recognition and early diagnosis Patient Volume Estimation – Estimate patient numbers from prescription and surgical history for sales resource allocation Drug Discontinuation Analysis – Investigate reasons for anticancer drug discontinuation to inform continuation strategies
R&D	<ul style="list-style-type: none"> Research Efficiency — Dramatically streamline existing clinical trial processes using proprietary OCR and DWH technology Approval Data Generation — Generate real-world standard-of-care outcome data for trials where randomized controlled trials are difficult to conduct" 		

B End-to-end service from protocol development to publication

Extensive track record across multiple use cases – Upon inquiry, a dedicated account team including medical expertise will be assigned to partner in addressing specific business needs

Provided Solution: Early identification of patients with malignant tumors who are non-responsive to standard therapy

Therapeutic Area : Oncology

? Background and Research Questions

- For entry of drugs into the Japanese market, data on the characteristics and outcomes of standard treatment for malignant tumor patients is needed
- Specifically:
 - What is the **efficacy of standard treatment** in **malignant tumor patients**?
 - What are the factors that predict **responsiveness to standard treatment**?
 - Are there differences in **characteristics and treatment patterns** between **Phase 3 clinical trial sites** and non-trial sites?

Services Provided

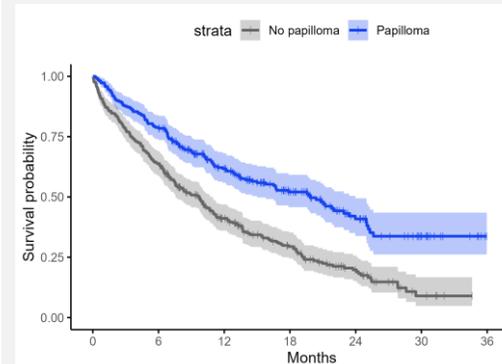
- Analyzed **150 patients with the target disease across 6 facilities (urban/rural)** for the following:
 - Patient background (medication, medical history, treatment history)
 - Pathological malignancy grade
 - Subsequent treatment
 - Outcomes (OS, PFS)
 - Classified into subgroups by pathological malignancy grade, renal functions, and treatment responsiveness
- Meticulous support from medical oncology specialists** through every stage — from research planning to analysis and reporting

Results

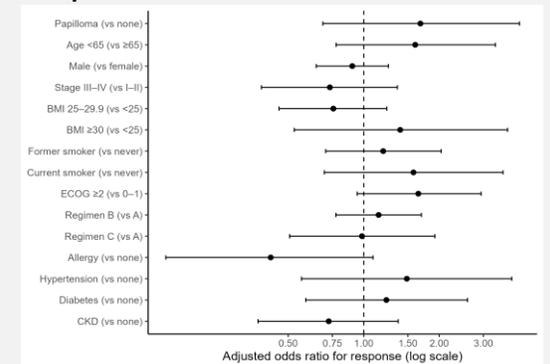
- Promoted appropriate use as part of **future medical plans**
- Widely utilized as **academic and practical knowledge** through publication
- Used as the foundation for **MR (medical representative) and marketing strategy planning toward product launch**

Output Image

■ Survival Curve in Standard Treatment



■ Predictive Factors for Standard Treatment Responsiveness



Data Source



EMR Text

- Pathology report
- Cancer stage



Lab Values/Vitals

- Cre, eGFR
- Blood pressure, pulse



DPC

- In-hospital prescriptions, procedures
- Discharge date

(Excerpt)

B End-to-end support from protocol design to manuscript publication, leveraging deep clinical expertise (Over 90 original articles published).

 **Solutions** : Seamless, integrated support provided by the TXP Research team, covering the entire lifecycle from protocol development to final publication.

Phase	TXP Capabilities	Description
Research Planning	High-Quality Protocol Development	<ul style="list-style-type: none"> • TXP Research develops study protocols robust enough to withstand high-evidence-level peer-reviewed publication. • Expert team comprising Specialist Physicians, MPHs, and Biostatisticians. • Track record of over 90 original articles published.
	Precise Patient Selection	<ul style="list-style-type: none"> • Accurate and efficient identification of target populations leveraging the TXP database.
	Streamlined Ethical Review (IRB) Support	<ul style="list-style-type: none"> • Utilization of an internal Ethics Review Committee registered with the MHLW system; multiple committee options proposed as needed. • Implementation strategies designed to minimize hospital burden and align with clinical operations.
	Enhanced Investigator Engagement	<ul style="list-style-type: none"> • Maintains physician motivation through expert-led study briefings, automated data extraction to reduce input burden, and regular communication.
Study Execution	Clinically-Informed Study Design	<ul style="list-style-type: none"> • EDC design incorporating frontline clinical insights from physicians, allowing for flexible responses to facility requests or protocol amendments.
	Tech-Driven Efficiency & High-Quality Monitoring	<ul style="list-style-type: none"> • Cloud-based EDC for progress visualization and reduced monitoring man-hours • Optimized Source Data Verification (SDV) utilizing DWH and OCR technology, supported by experienced monitoring professionals.
Analysis & Publication	Integrated Support by Expert Teams	<ul style="list-style-type: none"> • Multidisciplinary teams (MPH, Biostatisticians, Specialists) handle everything from analysis to manuscript preparation. • Extensive experience and a proven track record of success.
	Supervisory Framework	<ul style="list-style-type: none"> • Overall research oversight provided by Prof. Goto (Yokohama City University Graduate School of Health Data Science / CSO of TXP Medical).
	Extensive Publication Track Record	<ul style="list-style-type: none"> • Numerous research achievements, including publications in top-tier journals : <ul style="list-style-type: none"> - Critical Care: Joint international multi-center study on proprietary OCR technology. - Circulation Journal: Study on implantable devices in cardiac arrest patients. - Intensive Care Medicine: Multi-center study on PICS onset in ICU patients.

Reference : TXP Medical Publication List <https://docs.google.com/spreadsheets/d/1iTJEMh65gx8nYwepLxqEMTg-BDkjm8Lv/edit?gid=159749116#gid=159749116>



MISSION

Our Purpose

Saving Lives Through Medical Data