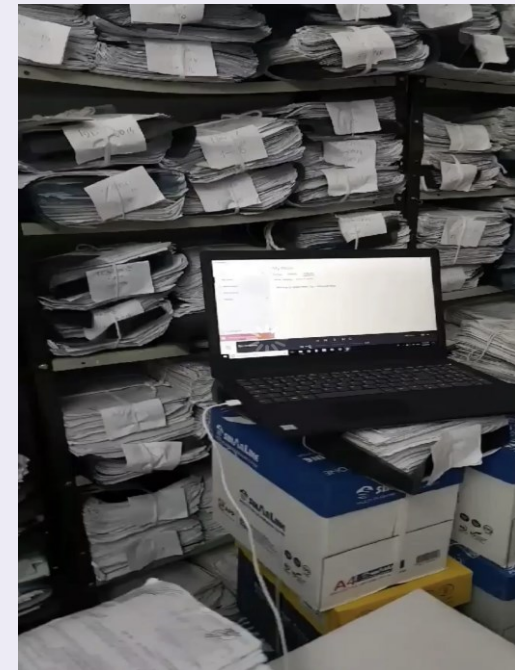


HOW TO BRING DATA TO LIFE



CURRENT STATUS OF ONCOLOGICAL RESEARCH

- Medical-data storage and research integration into daily practice is fragmented and unsystematic
- No centralized databases with historical series of decision making in healthcare and no specific outcomes reported
- No common data model implemented in the majority of oncological hospitals
- A lot of time spent in data standardisation, aggregation and tumour boards preparation
- No ethical, legal and transparent framework for data exchange implemented in daily practice
- Current EMRs are not helping doctors perform research, connect to a network of researchers and make us of technology to its full potential



WHY?

- INCREASED COMPLEXITY OF ONCOLOGICAL CARE



Exploding R&D
Pipelines



Combination
therapies



Value-based
care



Precision
Medicine



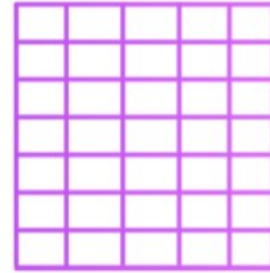
- HOSPITALS ARE UNDERSTAFFED - GLOBAL PROBLEM



SOLUTION: ONCOCHAIN



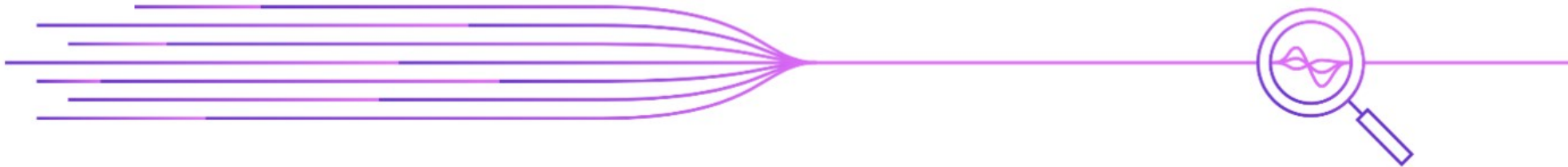
UNSTRUCTURED DATA



STRUCTURED DATA



GDPR - compliant



COLLECT

STANDARDISE

ANALYSE

SOLUTION: ONCOCHAIN



CT Abdominal + CT Chest+Abdominal + W contrast IV

04.11.2020

IMAGING

DESCRIPTION (free text):

Fara determinari secundare pulmonare sau adenoapati mediastinale. 2 noduli pulmonari cu aspect sechelar la nivelul L5D, stenoză arială la nivelul atrului dreptoric prin ingrosare circumferentiala indolfa, cu o grosime maxima de 12 mm intrina pe o lungime de 15 mm cu partial obstructiv, cu staza gastrica superioara; ficat steatotic, cu prezinta un hemangiom capilar de 5 mm in segment 4 fara adenoapati abdomino-pelvine cu viza patologica; chisturi corticale renale bilaterale; prostate cu dimensiuni crescute 56x53x55 mm, cu contururi regulate, difuz neomerga cu microcalcificari periferice, hipertrofi de lob median si amputa peintul postero-inferior al VU, fara determinari secundare osoase.

68 yo, MALE

CANCER TYPE

STOMACH

DOCTOR

Ioana Dinu

PRIMARY CANCER DIAGNOSIS

Malignant neoplasm of stomach, unspecified

HISTOLOGY

Carcinoma, NOS

STAGE

cT8cmet, unstaged, unknown, Stage X

CLINICAL STATUS

ACTIVE

COMORBID CONDITIONS

E811: Iron deficiency
E782: Mixed hyperlipidemia
R803: Phlebitis and thrombophlebitis of lower extremities, unspecified
R160: Hepatomegaly not elsewhere classified
R633: Feeding difficulties
E1165: Type 2 diabetes mellitus with hyperglycemia

HISTORY

SMOKING STATUS

Tobacco smoking consumption unknown

SMOKING YEARS

0

CT Abdominal + CT Chest+Abdominal + W contrast IV

09.12.2020

SURGERY

TREATMENT INTENT: CURATIVE

SURGERY NOTES (free text):

GASTROENTEROSTOMY TO ILL POSTERIOR MECHANICAL TRANSMEDICOLIC PE ANSA IN Y A LA ROUX.

CT Abdominal + CT Chest+Abdominal + W contrast IV

15.01.2021 - 15.04.2022

SYSTEMIC THERAPY

TREATMENT INTENT: CURATIVE

TYPE OF THERAPY: ADJUVANT

DATE 15.01.2021 - 15.04.2022

CT Abdominal + CT Chest+Abdominal + W contrast IV

15.03.2021

IMAGING

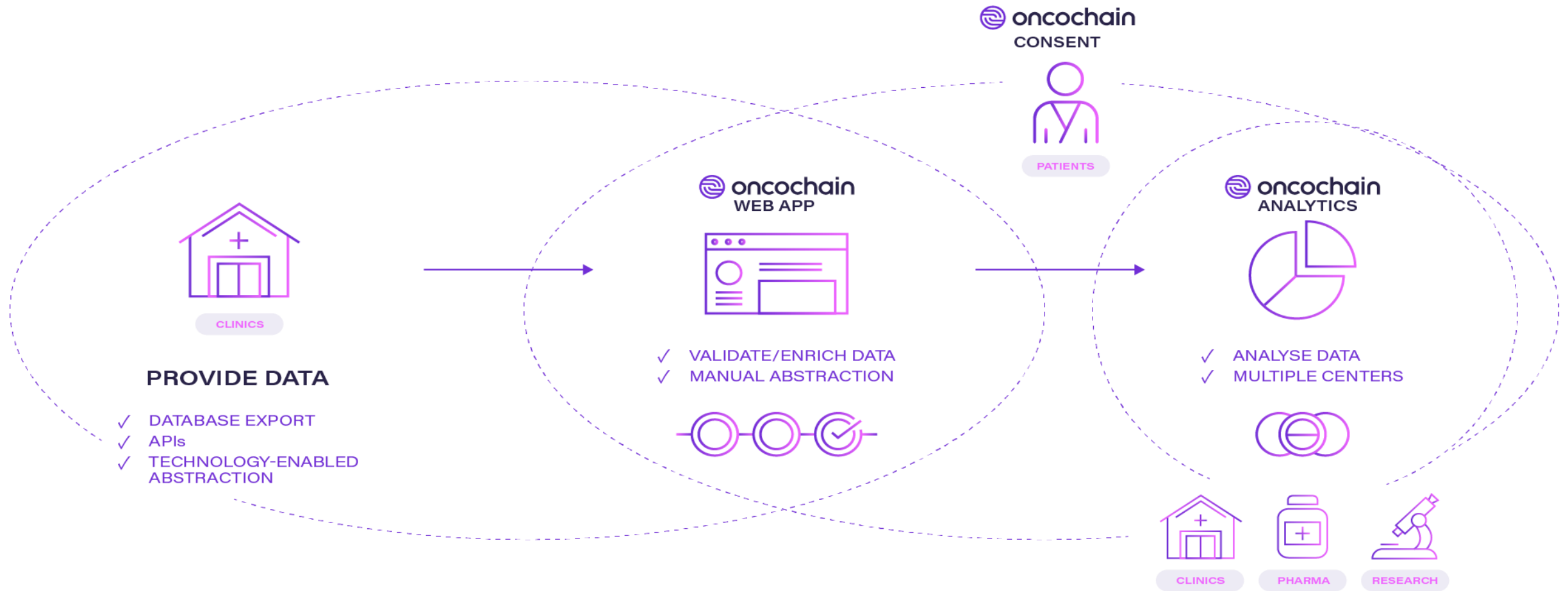
ADD EPISODE OF CARE

ADD RESPONSE TO TREATMENT

ADD RECURRENCE



PLATFORM ARCHITECTURE



COLLECTED DATA TYPES:

Patient characteristics and clinical features: sex, age, smoking status, cancer type, histology, stage, site of metastasis, associated comorbidities, ECOG status, date of death etc.

Specific clinical episodes: systemic therapy (prescribed molecule / regimen, line of therapy, planned duration), surgery, radiotherapy, imaging, side effects associated with treatment, imaging, response to treatment.

Biomarkers and other **laboratory tests, genomic data.**

LATEST INTEROPERABILITY STANDARDS:

- **HL7 FHIR**
- **mCODE**

UPDATED INTERNATIONAL CLASSIFICATIONS:

- **SNOMED CT**
- **ICD-10-CM, ICD-O-3**
- **LOINC**
- **NCI**
- **CTCAE, HGNC**

mCODE™

 **HL7 FHIR**

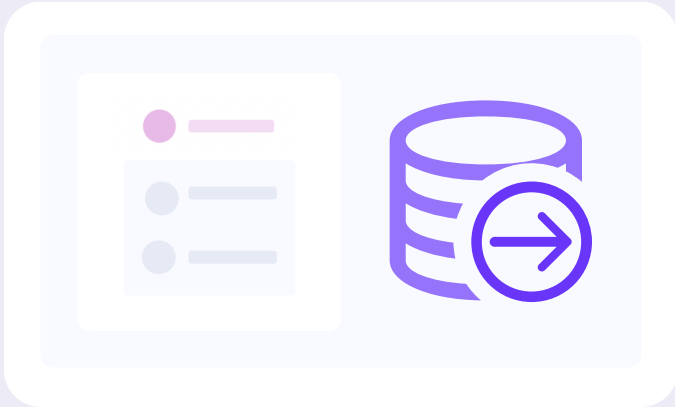
SNOMED CT
The global
language of
healthcare

LOINC®
from Regenstrief

HGNC

1. DATA ABSTRACTION:

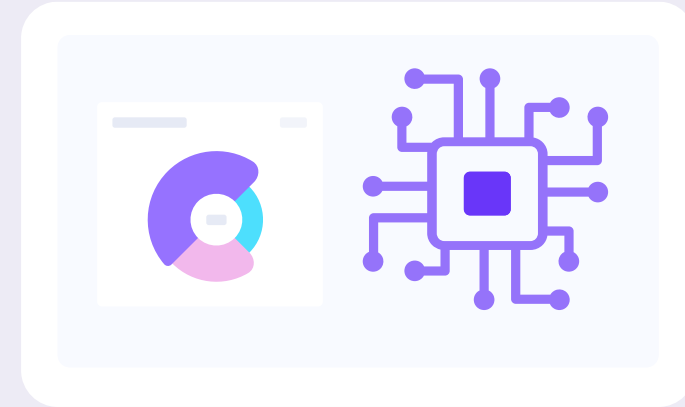
TRAINED ONCOLOGY PROFESSIONALS + TECHNOLOGY



✓ Database Export

✓ APIs

✓ Privacy-by-design



✓ Optical character recognition (OCR)

✓ Natural Language Processing (NLP)

✓ QLDB from AWS

2. DATA VISUALIZATION AND ANALYSIS:

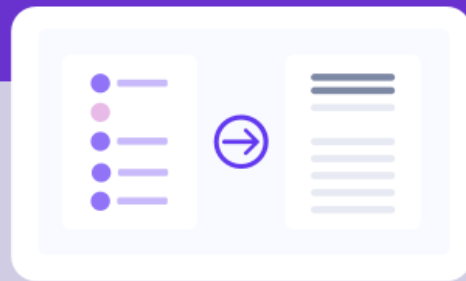
THE ONCOCHAIN PLATFORM

USERS: Oncology Professionals (Physicians, Researchers, Managers)

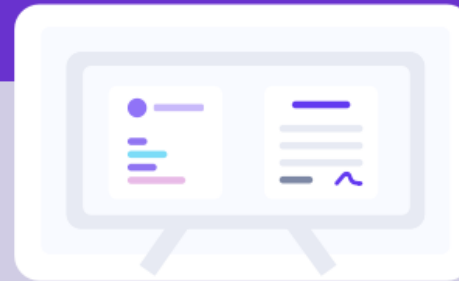
MAIN FEATURES:



**Analytics
Dashboard**



**RWD Studies
+
Research Network**



**Digital Tumor
Board**



**Patient's
eConsent
& Timeline**

ONCOCHAIN PLATFORM INTEGRATION:

EASY, FAST, ACCESSIBLE

Patient signs digital consent

An **e-Consent add-on** is integrated directly in the platform. Oncochain provides the necessary hardware to make the process flawless.

1



Input additional data

Other important, but less accessible data, like tumour progression and disease recurrence, can be inputted by **abstractors** or **staff members**.

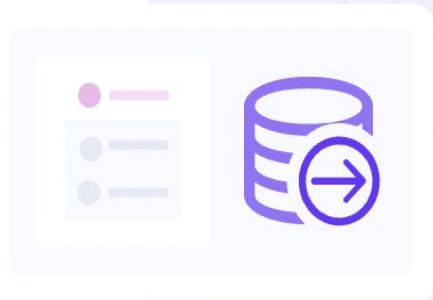
3



Export data from current EMR

Because of **interoperability standards**, we can extract specific data directly from your hospital's EMR/EHR.

2



Monitor analytics & Participate in RWD studies

We generate reliable and useful analytics to drive **improvements in daily practice** and aid delivery of value-based care for patients.

4



< BACK TO LIST


TIMELINE

STUDIES

CARE PLAN

MESSAGES

FILTER 

 ONLY SEEN BY PHYSICIAN AND CLINIC

PERSONAL INFO

 EDIT

Ioan Vasile

ID: 123742482379

OCN: 61617993306144159ab8309a

Deceased: 2021.10.18

CASE DETAILS

 EDIT

59 y.o., MALE

CANCER TYPE

PANCREAS

PRIMARY CANCER DIAGNOSIS

Malignant neoplasm of head of pancreas

HISTOLOGY

Intraductal papillary adenocarcinoma with invasion

STAGE

pStage III

CLINICAL STATUS



MR Abd WO+W contr IV

01.12.2020

IMAGING



1m 2w 4d



Pancreaticoduodenectomy

19.01.2021

SURGERY



1m 5d



LAB TEST

24.02.2021

LAB TEST



3d



GEM/CAP Regimen (Cycles: 3, Adverse Events: 1)

27.02.2021 - 18.10.2021

SYSTEMIC THERAPY



4w 0d



Gemcitabine Regimen (Cycles: 5, Adverse Events: 3)

28.03.2021 - 17.08.2021

SYSTEMIC THERAPY



4w 0d



Intensity modulated radiation therapy - 28 Gy

25.04.2021 - 02.06.2021

RADIOTHERAPY



2w 0d



LAB TEST

16.06.2021

LAB TEST



2m 4w 2d



CT Abd

15.09.2021

IMAGING



SPECIFIC TIMELINE FOR EACH PATIENT
- capture longitudinal data for better surveillance-

oncochain

RWD STUDIESANALYTICSCOHORTS

CANCER TYPE

MELANOMA: Cutaneous

END POINT

PFS

COHORT CONSTRUCTION:

SOURCE

TREATMENT EPISODES

SURGERY

None

SYSTEMIC THERAPY LINE 1

Dabrafenib / Trametinib

SYSTEMIC THERAPY LINE 2

Ipilimumab

RESULTS:

CASES = 481

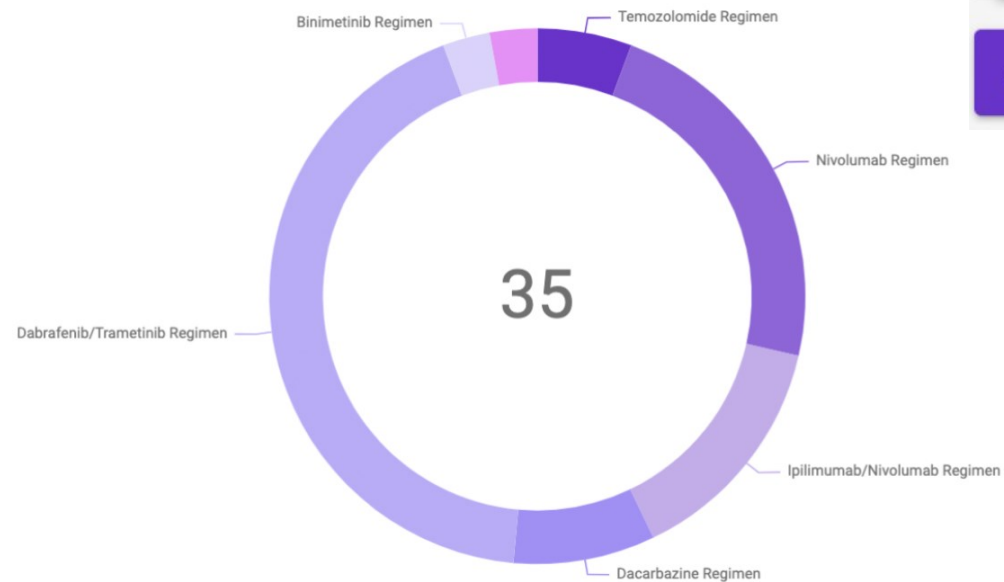
1 year PFS = 89,78%

3 year PFS = 55,90%

5 year PFS = 25,90%

BRAF V600E POSITIVE = 100%

Top Systemic Therapy Regimens



TREATMENT RESPONSE

EVIDENCE TYPE

Imaging (procedure)

DATE OF ASSESSMENT

21.10.2021

RESPONSE TO TREATMENT

No value selected

Complete response

Partial response

Stable disease

Progressive disease

Not assessed

oncochain

PATIENTSPEDIATRICSRWDANALYTICSBORDBOARDS

Test Test

Oncochain Clinic

MELANOMA: Cutaneous

MELANOMA: Uveal

CENTRAL NERVOUS SYSTEM

MY CASES

ALL CASES

ADD PATIENT

AGE	GENDER	DIAGNOSIS	STAGE		
51	male	Basal cell carcinoma of skin of right upper limb, including shoulder	pStage IV	<input checked="" type="checkbox"/>	
60d05d4	ca lo	Squamous cell carcinoma of skin of other part of trunk	pStage IIIC	<input checked="" type="checkbox"/>	
60d0a7c	cio roba	Squamous cell carcinoma of skin of breast	pStage IIA	<input checked="" type="checkbox"/>	
60d0ac0	ari cil	Basal cell carcinoma of skin of left upper limb, including shoulder	pStage IVA	<input checked="" type="checkbox"/>	
60d058e	tr va	Squamous cell carcinoma of skin of right lower limb, including hip	pStage IIIB	<input checked="" type="checkbox"/>	
60d06bf	de cl	Squamous cell carcinoma of skin of nose	pStage IV	<input checked="" type="checkbox"/>	
60d0990	iu li	Basal cell carcinoma of skin of left upper limb, including shoulder	pStage IIIA	<input checked="" type="checkbox"/>	
60d09ea	st en	Squamous cell carcinoma of skin of right lower limb, including hip	pStage IV	<input checked="" type="checkbox"/>	
60d0a55	co st	Basal cell carcinoma of skin of right upper limb, including shoulder	pStage IIC	<input checked="" type="checkbox"/>	
60d08f2	ne radican	Unspecified malignant neoplasm of skin of lin	pStage IIR	<input checked="" type="checkbox"/>	



HEALTHCARE PROVIDERS

- more informed treatment decisions
- research opportunities



PATIENTS

- better care
- improved treatment outcomes



oncochain



PHARMACEUTICAL COMPANIES

- access to anonymized aggregated analytics for faster pipeline-related decisions

GROWTH

18 PARTNERSHIPS WITH HOSPITALS
AND
ONCOLOGY INSTITUTES



6 CO-CREATION WORKSHOPS + **2** RWD
STUDIES WITH PHARMA COMPANIES



GRANTS,
SUPPORT,
FUNDING



cleverage.vc

seedblink 

Johnson & Johnson



10 TRAINED ABSTRACTORS/ DATA
CURATION SPECIALISTS

5 IT & DATA SCIENTISTS
SPECIALISTS



BENEFITS FOR PROVIDERS



CREATE RESEARCH-READY CLINICAL DATA REPOSITORIES

- Catalyze study research design and trial recruitment
- Perform **multicentric academic studies**
- Expedite **scientific article publishing**
- Facilitate accreditations with standardized reporting

EXPLORE CENTRE DATA → ACCESS TO SMART ANALYTICAL INSIGHTS

- Benchmark against best practices + inform and drive **quality of care improvements**
- On-demand dashboards
- Monitor performance through data end points calculation

AT ZERO COST TO YOUR PRACTICE PARTNER WITH US TO:

- Upskill your clinical research capabilities
- Benefit the most from your data and generate real-world evidence
- Obtain a comprehensive cancer patient journey
- Reduce the burden of tumour boards preparation



MULTIDISCIPLINARY TEAM



ROXANA MARGAN
CEO, MD, PhD



MADALIN MARGAN
COO & PO, MD, PhD



RADU GEOROCEANU
CTO, CS Msc



LIVIU MUNTEANU
Business Expert, MSc



ION PETROVAI
Mentor, MD



ANDREI MĂRGINEAN
General Surgeon



RADU DRAGOMIR
Lead Oncologist, PhD



ESTHER SUCEVEANU
Clinical Content Manager,
MD

HAVE WE MET BEFORE?



2nd Place, 2019



Finalist, 2019



Participant, 2019



Best Project Award, 2019



2nd Place, 2019



3rd Place, 2019



Participant, 2019



Best Blockchain Startup, 2019



Entrepreneurship Prize 2019



Participant, 2019



1st Prize, 2019



Semi-finalist, 2019



Slush, 2019 Side Events







TechCrunch Disrupt Berlin, Startup Alley, 2019



Nominated in 2 categories, 2019

KEY REQUIREMENTS FOR RWD PLATFORMS

-  **COMMON DATA MODEL**
-  **INTEROPERABILITY**
-  **LEGAL & ETHICAL FRAMEWORK**
-  **DATA QUALITY ASSURANCE**
-  **STAKEHOLDER COLLABORATION**



Looking for partnerships

Hospitals/Academia

ALUMNI

HealthCareLab

Powered by



BUCHAREST



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