



Data Driven Healthcare

stories — Andrea Pescino — a.pescino@softjam.it

While Worldwide

THE PRECISION MEDICINE INITIATIVE

2015



 U.S. National Library of Medicine



Your Guide to Understanding
Genetic Conditions

[Health Conditions](#) [Genes](#) [Chromosomes & mtDNA](#) [Resources](#) [Help Me Understand Genetics](#)

What is the Precision Medicine Initiative?

The Precision Medicine Initiative is a long-term research endeavor, involving the National Institutes of Health (NIH) and multiple other research centers, which aims to understand how a person's genetics, environment, and lifestyle can help determine the best approach to prevent or treat disease.

[Learn more about
Precision Medicine Initiative](#)

THE WHITE HOUSE

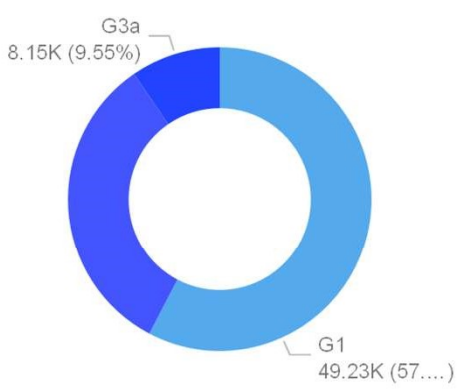


THE PRECISION MEDICINE INITIATIVE

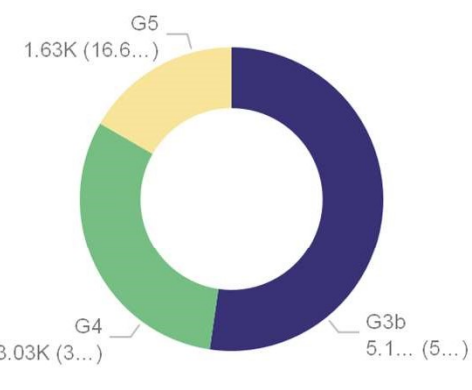
La nostra soluzione: SJ - CKD

Sistema esperto per l' **analisi dei dati clinici** per **epidemiologia**, **early warning** e **early referral** del **paziente asintomatico con tendenza a sviluppare cronicità**.

% Stage 1-3a

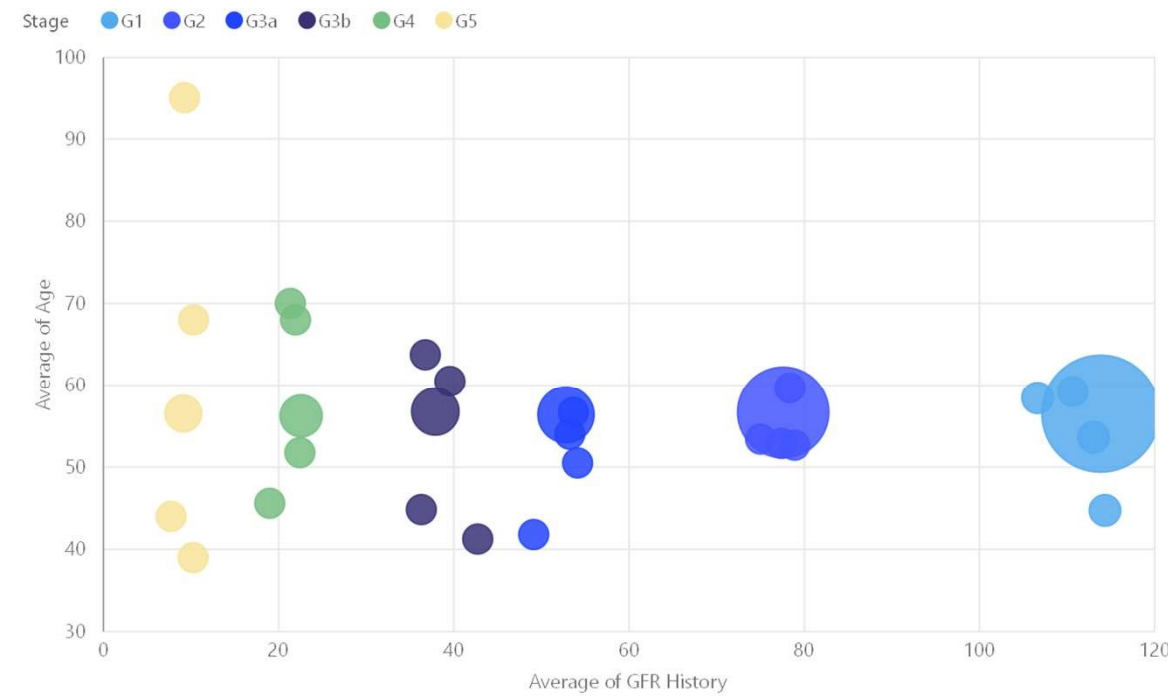


% Stage 3b-5

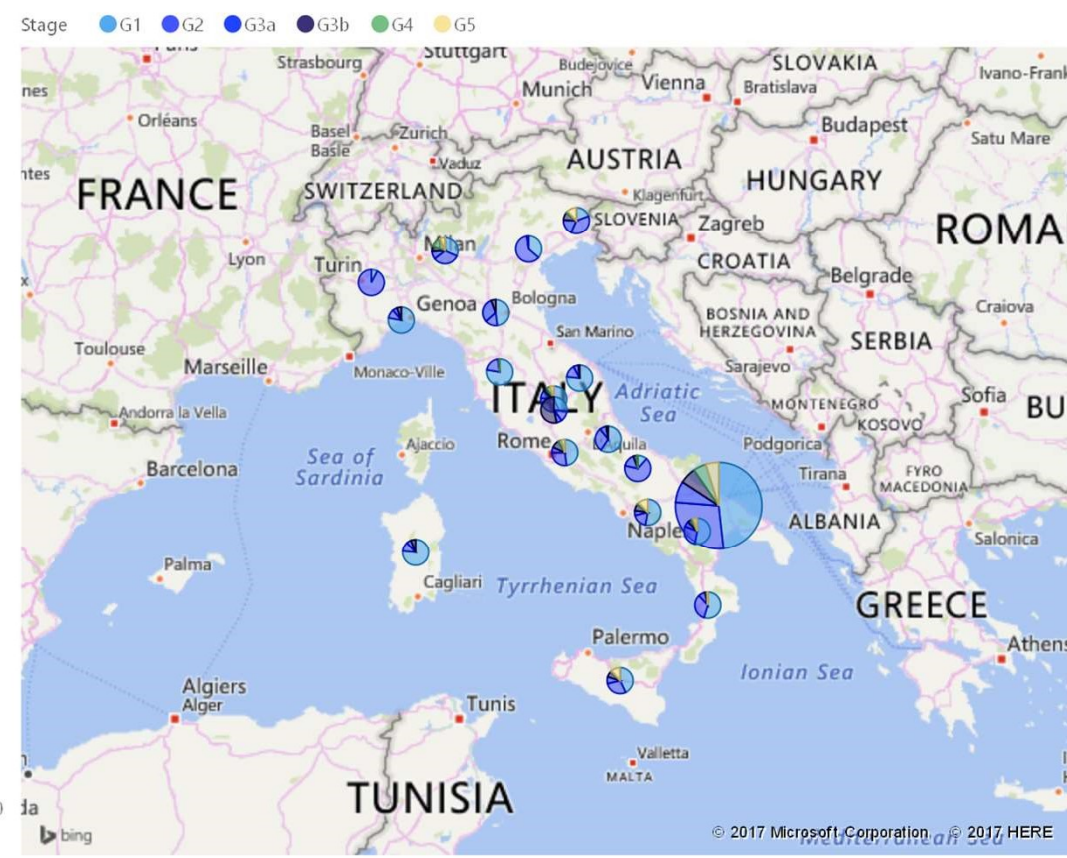


Stage	Count of PatientId	%GT Count of PatientId
G1	49234	65.76%
G2	27983	37.38%
G3a	8149	10.88%
G3b	5106	6.82%
G4	3028	4.04%
G5	1628	2.17%

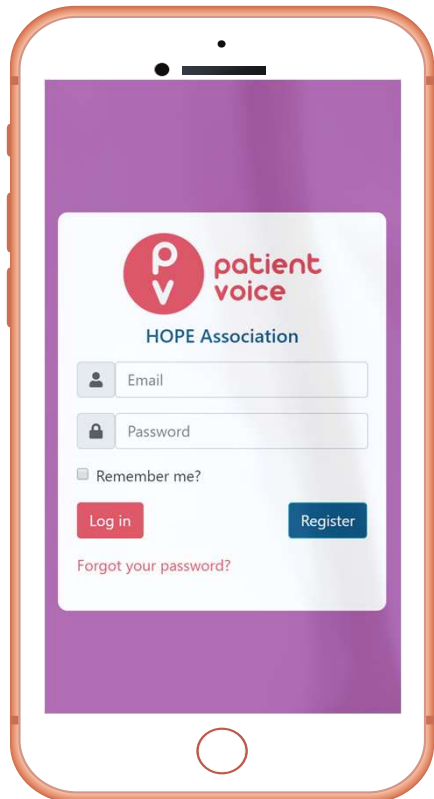
Average of GFR History, Average of Age and Count of Id by Area and Stage



History by Region_ and Stage



Phase 1



Cloud
Infrastructure
Security - Scalability



Data
Foundation



Integration
Layer



Modern Patient's
Apps
Mobile / Web



Associations'
apps
Mobile / Web

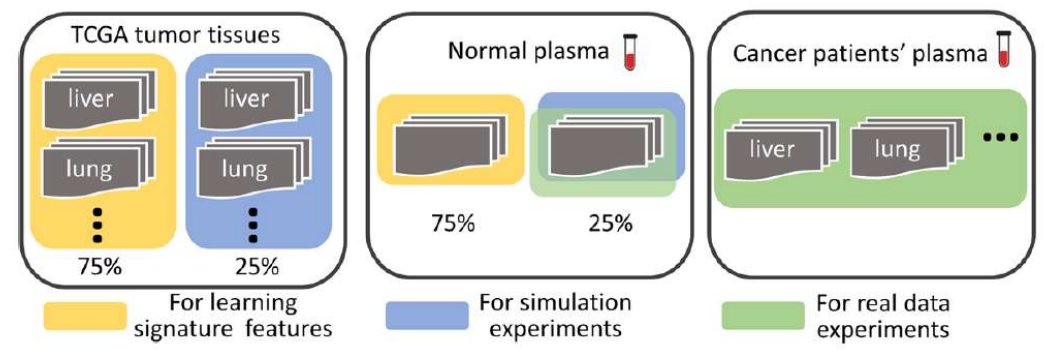
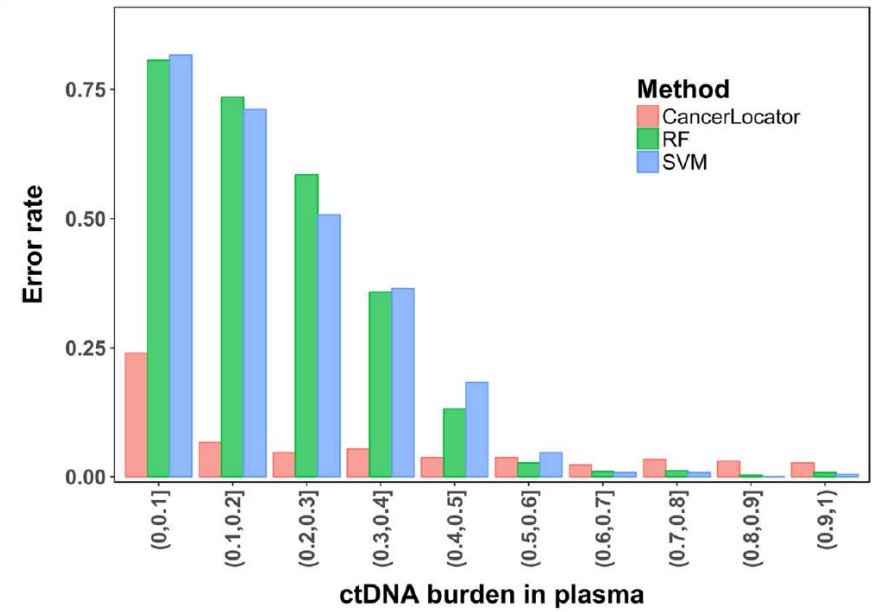
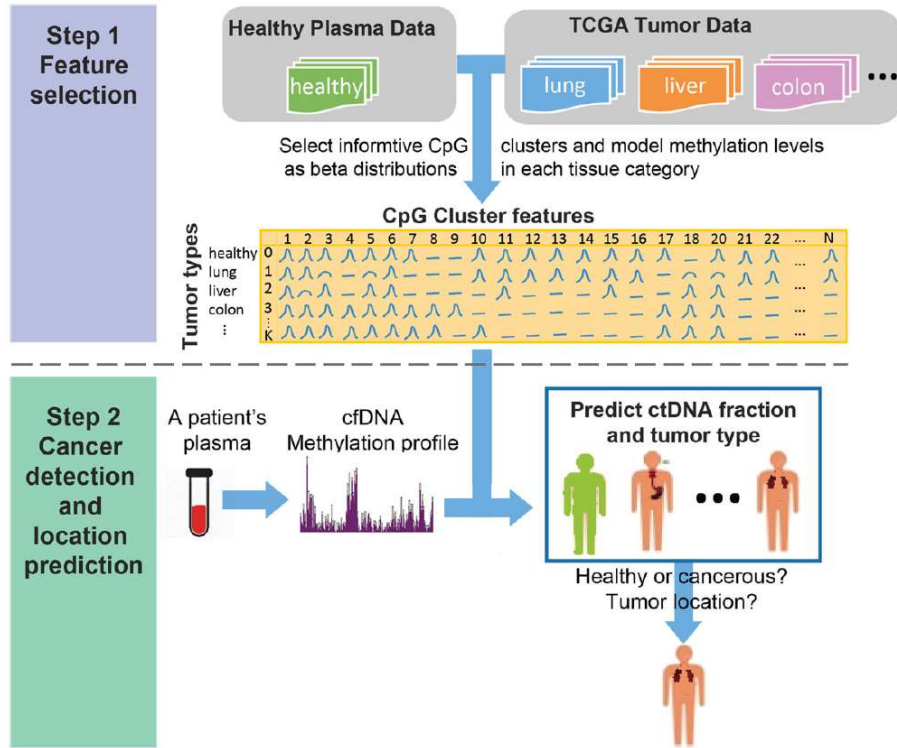


Dashboards



CancerLocator: non-invasive cancer diagnosis and tissue-of-origin prediction using methylation profiles of cell-free DNA

Shuli Kang¹, Qingjiao Li¹, Quan Chen¹, Yonggang Zhou^{2,3}, Stacy Park⁴, Gina Lee⁵, Brandon Grimes⁴, Kostyantyn Krysan⁴, Min Yu⁶, Wei Wang⁷, Frank Alber¹, Fengzhu Sun¹, Steven M. Dubinett^{2,8,9,10*}, Wenyuan Li^{2*} and Xianghong Jasmine Zhou^{2,3*}





2017

50.500 nuovi casi

12.000 decessi (-2.2%)

87% Survival a 5 anni



UNIVERSITÀ DEGLI STUDI
DI GENOVA

4 Tipologie

Luminali A

Luminali B → G1 → **G2** → G3

HER 2 positivi

Triplo negativi

Epigenetica - Metilazione DNA

Marker – HOXB13, TMEM179, CRMP1, SCNN1B

Signature (miRNA)

Classificatore di espressione genica

Machine Learning (DRF, DNN)