HOLOGENOMIX · DELFT

More molecules.

Finding cancer while it can still be cured, by putting more of its DNA in the test.

Pancreatic cancer, five years on: **44 in 100** alive if found early, **3** if found late.

Scroll ↓

What

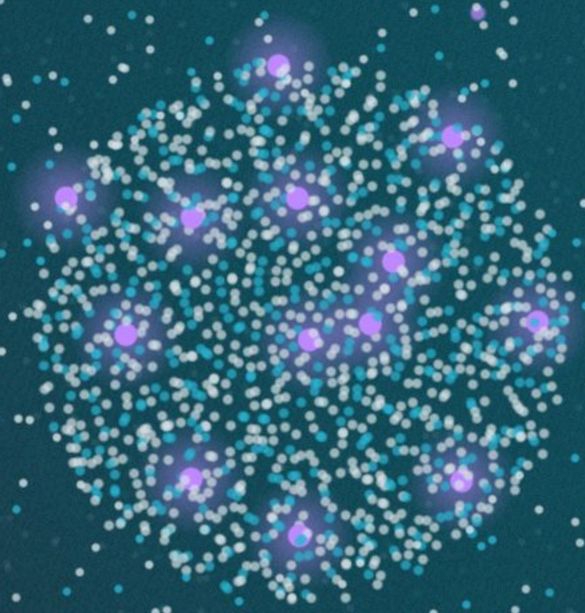
40–150× the DNA of a blood draw.

Our device, HFX, pulls DNA from a whole morning void (~300 mL, up to 500 mL), collected at home. Any DNA test downstream gets more to read.

Tumours shed DNA into the blood

Dying tumour cells release short fragments of DNA. They end up in the blood, and from there in the urine.

Catch those fragments and you can read the tumour without cutting into it. That's a liquid biopsy.



ONE BLOOD DRAW

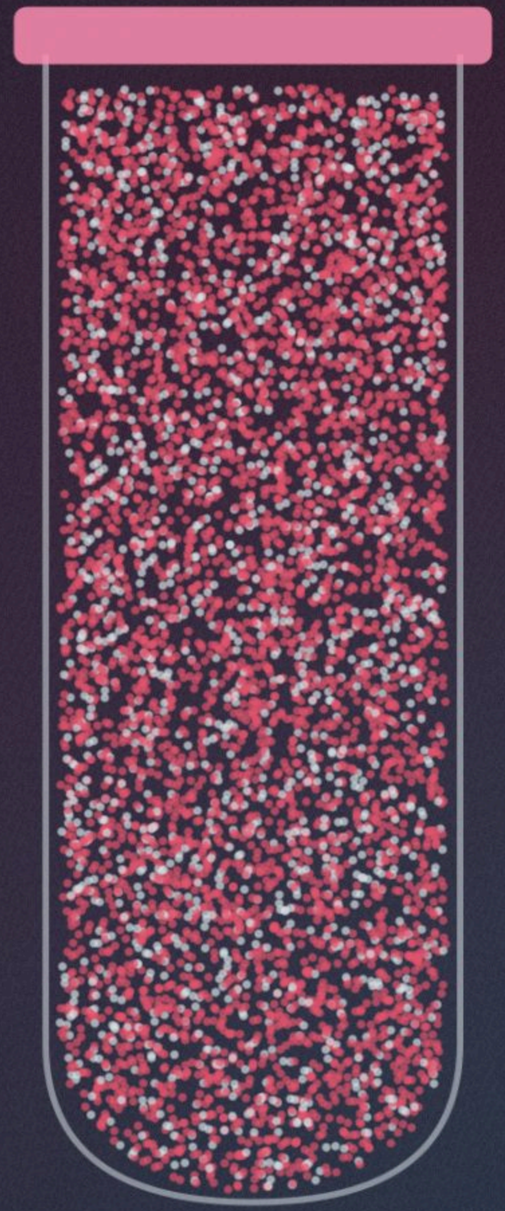
~6,000

usable copies of the genome. Every dot is one.

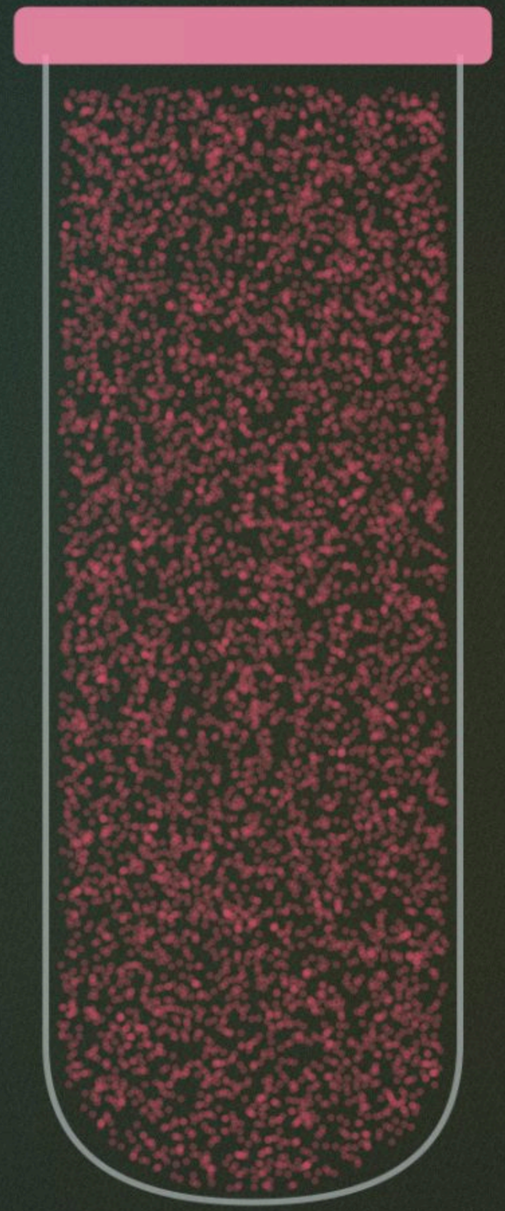
At one in a million, the expected number of tumour copies of any one mutation in that tube is **0.006**. Usually zero.

"If no physical fragment that supports a targeted [mutation] is present in the sample, even ideal ultra-deep targeted sequencing will fail to discover a signal."

Zviran et al., Nature Medicine 2020 (median 6,000 copies in 194 patients)



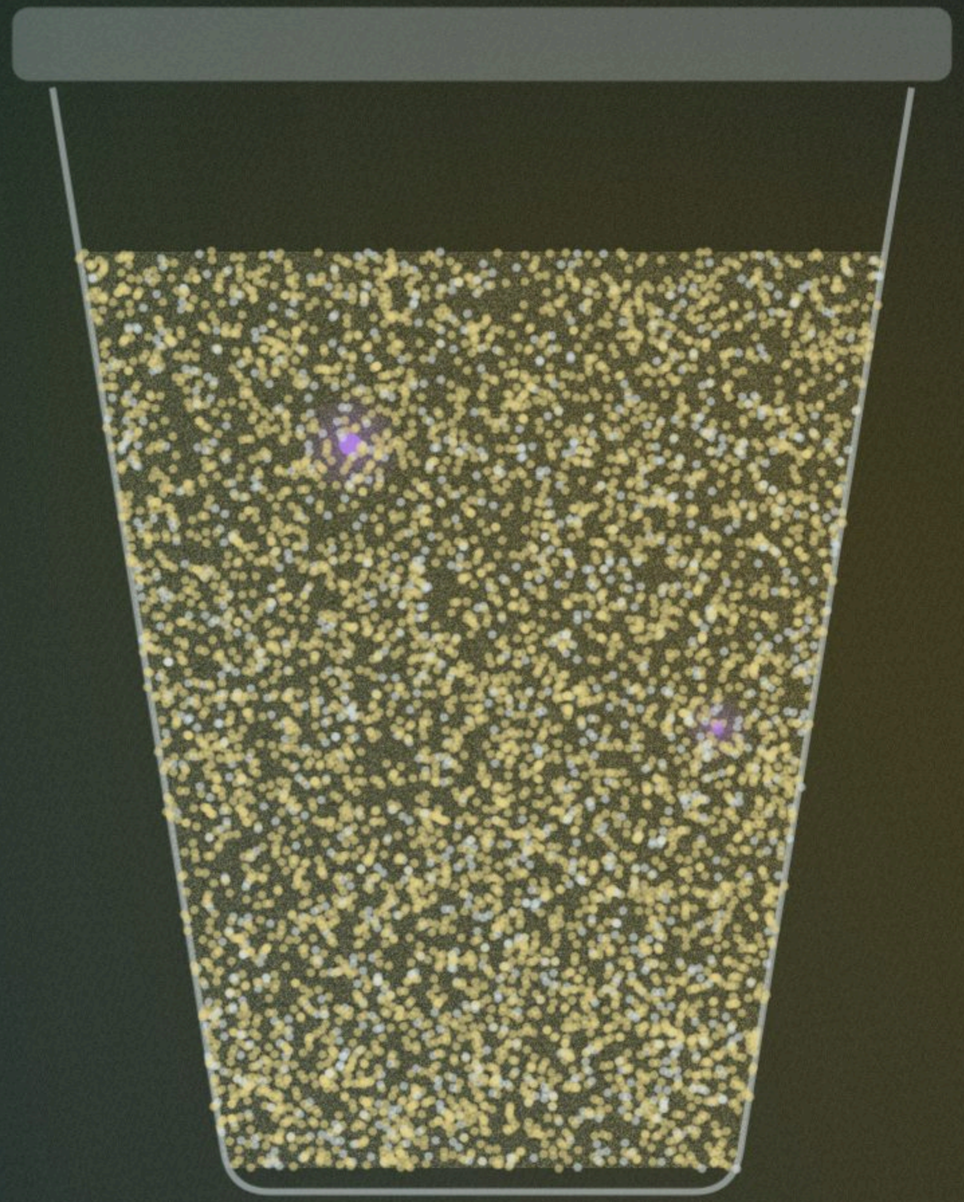
What if we just had more material?

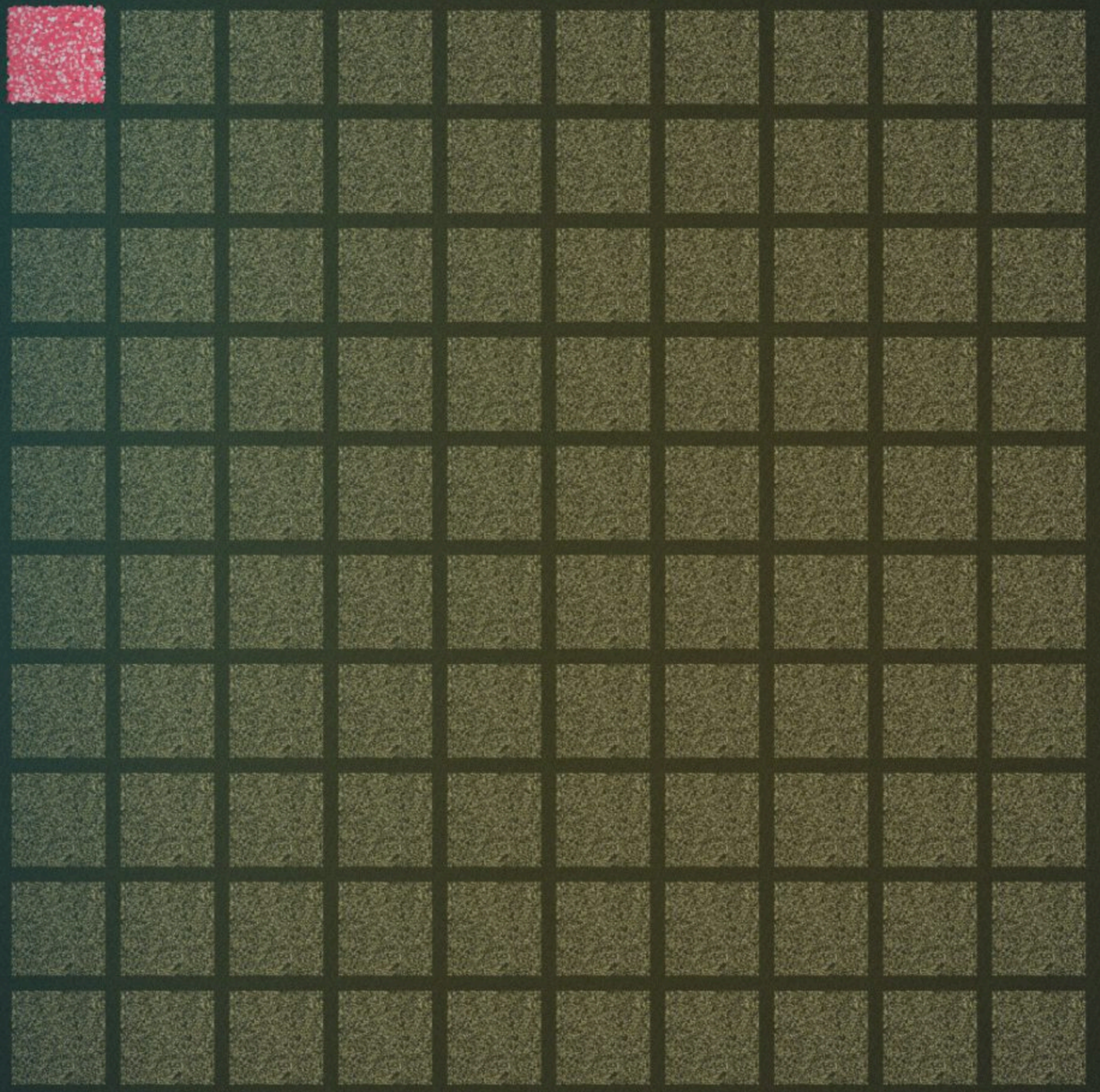


Urine carries DNA from the blood too

The kidneys pass DNA fragments from the blood into the urine. You can collect a whole cup at home, every year, with no needle.

HFX, our device, concentrates the DNA from 100–500 mL into one small pellet: **10–30× what a urine kit gets**.



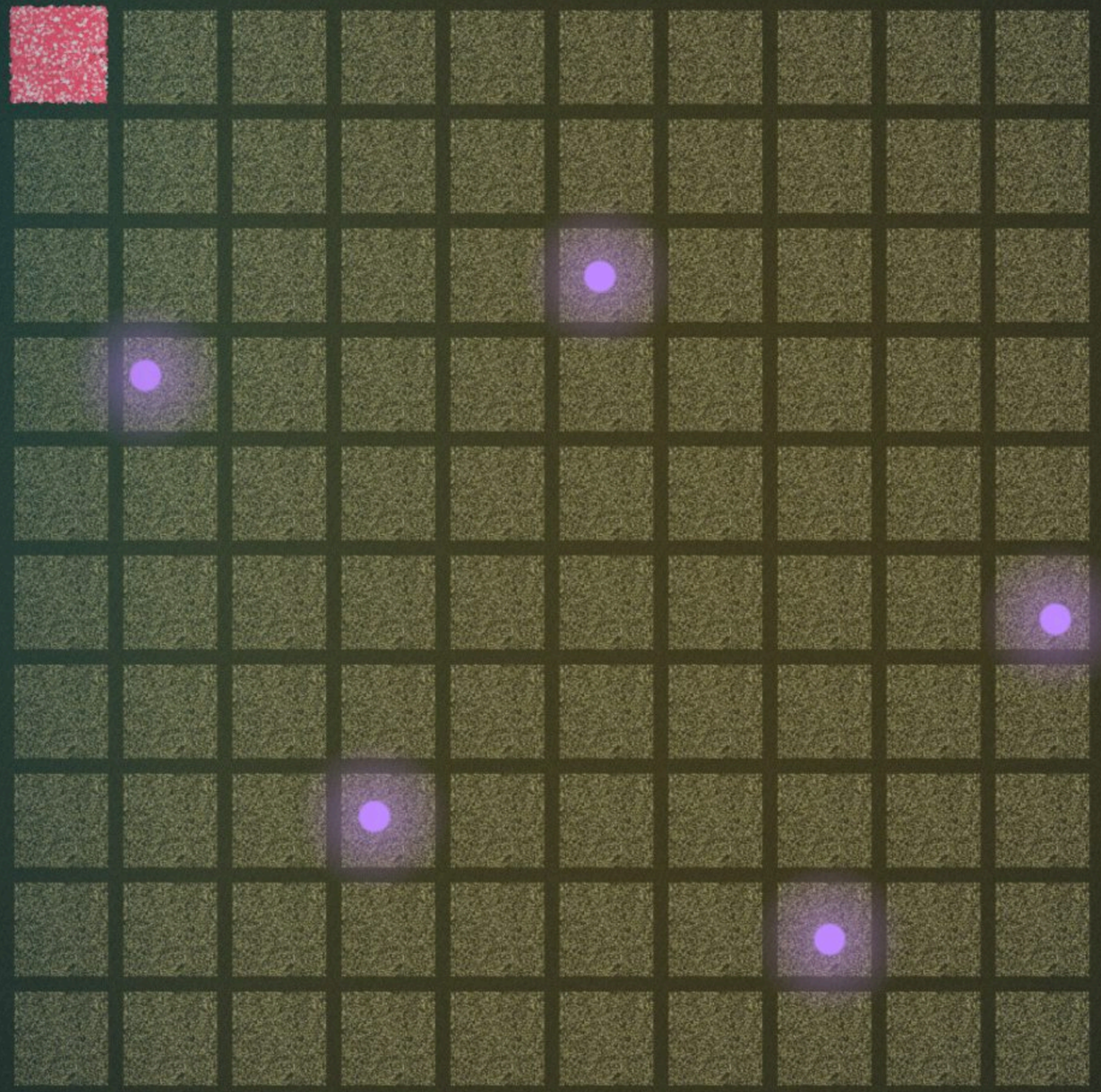


300 ML OF URINE THROUGH HFX

40–150×

225,000 to 900,000 genome copies: 40 to 150 blood draws in one cup. Each square is one draw; 100 shown.

300 mL is a normal morning void (HFX takes up to 500 mL), scaled from our 100 mL data: 250–1,000 ng cfDNA per 100 mL, 3.3 pg per copy, vs a median 6,000 copies per blood sample.



Now there's something to find

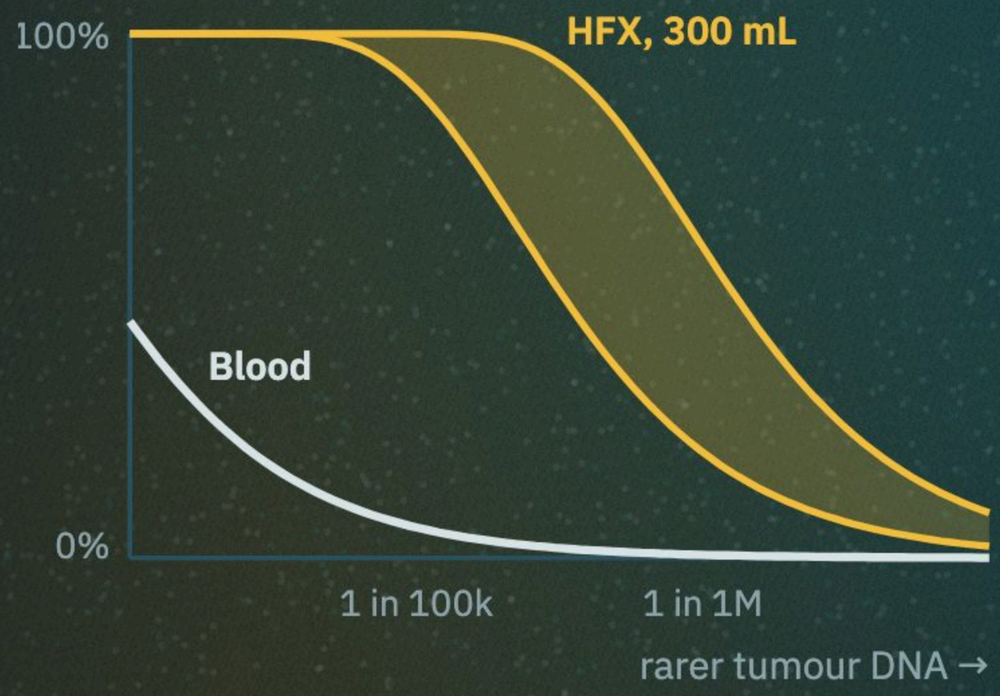
At one tumour copy in 100,000, a blood tube expects **0.06** tumour copies. The cup expects **2 to 9**, if urine carries the same tumour share as blood.

More copies, more chance one is there

Chance that at least one copy of a given tumour mutation is in the sample

At 1 in 100,000: blood **6%**, HFX **89% to ~100%**. At 1 in a million: **0.6%** vs **20–59%**.

The open question: urine also carries DNA from the kidneys and bladder, so its tumour share may be lower than blood's. For pancreatic cancer, that's the first thing we measure.



Why now

The tests are ready. The sample isn't.

Pharma needs to read tumour DNA. People take the easy test. Medicare now pays for early detection. Every test is still capped by one blood tube.

AUGUST 2026

Cancer drugs now aim at mutations

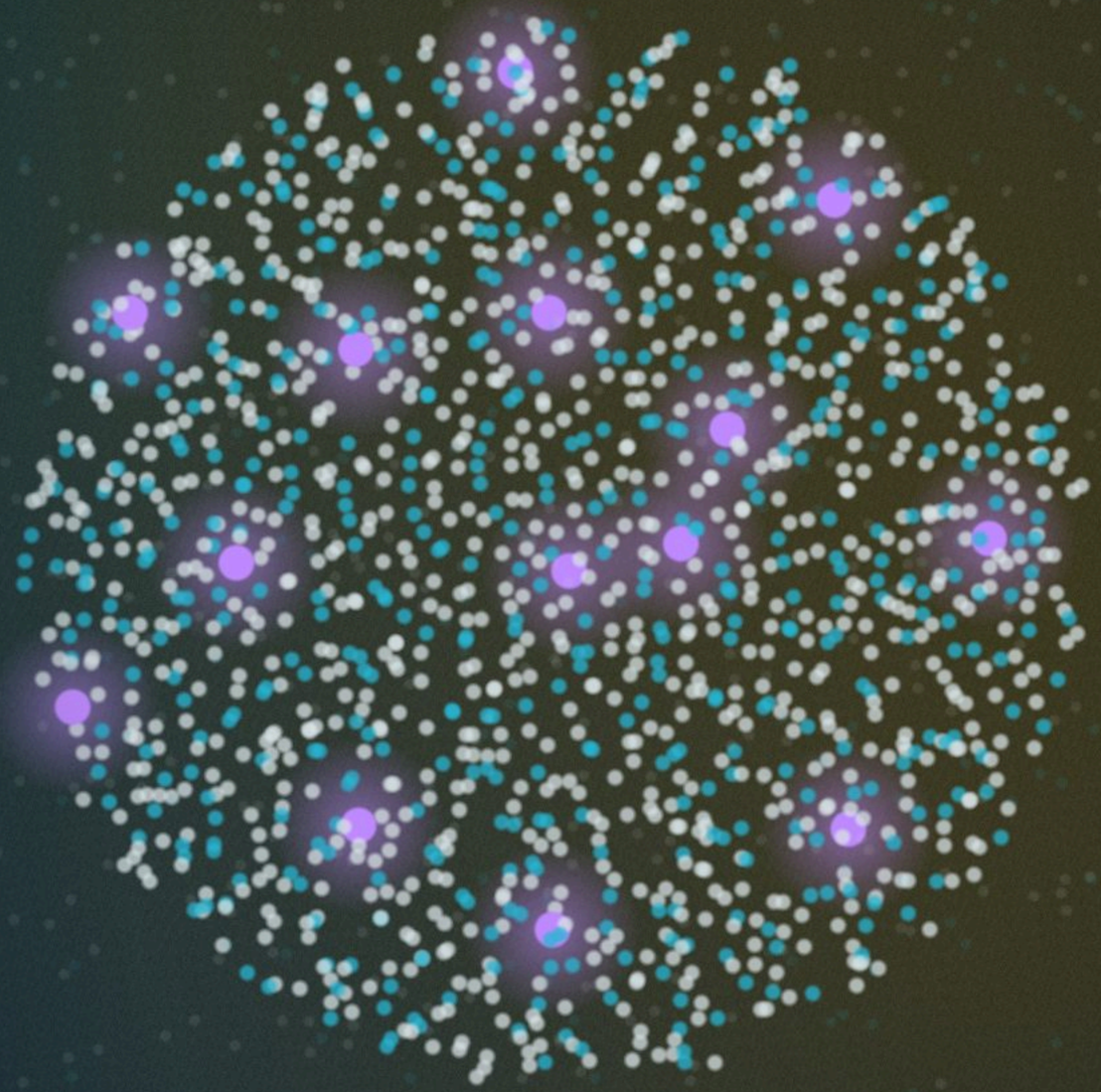
The FDA approved daraxonrasib, the first RAS drug for pancreatic cancer. RAS mutations drive about 9 in 10 of these cancers.

6.7 → 13.2

months median survival once the cancer has spread

The next drugs aim at single mutations. **To choose them, and to see if they work, doctors read the tumour's DNA.** Again and again.

RASolute 302 (ASCO 2026, NEJM); FDA approval 26 Aug 2026. KRAS mutated in ~93% of pancreatic adenocarcinomas (TCGA 2017).



PHARMA WANTS IT

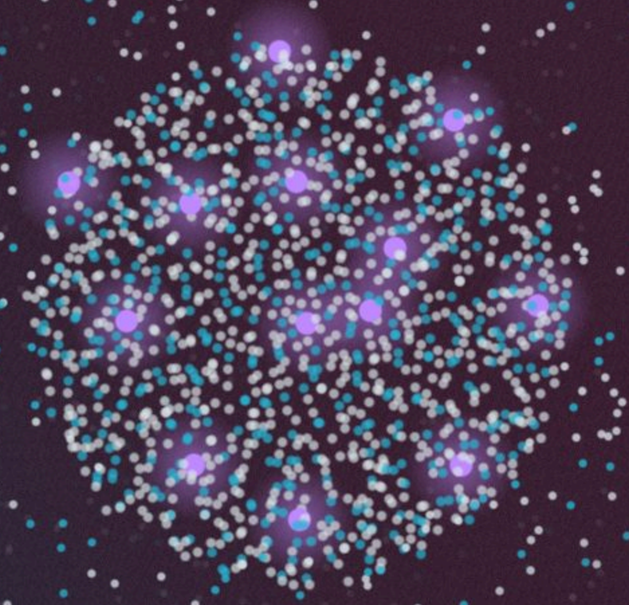
Tumour DNA shows if a drug works

28 of 28

patients on daraxonrasib saw their tumour DNA in the blood fall by half or more. When the drug stops working, it rises again.

The FDA accepts tumour DNA to pick patients and measure response in curative-intent drug trials. Guardant earned **$210M** from 190+ pharma partners in 2025.

The RAS drugs are now in trials right after surgery. **That's where the blood holds the least tumour DNA to read.**



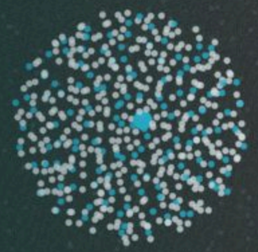
ASCO Post, May 2026 (28 evaluable patients); Nature Medicine 2026; FDA ctDNA guidance, Nov 2024; Guardant FY2025 results; RASolute 304 (adjuvant), Revolution Medicines Q3 2026.

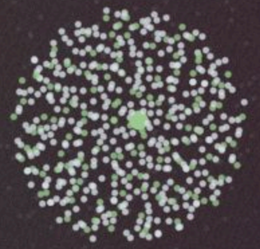
Liquid biopsy is already in the clinic

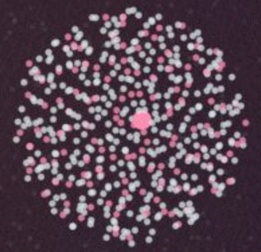
Choose the drug. Guardant360 CDx reads the tumour's mutations from blood, FDA-approved 2020.

Watch for relapse. Natera's Signatera tracks the patient's own tumour mutations after surgery.

Find it early. Guardant Shield (2024) and Freenome SimpleScreen (July 2026) screen for bowel cancer from blood.







~600,000

tests last quarter from four US companies alone. Up 70% in a year.

Q3 2026 vs Q3 2025, company reports: Natera, Guardant (incl. Shield), GRAIL, Tempus.

PEOPLE WANT IT

Make the test easy and people take it

30%

of people who had refused screening did it when offered a blood test

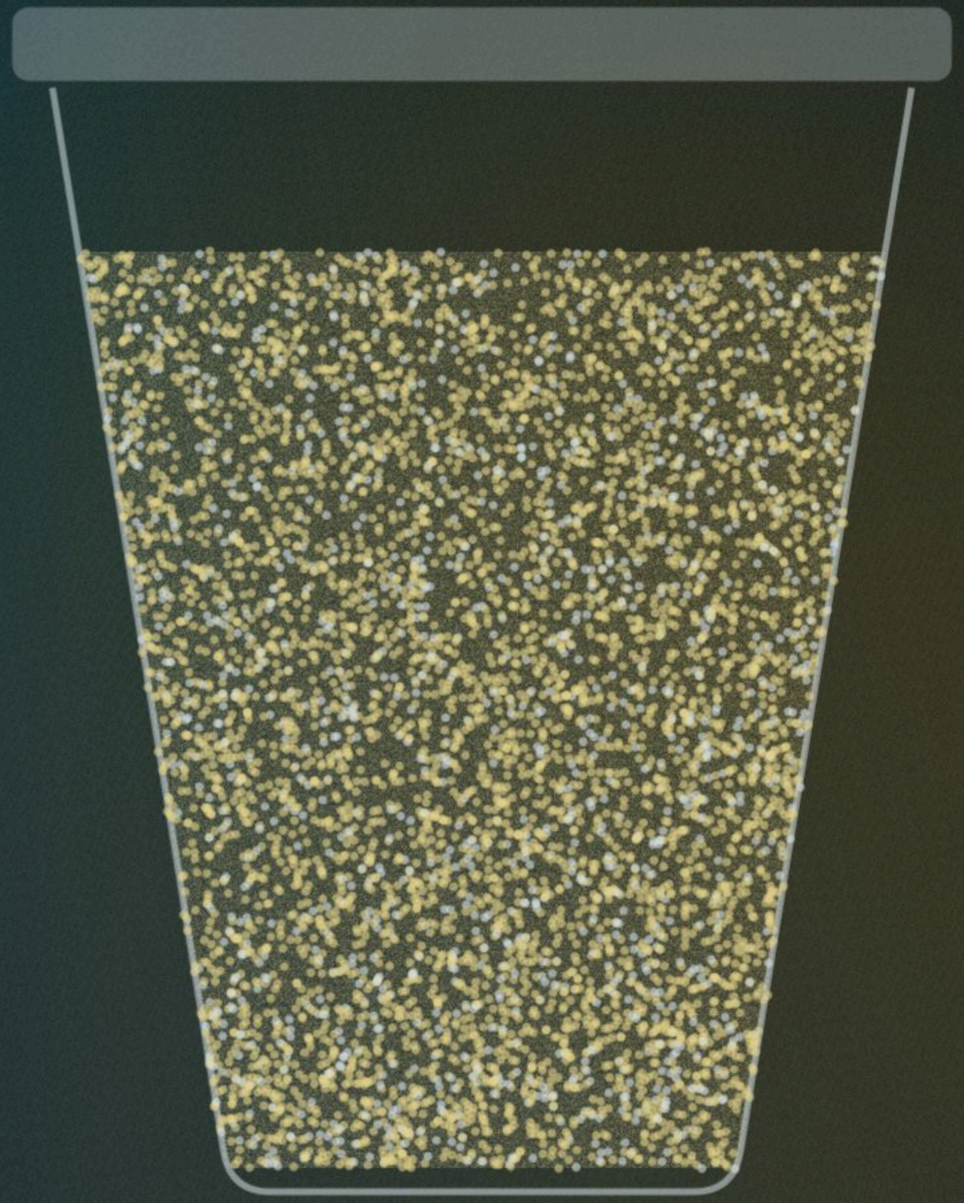
13%

when offered the usual options again

Guardant sold **83,000** Shield blood tests last quarter, 3.5× a year earlier. People bought **185,000** Galleri tests in 2025, mostly without insurance.

A cup at home is easier still: no needle, no appointment, every year.

Randomised trial, Gut 2024 (30.5% vs 13.0%; Guardant-funded). Guardant Q3 2026; GRAIL FY2025.



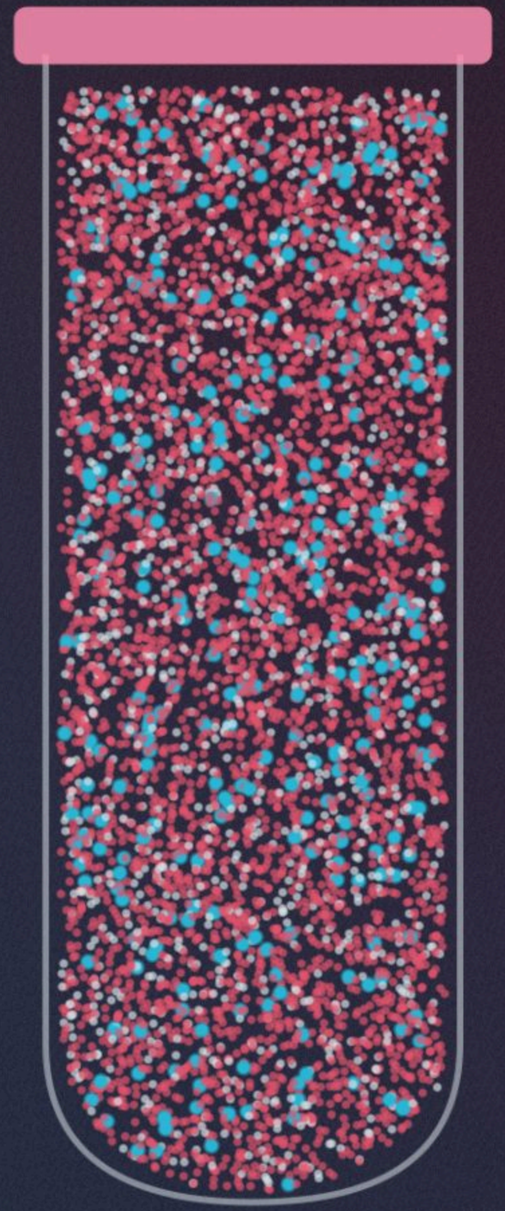
The record numbers need the tumour first

The best relapse tests now claim to see **one tumour fragment in a million**. They sequence the patient's tumour first, then track up to 5,000 of its mutations across the copies in the tube. Lots of chances from few copies.

Screening has no tumour to learn from. Screening tests stop at about **1 in 2,000 to 1 in 600**.

To find a cancer nobody knows about yet, you need more molecules.

Company claims, 2026; Signatera (Natera whitepaper); NeXT Personal (Oncotarget 2024); Shield (FDA SSED P230009); GRAIL (PLoS One 2023).



WHERE WE START

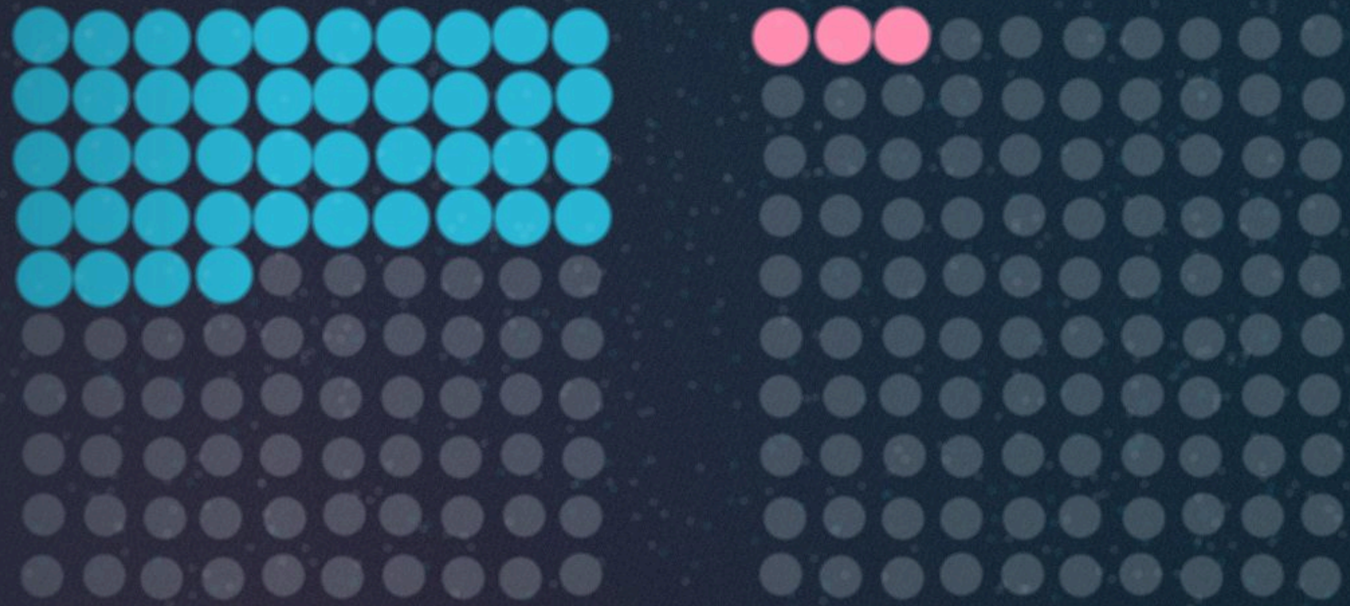
Pancreatic cancer

44

in 100 alive at five years, found early

3

in 100, found after it has spread



Half are found after the cancer has spread. No screening test is recommended for the public. 52,740 Americans die of it every year.

The new RAS drugs are moving to right after surgery. **That only helps people whose cancer is found in time.** First pancreatic data: 2027.

Five-year survival localised 44%, distant 3% (SEER). US deaths 2026: ACS.

PAYERS WANT IT

Medicare now pays to find cancer early

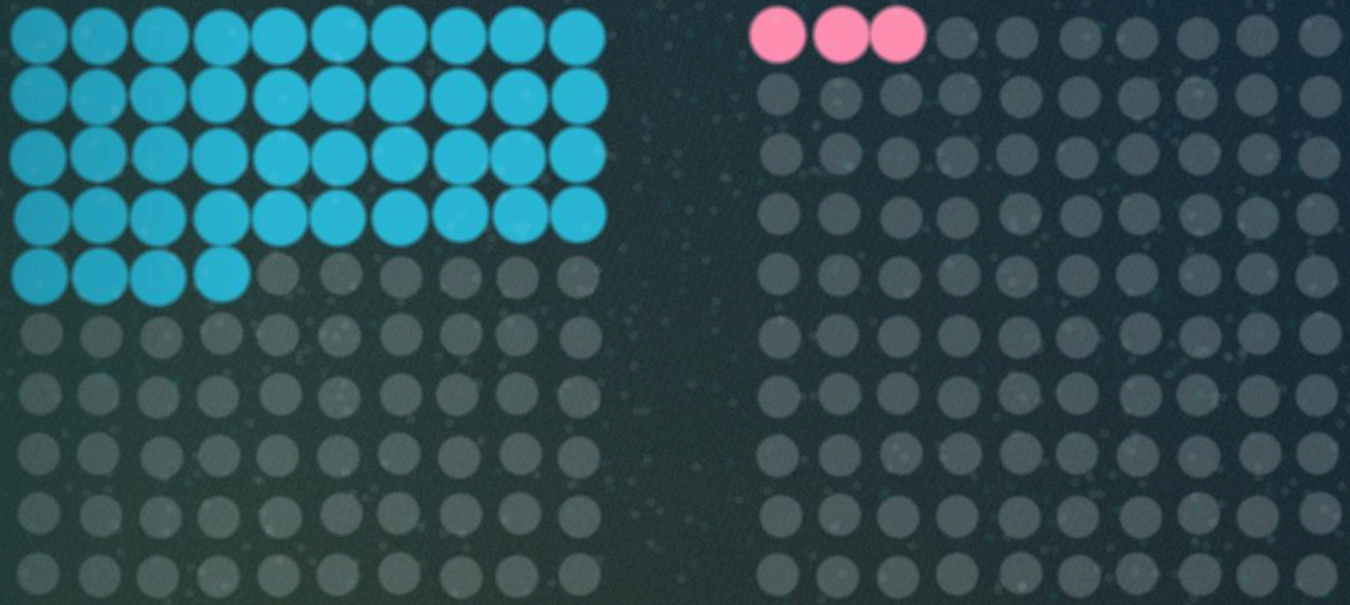
2028

Medicare starts covering multi-cancer screening tests, under a law signed in February 2026.

It already pays **$1,495** per Shield test and **$3,500+** per Signatera test.

For people at high risk, watching the pancreas pays off: about **€14,000 per healthy year** gained in one high-risk group. Under surveillance most cancers were found at stage I, and 73% of those patients were alive five years on.

Public Law 119-75 (MCED Act, 3 Feb 2026). CMS ADLT rates. Leiden CDKN2A surveillance, cost per QALY. CAPS cohort, JCO 2022 (19 cancers, 58% stage I).



WHO BUYS HFX

The labs that already run the tests

Guardant • Natera • GRAIL • Tempus • Exact Sciences

Each of their tests is capped by one blood tube. **HFX sits before the chemistry:** their assays can run on the extra copies.

Labs like these buy companies before revenue. Veracyte paid $150M + up to $30M for Convergent, a urine-DNA company. Quest paid $300M+ for Haystack before launch.

Veracyte 8-K, Sep 2026. Quest, Jun 2023 ($300M + up to $150M). Exact Sciences is part of Abbott since Mar 2026.



Why us

10–30× more DNA than a urine kit.

Patent filed. Team from TU Delft, KTH, DTU and the Broad Institute. Advisors who ran MDxHealth and sold NovioGendix and Vesica Health, all urine diagnostics.

Team



Eric van der Toorn

Co-founder, CEO

TU Delft, KTH



David Calderón Franco

Co-founder, CTO

TU Delft, DTU, fgen



Thomas Abeel

Co-founder, CSO. Associate professor

TU Delft, Broad Institute, MIT



Harshitha Hanji

Business development

TU Delft



Gonçalo Macedo

Research scientist

TU Delft, Utrecht University, MSD

Advisors

All three built and sold diagnostics companies.



Prof. Jack Schalken

Urology professor. Co-founded NovioGendix, sold to MDxHealth

Radboudumc



Joris Schuurmans

CEO Delta Life Sciences. Sold Cergentis in 2022. Before: SkylineDx, Biocartis

DELTA LIFE SCIENCE · SkylineDx



Jan Groen, PhD

Chaired Vesica Health to its 2026 sale. Ex-CEO MDxHealth

Vesica Health · CellBx Health · mdxhealth

HOLOGENOMIX

We're raising. Let's talk.

The whole field makes the reading better. We make the sample bigger.

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Eric van der Toorn, CEO · Hologenomix, Delft

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