



# Theranos

A Fallen Unicorn

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The Power of PowerPoint – [thepopp.com](http://thepopp.com)

# theranos

## THERANOS

### Founded

in 2003 by **19-year-old**  
Elizabeth Holmes.  
“Therapy” + “Diagnosis” = Theranos

### Raised

More than **\$1.4B USD** from  
Venture Capitalists &  
Private Investors, with an initial  
capital of **\$6M USD**.

### Valuation

This “revolutionize” biotech  
company reached its valuation peak  
of **\$9B USD** in 2013 & 2014.



“The Next Steve Jobs”

# ELIZABETH HOLMES

Founder/CEO of Theranos

- Stanford University – Electrical and Chemical Engineering (Dropped Out)
- 2015 Glamour’s **Women of the Year** Award
- 2015 Horatio Alger Award of the Horatio Alger Association of **Distinguished Americans**
- 2015 Forbes the **Youngest and Wealthiest self-made Female Billionaire** in USA
- Pepperdine University – **Honorary Doctorate**
- Net Worth: **\$4.5B USD** (At Peak)

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# The “Game Changer”





## THERANOS Edison

In **theory**, the machine is supposed to run more than **200** blood tests, including Cancer Diagnosis, Hemoglobin, Cholesterol...etc., with just a single drop of blood.

The miniLab follows Edison, which offered a supposedly revolutionary blood-testing method from just a few drops of blood.

Unlike Edison, miniLab will not be presented in stores but in hospital settings.

## THERANOS miniLab



# 01

## FASTER DIAGNOSIS

- Avoid line-ups
- Time-Consuming

# 02

## SELF-TESTING

- Allow patients have diseases that requires repeatedly follow-up consultations, such as AIDS, to test themselves without doctors' permission

# EVOLUTIONS

# 03

## LOWER TRANSPORT RISK

- Humidity
- Temperature
- Collisions

# 04

## USAGE IN ARMY

- Prevent disease spreading



Business Model



vs.



### 3 Ways For a New Lab Company To Succeed:

#### ✓ Satisfy an unmet Clinical Need

1. 1/1,000 Blood Volume
2. Big Needles

#### ✓ Satisfy an unmet Business Need

1. Price Per Test: \$50 USD → 2.99 USD

#### ✓ “Disrupt” the Market

1. Changing the entire way the diagnosis business operates – by eliminating a middleman, reaching new classes of customers – and coming out on top of the new world order.

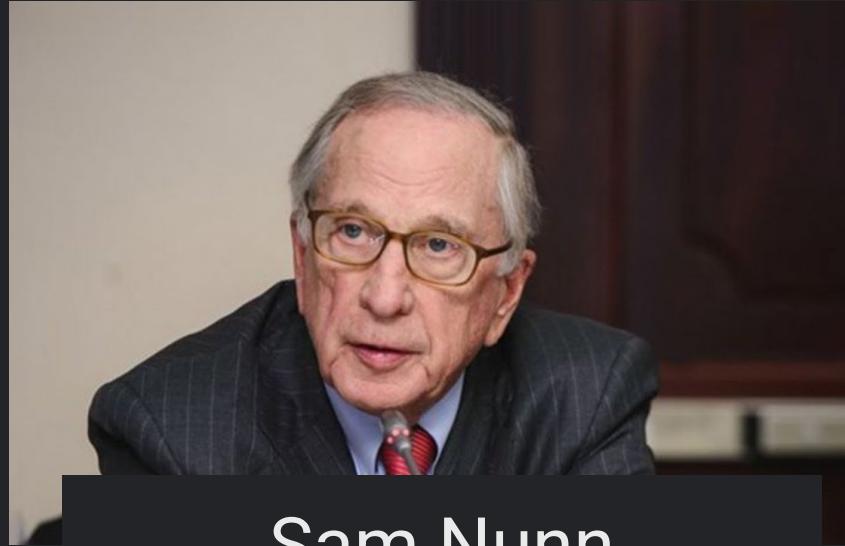
# Fundraising Strategies & Partnerships



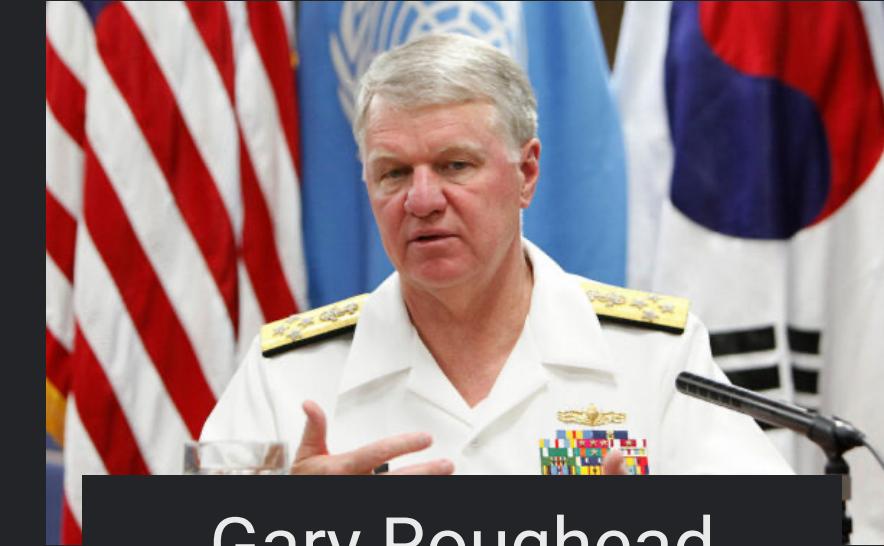
# BOARD OF DIRECTORS



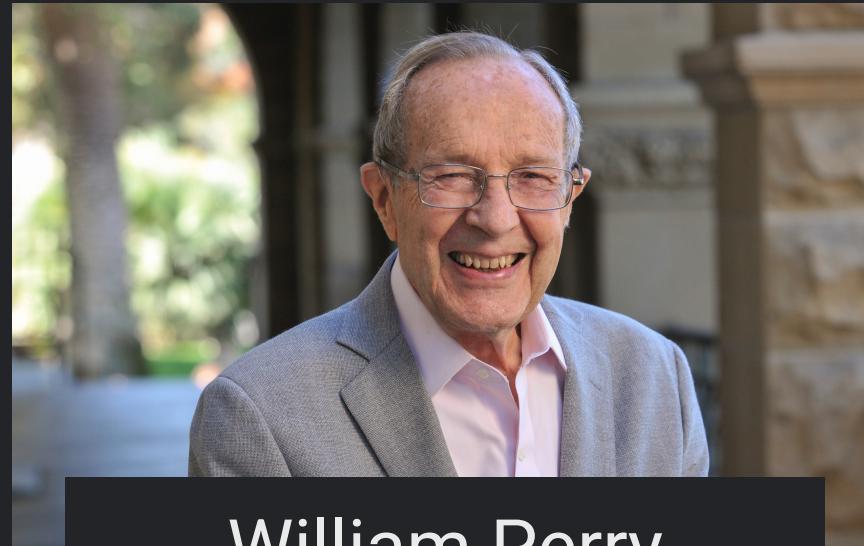
**Henry Kissinger**  
56<sup>th</sup> US Secretary of State



**Sam Nunn**  
Former US Senator



**Gary Roughead**  
29<sup>th</sup> Chief of Naval Operations



**William Perry**  
23<sup>rd</sup> US Secretary of Defense



**Jim Mattis**  
26<sup>th</sup> US Secretary of Defense



**Richard Kovacevich**  
Former Wells Fargo & Company CEO

# THE INVESTORS



Rupert Murdoch

- Chairman and CEO of **News Cooperation**
- Executive Chairman of News Corp
- Chairman and CEO of **21<sup>st</sup> Century FOX**
- Acting CEO of FOX News
- Chairman of FOX Corporation
- Invested **\$125M USD** in THERANOS



Walgreens

- Founded in Chicago, 1901
- An American company that operates the second-largest pharmacy store chain behind CVS Health.
- **Partnered with Theranos in 2013 by setting up wellness center without testing the technology.**

Safeway

- Founded in Idaho, USA, 1915
- An American supermarket chain
- Invested **\$350M USD** into building out clinics of its supermarkets to offer Theranos blood tests.



# The Turning Point

All the above sounds fantastic, but  
**NONE OF THEM ARE TRUE.**

- Instead of 200, Edison, the machine which Theranos created, could only run **no more than 15 types** of blood tests.
- Theranos tried to pull something off, but they still couldn't solve the two major problems:  
**Overheating & Insufficient Blood Volume.**
- In order to partner with Safeway and Walgreens, instead of telling the truth, Holmes decided to lie about the test results Theranos produced.
- Because their machine won't work, Theranos used other company's machines to run blood tests.
- These blood samples were transported under harsh conditions, resulting in deterioration and affecting test results.
- Signed strict FDA with all the employees.

# HISTORY

OCT 2015

## *WSJ Investigation*

The Wall Street journal reports Theranos is using its proprietary technique on only a small number of the 240 tests it performs, and that the vast majority were done with traditional vials of blood drawn from the arm, not “the few drops” taken if a finger.

NOV 2015

## *Safeway Partnership Fells Short*

Safeway looks to dissolve its relationship with Theranos with the company before it ever offered its services.

JAN 2016

## *CMS takes issue; Walgreens pulls back*

Center of Medicare and Medicaid Services sends Theranos a letter saying its lab has failed to comply with federal standards. In response, Walgreens says it will not send any test results to Theranos.

# HISTORY

JUN 2016

## *Theranos loses biggest Partner*

Walgreens ends its partnership with Theranos and says it will close all 40 Theranos Wellness Centers. Forbes revised Holmes' net worth from **\$4.5B USD to \$0 USD**, also lowered Theranos' valuation from **\$9B USD to \$800M USD**.

OCT 2016

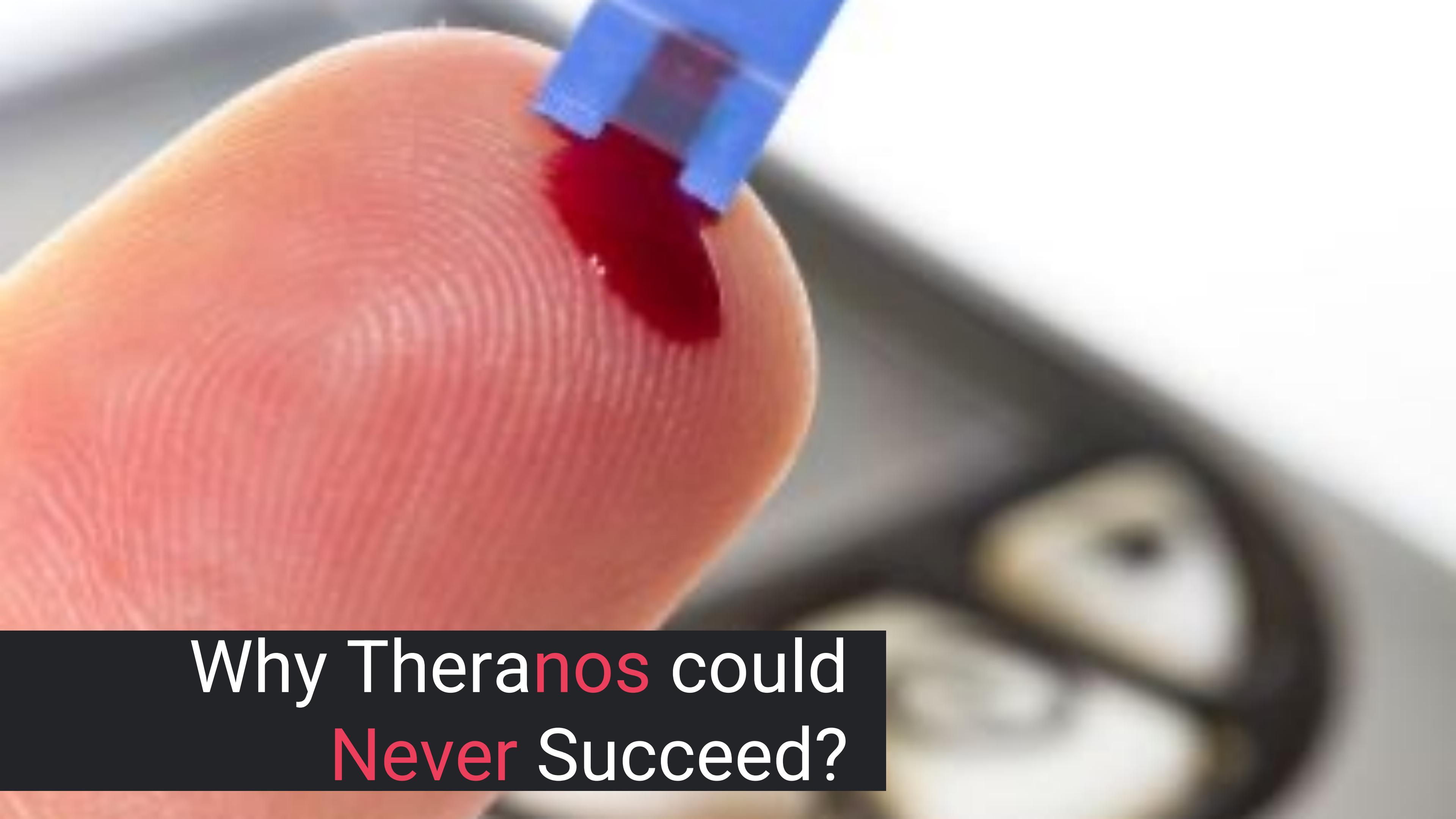
## *Investor sues Theranos*

Theranos investor Partner Fund Management sues the company for \$96.1M USD, the amount it sunk into the company in February 2014, plus damages. It accuses the company of securities fraud. Theranos and Partner Fund Management settled in May 2017, for an undisclosed amount.

MAR 2018

## *Holmes Charged with Massive Fraud*

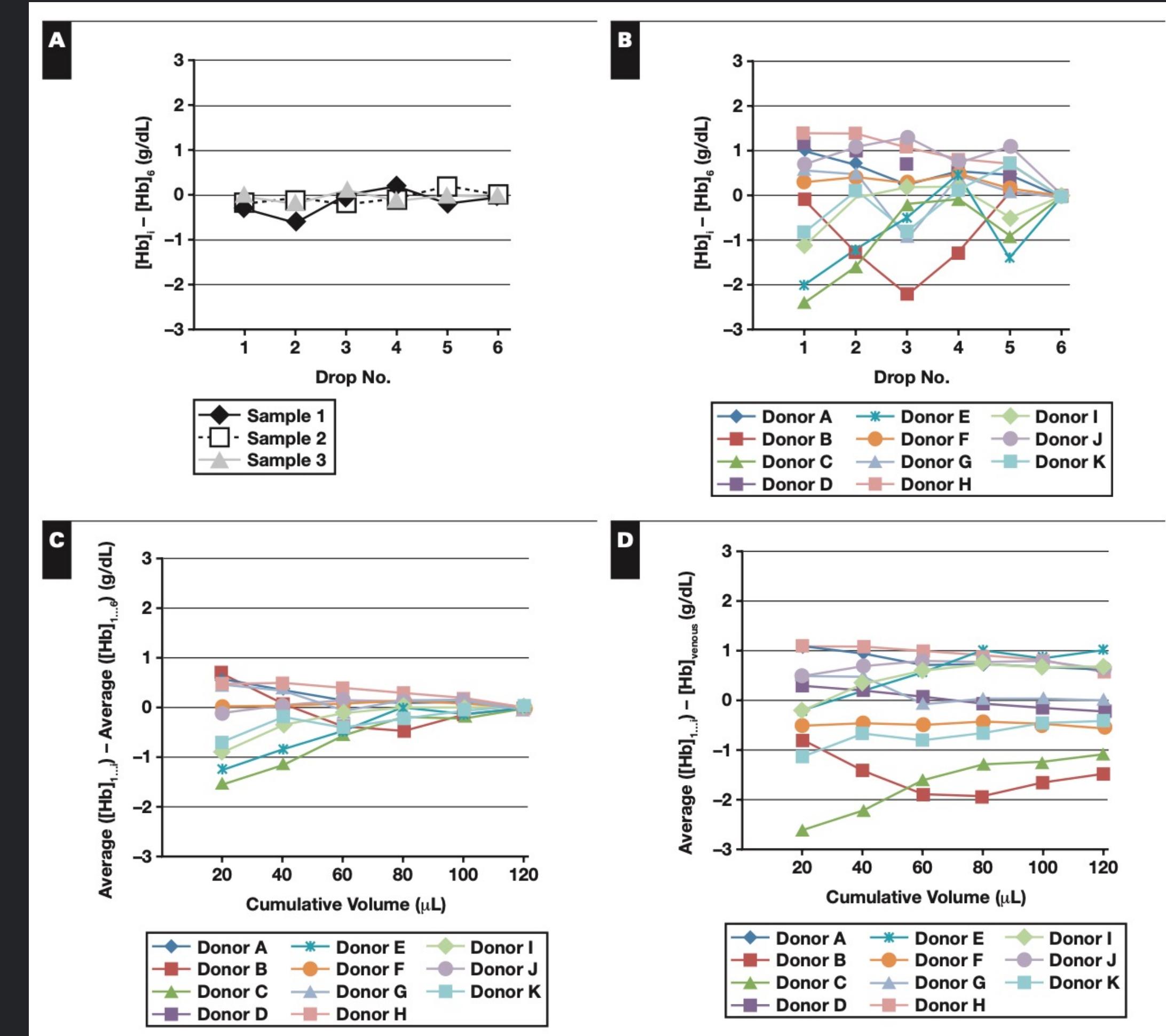
The SEC charged Holmes with a "massive fraud" involving more than \$700M USD from investors through an "elaborate, years-long fraud in which they exaggerated or made false statements about the company's technology, business, and financial performance."



Why Theranos could  
Never Succeed?

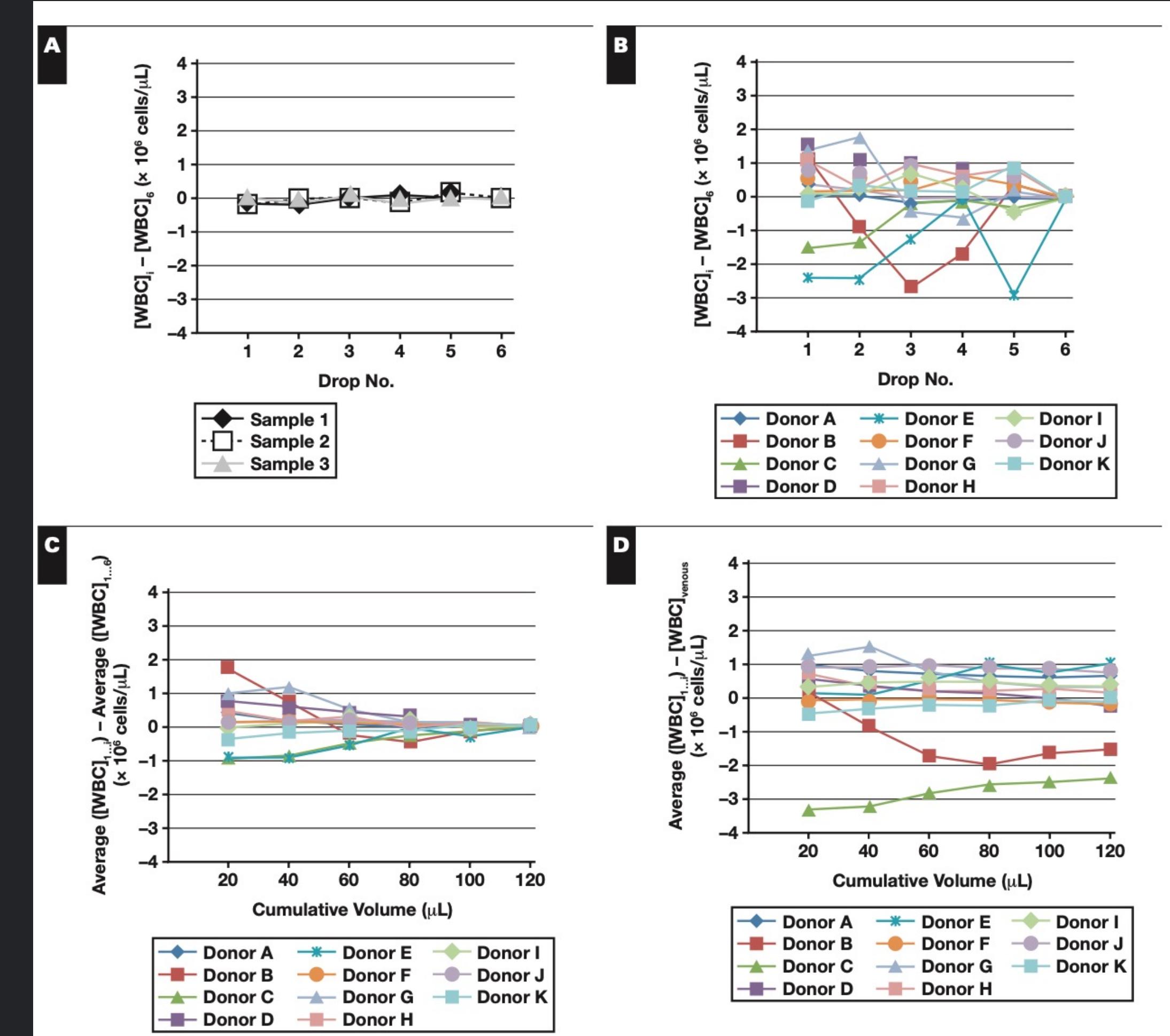
# Blood Test: Hemoglobin

- A. Variation of Hemoglobin Concentration in drops of venous blood
  - B. High variability for drops of fingerprick blood measured using a hematology analyzer
  - C. Variability for fingerpricks decreases when averaging multiple drops
  - D. Difference between running average of venous blood and fingerprick blood



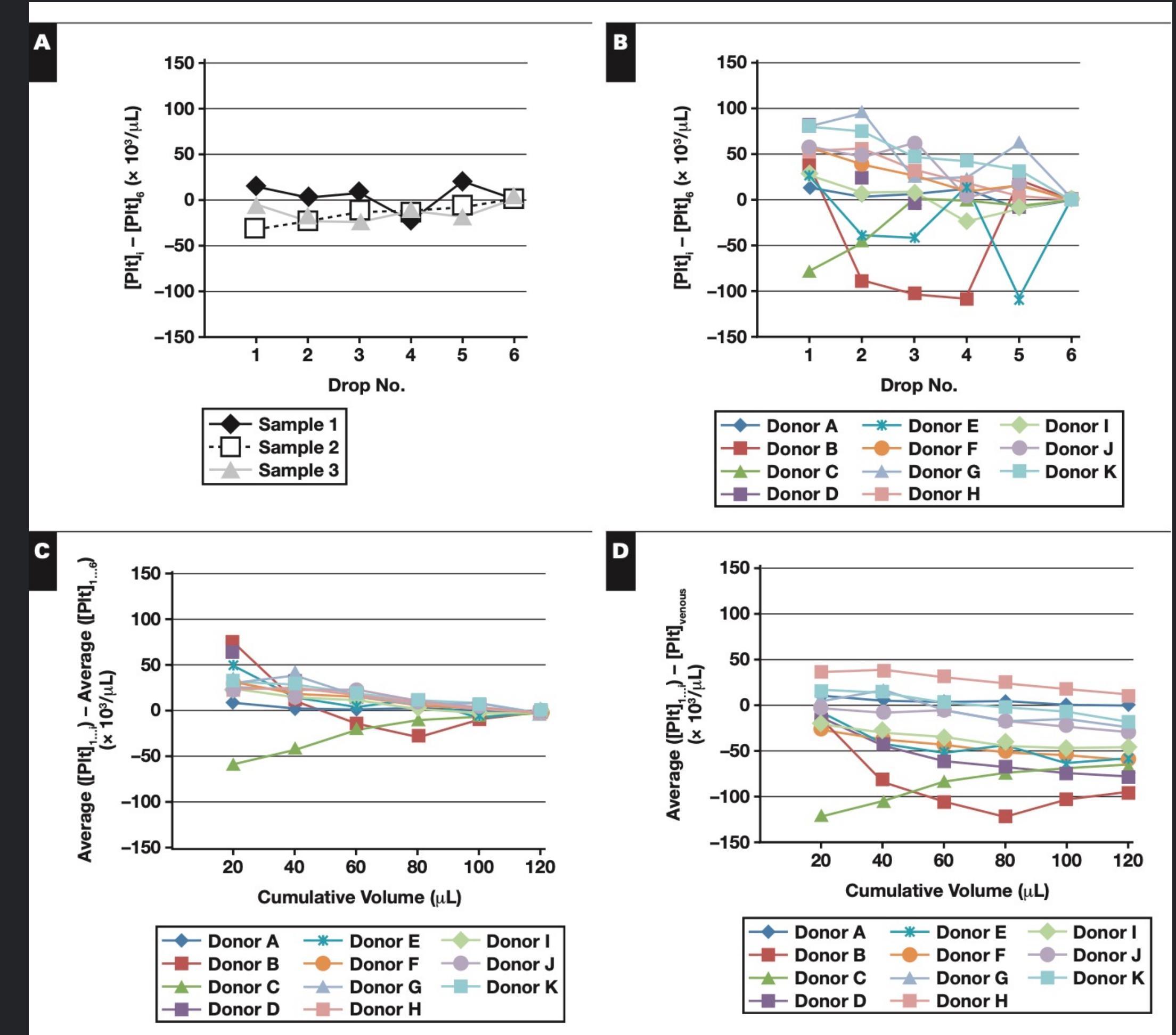
# Blood Test: WBCs

- A. Variation of White Blood Cells Concentration in 6 drops of venous blood
- B. High variability for drops of fingerprick blood measured using a hematology analyzer
- C. Variability for fingerpricks decreases when averaging multiple drops
- D. Difference between running average of venous blood and fingerprick blood



# Blood Test: Platelet

- A. Variation of Platelet Concentration in 6 drops of venous blood
- B. High variability for drops of fingerprick blood measured using a hematology analyzer
- C. Variability for fingerpricks decreases when averaging multiple drops
- D. Difference between running average of venous blood and fingerprick blood



A photograph of a hand holding a lit sparkler against a dark, wavy sea at night. The sparkler is positioned vertically, with bright sparks and glowing embers trailing off to the left. The background consists of dark blue and black waves under a dark sky.

"FAKE IT TILL YOU MAKE IT"

*"law of attraction"*

A solid black rectangular overlay covers the bottom portion of the image. The text "Lessons Learned" is centered within this area in a large, white, sans-serif font. The word "Lessons" is in white, and "Learned" has a red "L".

Lessons Learned

# AS AN ENTREPRENEUR

## The Mindset Of ‘Fake It Till You Make It’

There's always a gap between ambition and reality. The 'Fake it till you make it' was a mentality to trust in yourselves, attract investors, further turn ambition into reality, not burying your head in the sand.

## The Board Plays An Essential Role

Having a broad with great reputation creates valuable connections and routes to funding. Usually, the board must challenge the executive and hold them to account.

## Don't Ignore The Experts

Whatever the ambitions of leaders, in technically-based businesses – such as technology or pharma – the insights and advice of technical experts are crucial. This means that non-technical leaders will have to accept that, at times, their ambitions may not be realized.

# AS AN INVESTOR

## Always Perform Due Diligence

Do your own DD, particular in fields you don't know well. Don't trust other VCs/investors/PHDs who have already invested in the portfolio. Having own thoughts is a crucial technique while investing.

## Invest, Not Gamble

VCs do expect high returns, while higher risks coming along. It's OK to take risks when they are **accountable**.

## Don't Be Fooled By Charisma

The personality and storytelling skills of a Founder is decisive as the company grows; they can result in aspects such as corporate governance and fundraising. As an investor, it's also essential not to be fooled by the public persona when the plans sounds too good to be believed.

# THANK YOU!

ANY QUESTIONS?

- The Power of PowerPoint – [thepopp.com](http://thepopp.com)
- Font: [Roboto Font Family](#)