

# Illumina

## What it does

Illumina's products allow for the sequencing of genomes at an unprecedented scale. They help read the genetic code in our cells, helping identify variants that could lead to disease.

## Why we own it

- Genomic sequencing has the potential to revolutionise healthcare for which the addressable market could be enormous. Illumina is the leader in this field in terms of technology, relationships, standards, equipment and service.
- The proof of practical concept has become established across many fields, most recently during the COVID pandemic. Pre-natal, rare diseases and oncology are areas of further growth and theoretically any living organism can be sequenced.

## How it could be worth many times more

- The growth opportunity is huge, unlocked as sequencing costs march downward. Oncology is a \$150bn business, is growing rapidly, and only c.1% of patients have had their tumours sequenced globally. The case for this rising to 90%+ as sequencing costs come down is strong.
- Illumina can capture at least 1/3 of that market for \$50bn in revenues, with net margins of 30% achievable at such scale. Oncology alone could therefore deliver >5x today's valuation before we contemplate the longer-term potential of sequencing for more routine conditions. Timeframe is the biggest question mark here – this stock requires a lot of patience.

## Where we might be wrong

- This could still be a dead-end in terms of widespread clinical improvement.
- Competition starts to bite – PacBio, Guardant, Ultima
- The speed of adoption by health providers and society significantly drags on (prevents?) growth.

## Short 10 questions

Can sales double in the next five years?

1

Yes – growth in treating oncology, pre-natal, and rare diseases.

Ten years and beyond?

2

Genome sequencing of whole populations. Huge opportunity beyond humans.

Competitive advantage?

3

Illumina is now the industry standard preferred choice.

Is the business culture different?

4

Ambitious and science-driven.

Customers like you? Contribute to society?

5

Invented the industry, dramatically lowered costs, and are delivering great clinical benefits.

Are returns worthwhile?

6

Margins in the low 20% with scope to climb.

Will they rise or fall?

7

They should rise high enough.

How is capital allocated?

8

Purchase of Solexa in 2007 was instrumental in establishing Illumina's competitive position.

Could it be worth 5x as much?

9

Yes, with just oncology but there is lots of additional optionality.

What doesn't the market understand?

10

Hard to grasp the full scale of the global opportunity.

# Risk factors

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## **Registered Office:**

**Calton Square, 1 Greenside Row, Edinburgh EH1 3AN, Scotland**

**Telephone +44 (0)131 275 2000 [bailliegifford.com](http://bailliegifford.com)**

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**BGI Principal Office: Calton Square, 1 Greenside Row, Edinburgh EH1 3AN, Scotland.**

**Telephone: +44 (0)131 275 2000**

**780 Third Avenue, 43rd Floor, New York, NY 10017.**

**Telephone: (212) 319 4633**

**BGE Head Office: 4/5 School House Lane East, Dublin 2 D02 N279, Ireland.**

**Telephone: +35 315 294 150**

**BGE Frankfurt Branch: WINX Tower, Neue Mainzer Str. 6-10, 60311 Frankfurt, Germany**

**BGE Amsterdam Branch: Atrium Building, Strawinskylaan 3051, 4th Floor,  
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