

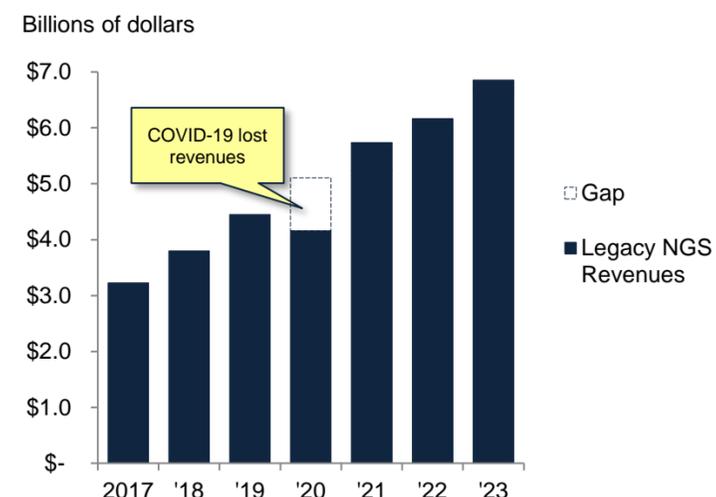
The Evolving NGS Manufacturer Market Landscape

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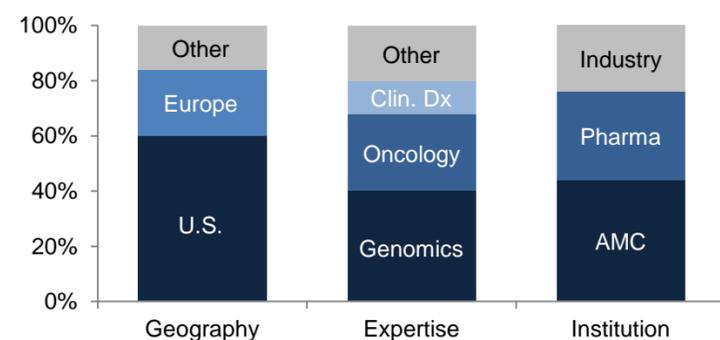
Illumina reached 60%+ market share of the NGS manufacturer market a decade ago and has exceeded this landmark since then. This impressive achievement has been driven by the continued scaling of the SBS chemistry, and near-flawless commercial execution. While the market saw a contraction in 2020, we expect a strong rebound in 2021, and long runway beyond that driven by clinical applications (e.g., early detection).

WW NGS Manufacturer Market (2017-23)

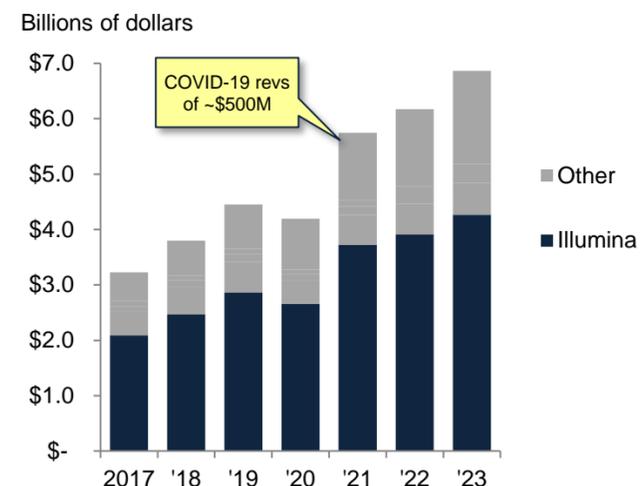


We conducted a primary research campaign to better understand the future NGS manufacturer landscape. We interviewed 25 NGS experts to assess how the competitive space may evolve, as well as evaluate the excitement around ancillary equipment / technologies.

Interviewee Demographics



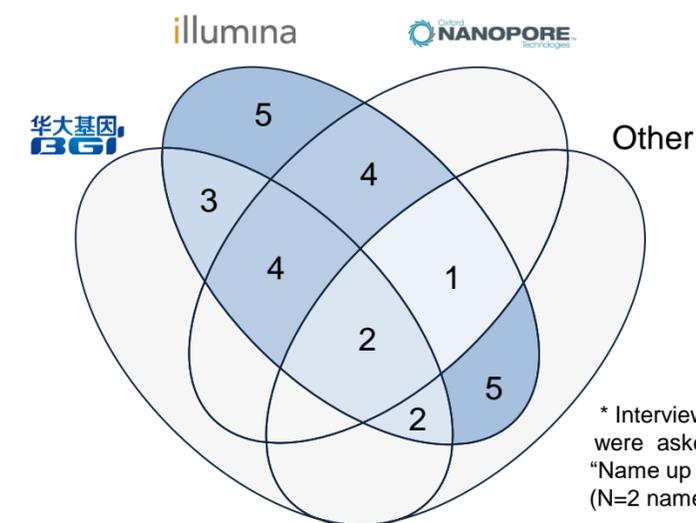
WW NGS Manufacturer Market by Competitor (2017-23)



As the sequencing ecosystem grows, competitors are capturing larger portions of the market, focusing on specific customer needs or applications.

Our analysis suggests that moving forward, the NGS landscape may be dominated by three companies: Illumina (25/25 respondents), MGI (11/25) and Oxford Nanopore (9/25). Other key players mentioned by interviewees included ThermoFisher (N=5), PacBio (N=3) and a couple of start-ups (N=2).

"Top NGS Providers" in 5 years* (N = 25)



Competitor Positioning & Expert Feedback

illumina

Illumina is expected to maintain its leadership due to the stickiness of its ecosystem and entrenchment into industry accounts that have clinical sequencing workflows or products. The company also offers systems that span the entire throughput needs.

"... It doesn't make sense to be using another provider, [than Illumina] as we know they will be around, and their systems are very robust [...] 'Nobody gets fired for buying IBM' ..."

– BioPharma Expert



MGI customers continue to produce high accuracy data that can rival Illumina's quality at a discount; as a result, we expect them to gain traction particularly outside of the U.S. and with more price-sensitive customers.

"... We've used the MGI-Seq for almost a year and can generate Illumina-quality exomes at half the cost [...] If MGI can win in the courtroom, and have freedom to operate, they will undoubtedly be a major player as sequencing becomes [more commoditized] ..."

– MGI User



Oxford Nanopore has largely addressed key accuracy issues, and gained traction across a broad set of customers interested in long-read high-throughput applications (PromethION) and / or portability (MinION) as part of research projects.

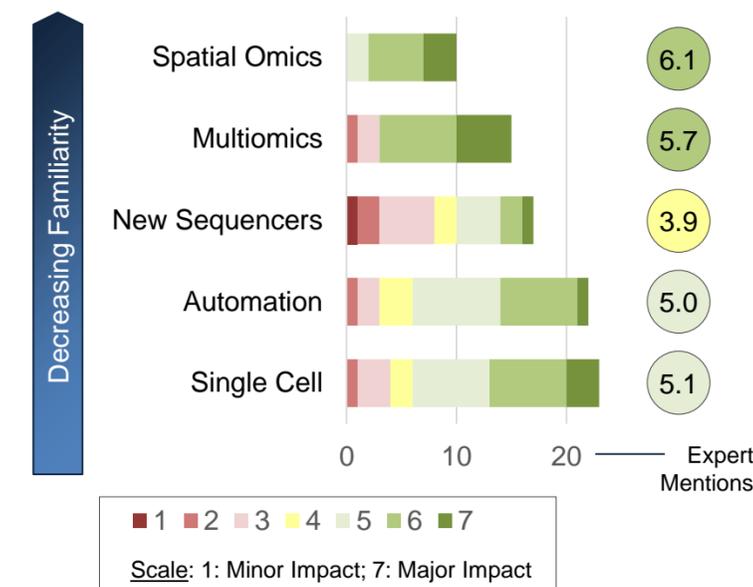
"... The sequencer works, the flow cells are increasingly reproducible, and the accuracy has drastically improved [driven by bioinformatics] since 2019 ..."

– Oxford Nanopore User

Additional Expert Feedback

Finally, we evaluated the attractiveness and niche opportunities available for a flurry of additional competitors that 1) are established (e.g., ThermoFisher), 2) have recently entered the market (e.g., Genapsys), or 3) are expected to launch a platform shortly (e.g., Omniome). We also evaluated the opportunities for reagent providers, and providers of ancillary products and services (e.g., 10X Genomics, Tecan).

Potential Impact of Select Technologies



Our analysis suggests that the sequencing space is still in its early days and will continue to develop and offer opportunities for companies beyond pure instrument providers. NGS is also increasingly being utilized as a high-throughput readout for other technologies (e.g., Olink, NanoString), and in tandem with proteomics as part of multimomics experiments.

Disclaimer: Companies listed in this poster may be DeciBio Consulting clients and customers; Additional analysis and insights can be found in our 2020 NGS Market Report
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