



Industry Trends and Assets to Watch Based on ASCO 2024

As the largest oncology conference, The American Society of Clinical Oncology (ASCO) Annual Meeting and the findings revealed during the event have the capacity to change established practices and signify trends in the space. We made the following observations when comparing ASCO 2023 vs. 2024:

- Focus on Kirsten rat sarcoma virus (Kras), Vascular endothelial growth factor (VEGF) and Hepatocyte growth factor (HGF) rose significantly at ASCO 2024.
- Epidermal growth factor receptor (EGFR), on the other hand, showed a significant reduction in focus.
- Kras has proven to be a very promising target in non-small cell lung cancer (NSCLC), due to some recent approvals, therefore it seems the industry has shifted its focus towards producing more Kras-targeting drugs.
- EGFR has mostly been targeted in NSCLC, and in the past few years, the interest has shifted towards other target genes.
- Antibody-drug conjugates (ADCs) gained significant traction between 2023 and 2024 (10% increase in Phase 3 ADC-focused trials), reinforcing their position as the cutting edge of oncology research for the past few years. Conversely, there was a significant drop in monoclonal antibody (mAb) focus, showing signs of saturation and the start of a paradigm shift towards more targeted therapies.



ASCO 2024 Target Distribution % of ASCO abstracts focusing on a specific target



= Kept the same rank as in ASCO 2023 -X Have gone down X number of ranks in relevance from ASCO 2023 +X Have gone up X number of ranks in relevance from ASCO 2023

Figure 1: Kras, VEGF and HGF are the targets that rose by the most spots in the ranking. Conversely, EGFR is the target that dropped the most spots in the ranking.

Major Oncology Modality Focus % difference of abstracts between ASCO 2023 and ASCO 2024

Benefit Disadvantage	ADC (%)	mAb (%)	SMI (%)	Other (%)
Phase 1	-2%	-6%	7%	-9%
Phase 2	4%	-2%	-4%	2%
Phase 3	10%	-6%	-5%	1%
Total	4%	-3%	-4%	3%

Figure 2: While ADCs show a significant increase in late-phase trials, mAbs and small molecule inhibitors (SMIs) display the opposite.

Time-Stamped Predictions at the Program Level

Though identifying industry trends is required for decision-making, it leaves significant room for uncertainty and interpretation. Information provided at the clinical program level significantly reduces that uncertainty.

Intelligencia AI's offering provides an AI-driven probability of technical and regulatory success (PTRS) per active clinical program^{*} for the entirety of oncology. To showcase the validity and robustness of said offering, using a specific subset of high-impact ASCO 2024 abstracts, we measured the PTRS before and immediately after abstract publication.



Changes in PTRS Post-ASCO 2024 Readouts | Assessments as of July 5, 2024

Figure 3: Focusing on programs that displayed PTRS changes due to ASCO 2024, Intelligencia AI identified several promising cases and accurately predicted the publication of certain positive outcomes.

Intelligencia AI PTRS Predictions as of May 2024 (pre-ASCO 2024)

Three high-performing ASCO programs alongside peer programs by indication and stage of development

Abemaciclib, HER2 negative breast carcinoma					•	•• •		•	•	•	•			• •	
IBI343, Pancreatic ductal carcinoma	$ \land \land$														
ABBV-706, SCLC		△▲·-☆☆	▶∆												
Program PTRS (%)) 5	10 1	5 20	25	30	35	40	45	50	55	60	65	70	75	80
\triangle Phase 1, peer programs	Phase 3, p	eer program	ıs	Pre-AS	CO PTRS		Post	-ASCO P	TRS	End	of secon	d quartile	e (Q2)		

Figure 4: Abemaciclib, IBI343, and ABBV-706 had top-quartile PTRS just before ASCO 2024, and the positive outcomes announced significantly boosted said PTRS.

Based on the analysis in the graphs above, Intelligencia AI accurately predicted the high performance of several cases across phases, as reflected in the published positive outcomes, including:

- Eli Lily's Abemaciclib in HER-2 negative breast cancer (Phase 3)
- AbbVie's ABBV-706 in small-cell lung cancer (Phase 1)
- Innovent Biologics' IBI343 in pancreatic ductal carcinoma (Phase 1)

As we look into the future, there is a number of early-stage programs showing great promise according to our predictions, including:

- Coherent Biopharma's CBP-1008 in ovarian cancer (Phase 1)
- Mabwell Bioscience's 9MW2821 in cervical cancer (Phase 2)
- Verastem's Avutometinib in pancreatic cancer (Phase 2)
- Roche's Glofitamab in Non-Hodgkin Lymphoma (Phase 2)

Applicability of ASCO Insights and Accurate, AI-Driven PTRS Assessments

ASCO serves as a strong indication of the oncology industry's trajectory. When the conference data is paired with Intelligencia AI's patented methodology we provide decision-makers in pharma with actionable insights to better inform search and evaluation and portfolio strategy decisions. Search and evaluation professionals can identify promising assets, test their strategy and decisions against past and current data, whereas portfolio strategists can prioritize the most promising assets among their pipelines.

Combining that extensive insight knowledge with a robust, validated and time-stamped PTRS aims to limit the uncertainty of decision-making through the power of AI and expertly curated clinical data.

About Intelligencia Al

Intelligencia AI[™] leads the way in leveraging proprietary data, biomedical expertise and artificial intelligence (AI) with its patented technology to address significant challenges in the pharmaceutical industry. These challenges include lengthy drug development timelines, excessive costs, and unsustainable return on investment (ROI). Its suite of AI-powered solutions delivers actionable insights crucial in mitigating risks and enhancing decision-making associated with drug development by providing an accurate, unbiased assessment of a drug's probability of success. Founded in 2017, Intelligencia AI is headquartered in New York, NY, with offices in Athens, Greece, and employs 110 individuals globally. Visit intelligencia.ai to discover more.





*By definition a program (also known as clinical pipeline or drug pipeline) is the clinical development of a drug (or a set of drugs in case of combination therapies) by a pharmaceutical company (alone or in collaboration with other partners) for an indication. A program consists of a set of clinical trials with the ultimate goal of approval for marketing. Each program has unique and specific parameters that can potentially justify a separate regulatory approval. Specifically, the definition of a clinical program is one of unique drug(s), drug dosage, mode of administration, adjuvant state, indication, sponsor, disease severity (e.g., stage of disease), line of treatment and biomarker information used as inclusion criteria.