ASCO Annual Meeting 2025 Report, Heena Solanki, Wellington Hospital



We're nearly halfway through 2025, and like clockwork, the American Society of Clinical Oncology (ASCO) annual meeting took place from the 30th of May to the 3rd of June in Chicago this year and I was fortunate to attend it this year. It has been on my wish list for a long time, and it couldn't have come at a better time, with major breakthroughs in the world of cancer been announced at the meeting this year.

With Pharma and Biotech companies from across the U.S. as well as from different parts of the world attending, the five-day event was packed with presentations from researchers and drug developers in the cancer therapeutics space. More than half the sessions at ASCO 2025 touched on immunotherapies, cell and gene therapies, and antibody-drug conjugates (ADCs) whereas about 10% of the content was focused on traditional modalities of chemotherapy, radiation, and surgery.

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https://www.asco.org/annual-meeting

https://www.asco.org/annual-meeting/program

The highlights for me were the following two trial data which will be practice changing for us here in NZ.

• MATTERHORN Trial: Durvalumab + FLOT (DFLOT) Improves EFS in Resectable Gastric/GEJ Cancer

MATTERHORN is Global, double-blind, phase 3 trial (N=948) in patients with resectable stage II–IVa gastric or GEJ adenocarcinoma. Randomized to perioperative FLOT ± durvalumab.

Both arms received 4 cycles of FLOT pre/post-surgery; durvalumab (or placebo) given every 4 weeks, with 10 additional maintenance doses post-therapy. Primary Endpoint was Event-free survival (EFS).

Key Findings:

- Median EFS: not reached (durvalumab arm) vs 32.8 months (placebo arm), HR 0.71; p<0.001
- 24-month EFS: 67.4% vs 58.5%
- Early OS data trending positive (HR 0.78)
- Safety: Grade 3–4 AEs similar; no delays to surgery or adjuvant treatment.
- Matterhorn trial presents the first evidence of perioperative immunotherapy benefit in resectable gastric/GEJ cancer. Supports global adoption of durvalumab + FLOT.
- You can read the Full Article in <u>NEJM</u>.

2. Positive data from the **Phase III DESTINY-Breast09 clinical trial** (NCT04784715) of Enhertu (trastuzumab deruxtecan) plus pertuzumab as a first-line treatment for patients with HER2-positive metastatic breast cancer.

The Enhertu-pertuzumab combination demonstrated a statistically significant and clinically meaningful improvement in progression-free survival (PFS) compared to a taxane, trastuzumab, and pertuzumab (THP) regimen.

Key Findings:

At a median follow-up of nearly 2.5 years (29 months), the study found that:

- Trastuzumab deruxtecan with pertuzumab reduced the risk of disease progression or death by 44% for patients.
- The median progression-free survival (PFS) was over 3 years in the trastuzumab deruxtecan with pertuzumab group (40.7 months). In the THP group, the median PFS was slightly over 2 years (26.9 months). This benefit was seen across all subgroups.
- At 2 years, about 70% of patients in the trastuzumab deruxtecan with pertuzumab group had not seen their cancer grow or spread, compared to about 52% in the THP group.
- For the patients who received trastuzumab deruxtecan and pertuzumab, about 85% had their cancer shrink or disappear compared to 78.6% of those in the THP group. About 15% of patients who responded to treatment with trastuzumab deruxtecan and pertuzumab had no signs of cancer in response to the treatment vs. 8.5% in the THP group.
- The analysis of overall survival is immature, but researchers observed a trend in improvement in overall survival for those in the trastuzumab deruxtecan with pertuzumab group. The researchers will continue to follow patients to better assess longer-term overall survival data.



Here are some of the highlights from the event. ASCO 2025 Top 10 Must-See Abstracts!



10. ATOMIC Ph III: Advances in Colon Cancer

The ATOMIC Ph III trial compares Adj FOLFOX versus Atezolizumab with FOLFOX for dMMR Stage III resected colon cancer. Consequently, this study provides new insights for colon cancer treatment.

9. MATTERHORN Ph III: Progress in Gastric Cancer Care

MATTERHORN Ph III explores PeriOP Durvalumab with FLOT and postOP Durva with FLOT followed by Durva versus PeriOP and postOP FLOT for resectable gastric and gastroesophageal junction cancer. Notably, it was a plenary session highlight.

8. SERENA6 Ph III: Advances in Breast Cancer Treatment

Meanwhile, SERENA6 Ph III studies Camizestrant with CDK 4/6i versus AI with CDK 4/6i in 1L HR positive and HER2 negative breast cancer at ESR1 emergence. Additionally, EVERITAC2 Ph III data for ARV-471, an oral PROTAC ER degrader, was presented in the plenary session.

7. ASCENT04 Ph III: Targeting Triple Negative Breast Cancer

ASCENT04 Ph III compares Sacituzumab with Pembrolizumab versus Chemo with Pembrolizumab in 1L locally advanced or metastatic PDL1 positive CPS greater than or equal to 10 triple negative breast cancer. As a result, it offers insights into breast cancer care.

6. DESTINY-Breast09 Ph III: HER2 Positive Breast Cancer Insights

Then, DESTINY-Breast09 Ph III evaluates Trastuzumab Deruxtecan with or without Pertuzumab versus THP in 1L locally advanced or metastatic HER2 positive IHC3 positive or FISH positive breast cancer. Hence, this trial provides data for HER2 positive patients.

5. IMforte Ph III: Small Cell Lung Cancer Progress

Furthermore, IMforte Ph III examines Carbo with Etop with Atezolizumab followed by Atezo with Lurbinectedin versus Atezo alone in maintenance 1L for extensive stage small cell lung cancer. In addition, DELlphi304 Ph III, focusing on Tarlatamab in 2L, was presented.

4. CheckMate816 Update: Non-Small Cell Lung Cancer Update

The CheckMate816 Update Ph III compares Neoadjuvant Nivolumab with Chemotherapy, approved in March 2022, versus Chemo alone in resectable non-small cell lung cancer. Thus, this update provides long-term data.

3. NIAGARA Ph III: Bladder Cancer Insights

Moreover, NIAGARA Ph III investigates the use of ctDNA in patients who received periOP durvalumab for muscle-invasive bladder cancer. Besides, PeriOP and PostOp Durvalumab was approved in March 2025.

2. NIVOPOSTOP Ph III: Head and Neck Cancer Findings

Similarly, NIVOPOSTOP Ph III compares Adj Chemo with XRT with Nivolumab versus Chemo with XRT in high-risk resected head and neck squamous cell carcinoma. Accordingly, this trial offers new strategies for head and neck cancer patients.

1. VERIFY Ph III: Polycythemia Vera Therapy

VERIFY Ph III studies Rusfertide, a hepcidin mimetic agent, with ongoing therapy versus Placebo in patients requiring frequent therapeutic phlebotomies for Polycythemia Vera. Ultimately, this plenary session abstract rounds out the list.

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