

On 3-4 May 2025, I attended the Advanced Stream of the COSA CPG Clinical Practice Education for Cancer Pharmacists, held at the Crown Plaza Hotel in Melbourne.

The program focussed on advances in cancer genomics, precision medicine and DOAC monitoring and reversal.

The predominant theme of the conference, was that cancer treatment is no longer a 'one size fits all' approach due to the advances in genomic and genetic testing. Research in cancer genomics is significantly advancing precision medicine, by refining the understanding of cancer types and subtypes through genetic profiles, enabling more accurate diagnoses and personalised treatments.

The initial presentations covered the background to somatic and germline testing, and challenged us to think of cancer diagnoses not by the organ affected, but by the mutations involved. Two techniques discussed in detail, were the use of next-generation sequencing (NGS), and ctDNA. NGS is a revolutionary technology that allows large amounts of DNA and RNA to be sequenced, to find genetic variations within a patient, and drive precision medicine. ctDNA is circulating tumour DNA, also known as a "liquid biopsy". This is a very convenient source of genetic material (blood test). There is thought that this may be a very accurate predictive marker, for relapse or remission, as it can provide very accurate diagnostic information when a biopsy is not possible.

The conference focussed on ovarian cancer, AML, colorectal cancer and lymphoma, with presentations followed by interactive workshops.

The lecture and workshop on AML were of particular interest to me, as already in NZ we have funded options to treat AML based on the genomic profile of the patient, such as midostaurin for FLT-3 mutation positive patients, and gemtuzumab for CD33 positive AML. Next generation sequencing has been a game changer in AML therapy, as > 95% of AML patients have at least 1 mutation driving their disease, and all diagnostic guidelines now classify AML based on mutations. The different mutations may be positive or negative prognostic factors, and guide drug therapy and treatment decisions.

The lymphoma session discussed how rapidly the lymphoma field is moving, especially the use of Bi-specific T-cell Engagers (BiTE's), and CAR-T cell therapy. There was much emphasis on the importance of strong engagement from pharmacists, requiring a robust knowledge of side effects and management strategies due to the unique toxicities of these agents. There was also discussion on how DLBCL is uniquely suited to using ctDNA, and there is hope that this will eventually be mainstream, as it can be used to confirm complete remission, or predict relapse, and therefore aid decisions in either early de-escalation of treatment, or early intervention.

The ovarian cancer and colorectal cancer sessions also confirmed how much treatment has changed, from most patients receiving chemotherapy, to genomic profiling being standard of care now, and many mutations being specifically targeted.

It was a very worthwhile conference and I would encourage any pharmacists wishing to extend their knowledge in cancer care to consider this course in the future. The fact that there are 2 consecutive streams, foundation and advanced, makes it an excellent option for pharmacists at all levels.

Link to the Advanced Stream Programme: [Advanced Stream Program — COSA CPG Courses](#)

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