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In the news

FROM ASCO 2016 — COLLECTIVE WISDOM

At the 2016 ASCO annual meeting, >37,000 people from around the world came together to share knowledge and grow networks. Thus, the meeting's theme of 'collective wisdom' could not have been more apt.

In keeping with this theme, ASCO provided an update on CancerLinQ™, their 'big data' initiative: 58 practices have now joined the platform, contributing medical records from ~750,000 patients across the USA, with the aim of monitoring, analysing, and improving care. A collaborative agreement with the Cancer Informatics for Cancer Centers, representing informatics and data science experts, was also announced.

In addition, ASCO reported milestones of the TAPUR study, which is designed to evaluate molecularly targeted agents outside of their approved indications, based on genomic profiling. Eight companies have now agreed to provide study drugs, and 15 precision medicine regimens, comprising 17 targeted agents, are currently available. TAPUR is underway at 37 health-care institutions, with ~100 more interested in participating. Importantly, the study has broad eligibility criteria, and flexibility in the choice of tissue sample and profiling test.

Data sharing and precision care also formed the foundations for an interesting phase III trial. Therein, weekly return of patient-reported information on key symptoms to oncologists via a web-based mobile application improved outcomes; despite undergoing fewer imaging scans and having a similar relapse rate, 75% of patients in the web-application group were alive at 1 year, versus 49% of patients assigned to standard follow up.

Other promising findings were presented for patients with small-cell lung cancer (SCLC). Firstly, rovalpituzumab tesirine, an anti-DLL3 antibody–drug conjugate, resulted in an objective response rate (ORR) of 18%, and a 68% clinical benefit rate. Patients with the highest tumoural levels of DLL3 had a 39% ORR and 32% 1-year survival. Secondly, in CheckMate 032, the ORRs to nivolumab and to nivolumab plus ipilimumab were 10% and ~20%, respectively. In 16 patients, responses were maintained for >6 months, indicating that immunotherapy is active in patients with SCLC.

Indeed, immunotherapy was another recurring theme at ASCO 2016. In CheckMate 141, the ORR of patients with head and neck cancer to nivolumab was double that achieved with standard chemotherapy; 12-month survival was 36% versus 17%, with maintenance or improvement of quality of life. Furthermore, atezolizumab was reported to provide benefits to patients with previously untreated advanced-stage bladder cancer. In this setting, the median survival with carboplatin-based regimens is typically 9–10 months, but was 14.8 months with atezolizumab. The ORR was 24%, and 75% of responses were ongoing.

In other notable developments, the first-in-class anti-claudin-18 splice variant 2 (CLDN18.2) antibody IMAB362 extended the median overall survival of patients with advanced-stage gastric cancer when added to standard chemotherapy in the FAST study (13.2 months versus 8.4 months with chemotherapy alone). Patients with the highest levels of CLDN18.2, which is expressed in many gastric tumours, had a median survival of 16.7 months. In the CASTOR trial in patients with multiple myeloma, when added to bortezomib–dexamethasone earlier than its FDA indication (that is, prior to the fourth-line setting), the anti-CD38 antibody daratumumab reduced the risk of progression by 61%. In the second-line setting, the 1-year progression-free survival was 77.5% with the daratumumab regimen versus 29.4% with bortezomib–dexamethasone alone (a risk reduction of 69%).

These results and others presented at ASCO 2016 demonstrate the advances that are possible through research embodying the ethos of 'collective wisdom'.

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