IMpassion132: A double-blind randomized phase 3 trial evaluating chemotherapy (CT) 6 atezolizumab (atezo) for early progressing locally advanced/metastatic triple-negative breast cancer (mTNBC). First Author: Rebecca Dent, National Cancer Center, Singapore, Singapore

Background: Atezo blocks the interaction of PD-L1 with receptors PD-1 and B7.1, restoring anti-tumor immunity. PD-L1 pathway inhibitors may be synergistic with CT. In a phase 1b study in mTNBC, atezo + nab-paclitaxel showed durable confirmed responses [Adams 2016]. The IMpassion130 and 131 randomized phase 3 trials are evaluating atezo combined with nab-paclitaxel and paclitaxel, respectively, as 1st-line therapy for mTNBC. Both exclude patients (pts) with disease progression (PD) within 12 mo of CT for early breast cancer (eBC). IMpassion132 (NCT03371017) compares atezo + CT vs placebo + CT in pts with PD #12 months after completing CT for eBC, and combines atezo with 2 commonly used non-taxane CT regimens.

Methods: In this multinational placebo-controlled randomized phase 3 trial, pts with recurrent (inoperable locally advanced/metastatic) TNBC treated with standard (neo)adjuvant anthracycline and taxane CT and relapsing #12 months after the last treatment with curative intent for eBC are eligible if they have received no prior CT for advanced/metastatic TNBC. PD-L1 status (for stratification) and TNBC status are confirmed centrally before randomization. Investigators select CT (gemcitabine 1000 mg/m² + carboplatin AUC 2, d1 & 8 q21d [GC] or capecitabine 1000 mg/m² bid d1–14 q21d [X]) before randomization. All pts with prior platinum for eBC must receive X. At least 30% of ~350 planned pts will receive X. Stratification factors are: visceral (lung and/or liver) metastases (yes vs no); tumor PD-L1 status (IC 0 vs 1/2/3); and selected CT (GC vs X). Pts are randomized to either atezo or placebo 1200 mg q21d with the chosen CT, continued until PD, unacceptable toxicity or pt/physician decision. Tumors are assessed q8w for the 1st year and q12w thereafter until PD. The primary endpoint is overall survival (OS). Secondary endpoints include 12- and 18-mo OS rates, progression-free survival, objective response rate (RECIST v1.1), duration of response, clinical benefit rate, pt-reported outcomes (PROs; EORTC QLQ-C30) and safety. Exploratory endpoints include further PROs, pharmacokinetics and translational research. Clinical trial information: NCT03371017.