Multimillion Dollar Grant Awarded from the National Cancer Institute for Translational Research at UCLA and in TRIO-US

We are excited to announce that the National Cancer Institute has awarded funding to study determinants of benefit from PD-1 inhibitors in patients at UCLA (including satellite sites) and the TRIO US Network for the proposal, “A model for predicting response to PD-(L)1 inhibitors in Non-Small Cell Lung Cancer.” The goal is to identify predictors of benefit to single agent inhibitors of the PD-1 immune checkpoint in a broad population of non-small cell lung cancer patients.

The FDA has now approved immune checkpoint inhibitors, pembrolizumab, nivolumab, and atezolizumab for use in certain patients with non-small cell lung cancer after research has shown durable responses. The potential of these immunotherapies has caused tremendous enthusiasm in the lung cancer research community and there is much to learn about which patients can benefit from these treatments.

We have generated a large specimen bank, and we plan to add to it substantially. With this tissue bank, we will evaluate clinical characteristics and properties of tumors and the immune microenvironment that predict benefit from immune checkpoint inhibition. From this data, we will create a model to identify patients with non-small cell lung cancer that are likely to benefit from PD-1/ PD-L1 inhibition. Lastly, we will validate that model in a set of independent samples.

Lancet Oncology Immunotherapy Publication

An article discussing nivolumab plus ipilimumab as first-line treatment for advanced non-small cell lung cancer was recently published in The Lancet Oncology.

Results were based on Checkmate 012, an open-label, phase 1, multicohort study. Patients were randomly assigned to receive nivolumab 1 mg/kg every 2 weeks plus ipilimumab 1 mg/kg every 6 weeks, nivolumab 3 mg/kg every 2 weeks plus ipilimumab 1 mg/kg every 12 weeks, or nivolumab 3 mg/kg every 2 weeks plus ipilimumab 1 mg/kg every 6 weeks until disease progression, unacceptable toxicities, or withdrawal.

Findings from the study indicate that first-line nivolumab plus ipilimumab has a tolerable safety profile as well as a high response rate and durable response. This study was conducted at UCLA Main Campus.

UCLA and the TRIO-US Network are continuing to investigate the use of combination therapies and immunotherapies with multiple studies and studies of this specific combination will be coming to UCLA and the TRIO-US network in the coming months.

Clinical Cancer Research Publication

An article discussing the dose escalation results of the first-in-human study of MET antibody, emibetuzumab, was recently published in Clinical Cancer Research.

The results were based on the phase I study, JTBA. Emibetuzumab is an antibody that inhibits hepatocyte growth factor (HGF)-dependent and HGF-independent MET signaling. This was comprised of a 3+3 dose escalation for emibetuzumab monotherapy and in combination with erlotinib.

Patients received emibetuzumab every two weeks by infusion. 23 patients with solid tumors received emibetuzumab monotherapy at 20, 70, 210, 700, 1400, and 2000 mg and 14 non-small cell lung cancer patients received emibetuzumab at 700, 1400, 2000mg in combination with erlotinib 150 mg daily. Based on tolerability, PK/PD analysis and clinical activity, the recommended Phase II dose range was found to be 700-2000 mg for emibetuzumab monotherapy and in combination with erlotinib.


Juniper Trial Closing to Accrual

The Juniper trial is now closed to accrual. The Juniper trial is a phase III study of abemaciclib plus best supportive care versus erlotinib in patients with previously treated KRAS mutated Stage IV non-small cell lung cancer.

Patients participating in the Juniper trial were randomized into Arms A and B. In the E Arm A, patients received 200 mg abemaciclib administered orally every 12 hours plus best supportive care on Day 1 to 28. Patients in Arm B received 150 mg erlotinib administered orally every 24 hours plus best supportive care on Days 1 to 28. Primary outcome measures were progression free survival and overall survival.

The Juniper was conducted at UCLA Main Campus, Pasadena, Valencia, Westlake Village, Porter Ranch, and at several sites in the TRIO-US network including Santa Maria, Bakersfield, Las Vegas, Fullerton, San Luis Obispo, and Ft. Wayne. Dr. Jonathan Goldman is leading the North American portion of this trial at UCLA.
TOTR 2016 Research Year in Review

Presentations


Lung small cancer?


Results: Five patients progressed while on treatment; the overall duration of response was 6 months. The most common adverse reactions were fatigue, nausea, constipation, and headache.

Conclusion: The combination of anti-angiogenic and anti-EGFR antibodies is well tolerated in patients with advanced non-small cell lung cancer and may be a promising treatment option for this population.
