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Ludwig Cancer Research and the Cancer Research Institute evaluate immunotherapies

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Ludwig Cancer Research (Ludwig) and the Cancer Research Institute (CRI) have launched clinical trials evaluating an immunotherapy for the treatment of the brain cancer glioblastoma multiforme (GBM), and a combination of immunotherapies for a variety of solid tumors.

The trials are being conducted through the CVC Clinical Trials Network in collaboration with MedImmune, the global biologics research and development arm of AstraZeneca. The CVC Clinical Trials Network—jointly managed by Ludwig and CRI—is a coordinated global network of basic and clinical immunologists with expertise in devising and developing immunotherapies for the treatment of cancer. The CVC Clinical Trials Network is led by Jedd Wolchok, Ludwig member and director of the Ludwig Collaborative Laboratory at Memorial Sloan Kettering Cancer Center, as well as associate director of the CRI Scientific Advisory Council.

The GBM trial is a nonrandomized, multicenter Phase 2 trial testing the effects of MedImmune's checkpoint blockade antibody durvalumab (MEDI4736) in patients with GBM, which is the most aggressive and deadly type of adult brain cancer. The study will be conducted using three cohorts of patients - newly diagnosed, recurrent patients and those with tumors which have become unresponsive to standard treatment of care.

"GBM is an inevitably lethal cancer that has so far eluded every therapy in the pharmaceutical arsenal," said Jonathan Skipper, Ludwig's

executive director of technology development. "We are hopeful that adding a promising immunotherapy to the treatment regimen for this brain cancer will yield significant benefits for patients who today have a median life expectancy of roughly 15 months, even with the best treatment available."

Durvalumab is an investigational human monoclonal antibody directed against programmed cell death ligand 1 (PD-L1). Signals from PD-L1 help tumors avoid detection by the immune system. Durvalumab blocks these signals, countering the tumor's immune-evading tactics. The antibody belongs to an emerging class of immunotherapies commonly referred to as checkpoint inhibitors because they remove checks the body places on immune activation.

"Checkpoint inhibitors have deservedly stirred considerable excitement in the oncology community as their application yields notable results against a growing variety of cancers," said Adam Kolom, managing director of CRI's venture fund and Clinical Accelerator, which organizes and provides philanthropic funding and clinical resources for this and other promising immunotherapy trials. "This will be the first time the immunotherapeutic agent will be tested against this difficult-to-treat cancer, and its outcomes are eagerly anticipated by the GBM patient community."

The other trial, which Ludwig and CRI launched in 2013, is a Phase 1 nonrandomized multicenter trial evaluating the combination of durvalumab with another checkpoint blockade therapy (tremelimumab, anti-CTLA-4) for the treatment of a variety of advanced solid tumors including ovarian cancer, non-small cell lung cancer, colorectal cancer, head and neck cancer, cervical cancer and kidney cancer.

Both clinical trials, which are now under way, are part of a larger clinical research program supported by Ludwig and CRI to speed the evaluation

of novel cancer immunotherapies, alone or in combination with other cancer drugs. All of the studies will include collection of genetic and immunologic data derived from clinical samples obtained from patients. Such information will provide clues to the impact of the evaluated therapies and suggest refined or new strategies for treating cancer.

Provided by Ludwig Institute for Cancer Research