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Field of Research (2 keywords): Clinical cardiology

Department: Interventional cardiology, Division of Cardiology, Faculty of Medicine

School of Graduate Studies Appointment (IMS, LMP, IHPME etc)? Yes/No: No

Project Title: Clinical Outcomes of Transcatheter Mitral Intervention

Brief Project Description (~300 words):

Mitral regurgitation is the most common valvular disease in population based studies, with a prevalence close to 10% in adults 75 years of age or older\(^1\). Unfortunately, a significant proportion of patients with severe mitral regurgitation are considered high surgical risk due to left ventricular dysfunction, medical comorbidities, or age, and are often left untreated\(^3\). Transcatheter mitral valve repair has become an option in this population, with the MitraClip device being the most established with more than 25,000 patients treated worldwide. Multiple international registries have also demonstrated efficacy and safety in high risk MR patients, including TRAMI, European Sentinel, GRASP, ACCESS EU and the MitraClip Asia Pacific Registry\(^9\)–\(^13\). The COAPT study is a North American multi-centre randomized clinical trial comparing MitraClip to optimal medical therapy in patients with severe mitral regurgitation who are not surgical candidates. Patients are still being actively recruited with an estimated completion date in 2017. Currently, a combined registry of patients treated with MitraClip in Ontario and Canada does not exist, despite a large and growing clinical experience.

Our study will be descriptive in nature, to better understand the patient population being treated with MitraClip locally, and to allow for comparison with other international registries. Clinical outcomes including 30 day and 1 year mortality, symptom
and quality of life measures, and major adverse events will be reported. Lastly, by linking with provincial administrative databases, all-cause in hospital days as well as heart failure related admissions for a 1 year period prior to MitraClip and a minimum of 1 year after will be compared, to determine the impact of MitraClip therapy on heart failure hospitalization.