The Québec PROCURE Prostate Cancer Biobank: A unique resource for comprehensive studies of the disease

Prostate Cancer (PCa) is the most prevalent cancer in North American males. Ethiologic factors are still not fully identified. Screening and optimal treatments remain matters of debate. Yet PCa kills thousands of patients yearly, being among predominant causes of cancer deaths. Research has been slowed down by the lack of high quality biospecimens and data. With the goal of creating a prospective biobank, PROCURE in concertation with urologists, scientists and pathologists working at four university hospital centers in the Québec province enrolled ~2000 radical prostatectomy (RP) patients between 2007 and 2012. The participants donated blood, urine and prostate tissues and filled a questionnaire on socio-demographic factors, family history, lifestyle habits and health issues. They also consented to periodic blood and urine recollection and update of their clínico-pathological data, notably at follow-up visits. Quality analyses have been and are being continuously performed. The cohort characteristics are the followings: Mean age of 62 years old, prostate specific antigen (PSA) of 7.9 ng/mL at diagnosis, distribution of Gleason scores (GS) of 23.7% GS6, 66% GS7, 10.3% GS≥8; 62.5% of tumor stages pT2, 26.7% pT3a and 10.9% pT3b. The median follow-up time is 48.2 months with a recurrence rate of 27.5% and a death rate of 4%, among which 0.8% were due to PCa. Altogether, the prospective PROCURE Biobank has reached sufficient maturity for allocation of biospecimens and data for research. Moreover, its specific sub-cohorts of patients will enable comprehensive studies on the disease. This will pave the way to Personalized/Precision Medicine.

Biography

Simone Chevalier (PhD, Biochemistry, University Montréal, Canada) first completed Post-doctoral studies in Biochemistry (University British Columbia) and then in Endocrinology (Maisonneuve-Rosemont Research Centre, Montréal) with emphasis on the Prostate Physiopathology. Her research uses a bench to bedside approach allowing studies from molecules to cell lines, animal models and patients. She is Professor in the Surgery Department (Urology) at McGill University and holds affiliations in Medicine and Oncology. She directs McGill Urology Research and the PROCURE Prostate Cancer Biobank. She has published more than 90 papers in leading scientific journals and presented numerous talks at national and international meetings.

Simone Chevalier
PROCURE Alliance, Canada
McGill University Health Centre, Canada

Simone Chevalier, J Tissue Sci Eng 2016, 7:3 (Suppl)
http://dx.doi.org/10.4172/2157-7552.C1.026