Introduction
In Western countries, prostate cancer is the most frequent malignancy and one of the major causes of cancer-related death in men. The Prostate Cancer Molecular Medicine (PCMM) project addresses two major clinical needs in prostate cancer, namely the reduction of overdiagnosis and overtreatment of this disease due to screening and the improvement of therapy monitoring of advanced disease. While work packages 1 and 2 are related to the discovery of biomarkers and the development of novel imaging approaches, work package 3 (WP3) is about biobanking, the IT infrastructure and decision support.

PCMM biobank
The four PCMM clinical centers are jointly establishing a prospective biobank containing blood, urine, tissue, clinical and imaging data from the following patient groups: 1) 200 men biopsied for prostate cancer 2) 200 men with localized prostate cancer who undergo primary treatment by radical prostatectomy 3) 55 men with metastatic hormone-refractory prostate cancer who participate in a Phase I trial with therapy response monitoring by molecular imaging in WP2. The PCMM biobank will be part of the Dutch String of Pearls (Parelsnoer) initiative.

Current status
At this moment (June 2013), data from 157 patients of patient group 2 have been collected. This includes >368,000 MRI images and ~1900 US images, as well as clinical data (lab values, questionnaires), blood/urine/tissue data, radiology reports and pathology reports. For 95 patients, data collection has been completed. The collection for patient groups 1 and 3 is being setup.

Decision Support System (DSS)
PCMM is developing an IT infrastructure to allow for the inclusion of results from novel biomarker tests and imaging tools into a DSS for prostate cancer. Such a system will assist physicians in the selection of the best individual treatment strategy for their patients diagnosed with prostate cancer. As a part of this system, several open source applications have already been installed and are operational, such as the OpenClinica software package and various CaBIG (Cancer Biomedical Informatics Grid) applications e.g. NBIA and CaTissue for storing and analyzing clinical, imaging and tissue data. These applications are web-accessible to the authorised participants of WP3.

Translational Research IT infrastructure
The IT infrastructure that is being set up for PCMM will also be part of the new CTMM project TraIT (Translational IT Infrastructure). The current PCMM infrastructure includes OpenClinica, NBIA and CaTissue. Overmore, a central, integrated PCMM database has been setup which contains data from all different fields.

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