


Titre	[Ac-225]-PSMA-62 Phase I/II Clinical Trial to Characterize Efficacy, Safety, Tolerability, and Dosimetry in Biochemically Recurrent and Metastatic Castration Resistant Prostate Cancer
Protocole ID	ACCEL
ClinicalTrials.gov ID	<a href="https://clinicaltrials.gov/ct2/show/study/NCT06229366">NCT06229366</a>
Type(s) de cancer	Prostate
Phase	Phase I-II
Stade	Résistant à la castration - métastatique
Type étude	Clinique
Médicament	[Ac-225]-PSMA-62
Institution	CENTRE UNIVERSITAIRE DE SANTE MCGILL  SITE GLEN 1001 boul. Décarie , Montréal, QC, H4A 3J1
Ville	
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Statut	Actif en recrutement
Date d'activation	08-07-2024
But étude	The primary aim of the phase I study is to evaluate the safety and tolerability of [Ac-225]-PSMA-62 to determine recommended phase II doses for patients with mCRPC and BCR prostate cancer. The aim of the phase II study for patients with mCRPC is to evaluate the efficacy of [Ac-225]-PSMA-62.
Critères d'éligibilité	<ul style="list-style-type: none"><li>• Adults aged 18 years or older</li><li>• Histological, pathological, and/or cytological confirmation of adenocarcinoma of the prostate</li><li>• Adequate organ function (bone marrow reserve, liver function, renal function)</li><li>• Patients with human immunodeficiency virus who are healthy and have a low risk of acquired immunodeficiency syndrome-related outcomes are included in this trial.</li><li>• Willing and able to comply with all study requirements and treatments (including [Ac-225]-PSMA-62) as well as the timing and nature of required assessments</li><li>• ECOG performance status 0 to 2</li><li>• Life expectancy of at least 6 months per investigator judgement</li><li>• Patients and their female partner(s) of childbearing potential must agree to use two acceptable forms of contraception, one of which must be a barrier method during the study and for 21 weeks after last study drug administration.</li><li>• The patient has read, understood, and signed the written informed consent form(s)</li><li>• Criteria specific for patients with mCRPC:<ul style="list-style-type: none"><li>• Previously received treatment for their underlying disease and have exhausted all satisfactory or available approved treatment options</li><li>• Progressive mCRPC at the time of consent based on at least 1 of the following criteria:<ul style="list-style-type: none"><li>• Serum/plasma PSA progression defined as increase in PSA greater than 25% and &gt;2 ng/mL above nadir, with a confirmatory PSA test at least 1 week later</li><li>• Soft-tissue progression defined as an increase <math>\geq 20\%</math> in the sum of the diameter (SOD) (short axis for nodal lesions and long axis for non-nodal lesions) of all target lesions based on the smallest SOD since treatment started or the</li></ul></li></ul></li></ul>

- appearance of one or more new lesions
  - Progression of bone disease defined as the appearance of one or more new lesions by bone scan
- Positive PSMA-PET within 90 days of enrolment; note that either [Ga-68] or [F-18] PSMA targeted agents, approved for commercial use, may be used as per diagnostic standard of care
- Castrate circulating testosterone levels (<1.74 nmol/L or <50 ng/dL)
- Criteria specific for patients with BCR:
  - The patient's primary tumor must have been previously treated with surgery and/or definitive radiation. Prior salvage treatments (radiation or surgery) to the prostate bed or pelvis are allowed
  - Biochemical recurrence after primary therapy. Patients without any prior ADT, or those with prior ADT having recovered testosterone to within the normal range - defined as  $\geq 5.2$  nmol/L ( $\geq 150$  ng/dL) - must meet the following thresholds for BCR:
    - Patients with prior radical prostatectomy, with or without definitive radiation treatment must have a prostate specific antigen (PSA)  $\geq 0.2$  ng/mL OR,
    - Patients who received only definitive radiation for treatment of their primary tumor must have a PSA of  $\geq 2$  ng/mL above nadir
  - Positive PSMA-PET within 90 days of enrolment. Either [Ga-68] or [F-18] PSMA targeted agents, which are approved by the respective health authority, may be used as per standard of care (diagnostic protocols) for each institution
  - No indication for urgent or emergent radiation
  - Patient has not received any form of prostate-cancer directed therapy since undergoing screening PSMA scan

#### Critères d'exclusion

- Patients with neuroendocrine or small cell carcinoma of the prostate
- Major surgery  $\leq 30$  days prior to start of study treatment
- Patient has received any other investigational therapeutic agents within 4 weeks or 5 half-lives (whichever is shorter) of starting the study treatment
- Evidence of ongoing and untreated urinary tract obstruction
- History of grade 4 myelosuppression lasting > 7 days, or grade 3 myelosuppression requiring more than 6 weeks recovery
- Patients receiving medications which are known to cause xerostomia or xerophthalmia (e.g. Darafenicin) are excluded if they are not on stable doses for at least 4 weeks prior to screening
- Existing Grade 1 dry mouth (xerostomia) or symptomatic Grade 1 dry eye (xerophthalmia) for any reason
- Contraindications to the use of planned [Ac-225]-PSMA-62 therapy, including but not limited to hypersensitivity to [Ac-225]-PSMA-62 excipients
- Has a known history of other malignancy within the last 5 years. Except: malignancies that were treated curatively and have not recurred within 2 years prior to study treatment; completely resected basal cell and squamous cell skin cancers; any malignancy considered to be indolent and that has never required therapy; and completely resected carcinoma in situ of any type
- Patient has any concurrent severe and/or uncontrolled medical conditions that could increase the patient's risk for toxicity while on the study or that could confound discrimination between disease- and study treatment-related toxicities
- Serious psychological, familial, sociological, or geographical condition that might hamper compliance with the study protocol and follow-up schedule.
- Symptomatic cord compression, or clinical or radiologic findings indicative of impending cord compression
- Inability to lie flat during or tolerate PET/CT or MRI
- History of Torsades de Pointes or congenital prolonged QT syndrome
- Concurrent serious (as determined by the investigator) medical conditions
- Criteria specific for patients with mCRPC:
  - Patient has received any therapeutic systemic radionuclides (e.g., radium-223, rhenium-186, strontium-89), or therapeutic radioligands (e.g., Lu-177-PSMA) within 5 half-lives of starting the study treatment
  - Patients currently receiving systemic anti-cancer therapy, with the exception of ADT with or without ARPI. However, patients may be included in the study if they stop all prohibited anti-cancer therapy, prior to receiving the first dose of investigational study drug
  - Patient has initiated therapy with, or switch to, an alternative ARPI since PSMA-PET scan used for eligibility. Patients already receiving an ARPI may continue treatment with the same ARPI during study
  - Patients with a history of central nervous system (CNS) metastases must have received therapy (surgery, radiotherapy, gamma knife) and be neurologically stable, and not receiving corticosteroids for the purposes of maintaining neurologic integrity. Patients with epidural disease, canal disease, and prior cord involvement are eligible if those areas have been treated and are stable. For patients with parenchymal CNS metastasis (or a history of CNS metastasis), baseline and subsequent radiological imaging must include evaluation of the brain
- Criteria specific for patients with BCR:
  - Any prior cytotoxic chemotherapy
  - Prior treatment with therapeutic systemic radionuclides (e.g., radium-223, rhenium-186, strontium-89), or therapeutic radioligands (e.g. Lu-177-PSMA)
  - Prior immuno-therapy or adoptive T-Cell Therapy (e.g. CAR-T therapy, TCR therapy, etc.)

- Prior poly ADP ribose polymerase (PARP) inhibitor for prostate cancer
- Patient has received any systemic anti-cancer therapy for prostate cancer with the exception of limited course of ADT for management of localized disease
- Presence of any liver metastases
- Use of opioids for cancer-related pain  $\leq$  30 days prior to screening
- Known presence of central nervous system metastases