

PROSTATE CANCER JUNIOR CLINICAL RESEARCH UNIT

David Olmos (until December)
Junior Clinical Research Unit Head

Staff Scientist
Pedro P. Lopez-Casas (until
November)

Post-Doctoral Fellows
Ylenia Cendón, David Martínez, María
Isabel Pacheco (until June)

Technicians
Mónica Balsells (until May) (TS)*, Eva



M. Casas, Jeniffer P. Condo (until
February), Olga Popova (April-
November), Leticia Rivera (until
December), Alejandro Sanz (until
July) (TS)*

*Titulado Superior (Advanced Degree)

Visiting Scientists
Daniel Alameda (*Instituto de
Investigación Biomédica de Málaga,
Málaga, Spain*), Elena Castro
(*Instituto de Investigación Biomédica
de Málaga, Málaga, Spain*), Carlo

Cattrini (*Università di Genova,
Genoa, Italy*), Rebeca Lozano
(*Instituto de Investigación Biomédica
de Salamanca, Salamanca, Spain*)

OVERVIEW

Prostate cancer is the most common cancer diagnosis in men and, despite its potential to be cured in almost 90% of early stages, its metastatic spread causes about 6,000 deaths every year in Spain alone, whilst in the US over 30,000 men succumb to the disease each year.

During the last few years, our Group has focused precisely on the development of new methods to identify and treat the most aggressive and lethal forms of prostate cancer, in order to accelerate precision medicine for the disease. In particular, over the last 9 years, our group has made significant contributions in:

- i) Establishing and developing several biomarkers based on the concept of liquid biopsy.
- ii) Understanding the implication of gene alterations leading to DNA repair deficiency in this disease.
- iii) Developing new treatments for prostate cancer.

Our work has been widely recognised with several highly cited publications in top journals in our field, including *The New England Journal of Medicine*, *The Lancet Oncology*, *The Journal of Clinical Oncology*, *European Urology*, *Annals of Oncology*, and many others. ■

► PUBLICATIONS

- Sweeney C, Bracarda S, Sternberg CN, Chi KN, Olmos D, Sandhu S, Massard C, Matsubara N, Alekseev B, Parnis F, Atduev V, Buchschacher GL Jr, Gafanov R, Corrales L, Borre M, Stroyakovskiy D, Alves GV, Bournakis E, Puente J, Harle-Yge ML, Gallo J, Chen G, Hanover J, Wongchenko MJ, Garcia J, de Bono JS (2021). Ipatasertib plus abiraterone and prednisolone in metastatic castration-resistant prostate cancer (IPATential150): a multicentre, randomised, double-blind, phase 3 trial. *Lancet* 398, 131-142.
- Lorente D, Llacer C, Lozano R, de Velasco G, Romero-Laorden N, Rodrigo M, Sánchez-Iglesias Á, di Capua C, Castro E, Ferrer C, Sánchez-Hernández A, Olmos D (2021). Prognostic score and benefit from abiraterone in first-line metastatic, castration-resistant prostate cancer. *Eur Urol* 80, 641-649.
- Smith MR, Saad F, Chowdhury S, Oudard S, Hadaschik BA, Graff JN, Olmos D, Mainwaring PN, Lee JY, Uemura H, De Porre P, Smith AA, Brookman-May SD, Li S, Zhang K, Rooney B, Lopez-Gitlitz A, Small EJ (2021). Apalutamide and overall survival in prostate cancer. *Eur Urol* 79, 150-158.
- Smith MR, Thomas S, Gormley M, Chowdhury S, Olmos D, Oudard S, Feng FY, Rajpurohit Y, Urtishak K, Ricci DS, Rooney B, Lopez-Gitlitz A, Yu M, Wyatt AW, Li M, Attard G, Small EJ (2021). Blood biomarker landscape in patients with high-risk nonmetastatic castration-resistant prostate cancer treated with apalutamide and androgen-deprivation therapy as they progress to metastatic disease. *Clin Cancer Res* 27, 4539-4548.
- Lozano R, Castro E, Aragón IM, Cendón Y, Cattrini C, López-Casas PP, Olmos D (2021). Genetic aberrations in DNA repair pathways: a cornerstone of precision oncology in prostate cancer. *Br J Cancer* 124, 552-563.
- Oliva L, Lozano R, Llacer C, Aragón I, Pajares BI, Sáez MI, Herrera-Imbroda B, Montesa A, Hernández D, Villatoro R, Otero A, Correa R, Grau G, Peinado P, Pacheco MI, García-Galisteo E, Rueda A, Machuca FJ, Alba E, Márquez-Aragónés A, Olmos D, Castro E (2021). Risk prediction tools available for germline BRCA1/2 mutations underperform in prostate cancer patients. *Eur Urol Oncol* 4, 315-318.
- Lozano R, Lorente D, Aragón IM, Romero-Laorden N, Nombela P, Mateo J, Reid AHM, Cendón Y, Bianchini D, Llacer C, Sandhu SK, Sharp A, Rescigno P, Garcés T, Pacheco MI, Flohr P, Massard C, López-Casas PP, Castro E, de Bono JS, Olmos D (2021). Value of early circulating tumor cells dynamics to estimate docetaxel benefit in metastatic castration-resistant prostate cancer (mCRPC) patients. *Cancers (Basel)* 13, 2334.
- Sokolova AO, Marshall CH, Lozano R, Gulati R, Ledet EM, De Sarkar N, Grivas P, Hígano CS, Montgomery B, Nelson PS, Olmos D, Sokolov V, Schweizer MT, Yezefski TA, Yu EY, Paller CJ, Sartor O, Castro E, Antonarakis ES, Cheng HH (2021). Efficacy of systemic therapies in men with metastatic castration resistant prostate cancer harboring germline ATM versus BRCA2 mutations. *Prostate* 81, 1382-1389.