Technological Platform / Bergonié Institute or CHU

Name	**Medical Biology Unit**	Bergonié UNICANCER NOUVELLE-AQUITAINE
Platform coordinator(s)	**Dr. Françoise DURRIEU, MD, PhD** Coordinator of the Medical Biology Unit Biopathology Department –Bergonié Institute f.durrieu@bordeaux.unicancer.fr/ +33(0)5 56 33 33 42 website: https://www.bergonie.fr/diagnostic-et-traitements/laboratoire/	
Type of services	**Routine diagnostics & Collaborative Research projects**	
Activities	The Medical Biology Unit uses several technologies allowing determination of the concentration of more than **200 analytes** in blood, bone marrow, urine , CSF, ascitis or pleural fluid, contributing in the diagnosis and prognosis of different types of cancer, evaluation of therapeutic toxicities and peripheral lymphocyte immune response to immuno-chemotherapy. ➔ **The unit realizes more than 360 000 analysis per year for 150 to 200 samples per day.** Thanks to its expertise in flow cytometry, the unit actively participates in clinical research activities. To date, it is participating in internal biological research projects, in clinical studies at the institute initiative, in clinical studies with industrial promotor as well as multiple internal pilot projects. Examples of internal and collaborative research project : - Development of the research of BCL-2 mutation in B chronic lymphocytic leukemia to diagnose resistance to Venetoclax and adapt the reatment - CIRCULSARC : Immunomorphological and molecular characterization of CIRCULating tumor cells in patients with soft-tissue SARComas : A Pilot Study - BIP-AIRIC : Immunotherapy study based on BIP study (Bergonié Institute Profiling) - BGB-311-304 : Phase III randomized clinical trial, international, based on the evaluation of BGB-3111 as compare to bendamustine plus rituximab treatment in patients with previously untreated chronic lymphocytic leukemia or lymphocytic lymphoma - CABL001A2301 : A phase 3, multi-center, open-label, randomized study of oral ABL001 (asciminib) versus bosutinib in patients with Chronic Myelogenous Leukemia in chronic phase (CMLCP), previously treated with 2 or more tyrosine kinase inhibitors	
Key technologies	▪ **Up-to-date routine analyzers for chemistry and electro-chemoluminescence immunoassay, automated cell counting, serum or CSF immunoglobulin heavy and light chains determination…** ▪ **Cell immunophenotyping : 10 fluorescence/12 parameters Flow cytometry - FISH (Fluorescence in situ Hybridization)** ▪ **AutoMACS Pro : magnetic cell sorter** ▪ **RareCell® : circulating tumor cell isolation**	
Please state no more than 5 facts illustrating the appeal or reputation of the platform	• F Durrieu : nominated as a member of the selection committee for French Reference Laboratories in Medical Biology (Hematology section) • Participation in national and international research projects • Active participation in University or Medical training • Center of reference for Medical and Pharmacy student in medical Biology • Interventions in national and international meetings	
Please state the platform's major publications	Etienne G. *et al*.. BJH Accepted Jan 20/2020 Gauthier M, Durrieu F. *et al*., BMC Cancer 19, 809 (2019). Durrieu F *et al*. Ann Biol Clin 2018 ; 76 (6) : 687-93 Correia P *et al*. Int. Jnl. Lab. Hem. 2019 41 (Suppl. 2) : 45-46 Leroy L, *et al*. Annals of Oncology, 2018;29(2):514-515	
People in the platform with their degree	Julie BLANCHI, MD, PhD training, Françoise DURRIEU, MD,PhD / Pascal CORREIA, M.S : application engineer/ Pauline ALLARD, Marie-Claude BORT, François BOULINGUEZ, Laure GIRAULT, Emma HOSTEINS, Angélique PECQUET, Germain PICARD, Victoria NORMAND, Florian RENAUD, Mathilde SAINTENOY : technicians / Sonia MICHEL, Véronique RANGUIN : medical secretary /Karine PEUTAT : manager / Anulka KESTEMONT : Quality Insurance manager	
Innovation technologic or research in the future 5 years	Development of liquid biopsy in collaboration with the Molecular Pathology Unit - Identification and prognostic evaluation of circulating tumor cells by flow cytometry - Phenotypic characterization of cells resistant to new treatment in B-CLL - Evaluation of blood cells immuno-phenotypic abnormalities as a diagnostic tool in myelodysplastic syndrome	