



PhD Offer – 2026 Doctoral Call for Projects

Study of the Role and Therapeutic Targeting of CD160 Isoforms in Triple-Negative Breast Cancer

Host Unit: IRMAIC (UR 7509) – University of Reims Champagne-Ardenne

Location: Research Department, Institut Godinot, Reims

Supervision: Principal Investigator: Dr S. Potteaux (INSERM, IRMAIC, Institut Godinot)

Co-supervisor: Prof. J. Devy (UMR CNRS MEDyC)

Scientific Background and PhD Objectives

Triple-negative breast cancers (TNBC), accounting for 15–20% of cases, are particularly aggressive and associated with poor prognosis. Despite advances in immunotherapy, response rates remain limited. New therapeutic combinations capable of overcoming these resistances are needed. Targeting CD160, a newly identified glycoprotein expressed on TNBC cells, represents a promising approach. Our hypothesis is that targeting all CD160 isoforms could limit TNBC progression by normalizing intratumoral vascularization and overcoming immunoresistance associated with anti-PD-1 immunotherapy. The role of CD160 isoforms in cancer cells will be investigated using CRISPR/Cas9 methodology. Monoclonal antibodies targeting CD160 isoforms have already been generated. Functional effects of CD160 isoforms will be studied in vitro using relevant cell lines and tumorspheres, and in vivo using a syngeneic TNBC model, both alone and in combination with anti-PD-1 immunotherapy. This work will help elucidate the role of CD160 isoforms in TNBC progression and could improve treatment strategies, particularly in cases of resistance or in combination with immunotherapy. There is strong potential for the valorization of these antibodies as part of a novel therapeutic approach in oncology.

Approaches and methodologies

2D/3D cell culture, tumor immunology, genome editing (CRISPR/Cas9), murine and alternative models (tumorspheres), flow cytometry, imaging, immunohistochemistry, Incucyte® imaging


Project strengths

- Innovative topic in immuno-oncology
- Strong preliminary results + antibodies already available
- High potential for valorization (patents, start-up creation)
- Experienced and dynamic supervision

Candidate profile

- Master's degree (M2) in biology, immunology, oncology, or a related field
- Skills in cellular and/or molecular biology
- Interest in immuno-oncology and translational research
- Autonomy, rigor, and team spirit

How to apply

Please send the following documents to  stephane.potteaux@univ-reims.fr:

- CV
- Cover letter
- Academic transcripts (M1 & M2)
- Reference contacts