

**THESIS TOPIC**

<b>Subject N° (to be completed by the ED):</b>	<b>FUNDING:</b> <input checked="" type="checkbox"/> Requested <input type="checkbox"/> Acquired	<b>Funding origin:</b>
Thesis title: <b>Drug-induced pruritus</b>	3 keywords: pruritus, drug, pharmacovigilance	
Unit / team: Laboratoire Interactions Epithéliums Neurones (LIEN), EA4685, Faculty of Medicine of Brest		
Supervisor's name: Thesis director : Raphaële Le Garrec, associate professor (HDR) in toxicology Co-supervision : Emilie Brenaut, associate professor in dermatology	Phone number: +33 298016448 Email address: rlegarrec@univ-brest.fr	
<p><u>Socio-economic and scientific context (approximately 10 lines):</u>  Pruritus (itch) is defined as an unpleasant sensation leading to the need to scratch. It is most often secondary to a skin disease (such as psoriasis or eczema). When there is no specific dermatological lesion, or only lesions related to scratching, it is called pruritus <i>sine materia</i>. This pruritus may have a systemic cause such as cholestasis, renal failure, hematological disease, or a drug. This adverse drug reaction is under-recognized. There is very limited scientific data on this side effect. A review of the literature was published in 2009 on all drugs reported to induce pruritus, but a large majority of these data came from isolated clinical cases. Although the imputability seems clear for certain molecules such as hydroxyethyl starch or opioids, it is doubtful and not established for the majority of drugs. It is essential to have more tangible data to help physicians decide whether or not to stop using a drug when a patient presents with pruritus, and this work will provide data for the assessment of extrinsic imputability.</p>		
<p><u>Working hypothesis and aims (approximately 8 lines):</u>  The overall objective of this study is to improve knowledge of pruritus <i>sine materia</i> of iatrogenic origin in order to better prevent and manage it. The main objective is to identify by several methods the drugs likely to induce pruritus <i>sine materia</i>.</p>		
<p><u>Main milestones of the thesis (approximately 12 lines):</u>  This thesis will associate for the first time the collaboration of LIEN and the dermatology department of the CHU of Brest, specialized in the study and management of pruritus, with the Regional Center of Pharmacovigilance of Brest, thus bringing together the expertise of these 3 teams working on pruritus, dermatology, pharmacology and analysis of epidemiological and pharmacovigilance data.</p> <p>The thesis will begin with the realization of a review of the literature via the general research bases and specific bases and reference works. It will continue with the analysis of data associating medication and the occurrence of pruritus <i>sine materia</i> in patients:  -Analysis of data from the Brest University Hospital via the Clinical Data Centre  -Analysis of data from the national pharmacovigilance database  -Analysis of data from the global pharmacovigilance database</p> <p>A retrospective and prospective analysis of drug intake (with their chronology) of patients hospitalized for pruritus <i>sine materia</i> at the University Hospital of Brest will be carried out to obtain more qualitative data, to identify characteristics for this pruritus and aggravating factors.</p>		
<p><u>Scientific and technical skills required by the candidate (2 lines):</u>  Knowledge of database management and analysis, scientific biological/medical knowledge</p> <p>Profile: student in medicine, pharmacology, epidemiology</p>		
<p><u>3 publications from the team related to the topic (last 5 years):</u></p> <ul style="list-style-type: none"> <li>- Chronic itch: emerging treatments following new research concepts. Misery L, Brenaut E, Pierre O, Le Garrec R, Gouin O, Lebonvallet N, Abasq-Thomas C, Talagas M, Le Gall-Ianotto C, Besner-Morin C, Fluhr JW, Leven C. Br J Pharmacol. 2021</li> <li>- Chronic Pruritus in the Absence of Skin Disease: A Retrospective Study of 197 French Inpatients. Robert M, Misery L, Brenaut E. Acta Derm Venereol. 2020</li> <li>- Frequency and characteristics of pruritus in patients with monoclonal gammopathy: a case-control study C Devergne, H Kerspern, F Poizeau, J R Eveillard, J L Carré, L Misery, C Le Gall-Ianotto, E Brenaut J Eur Acad Dermatol Venereol . 2020 Dec</li> </ul>		
<p><u>National and international collaborations:</u></p> <ul style="list-style-type: none"> <li>- Dermatology department of University Hospital of Brest</li> <li>-Regional center of pharmacovigilance of University Hospital of Brest ( Dr Greta Gourier, doctor in pharmacovigilance)</li> <li>- Pruritus center of Münster, Germany, Pr Sonja Ständer</li> <li>-Miami Itch Center, USA, Pr Gil Yosipovitch</li> </ul>		