Date: August 2017

CURRICULUM VITAE

Name: **LESUISSE** **Forename:** **Dominique**

Date of Birth: **March 24th, 1955** **Nationality:** **Belgian**

---

1. EDUCATION

June 1976 Master's Degree in Chemistry — University of Louvain/Master's degree thesis prepared in Professor L. Ghosez's laboratory on "Synthesis of modified β-lactams" with "La Plus Grande Distinction".

May 1981 Ph.D. in Chemistry — University of Louvain/Ph.D thesis prepared in Professor L. Ghosez's laboratory on "New methods on the synthesis of tricyclic **β-lactams**"; with "La Plus Grande Distinction".

Sept.1976/79 Three years of IRSIA fellowship.
Oct.1979/80 One year sponsored by the pharmaceutical company UCB (Union Chimique Belge).

Post-Doctoral Experience

From May 1981 to June 1983 — Post-doctoral Research Associate at the University of California, Irvine. I worked with L.E. Overman, completing the synthesis of **Gephyrotoxin**, a **Dendrobatid alkaloid**, as well as studies on the synthesis of optically active **Pumiliotoxin A** via Lewis acid catalyzed "ene" reactions.

From November 1983 to November 1985 — Post-doctoral Research Associate at the Massachusetts Institute of Technology (MIT), Cambridge. I accomplished in the laboratory of Professor G.A. Berchtold the total synthesis of 9-methyl chorismic acid, the first pseudo-substrate of enzyme **chorismate mutase-prephenate dehydrogenase**, and developed the access to optically active analogues of chorismic acid.

From January 1986 to September 1986 — Research assistant at the University of Louvain.

---

2. LANGUAGES

French (mother tongue)
English (fluent)
German (scholar)

---

3. PROFESSIONAL EXPERIENCE

January 1987 to 1991	Head of laboratory then Project Leader in the Endocrinology Department (**Roussel Uclaf**)
	I worked for 4 years on **aromatase inhibitors**; this project gave rise to 3 steroidal inhibitors which are in RU's outlicensing portfolio.
1991 to 1993	In charge of exploratory research within the Endocrinology Department
	Discovery of original non-steroidal compounds with affinity for the hormonal receptors (**estrogen receptor**) or inhibiting the enzyme **5-α-reductase**.
	Discovery, extraction and characterization of the active principle of the folk medicine *Epilobium Parviflorum*.
1994-1995	Bone Disease Domain
	Search for non peptidic ligands of the **Parathormone receptor**. Search for inhibitors of the **osteoclastic V-H+-ATPase** Search for inhibitors of the **sigma receptor**
1996 to 1998	Project Leader of a high visibility multicenter project
	Search for **inhibitors of the Src** protein, a 42 M$ collaboration with an American pharmaceutical company, ARIAD. This cutting edge project dealing with **protein-protein interactions** was pursued with large teams of scientists in France (30), Boston (20) along with Tucson and Frankfurt.
1998 to 2001	Co-Head of the Medicinal Chemistry Department (**Hoechst Marion Roussel**)
	This function encompassed scientific supervision of all projects of the Medicinal Chemistry Department [Hoechst Marion Roussel: 8-10 Block A projects supported by chemistry, 13 exploratory projects with chemistry mentors, 3 disease groups (**antiinfectives**, **bone disease** and **oncology**), 58 scientists] and direct management of 28 scientists.
2001 to 2004	Section Head of Medicinal Chemistry (**Aventis**)
	This function encompassed scientific coaching of projects within oncology, neurodegeneration and antiinfectives and direct management of 30 scientists.
2005 to 2009	Local Head of CNS Chemistry (**Sanofi-Aventis**)
	Direct responsibility over the chemistry programmes of CNS disease group conducted in Vitry and direct management of approximately 30 scientists.
2010 to 2011	Medicinal chemistry Head in the Aging Therapeutic Strategic Unit (TSU), Cluster Disabilities of Cardiac, Vascular and Cerebral origin (**Sanofi-Aventis**) Transversal coordination of the part of the group in Frankfurt.
2011 to 2014	Medicinal chemistry Head in the Aging Therapeutic Strategic Unit (TSU), Neurodegenerative Diseases (**Sanofi**) (approximately 45 scientists).
2014 to 2015	Member of the Board of Lead Generation France Responsible for Merial Animal Health target-based programmes Responsible for Brain delivery strategies
2016 to present	Head of CNS Barriers (Neurosciences)

New strategy: Brain penetration of biotherapeutics, neurovascular targets, new mechanisms of brain delivery.

---

4. LOCATION

1991 to 1999	102 Route de Noisy, 93230 Romainville, FRANCE
1999 to 2009	13 Quai Jules Guesde, 94403 Vitry-sur-Seine, FRANCE
2009 to present	1 av. Pierre Brossolette, 91385 Chilly-Mazarin, FRANCE

---

5. CANDIDATES PROPOSED TO DEVELOPMENT (by myself or in my perimeter)

This section is summarized for confidentiality reasons.
13 candidates proposed in the fields of Oncology, Neurodegeneration, Antiinfectives and Bone Diseases.
One of these, a beta-lactamase inhibitor (developed at Novexel, then Astra Zeneca), in now on the market.

---

6. TEAM MANAGEMENT

1987-1995	4 persons as head of laboratory
1996 to 1998	Team leadership of a high visibility multicenter project (30 scientists in Romainville, 25 scientists in Ariad, Boston, not including scientists in Frankfurt and Tucson)
1998 to 2015	Medicinal Chemistry Department (up to 45 scientists)

---

7. MANAGEMENT TRAINING

Méthode Hay. 1989, Hay Management Consultants

SCF International Management. INSEAD. Fontainebleau. January and February 1990.

SEMINAIRE DANTHROS EQUIPE DIRIGEANTE. DANTHROS, F. Aelion, 2000.

Coaching, Holodis, 2000.

---

8. SPECIAL AWARDS

First prize at the "Concours Inter-universitaire", October 1977, Belgium.

Laureate of the "Concours de bourse de voyage", 1982, Belgium.

---

9. COMMITTEES / BOARDS/CONSORTIA

Member of the organizing committee of the Franco-Japanese Symposium for Medicinal and Fine Chemistry (1995-2003).

Reviewer for several international journals including Bioorganic and Medicinal Chemistry Letters, European Journal of Medicinal Chemistry, Bone, Bulletin de la Société Chimique de France, Journal of Medicinal Chemistry.

Member of the Editorial Board of Chemical Biology and Drug Design, A new Journal created in 2005.

Member of the Board of Société de Chimie Thérapeutique (2007-2010)

Member of the Scientific Advisory Committee of the XXIst International Symposium on Medicinal Chemistry (Brussels, September 2010)

Member of the International Advisory Board of ChemMedChem Journal since November 2010

Member of the Editorial Board of the European Journal of Medicinal Chemistry, 2011-2014

Member of the Scientific Board of the Ecole Doctorale, Paris Descartes, 2014-2018

Industrial co-leader of the COMPACT IMI Consortium dealing with Biotherapeutics across biological barriers, in the Brain delivery workpackage (2012-2017).

Scientific Industrial Leader of IMI2 call launched May 2017 on "Discovery of blood-brain barrier targets and transport pathways to treat neuro/metabolic diseases". 7 Pharmas involved.

---

10. TEACHING EXPERIENCE

Teaching assistant at the University of Louvain. 1986.

"Pharmacie : de la conception à la commercialisation" a course given in the LEP Schools of Bobigny, Nogent and Romainville (1991)

"Chimie Médicinale" a course given at the DEA of Créteil in 2003.

"Le Médicament : de la conception à l'approbation" a course taught at the ESPCI (Paris) each year 2001-2005.

---

11. PUBLICATIONS (except posters, lectures, oral communications, internal reports, patents):

"**2-aminio-1-azetines, a new class of strained amidines**", J.Marchand-Brynaert, M.Moya-Portuguez, D.Lesuisse and L.Ghosez*; J.Chem.Soc.Chem.Comm. 1980, 173.

"**Synthetic applications of N-acylamino-1,3-dienes. 10. Importance of allylic interactions and stereoelectronic effects in dictating the steric course of the reaction of iminium ions with nucleophiles. An efficient total synthesis of (±)-gephyrotoxin**", L.E.Overman*, D.Lesuisse and M.Hashimoto; J.Am.Chem.Soc. 1983 (105), 5373.

"(-)-Methyl 4,5-0-benzylidene 4-epi-shikimate: an intermediate for the synthesis of (-)-chorismic acid and analogues", D.Lesuisse and G.A.Berchtold, J.Org.Chem. 1985 (50), 871.

"**The synthesis of indolizidines by intramolecular ene cyclizations. Preparation of (E)-alkylidene analogues of pumiliotoxin A**", L.E.Overman and D.Lesuisse, Tet.Lett. 1985 (26), 4167.

"**Uncatalyzed and chorimate mutase catalyzed claisen rearrangement of (Z)-9-methylchorismic acid**", D.Lesuisse and G.A.Berchtold, J.Org.Chem. 1988 (53), 4992.

"**Synthesis and evaluation of a new series of mechanism-based aromatase inhibitors**", D.Lesuisse*, J.F.Gourvest, C.Hartmann, B.Tric, O.Benslimane, D.Philibert and J.P.Vevert, J.Med.Chem. 1992 (35[9]), 1588-97.

"**RU54115, a tight-binding aromatase inhibitor potentially useful for the treatment of breast cancer**", C. Delaisi, B. Doucet, C. Hartmann, B. Tric, J.F. Gourvest and D. Lesuisse*. J.Steroid Biochem. Molec. Biol. 1992 (41), 773-77.

"**Recent developments in aromatase inhibition**", D.Lesuisse, Curr.Op.Ther.Pat. 1993 (3), 351-8.

"**A new route to 19-substitued steroids from 19-norsteroids: sigmatropic [3,3] and [2,3] rearrangements revisited**", D.Lesuisse*, F.Canu and B.Tric, Tetrahedron (1994), 50(28), 8491-504.

Structure-Activity Relationships of a New Family of Steroidal Aromatase Inhibitors. 1. Synthesis and Evaluation of a Series of Analogs Related to 19-[(Methylthio)methyl]androstenedione (RU54115), D.

Lesuisse*, J.F. Gourvest, O. Benslimane, F. Canu, C. Delaisi, B. Doucet, C. Hartmann, J.M. Lefrançois, B. Tric, D. Mansuy, D. Philibert and G. Teutsch, J. Med. Chem. 1996, 39, 757-72.

"**Determination of Oenothein B as the 5-α-Reductase-Inhibiting Principle of the Folk Medicine Epilobium Parviflorum**", D. Lesuisse*, J. Berjonneau, C. Ciot, P. Devaux, B. Doucet, J.F. Gourvest, B. Khemis, C. Lang, R. Legrand, M. Lowinski, P. Maquin, A. Parent, B. Schoot, G. Teutsch, A. Chodounska and A. Kasal, J. Nat. Products, 1996, 59, 490-92.

"**Biphenyls as Surrogate of the Steroidal Backbone – 1 – Synthesis and Estrogen Receptor Affinity of an Original Series of Polysubstituted Biphenyls**". D. Lesuisse, E. Albert, F. Bouchoux, E. Cérède, J.M.Lefrançois, M.O. Levif,D. Philibert; S. Tessier, B. Tric and G. Teutsch, Bioorg. Med. Chem. Lett. 2001, 11, 1709-12.

"**Biphenyls as Surrogate of the Steroidal Backbone – 2 - Discovery of a Novel Family of Non-Steroidal 5-α-Reductase Inhibitors** ". D. Lesuisse, J.F. Gourvest, E. Albert, B. Doucet, C. Hartmann, J.M.Lefrançois, S. Tessier, B. Tric and G. Teutsch, Bioorg. Med. Chem. Lett. 2001, 11, 1713-16.

"**Bone Targeted Src SH2 Inhibitors Block Src Cellular Activity and Osteoclast Mediated Resorption**", S.M. Violette, W. Guan, C. Bartlet, J.A. Smith, C. Bardelay, E. Antoine, R.J. Rickles, M.R. van Schravendijk, S. E. Adams, B.A. Lynch, W.C.Shakespeare, M. Yang, V.A. Jacobsen, E. Mandine, C.S. Takeuchi, K.J. Macek, D. Lesuisse, T.K. Sawyer and R. Baron, Bone (2001 Jan), 28(1), 54-64.

"**Discovery of Thioazepinones Ligands for Src SH2 : From non specific to specific binding**".
D. Lesuisse* , Pierre Deprez, Eva Albert, Tran Thien Duc, Benoit Sortais, Eliane Mandine, Dominique Gofflo , B. Schoot, G. Lange, P. Broto, Bioorg. Med. Chem. Lett. 2001, 11, 2127-31.

"**SAR by crystallography : a new approach combining screening and rational drug design. Aplication to the discovery of nanomolar Src SH2 binders.** Lesuisse, D., Deprez, P., Bénard, D., Broto, P., Delettre, G., Jean-Baptiste, V., Marquette, J.P., Sarubbi, E., Schoot, B., Mandine, E., Lange, G. Chim. Nouv. 2001, 19 (73), 3240-41.

"**Small Ligands Interacting with the Phosphotyrosine Binding Pocket of the Src SH2 Protein**".
P. Deprez*, E. Mandine, D. Gofflo, S. Meunier and D. Lesuisse, Bioorg. Med. Chem. Lett. 12, 1295-98 (2002).

"**Imidazole-based Ligands of the Src SH2 Protein**". P. Deprez, E. Mandine, A. Vermond, D. Lesuisse, Bioorg. Med. Chem. Lett. 12, 1287-89 (2002).

"**Discovery of highly potent Src SH2 binders : Structure-activity studies and X-ray structures.** P.Deprez, I. Baholet, S. Burlet, G. Lange, R. Amengual, B. Schoot, A. Vermond, E. Mandine and D. Lesuisse, Bioorg. Med. Chem. Letters, 12, 1291-94 (2002).

"**Peptidic and non peptidic ligands interacting with the Src Homology 2 domain affect differently the Src kinase activity**". Eliane Mandine*§, Véronique Jean-Baptiste*, Béatrice Vayssière, Dominique Gofflo*, Didier Bénard**, Edoardo Sarubbi#, Pierre Deprez**, Roland Baron*, Giulio Superti-Furga♦, Dominique Lesuisse**. Chemistry and Biology, submitted November 2001.

"**SAR by Crystallography – A New Approach Combining Screening and Rational Drug Design ; Application to the Discovery of Nanomolar Inhibitors of Src SH2**"
D. Lesuisse*, G. Lange, P. Deprez, B. Schoot, D. Bénard, G. Delettre, J.P. Marquette, P. Broto, V. Jean-Baptiste, P. Bichet, E. Sarubbi, E. Mandine, J. Med. Chem., 45 (12) 2379-87 (2002).

"**Principles governing the binding of a class of non-peptidic inhibitors to the SH2 domain of src studied by X-ray analysis**", Gudrun Lange1,2,*, Dominique Lesuisse, Pierre Deprez, Bernard Schoot, Petra Loenze, Didier Bénard, Jean-Pierre Marquette, Pierre Broto, Edoardo Sarubbi, Eliane Mandine, J. Med. Chem 45 (14) 2915-2922 (2002).

"**Src homology-2 domain binding assays by scintillation proximity and surface plasmon resonance.** "
Mandine, Eliane; Gofflo, Dominique; Jean-Baptiste, Veronique; Sarubbi, Edoardo; Touyer, Gaetan; Deprez, Pierre; Lesuisse, Dominique. Journal of Molecular Recognition (2001), 14(4), 254-260.

"**Du tétrapeptide pYEEI à la découverte de nouveaux ligands non peptidiques de la protéine Src SH2.** P. Deprez, D. Bénard, G. Delettre, C. Bardelay, P. Broto, C. Fernandez, G. Lange, A. Vermond, E. Mandine and D. Lesuisse. Actualités de Chimie Thérapeutique, 2002, 28eme série, 225-241.

"**High-affinity Src-SH2 ligands which do not activate Tyr527-phosphorylated Src in an experimental in vivo system**", Eliane Mandine, Véronique Jean-Baptiste, Béatrice Vayssière, Dominique Gofflo, Didier Bénard, Edoardo Sarubbi, Pierre Deprez, Roland Baron, Giulio Superti-Furga and Dominique Lesuisse. Biochemical and Biophysical Research Communications, 298 (2) 185-192 (2002)

"**Requirements for Specific Binding of Low Affinity Inhibitor Fragments to the SH2 Domain of pp60Src Are Identical to Those for High Affinity Binding of Full Length Inhibitors**",
Gudrun Lange, Dominique Lesuisse, Pierre Deprez, Bernard Schoot, Petra Loenze, Didier Bénard, Jean-Pierre Marquette, Pierre Broto, Edoardo Sarubbi, and Eliane Mandine
J. Med. Chem. 46(24) 5184 – 5195(2003).

"**Rational design of potent GSK3β inhibitors with selectivity for Cdk1 and Cdk2."** Lesuisse, Dominique; Dutruc-Rosset, Gilles; Tiraboschi, Gilles; Dreyer, Matthias K.; Maignan, Sebastien; Chevalier, Alain; Halley, Frank; Bertrand, Philippe; Burgevin, Marie-Claude; Quarteronet, Dominique; Rooney, Thomas Bioorganic & Medicinal Chemistry Letters (2010), 20(6), 1985-1989.

"Design of potent and selective GSK3β inhibitors with acceptable safety profile and pharmacokinetics. " Lesuisse, Dominique; Tiraboschi, Gilles; Krick, Alain; Abecassis, Pierre-Yves; Dutruc-Rosset, Gilles; Babin, Didier; Halley, Frank; Chatreau, Fabienne; Lachaud, Sylvette; Chevalier, Alain; Quarteronet, Dominique; Burgevin, Marie-Claude; Amara, Celine; Bertrand, Philippe; Rooney, Thomas. Bioorganic & Medicinal Chemistry Letters (2010), 20(7), 2344-2349.

"Design of potent IGF1-R inhibitors related to bis-azaindoles". Conception Nemecek, Sylvie Wentzler, Corinne Venot, Anne Dagallier, Sébastien Maignan, Jean-Pierre Guilloteau, François Bernard, Alain Henry, Sandrine Grapinet and Dominique Lesuisse*, Chem. Biol. Drug Des. 2010; 76: 100–106.

"**Discovery of the first non competitive IGF1-R kinase inhibitor : advantages in comparison with competitive inhibitors related to azaindoles"** Dominique Lesuisse, Jacques Mauger, Conception Nemecek, Sébastien Maignan, Janine Boiziau, Greg Harlow, Augustin Hittinger, Swen Ruf, Hartmut Strobel, Anil Nair, Kurt Ritter, Jean-Luc Malleron, Anne Dagallier, Youssef El-Ahmad, Jean-Pierre Guilloteau, Houlfa Guizani, Hervé Bouchard, Corinne Venot. Bioorg. Med. Chem. Letters, 21 (2011) 2224–2228.

"Importance of chirality in the field of anti-infective agents", Lesuisse, D.; Tabart, M. Comprehensive Chirality (2012), 1, 8-29.

"Efficient and Modular Synthesis of New Structurally Diverse Functionalized [n] Paracyclophanes by a Ring-Distortion Strategy" Krieger, Jean-Philippe; Ricci, Gino; Lesuisse, Dominique; Meyer, Christophe; Cossy, Janine, Angewandte Chemie, International Edition (2014), 53(33), 8705-8708.

"Preparation of water-soluble compounds by covalent attachment of solubilizing moieties" Wermuth, Camille G.; Lesuisse, Dominique. Practice of Medicinal Chemistry (4th Edition) (2015), 723-745.

« La catalyse duale synergique ». Vers de nouvelles réactivités/sélectivités en synthèse organique Maxime R. Vitale, D. Lesuisse, Véronique Michelet, Virginie Vidal, Actualité Chimique, - février-mars 2015 - n° 393-394.

« **Harnessing C–H Activation of Benzhydroxamates as a Macrocyclization Strategy: Synthesis of Structurally Diverse Macrocyclic Isoquinolones**" Jean-Philippe Krieger, Gino Ricci, Dominique Lesuisse, Christophe Meyer and Janine Cossy, Chemistry - A European Journal (2016), 22(38), 13469-13473.

"Rhodium(III)-Catalyzed C–H Activation/Heterocyclization as a Macrocyclization Strategy. Synthesis of Macrocyclic Pyridones" Organic Letters, Krieger, Jean-Philippe; Lesuisse , Dominique ; Ricci, Gino; Perrin, Marc-Antoine; Meyer, Christophe; Cossy, Janine Organic Letters (2017), 19(10), 2706-2709.

---

12. PATENTS

Mathieu Barrague, Xin Chen, Dominique Lesuisse, Valery Polyakov, Steven Shimshock **4-aryl and heteroaryl indanone and indanol compounds as ER beta agonists,** No. **US2009/026 US PSP** and (if filed prior to the execution hereof) filed on **April 9, 2009**, as Serial No. **61/167,896**

Mathieu Barrague, Bin Cao, Xin Chen, John Jurcak, Dominique Lesuisse, Jinqi Lu, Valery Polyakov, Steven Shimshock **6-aryl and heteroaryl indanone and indanol compounds as ER beta agonists,** No. **US2008/137 US PSP** and (if filed prior to the execution hereof) filed on **April 9, 2009**, as Serial No. **61/167,894**

Nemecek, Conception, Metz, William A, Wentzler, Sylvie, Lesuisse, Dominique, **Nouveaux dérivés bisazaindoles, leur préparation et leur utilisation pharmaceutique comme inhibiteurs de kinases**, FRAV2004/0027 Déposé le 1er octobre 2004.

Jacques Mauger, Conception Nemecek, Dominique Lesuisse, Hartmut Strobel, et al. **Nouveaux dérivés d'urée cyclique, leur préparation et leur utilisation pharmaceutique comme inhibiteurs de kinase,** FRAV2003/0002 Déposé le 31 janvier 2003

Dominique Lesuisse, Hartmut Strobel, et al. **Nouveaux dérivés d'urée cyclique, leur préparation et leur utilisation pharmaceutique comme inhibiteurs de kinase**, FRAV2004/0022 Déposé le 27 juillet 2004

Dominique Lesuisse, Hartmut Strobel, et al. **Nouveaux dérivés d'urée cyclique, leur préparation et leur utilisation pharmaceutique comme inhibiteurs de kinase**, FRAV2004/0023 Déposé le 27 juillet 2004

Dominique Lesuisse, Hartmut Strobel, et al. **Nouveaux dérivés d'urée cyclique, leur préparation et leur utilisation pharmaceutique comme inhibiteurs de kinase**, FRAV2004/0024 Déposé le 27 juillet 2004

Dutruc-Rosset Gilles ; Lesuisse, Dominique; Rooney, Thomas; Halley, Franck. **Preparation of aminoindazoles as protein Tau phosphorylation inhibitors, their drugs and pharmaceutical compositions containing them for treatment, in particular, of central and peripheral nervous system diseases.** FRAV2002/0004. FR N° 0202997 , 11 mars 2002 ; US NP filed March 11, 2003. Fr. Demande (2003), 80 pp.

Lesuisse, Dominique; Dutruc, Rosset Gilles; Halley, Franck; Babin, Didier; Rooney, Thomas. **Preparation of aminoindazoles as protein Tau phosphorylation inhibitors, their drugs and pharmaceutical compositions containing them for treatment, in particular, of central and peripheral nervous system diseases.** Fr. Demande (2004), 44 pp.

Lesuisse, Dominique; Dutruc-Rosset, Gilles; Halley, Franck; Babin, Didier; Rooney, Thomas. **Preparation of aminoindazoles as protein Tau phosphorylation inhibitors, their drugs and pharmaceutical compositions containing them for treatment, in particular, of central and peripheral nervous system diseases.** PCT Int. Appl. (2004), 71 pp.

Lesuisse, Dominique; Halley, Franck; Baudoin, Bernard; Rooney, Thomas; Hoelder, Swen; Naumann, Thorsten; Tiraboschi, Gilles. **Preparation of pyridazinones as protein Tau phosphorylation inhibitors, their drugs and pharmaceutical compositions containing them for treatment, in particular, of central and peripheral nervous system diseases.** Fr. Demande (2004), 65 pp.

Lesuisse, Dominique; Dutruc-Rosset, Gilles; Halley, Franck; Babin, Didier; Rooney, Thomas; Tiraboschi, Gilles. **Preparation of aminoindazoles as protein Tau phosphorylation inhibitors, their drugs and pharmaceutical compositions containing them for treatment, in particular, of central and peripheral nervous system diseases.** PCT Int. Appl. (2004), 55 pp.

Babin, Didier; Dutruc-Rosset, Gilles; Halley, Frank; Lesuisse, Dominique, Rooney, Tom. FRAV2002/0023. Déposé le 5 septembre 2002.

Baudoin, Bernard; Halley, Frank; Hoelder, Swen; Lesuisse, Dominique, Rooney, Tom. N° 0214443. Déposé le 19 novembre 2002.

Babin, Didier; Dutruc-Rosset, Gilles; Halley, Frank; Lesuisse, Dominique, Rooney, Tom, Tiraboschi, Gilles. PRJ02036. Déposé janvier 2003.

Benard, Didier; Deprez, Pierre; Lesuisse, Dominique; Mandine, Eliane; Ugolini, Antonio. **Preparation of 6-[[[[phosphono(oxy)]aryl]alkanoyl]amino]-1,4-thiazepin-5-ones and analogs as protein tyrosine kinase c-Src inhibitors.** PCT Int. Appl. (2000), 151 pp.

Deprez, Pierre; Lesuisse, Dominique; Mandine, Eliane. **Preparation of benzodiazepine derivatives as c-Src tyrosine kinase SH2 ligands.** PCT Int. Appl. (2000),

Deprez, Pierre; Lesuisse, Dominique. **Preparation of imidazole derivatives as antagonists of the SH2 domain of c-Src tyrosine protein kinase.** Fr. Demande (2000), 44 pp. CODEN: FRXXBL FR 2793796 A1 20001124 CAN 134:237475 AN 2001:231738 CAPLUS

Deprez, Pierre; Lesuisse, Dominique; Benard, Didier. **Preparation of caprolactam derivatives with Src-SH2 domain inhibitor activity and their intermediates and their application as bone resorption inhibitors.** PCT Int. Appl. (2001), 43 pp.

J.L. Buchanan, C.B. Vu, R. Bohacek, G.P. Luke, M. Weigele, M.G.Wang, T.K. Sawyer, N.H. Kawahata, D. Lesuisse, D. Bénard, P. Deprez. **Heterocyclic Signal Transduction Inhibitors, Compositions containing them and uses thereof.** US 09/523,243. Filed on 10 March 2000.

Deprez Pierre, Lesuisse Dominique, Bénard Didier **Caprolactam derivatives and uses thereof**, WO 01/68655 A2.
Deprez Pierre, Lesuisse Dominique, Mandine Eliane**. Dérivés de Caprolactames, procédé de préparation et intermédiaires de ce procédé à titre de médicaments et compositions pharmaceutiques les renfermant.** FP 9902944. 10/3/99.

Deprez Pierre, Lesuisse Dominique, Mandine Eliane**. Nouveaux dérivés d'imidazoles, procédé de préparation et intermédiaires de ce procédé à titre de médicaments et compositions pharmaceutiques les renfermant.** FP 9904640. 14/4/99.

Bénard Didier, Deprez Pierre, Lesuisse Dominique, Mandine Eliane. **Dérivés du thiophène, procédé de préparation et intermédiaires de ce procédé à titre de médicaments et compositions pharmaceutiques les renfermant.** FP 9904461. 14/4/99.

Deprez Pierre, Lesuisse Dominique, Mandine Eliane**. Dérivés bicycliques de thioazépinone ou de caprolactame, procédé de préparation et intermédiaires de ce procédé à titre de médicaments et compositions pharmaceutiques les renfermant.** FP 9909006. 7/12/99.

Lesuisse Dominique, Mandine Eliane. **Dérivés de thioazépinones, procédé de préparation et intermédiaires de ce procédé à titre de médicaments et compositions pharmaceutiques les renfermant.** FP 98 09258. 21/07/1998, PCTFR 9901770, 7/20/99, FP 9811194 9/8/98, PCTFR9902124, 9/7/99.

Lesuisse, Dominique**. Biphenyl compounds and use thereof as estrogenic agents.** PCT Int. Appl. 34 pp. WO 9728116 A1 970807 CAN 127:205360; AN 1997:533607

Lesuisse, Dominique; Teutsch, Jean-Georges. **Biphenyl compounds and use thereof as estrogenic agents.** PCT Int. Appl. 80 pp. WO 9727846 A1 970807 CAN 127:205342; AN 1997:532215

Gourvest, Jean-Francois; Lesuisse, Dominique; Teutsch, Jean-Georges**. Biphenyl compounds, process for their preparation, intermediates for this process, their use as 5-alpha-reductase inhibitors, and pharmaceutical compositions containing them.** Eur. Pat. Appl. 47 pp. EP 757982 A1 970212 CAN 126:211916; AN 1997:230986

Gourvest, Jean-Francois; Kasal, Alexander; Lesuisse, Dominique; Teutsch, Jean. **Oenothein B extraction from Epilobium parviflorum.** Fr. Demande 20 pp. FR 2712594 A1 950524 CAN 123:93255; AN 1995:719464

Gourvest, Jean Francois; Kasal, Alexander; Lesuisse, Dominique; Teutsch, Jean Georges. **Use of oenothein B extracted from Epilobium parviflorum for treatment of disorders related to hyperandrogenism.** Eur. Pat. Appl. 13 pp. EP 657167 A2 950614 CAN 123:65816; AN 1995:665318

Gourvest, Jean Francois; Lesuisse, Dominique. **Preparation of 10-[2-(methylthio)ethyl]estrenediones and analogs as aromatase inhibitors.** Eur. Pat. Appl. 24 pp. EP 516530 A1 921202 CAN 118:124873; AN 1993:124873

Gourvest, Jean Francois; Lesuisse, Dominique. **Steroid products carrying a substituted thioethyl group in position 10.** Eur. Pat. Appl. 50 pp. EP 434570 A2 910626 CAN 115:280374; AN 1991:680374

Gourvest, Jean Francois; Lesuisse, Dominique. **New steroid derivatives with a substituted ethyl group in position 10.** Eur. Pat. Appl. 11 pp. EP 434571 A2 910626 CAN 115:114881; AN 1991:514881

Gourvest, Jean Francois; Lesuisse, Dominique; Philibert, Daniel; Vevert, Jean Paul. **Preparation of 4-(alkylthio)androst-4-en-3-one derivatives as aromatase inhibitors**. Eur. Pat. Appl. 17 pp. EP 375559 A1 900627 CAN 114:24321; AN 1991:24321

---

13. LECTURES (not including internal meetings)

"**Synthesis and evaluation of a new series of mechanism-based aromatase inhibitors**"
7th International Symposium of Steroid Hormones. Den Haag, September, 1990.

"**Les inhibiteurs de l'aromatase**".
Hôpital Kremlin-Bicêtre. Paris, Mai 1991.

"**Synthesis and enzyme-inhibiting properties of new steroidal aromatase inhibitors**"
Franco-Japanese Symposium on Medicinal and Fine Chemistry. Strasbourg. September 1993.

"**Le squelette biphényle comme substitut du noyau stéroïde. Application à la synthèse de ligands du récepteur des estrogènes et d'inhibiteurs de 5-α-réductase**. Université de Lausanne. Mai 1998.

" **SAR by Crystallography – A new approach combining high throughput screening and rational drug design ; Application to the discovery of nanomolar inhibitors of Src SH2**" – FACS, Sonoma, June 5-7th, 2000.

" **SAR by XRay – An original approach combining high throughput screening and rational drug design ; Application to the discovery of nanomolar inhibitors of Src SH2**" – Société Royale de Chimie, Mt St Guibert, December 1st, 2000.

"**SAR by Crystallography – A new approach combining high throughput screening and rational drug design ; Application to the discovery of subnanomolar inhibitors of Src SH2**"
D. Lesuisse, Pfizer Research Center, Fresnes, January 21, 2003.

"**SAR by Crystallography – A new approach combining high throughput screening and rational drug design ; Application to the discovery of subnanomolar inhibitors of Src SH2**"
D. Lesuisse, Structure Based Drug Design, Cambridge, April 28th -29th, 2003.

"**The use of fragments for Drug Design**" **D. Lesuisse**. ENSCP, Paris, May 2003.

"**Fragment Screening**". **D. Lesuisse**, ACSMC, Moscow, May 5th-8th, 2004.

"La pharmacochimie pour moduler la pharmacodynamie, la pharmacocinétique et/ou la toxicité d'un agent pharmacologique" La Biologie, inspiratrice de nouveaux médicaments. Jeudi 10 Décembre 2009. Chambre de Commerce et d'Industrie de Rouen

"Design and optimisation of ATP-competitive and non competitive kinase inhibitors : GSK3β and IGF1R as case studies" Rencontres Internationales de Chimie Thérapeutique, Lyon, July 2011.

"Discovery of ATP-competitive and non ATP-competitive IGF1R inhibitors" Franco-Japanese Symposium. Rouen. September 2011.

"La pharmacochimie pour moduler la pharmacodynamie, la pharmacocinétique et/ou la toxicité" Société de Chimie Thérapeutique. Journée Jeunes Chercheurs February 10, 2012. BiociTech Romainville.

"La pharmacochimie pour moduler la pharmacodynamie, la pharmacocinétique et/ou la toxicité d'un agent pharmacologique" Ecole Doctorale de Paris 7 – April 2012

« Approches nanotechnologiques pour la délivrance au cerveau de principes actifs » ***Salle des Séminaires de l'ICOA Campus Universitaire / Orléans-La Source*** http://www.icoa.fr – October 2015

---

14. BOOKS

Comprehensive Chirality (9 Volume Set) Elsevier. Editors-in-Chief: Hisashi Yamamoto, The University of Chicago, Illinois, USA & Chubu University, Aichi, Japan; Erick M. Carreira, ETH Zürich, Switzerland. Comprehensive Chirality (2012), 1, 8-29.

Practice of Medicinal Chemistry Chapter 38: Preparation of Water-Soluble Compounds by Covalent Attachment of Solubilizing Moieties, Camille G. Wermuth. (4th Edition) (2015), 723-745.

---

15. POSTERS

"**Synthesis and evaluation of a new series of mechanism-based aromatase inhibitors**". D. Lesuisse*, J.F. Gourvest, C. Hartmann, D. Philibert, B. Tric and J.P. Vévert. 7th International Symposium of Steroid Hormones. Den Haag, September, 1990.

"**RU54115, a tight binding inhibitor of aromatase potentially useful for the treatment of breast ca**ncer." C. Delaisi, B. Doucet, C. Hartmann, B. Tric, J.F. Gourvest and D. Lesuisse*. 10th International Symposium on Receent Adavnces in Steroid Biochemistry and Molecular Biology. Paris, May 26-29, 1991.

"**10-β-methylthioethyl androstenes : a novel family of aromatase inhibitors potentially useful for the treatment of breast cancer**. D. Lesuisse*, F. Canu, C. Delaisi, B. Doucet, C. Hartmann, B. Tric and J.F. Gourvest. Fourth International Congress on Hormones and Cancer. Amsterdam, September 1991.

"**A new route to 19-substituted steroids from 19-norsteroids. Application to the synthesis of potent aromatase inhibitors**". D. Lesuisse*, F. Canu, J.M. Lefrançois, and B. Tric. Hoechst Chemistry Symposium. Frankfurt, February, 1992.

"**RU54115, RU56152 and RU56562 : New 19-substituted steroidal aromatase inhibitors potentially useful for the treatment of breast cancer**. D. Lesuisse*, F. Canu, C. Delaisi, C. Hartmann, B. Tric, D. Philibert, G. Teutsch and J.F.Gourvest. 12th International Symposium onf Medicinal Chemistry. Basel, September 1992.

"**Oenothein B is the active principle for the 5-α-reductase inhibiting properties of the folk medicine Epilobium Parviflorum**". D. Lesuisse*, J. Berjonneau, C. Ciot, P. Devaux, B. Doucet, J.F. Gourvest, B. Khemis, C. Lang, R. Legrand, M. Lowinski, P. Maquin, A. Parent, B. Schoot, G. Teutsch, A. Chodounska and A. Kasal Franco-Japanese Symposium for Medicinal and Fine Chemistry. Tokyo, May 1995.

"**The reactivation of Csk-inactivated Src by phosphopeptides is correlated to their affinity for the SH2 domain**." E. Mandine* ; D. Gofflo ; V. Jean-baptiste;R. Baron;M. Gaillard-Kelly, M. Zoller **;** D. Lesuisse. American Society for Bone and Mineral Research. San Francisco, 1998.

Assessment of the penetration of Src SH2 compounds in isolated osteoclasts. Identification of RU97139 as a fluorescent and cell permeant phosphate Src SH2 inhibitor. C. Bardelay ; R. Botham ; M. Badel; C. Tillier; E. Antoine ; I. Baholet ; E. Cagniant ; G. Delettre ; L. Lepescheux ; S. Viet; J. Humbert; D. Gofflo; E. Mandine ; D. Lesuisse ; R. Baron and P. Deprez . American Society for Bone and Mineral Research, Toronto, September 22-26th, 2000.

A novel Class of non-Peptidic, Phosphobenzoate-Containing Src-SH2 Signal Transduction Inhibitors. A. Ugolini, E. Mandine, R. Amengual, M. Auberval, C. Bardelay, R. Botham, P. Broto, P. Deprez, D. Gofflo, S. Viet, J. Humbert, V. Jean-Baptiste, S. Lachaud, G. Lange, B. Schoot, B. Sortais, C. Tillier, M. Gaillard, R. Baron and D. Lesuisse. American Society for Bone and Mineral Research, Toronto, September, 22-26th, 2000.

RU79410 : An ATP-Non Competitive inhibitor of Src Kinase demonstrating bone resorption inhibiting properties. E. Mandine*, G. Harlow, F. Al'Obeidi, R. Daranipraghada, K. Wertman, A. Ugolini, A. Jouanen, C. Bardelay, E. Sarubi, M. Auberval , D. Gofflo , V. Jean-Baptiste, A. M. Tremblet, S. Viet, S. Bernard, M. Gaillard, R. Baron and D. Lesuisse. American Society for Bone and Mineral Research, Toronto, September 22-26th, 2000.

RU85052 : A Potent Src SH2 Inhibitor Devoided of Phosphate Group. Synthesis and biological activity. D. Lesuisse**,** P. Deprez, C. Bardelay, G. Lange, B. Schoot, E. Sarubbi, E. Mandine, M. Gaillard, R. Baron. American Society for Bone and Mineral Research, Toronto, September 22-26th, 2000.

Discovery of RU 81843 as a nanomolar Src SH2 Iinhibitor. P. Deprez; E. Mandine ; C. Bardelay ; G. Delettre ; G.Lange ;B. Schoot ; D. Massardier ; J. Humbert ; A. Vermond ; S. Viet ; D. Lesuisse ; M. Gaillard and R. Baron. American Society for Bone and Mineral Research, Toronto, September 22-26th, 2000.

Potent non peptide Src SH2 inhibitors designed from a novel heterocyclic scaffold: modification of phosphotyrosine and structure activity studies. Deprez, P.; Mandine, E.;Bardelay, C.; Botham, R.; Benard, D; Delettre, G.; Lange, G.; Humbert, J.; Massardier, D.; Schoot, B ; Viet, S.; Sarubbi, E.; Kawahata, N.; Yang, M.; Jacobsen, V.; Bohacek, R.; Dalgarno, D.; Sawyer, T.; Weigele, M.; Baron, R.; Lesuisse, D. American Society for Bone and Mineral Research, Toronto, September, 22-26th, 2000.

SAR by Crystallography – A new approach combining high throughput screening and rational drug design ; Application to the discovery of subnanomolar inhibitors of Src SH2
D. Lesuisse, P. Deprez, C. Bardelay, G. Lange, B. Schoot, E. Sarubbi, E. Mandine, M. Gaillard, R. Baron, 16th International Symposium on Medicinal Chemistry, Bologna, September 18-22, 2000.

SAR and rational design of Src SH2 binders around a heterocyclic scaffold. Identification of RU 84687, a sub-nanomolar and Src SH2 selective binder. Deprez, P.; Mandine, E.; Baholet, I; Bardelay, C.; Botham, R.; Broto, P.; Marquette,J.P.; Massardier D.; Sarubbi, E.; Vermond A.; Viet, S.; Lange, G.; Schoot, B ; Lesuisse, D. 16th International Symposium on Medicinal Chemistry, Bologna, September 18-22, 2000.

Effect of SH2 Ligands on the Src Kinase Activity. E. Mandine, V. Jean-Baptiste, B. Vayssière, D. Gofflo, D. Bénard, P. Deprez, R. Baron, G. Superti-Furga, D. Lesuisse. Signal Transduction. Berlin, November 2-4 (2000).

A Thioazepinone Ligand of Src SH2 that Inhibits Bone Resorption. Attempts of Optimization by Rational Drug Design. Dominique Lesuisse* , Pierre Deprez, Tony Ugolini, Eva Albert, Dominique Gofflo, Bernard Schoot, Gudrun Lange, Pierre Broto, Bernard Doucet, Jean-François Gourvest and Eliane Mandine. Gordon Research Conference on Medicinal Chemistry, Colby Sawyer College, August 2001.
ron. 16th International Symposium on Medicinal Chemistry, Bologna, September 18-22, 2000.
