

## PERSONAL INFORMATION

## Alessandra Montalbano

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 | Nationality Italian

## WORK EXPERIENCE

September 2015 – today

**Associate Professor – Medicinal Chemistry (CHIM/08)**

Università degli Studi di Palermo - Department of Biological, Chemical and Pharmaceutical Sciences and Technologies (STEBICEF)

- Teaching, Research

December 2002 – August 2015

**Researcher – Medicinal Chemistry (CHIM/08)**

Università degli Studi di Palermo - Department of Biological, Chemical and Pharmaceutical Sciences and Technologies (STEBICEF)

- Teaching, Research

## EDUCATION AND TRAINING

2000-2002

**Research fellow**

Università degli Studi di Palermo

- Synthesis and biological evaluation of heterocyclic compounds

1996 – 1999

**PhD in Pharmaceutical Sciences**

Università degli Studi di Palermo

- Synthesis and biological evaluation of heterocyclic compounds

1991 - 1996

**Master's degree in Pharmaceutical Chemistry and Technology**

Università degli Studi di Palermo

## SCIENTIFIC SKILLS AND COMPETENCES

Research Interests and expertises

Design, synthesis, identification and biological evaluation of nitrogen heterocyclic compounds as antitumor agents, modulators in cystic fibrosis and antiviral agents. Author of 84 publications on Scientific Journals (see links above), 1 Italian Patent, 1 International Patent.

Citation indexes (Scopus)

- NUMBER OF PUBLICATIONS: 96
- H-INDEX: 35

Research Projects

- Partecipant, Progetto strategico FFC Ricerca 2021-2023. Molecole 3.0 per la fibrosi cistica. - New generation of pharmacological modulators to rescue mutant CFTR protein
- Partecipant, Italian Cystic Fibrosis Foundation FFC Grant 2020 (FFC#3/2020)
- Partecipant, Italian Cystic Fibrosis Foundation FFC Grant 2018 (FFC#4/2018)
- Partecipant Partenariato Esteso dal titolo "HEAL ITALIA - Health Extended

Alliance for Innovative Therapies, Advanced Lab-research, and Integrated Approaches of Precision Medicine”, Piano Nazionale di Ripresa e Resilienza (PNRR), Missione 4 “Istruzione e Ricerca” – Componente 2 “Dalla Ricerca all’Impresa” – Investimento 1.3, funded by EU – NextGenerationEU

-Supervisor of a PhD project–PON R&I 2014-2020 “Dottorati Innovativi con caratterizzazione industriale”(Ciclo XXXVI- Approccio sistematico verso nuove small molecules a struttura eterociclica come agenti antivirali) with Prof. Graciela Andrei (Laboratory of Virology and Chemotherapy, Rega Institute for Medical Research, Department of Microbiology, Immunology and Transplantation, KU Leuven, Belgium) as a partner.

- Participant, PRIN 2017 (prot. 2017XZ7A37\_006)

- Participant, PON02\_00451\_3361785– DI.ME.SA.

- Participant, PRIN 2002 (prot. 2002033121\_008)

- Participant, PRIN 2004 (prot. 2004030405\_003)

- Participant, PRIN 2006 (prot. 2006030430\_005)

- Participant, PRIN 2008 (prot. 20082L3NFT\_001)

- Participant, PRIN 2010 (prot. 20105YY2HL\_001)

- P.I., JUMP 2023 - Joint Universities prograM for Proof of Concept-“ Sistemi Eterociclici per il trattamento di Leucemia Mieloide Acuta con mutazioni FLT3/ITD”- SE-LMA

## Teaching and mentoring

Drug Analysis (Master Course in Pharmaceutical Chemistry and Technology) and Drug Analysis I (Master Course in Pharmacy), University of Palermo from 2003 to 2022.

Observational Study in Medicinal Chemistry at the Specialist Hospital Pharmacy School of Palermo (2014-2016)

Supervisor of several theses; Tutor of 2 doctoral theses.

## List of Publications

1. Renda, M.; Barreca, M.; Borrelli, A.; Spanò, V.; **Montalbano, A.**; Raimondi, M. V.; Bivacqua, R.; Musante, I.; Scudieri, P.; Guidone, D.; Buccirosi, M.; Genovese, M.; Venturini, A.; Bandiera, T.; Barraja, P.; Galiotta, L. J. V. Novel tricyclic pyrrolo-quinolines as pharmacological correctors of the mutant CFTR chloride channel. *Scientific Reports*, (2023), 13, 7604.
2. Barreca, M.; Spanò, V.; Rocca, R.; Bivacqua, R.; Gualtieri, G.; Raimondi, M. V.; Gaudio, E.; Bortolozzi, R.; Manfreda, L.; Bai, R.; **Montalbano, A.**; Alcaro, S.; Hamel, E.; Bertoni, F.; Viola, G.; Barraja, P. Identification of pyrrolo[3',4':3,4]cyclohepta[1,2-d][1,2]oxazoles as promising new candidates for the treatment of lymphoma. *European Journal of Medicinal Chemistry* (2023), 254, 115372.
3. Barreca, M.; Buttacavoli, M.; Di Cara, G.; D'Amico, C.; Peri, E.; Spanò, V.; Li Petri, G.; Barraja, P.; Raimondi, M. V.; Cancemi, P.; **Montalbano, A.** Exploring the anticancer activity and the mechanism of action of pyrrolomycins F obtained by microwave-assisted total synthesis. *European Journal of Medicinal Chemistry* (2023), 253, 115339.
4. Bivacqua, R.; Romeo, I.; Barreca, M.; Barraja, P.; Alcaro, S.; **Montalbano, A.** HSV-1 Glycoprotein D and Its Surface Receptors: Evaluation of Protein-Protein Interaction and Targeting by Triazole-Based Compounds through In Silico Approaches. *International journal of molecular sciences* (2023), 24(8), 7092.
5. Bivacqua, R.; Barreca, M.; Spanò, V.; Raimondi, M. V.; Romeo, I.; Alcaro, S.; Andrei, G.; Barraja, P.; **Montalbano, A.** Insight into non-nucleoside triazole-

based systems as viral polymerases inhibitors. *European Journal of Medicinal Chemistry* (2023), 249, 115136.

6. Barreca, M.; Spanò V.; Rocca, R.; Bivacqua, R.; Abel, A. C.; Maruca, A.; **Montalbano, A.**; Raimondi, M. V.; Tarantelli, C.; Gaudio, E.; Cascione, L.; Rinaldi, A.; Bai, R.; Steinmetz, M. O.; Prota, A. E.; Alcaro, S.; Hamel, E.; Bertoni, F.; Barraja, P. Development of [1,2]oxazoloisoindoles tubulin polymerization inhibitors: Further chemical modifications and potential therapeutic effects against lymphomas. *European Journal of Medicinal Chemistry* (2022) 243,114744

7. Barreca, M.; Ingarra, A. M.; Raimondi, M. V.; Spanò, V.; Palumbo Piccionello, A.; De Franco, M.; Menilli, L.; Gandin, V.; Miolo, G.; Barraja, P.; **Montalbano, A.** New tricyclic systems as photosensitizers towards triple negative breast cancer cells. *Archives of Pharmacal Research* (2022), 45, 806-821

8. Barreca M.; Spanò V.; Rocca R.; Bivacqua R.; Maruca A.; **Montalbano A.**; Raimondi M.V.; Tarantelli C.; Gaudio E.; Cascione L.; Rinaldi A.; Bai R.; Prota A.; Abel A.C.; Steinmetz M.; Alcaro S.; Hamel E.; Bertoni F.; Barraja P. Transcriptome and computational analysis assess the anti-tubulin activity of [1,2]oxazole derivatives in lymphoma. *European Journal of Cancer* (2022),174, S65-S66

9. Grillone, K.; Riillo, C.; Rocca, R.; Ascrizzi, S.; Spanò, V.; Scionti, F.; Polerà, N.; Maruca, A.; Barreca, M.; Juli, G.; Arbitrio, M.; Di Martino, M. T. Caracciolo, D.; Tagliaferri, P.; Alcaro, S.; **Montalbano, A.\***; Barraja, P.; Tassone, P. The New Microtubule-Targeting Agent SIX2G Induces Immunogenic Cell Death in Multiple Myeloma. *International Journal of Molecular Sciences* (2022), 23,10222

10. Labbozzetta, M.; Barreca, M.; Spanò, V.; Raimondi, M.V.; Poma, P.; Notarbartolo, M.; Barraja, P.; **Montalbano, A.** Novel insights on [1,2]oxazolo[5,4-e]isoindoles on multidrug resistant acute myeloid leukemia cell line. *Drug Development Research* (2022), 83, 1331-1341

11. Barreca, M.; Ingarra, A. M.; Raimondi, M. V.; Spanò, V.; De Franco, M.; Menilli, L.; Gandin, V.; Miolo, G.; Barraja, P.; **Montalbano, A.** Insight on pyrimido[5,4-g]indolizine and pyrimido[4,5-c]pyrrolo[1,2-a]zepine systems as promising photosensitizers on malignant cells. *Eur. J. Med. Chem.* (2022), 237, 114399.

12. Cilibrasi, V.; Spanò, V.; Bortolozzi, R.; Barreca, M.; Raimondi, M. V.; Rocca, R.; Maruca, A.; **Montalbano, A.\***; Alcaro, S.; Ronca, R.; Viola, G.; Barraja, P. Synthesis of 2H-Imidazo[2',1':2,3] [1,3]thiazolo[4,5-e]isoindol-8-yl-phenylureas with promising therapeutic features for the treatment of acute myeloid leukemia (AML) with FLT3/ITD mutations. *Eur. J. Med. Chem.* (2022), 235, 114292.

13. Barreca, M.; Spanò, V.; Raimondi, M. V.; Bivacqua, R.; Giuffrida, S.; **Montalbano, A.\***; Cavalli, A.; Bertoni, F.; Barraja, P. GPCR Inhibition in Treating Lymphoma. *ACS Med. Chem. Lett.* 2022, 13, 358–364

14. Barreca, M.; Spanò, V.; Raimondi, M. V.; Tarantelli, C.; Spriano F.; Bertoni, F.; Barraja, P.; **Montalbano A.** Recurrence of the oxazole motif in tubulin colchicine site inhibitors with anti-tumor activity. *Eur. J. Med. Chem. Rep.* (2021), 1, 100004.

15. Li Petri, G.; Raimondi, M. V.; Spanò, V.; Holl, R.; Barraja, P.; **Montalbano, A.** Pyrrolidine in Drug Discovery: A Versatile Scaffold for Novel Biologically Active Compounds. *Top. Curr. Chem.* (2021), 379, 34

16. Spanò, V.; Barreca, M.; Cilibrasi, V.; Genovese, M.; Renda, M.; **Montalbano, A.\***; Galletta, L. J. V.; Barraja, P. Evaluation of Fused Pyrrolothiazole Systems as Correctors of Mutant CFTR Protein. *Molecules* (2021), 26, 1275. DOI:10.3390/molecules26051275

17. Spanò, V.; Barreca, M.; Rocca, R.; Bortolozzi, R.; Bai, R.; Carbone, A.; Raimondi, M. V.; Palumbo Piccionello, A.; **Montalbano, A.\***; Alcaro, S.; Hamel, E.; Viola, G.; Barraja, P. Insight on [1,3]thiazolo[4,5-e]isoindoles as tubulin polymerization inhibitors. *Eur. J. Med. Chem.* (2021), 212, 113122.

18. Barreca, M.; Spanò, V.; Raimondi, M. V.; **Montalbano, A.**; Bai, R.; Gaudio, E.; Rocca, R.; Alcaro, S.; Hamel, E.; Bertoni, F.; Barraja, P. Evaluation of [1,2]oxazolo[5,4-e]isoindoles in lymphoma cells. *Eur. J. Cancer* 138S2 (2020) S1–S62. ISSN: 0959-8049 [https://doi.org/10.1016/S0959-8049\(20\)31165-5](https://doi.org/10.1016/S0959-8049(20)31165-5)
19. Barreca, M.; Spanò, V.; **Montalbano, A.**; Cueto, M.; Díaz Marrero, A. R.; Deniz, I.; Erdogan, A.; Lukic Bilela, L.; Moulin, C.; Taffin-de-Givenchy E.; Spriano, F.; Perale, G.; Mehiri, M.; Rotter, A.; Thomas, O. P.; Barraja, P.; Gaudêncio, S. P.; Bertoni, F. Marine Anticancer Agents: An Overview with a Particular Focus on Their Chemical Classes. *Mar. Drugs* (2020), 18, 619.
20. Spanò, V.; Rocca, R.; Barreca, M.; Giallombardo, D.; **Montalbano, A.\***; Carbone, A.; Raimondi, M. V.; Gaudio, E.; Bortolozzi, R.; Bai, R.; Tassone, P.; Alcaro, S.; Hamel, E.; Viola, G.; Bertoni, F.; Barraja, P. Pyrrolo[2',3':3,4]cyclohepta[1,2-d][1,2]oxazoles, a New Class of Antimitotic Agents Active against Multiple Malignant Cell Types. *J. Med. Chem.* (2020), 63, 12023-12042.
21. Spanò, V.; Venturini, A.; Genovese, M.; Barreca, M.; Raimondi, M. V.; **Montalbano, A.\***; Galiotta, L. J. V.; Barraja, P. Current development of CFTR potentiators in the last decade. *Eur. J. Med. Chem.*, (2020), 204, 112631.
22. Li Petri, G.; Spanò, V.; Spatola, R.; Holl, R.; Raimondi, M. V.; Barraja, P.; **Montalbano, A.** Bioactive pyrrole-based compounds with target selectivity *Eur. J. Med. Chem.*, (2020), 208, 112783
23. Pojero, F.; Poma, P.; Spanò, V.; **Montalbano, A.**; Barraja, P.; Notarbartolo, M. Targeting multiple myeloma with natural polyphenols. *Eur. J. Med. Chem.*, (2019), 180, 465-485.
24. Spanò, V.; **Montalbano, A.**; Carbone, A.; Scudieri, P.; Galiotta, L. J. V.; Barraja, P. An overview on chemical structures as  $\Delta F508$ -CFTR correctors. *Eur. J. Med. Chem.*, (2019), 180, 430-448.
25. Carbone, A.; **Montalbano, A.**; Spanò, V.; Musante, I.; Galiotta, L. J. V.; Barraja, P. Furocoumarins as multi-target agents in the treatment of cystic fibrosis. *Eur. J. Med. Chem.*, (2019), 180, 283-290.
26. Attanzio, A.; Diana, P.; Barraja, P.; Carbone, A.; Spanò, V.; Parrino, B.; Cascioferro, S.M.; Allegra, M.; Cirrincione, G.; Tesoriere, L.; **Montalbano, A.\*** Quality, functional and sensory evaluation of pasta fortified with extracts from *Opuntia ficus-indica* cladodes. *Journal of the Science of Food and Agriculture* (2019), 99, 4242-4247.
27. Frasson, I.; Spanò, V.; Di Martino, S.; Nadai, M.; Doria, F.; Parrino, B.; Carbone, A.; Cascioferro, S.M.; Diana, P.; Cirrincione, G.; Freccero, M.; Barraja, P.; Richter, S. N.; **Montalbano, A.\*** Synthesis and photocytotoxic activity of [1,2,3]triazolo[4,5-h][1,6]naphthyridines and [1,3]oxazolo[5,4-h][1,6]naphthyridines. *Eur. J. Med. Chem.*, (2019), 162, 176-193.
28. Carbone, A.; Parrino, B.; Cusimano, M.G.; Spanò, V.; **Montalbano, A.**; Barraja, P.; Schillaci, D.; Cirrincione, G.; Diana, P.; Cascioferro, S. New thiazole nortopsentin analogues inhibit bacterial biofilm formation. *Marine Drugs*, (2018), 16, 274/1-274/15.
29. Parrino, B.; Ullo, S.; Attanzio, A.; Cascioferro, S.; Spanò, V.; Carbone, A.; **Montalbano, A.**; Barraja, P.; Cirrincione, G.; Tesoriere, L.; Diana, P. Synthesis of 5H-pyrido[3,2-b]pyrrolizin-5-one tripentone analogs with antitumor activity. *Eur. J. Med. Chem.*, (2018), 158, 236-246.
30. Parrino, B.; Ullo, S.; Attanzio, A.; Spanò, V.; Cascioferro, S.; **Montalbano, A.**; Barraja, P.; Tesoriere, L.; Cirrincione, G.; Diana, P. New tripentone analogs with antiproliferative activity. *Molecules*, (2017), 22, 2005/1-2005/13.

31. Cascioferro, S.; Parrino, B.; Spanò, V.; Carbone, A.; **Montalbano, A.**; Barraja, P.; Diana, P.; Cirrincione, G. 1,3,5-Triazines: A promising scaffold for anticancer drugs development. *Eur. J. Med. Chem.*, (2017), 142, 523-549.
32. Cascioferro, S.; Parrino, B.; Spanò, V.; Carbone, A.; **Montalbano, A.**; Barraja, P.; Diana, P.; Cirrincione, G. An overview on the recent developments of 1,2,4-triazine derivatives as anticancer compounds. *Eur. J. Med. Chem.*, (2017), 142, 328-375.
33. Balogh, B.; Carbone, A.; Spanò, V.; **Montalbano, A.**; Barraja, P.; Cascioferro, S.; Diana, P.; Parrino, B. Investigation of Isoindolo[2,1-a]quinoxaline-6-imines as Topoisomerase I Inhibitors with Molecular Modeling Methods. *Current Computer-Aided Drug Design* (2017), 13, 208-221.
34. Parrino, B.; Attanzio, A.; Spanò, V.; Cascioferro, S.; **Montalbano, A.**; Barraja, P.; Tesoriere, L.; Diana, P.; Cirrincione, G.; Carbone, A. Synthesis, antitumor activity and CDK1 inhibition of new thiazole nortopsentin analogues. *Eur. J. Med. Chem.*, (2017), 138, 371-383.
35. Cascioferro, S.; Parrino, B.; Spanò, V.; Carbone, A.; **Montalbano, A.**; Barraja, P.; Diana, P.; Cirrincione, G. Synthesis and antitumor activities of 1,2,3-triazines and their benzo- and heterofused derivatives. *Eur. J. Med. Chem.*, (2017), 142, 74-86.
36. Schillaci, D.; Spanò, V.; Parrino, B.; Carbone, A.; **Montalbano, A.**; Barraja, P.; Diana, P.; Cirrincione, G.; Cascioferro, S. Pharmaceutical Approaches to Target Antibiotic Resistance Mechanisms. *J. Med. Chem.*, (2017), 60, 8268-8297.
37. Spanò, V.; Giallombardo, D.; Cilibrasi, V.; Parrino, B.; Carbone, A.; **Montalbano, A.**; Frasson, I.; Salvador, A.; Richter, S.N.; Doria, F.; Freccero, M.; Cascioferro, S.; Diana, P.; Cirrincione, G.; Barraja, P. Pyrrolo[3',2':6,7]cyclohepta[1,2-b]pyridines with potent photo-antiproliferative activity. *Eur. J. Med. Chem.*, (2017), 128, 300-318.
38. Spanò, V.; Attanzio, A.; Cascioferro, S.; Carbone, A.; **Montalbano, A.**; Barraja, P.; Tesoriere, L.; Cirrincione, G.; Diana, P.; Parrino, B. Synthesis and antitumor activity of new thiazole nortopsentin analogues. *Marine Drugs*, (2016), 14, 226/1-226/18.
39. Spanò, V.; Pennati, M.; Parrino, B.; Carbone, A.; **Montalbano, A.**; Loperuolo, A.; Zuco, V.; Cominetti, D.; Diana, P.; Cirrincione, G.; Zaffaroni, N.; Barraja, P. [1,2]Oxazolo[5,4-e]isoindoles as promising tubulin polymerization inhibitors. *Eur. J. Med. Chem.*, (2016), 124, 840-851.
40. Spanò, V.; Frasson, I.; Giallombardo, D.; Doria, F.; Parrino, B.; Carbone, A.; **Montalbano, A.**; Nadai, M.; Diana, P.; Cirrincione, G.; Freccero, M.; Richter, S.N.; Barraja, P. Synthesis and antiproliferative mechanism of action of pyrrolo[3',2':6,7]cyclohepta[1,2-d]pyrimidin-2-amines as singlet oxygen photosensitizers. *Eur. J. Med. Chem.*, (2016), 123, 447-461.
41. Spanò, V.; Pennati, M.; Parrino, B.; Carbone, A.; **Montalbano, A.**; Cilibrasi, V.; Zuco, V.; Loperuolo, A.; Cominetti, D.; Diana, P.; Cirrincione, G.; Barraja, P.; Zaffaroni, N. Preclinical Activity of New [1,2]Oxazolo[5,4-e]isoindole Derivatives in Mesothelioma. *J. Med. Chem.*, (2016), 59, 7223-7238.
42. **Montalbano, A.**; Tesoriere, L.; Diana, P.; Barraja, P.; Carbone, A.; Spanò, V.; Parrino, B.; Attanzio, A.; Livrea, M.A.; Cascioferro, S.; Cirrincione, G. Quality characteristics and in vitro digestibility study of barley flour enriched ditalini pasta. *LWT--Food Science and Technology* (2016), 72, 223-228.
43. Carbone, A.; Parrino, B.; Di Vita, G.; Attanzio, A.; Spanò, V.; **Montalbano, A.**; Barraja, P.; Tesoriere, L.; Livrea, M.A.; Diana, P.; Cirrincione, G. Synthesis and antiproliferative activity of thiazolyl-bis-pyrrolo[2,3-b]pyridines and indolyl-thiazolyl-pyrrolo[2,3-c]pyridines, nortopsentin analogues. *Marine Drugs*, (2015), 13, 460-492.

44. Parrino, B.; Carbone, A.; Ciancimino, C.; Spanò, V.; **Montalbano, A.**; Barraja, P.; Cirrincione, G.; Diana, P.; Sissi, C.; Palumbo, M.; Pinato, O.; Pennati, M.; Beretta, G.; Folini, M.; Matyus, P.; Balogh, B.; Zaffaroni, N. Water-soluble isoindolo[2,1-a]quinoxalin-6-imines: In vitro antiproliferative activity and molecular mechanism(s) of action. *Eur. J. Med. Chem.*, (2015), 94, 149-162.
45. Parrino, B.; Carbone, A.; Spanò, V.; **Montalbano, A.**; Giallombardo, D.; Barraja, P.; Attanzio, A.; Tesoriere, L.; Sissi, C.; Palumbo, M.; Cirrincione, G.; Diana, P. Aza-indolo and isoindolo-azaquinoxaline derivatives with antiproliferative activity. *Eur. J. Med. Chem.*, (2015), 94, 367-377.
46. Parrino, B.; Carbone, A.; Di Vita, G.; Ciancimino, C.; Attanzio, A.; Spanò, V.; **Montalbano, A.**; Barraja, P.; Tesoriere, L.; Livrea, M.A.; Diana, P.; Cirrincione, G. 3-[4-(1H-Indol-3-yl)-1,3-thiazol-2-yl]-1H-pyrrolo[2,3-b]pyridines, Nortopsentin Analogues with Antiproliferative Activity. *Marine Drugs*, (2015), 13, 1901-1924.
47. Spanò, V.; Parrino, B.; Carbone, A.; **Montalbano, A.**; Salvador, A.; Brun, P.; Vedaldi, D.; Diana, P.; Cirrincione, G.; Barraja, P. Pyrazolo[3,4-h]quinolines promising photosensitizing agents in the treatment of cancer. *Eur. J. Med. Chem.*, (2015), 102, 334-351.
48. Parrino, B.; Ciancimino, C.; Carbone, A.; Spanò, V.; **Montalbano, A.**; Barraja, P.; Cirrincione, G.; Diana, P. Synthesis of isoindolo[1,4]benzoxazinone and isoindolo[1,5]benzoxazepine: two new ring systems of pharmaceutical interest. *Tetrahedron*, (2015), 71, 7332-7338.
49. Parrino, B.; Carbone, A.; Muscarella, M.; Spanò, V.; **Montalbano, A.**; Barraja, P.; Salvador, A.; Vedaldi, D.; Cirrincione, G.; Diana, P. 11H-Pyrido[3',2':4,5]pyrrolo[3,2-c]cinnoline and pyrido[3',2':4,5]pyrrolo[1,2-c][1,2,3]benzotriazine: two new ring systems with antitumor activity. *J. Med. Chem.*, (2014), 57, 9495-9511.
50. Carbone, A.; Pennati, M.; Barraja, P.; **Montalbano, A.**; Parrino, B.; Spanò, V.; Lopergolo, A.; Sbarra, S.; Doldi, V.; Zaffaroni, N.; Cirrincione, G.; Diana, P. Synthesis and Antiproliferative Activity of Substituted 3[2-(1H-indol-3-yl)-1,3-thiazol-4-yl]-1H-pyrrolo[3,2-b]pyridines, Marine Alkaloid Nortopsentin Analogues. *Current Medicinal Chemistry* (2014), 21, 1654-1666.
51. Parrino, B.; Spanò, V.; Carbone, A.; Barraja, P.; Diana, P.; Cirrincione, G.; **Montalbano, A.**\* Synthesis of the new ring system bispyrido[4',3':45]pyrrolo[1,2-a:1',2'-d]pyrazine and its deaza analogue. *Molecules* (2014), 19, 13342-13357.
52. Parrino, B.; Ciancimino, C.; Sarwade, C.; Spanò, V.; **Montalbano, A.**; Barraja, P.; Cirrincione, G.; Diana, P.; Carbone, A. Synthesis of substituted isoindolo[2,1-a]quinoxalin-6-yl-amino and 6-imino-5-yl thiourea derivatives. *ARKIVOC*, (2014), 384-398.
53. Parrino, B.; Spanò, V.; Carbone, A.; **Montalbano, A.**; Barraja, P.; Matyus, P.; Cirrincione, G.; Diana, P. 'Interrupted' diazotization of 3-aminoindoles and 3-aminopyrroles. *Tetrahedron*, (2014), 70, 7318-7321.
54. Spanò, V.; **Montalbano, A.**; Carbone, A.; Parrino, B.; Diana, P.; Cirrincione, G.; Castagliuolo, I.; Brun, P.; Issinger, O.-G.; Tisi, S.; Primac, I.; Vedaldi, D.; Salvador, A.; Barraja, P. Synthesis of a new class of pyrrolo[3,4-h]quinazolines with antimetabolic activity. *Eur. J. Med. Chem.*, (2014), 74, 340-357.
55. Spanò, V.; **Montalbano, A.**; Carbone, A.; Parrino, B.; Diana, P.; Cirrincione, G.; Barraja, P. Convenient synthesis of pyrrolo[3,4-g]indazole. *Tetrahedron* (2013), 69, 9839-9847.
56. Carbone, A.; Pennati, M.; Parrino, B.; Lopergolo, A.; Barraja, P.; **Montalbano, A.**; Spanò, V.; Sbarra, S.; Doldi, V.; De Cesare, M.; Cirrincione, G.; Diana, P.; Zaffaroni, N. Novel 1H-Pyrrolo[2,3-b]pyridine Derivative Nortopsentin Analogues: Synthesis and Antitumor Activity in Peritoneal Mesothelioma Experimental Model *J. Med. Chem.*, (2013), 56, 7060-7072.

57. Barraja, P.; Spanò, V.; Giallombardo, D.; Diana, P.; **Montalbano, A.**; Carbone, A.; Parrino, B.; Cirrincione, G. Synthesis of [1,2]oxazolo[5,4-e]indazoles as antitumor agents. *Tetrahedron*, (2013), 69, 6474-6477.
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## Patents

Brevetto internazionale (2021), WO2021038452 - Ingresso nella fase Europea - n. deposito EP 20780788.4

PCT Int. Appl. (2021), WO2021038452 "New therapeutic agents for the treatment of haematological pathologies"

Italian Patent (2019), P021153IT-01 "Nuovi agenti terapeutici per il trattamento di patologie ematologiche"

**Insitutional activities**

- *Member of Assicurazione di Qualità (AQ) committee for the degree course in Pharmacy, University of Palermo(2016-2018);*
- *Member of the Assicurazione di Qualità della Ricerca (AQR) committee for the Department of Biological, Chemical and Pharmaceutical Sciences and Technologies, University of Palermo (2016-2021);*
- *Member of managing board of the Italian Chemical Society-Sicilian Section from 2013- 2018*
- *Member of specialist hospital pharmacy school (University of Palermo) from 2014 to 2016;*
- *Member of PhD council in Molecular and biomolecular sciences (University of Palermo) from 2012 to date*
- *Member of the Departmental Council from 31/05/2022 to date*

**Other Activities**

- *Evaluator for the Italian Ministry of Research (Reviewer VQR 2011-2014; Reviewer VQR 2015-2019)*
- *Member of the Editorial Board for the Journal “Archiv der Pharmazie” (Wiley)*
- *Review Editor for the Journal “Frontiers in Chemistry” (Frontiers Media SA)*
- *Referee for scientific journals (European Journal of Medicinal Chemistry, Arabian Journal of Chemistry, European Journal of Pharmacology, Chémico Biological Interactions, Cancer Science, Mini-Reviews in Medicinal Chemistry, Molecules, Photochemical & Photobiological Sciences, Archiv der Pharmazie, Frontiers in Chemistry etc.)*

**Personal Data**

According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV  
Autorizzo il trattamento dei miei dati personali ai sensi del Decreto Legislativo 30 giugno 2003, n. 196 "Codice in materia di protezione dei dati personali".

Palermo 09/10/2023

Alessandra Montalbano

