

# Curriculum Vitae

Prof. Luigi E. Xodo

Nato il 7 novembre 1952 a Donada (Rovigo), Italia;

Laurea in Chimica 15-12-1976 presso l'Università degli Studi di Trieste, Italia;

Servizio Militare, 09/1977-09/1978 (Tarvisio, Italia);

Assegnista di ricerca presso l'Università di Reading (UK) 1979

Assegnista di ricerca presso l'Università di Guildford (UK):1980;

Membro di Facoltà (Ricercatore), Università di Trieste: 1983-1992;

Professore Associato (Biochimica, BIO 10), Università di Trieste: 1992-1997;

Professore Associato (Biochimica, BIO 10), Università di Udine: 1997-2003;

Professore Ordinario (Biochimica, BIO 10), Università degli Studi di Udine, dal 2003 ad oggi;

Docente del corso di “Biochimica Medica” per studenti di Medicina dal 1997/1998 ad oggi;

Membro del Collegio dei Docenti del Corso di Dottorato in Scienze Mediche e Biotecnologiche.

Responsabile del Laboratorio di Biochimica presso il Dipartimento di Medicina di Udine;

Membro Comitato Editoriale di “Scientific Reports” (Nature);

Regolare attività di “Peer reviewing” per Nucleic Acids Research (Oxford Press), J. Medicinal Chemistry (ACS); J. American Chemical Society (ACS), Scientific Reports...

Autore di 120 pubblicazioni (in PubMed/Web of Science),

Numero di citazioni 5443 (Google Scholar); h-indice= 41, i10-indice=94

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Titolare di Fondi di Ricerca AIRC “Associazione Italiana per la Ricerca sul Cancro”, PRIN e FVG:

**AIRC: IG 2007-2009** “Characterization of a regulatory cis-element of oncogenic KRAS and strategies to down-regulate transcription”, (114.000 euro), Progetto Triennale (2007-2009);

**AIRC: IG 2010-2012** “Molecular targeting of oncogenes: rationale design of anticancer drugs directed against KRAS”, (105.000 euro), Progetto Triennale (2010-2012);

**AIRC: IG 2013-2015:** “Epigenetic modifications in gene regulation: effect of 8-oxoguanine on KRAS transcription in pancreatic cancer cells”, (150.000 euro), Progetto Triennale (2013-2015);

**AIRC: IG 2017-2022** “Epigenetic modifications in gene regulation: effect of 8-oxoguanine on KRAS transcription in pancreatic cancer cells”, (370.000 euro), Progetto Quinquennale (2017-2022);

**PRIN 1999-2001:** (101.429.000 lire), “Oligonucleotides and molecular strategies to study and control neoplastic cell progression”; progetto biennale, responsabile Unità di ricerca di Udine;

**PRIN 2001-2003** (62.000 euro), “Use of antigene and antisense effector molecules for the control of tumor cell proliferation: oligonucleotides conjugated to polyethylene glycol”, progetto biennale, responsabile Unità di ricerca di Udine;

**PRIN 2005-2007** (71500 euro), “Use of PNA-DNA oligonucleotides conjugated to PEG in molecular strategies against protein targets”, progetto biennale, responsabile Unità di ricerca di Udine;

**PRIN 2008-2010** (88858 euro), “Formation of G-quadruplex structures in the promoter of the KRAS oncogene and their involvement in transcription regulation”, progetto biennale, responsabile Unità di ricerca di Udine;

**PRIN 2011-2013** (52000 euro), “Development of G4 decoy oligonucleotides with potent antiproliferative activity specific for the human KRAS and HRAS genes”. progetto biennale, responsabile Unità di ricerca di Udine;

**PRIN 2023-2025** ( 277.000 euro per tre gruppi di ricerca) “Design, synthesis and investigations on new G-quadruplex aptamers against STAT3 and the interleukine-6 receptor (G4-APTASTAT)”; progetto biennale, responsabile Unità di ricerca di Udine;

**FVC (Friuli Venezia Giulia) da 1-06-2008 a 30-09-2011**, (55000 euro UniUd; 27000 euro UniTs); Titolare del progetto congiunto Università di Udine e Università di Trieste “Sviluppo di nuovi farmaci per la terapia fotodinamica del cancro” (codice 200501822001).

International Collaborations active:

- **Prof. Gilmar Salgado**, Laboratoire d'Optique et Biosciences, Ecole Polytechnique, CNRS, INSERM, Institut Polytechnique de Paris, Route de Saclay, Palaiseau Cedex 91128, France.
- **Prof. Stefan Vogel**, Department of Physics, Chemistry and Pharmacy, University of Southern Denmark, Odense, Denmark.
- **Prof. Andrey Shchekotikhin**, Gause Institute of New Antibiotics, B. Pirogovskaya 11, 119021 Moscow, Russia.

- **Prof. Erik Pedersen**, Nucleic Acid Center, Institute of Physics and Chemistry, University of Southern Denmark, DK-5230 Odense, Denmark;
- **Prof. Sara Richter**, Department of Molecular Medicine, University of Padua, 35121 Padua, Italy.

Luigi Xodo has attended many international meetings, mainly as invited speaker

## Publications

1. M.H.Abraham, **L.E.Xodo**, R.J.Abraham, M.J.Cook. A direct experimental and theoretical study of solvent effects on the equilibrium between trans cis and trans trans 1,2-dibromo-4-butylcyclohexanes. *Tetrahedron Letters* (1981) **22**, 5183-5186.
2. M.J.Cook, M.H.Abraham, **L.E.Xodo**, R.Cruz. Empirical determination of medium effects on the equilibrium between trans cis and trans trans 1,2-dibromo-4-t-butylcyclohexanes. *Tetrahedron Letters* (1981) **22**, 2991-2994.
3. M.H.Abraham, **L.E.Xodo**, M.J.Cook, R.Cruz. Solvent and gas-phase effects on the equilibrium between configurational isomers of some 4-t-butylcyclohexanes. *J. Chem. Soc. Perkin Trans. II* (1982) 1503-1509.
4. M.L.Barcellona, G.Manzini, **L.E.Xodo**, N.Ragusa, M.Avitabile, F.Quadrifoglio. Interaction of DAPI with natural and synthetic polyribonucleotides: calorimetric measurements. *The Italian Journal of Biochemistry* (1985) **34**, 467-470.
5. G.Manzini, **L.E.Xodo**, M.L.Barcellona, F.Quadrifoglio. Interaction of 4'-6-diamidino-2-phenylindole.2HCl with synthetic and natural deoxy- and ribonucleic acids. *Journal of Biosciences* (1985) **8**, 699-711.
6. G. Manzini, **L.E. Xodo**, M.L. Barcellona, F. Quadrifoglio. Interaction of DAPI with double stranded ribonucleic acids. *Nucleic Acids Research* (1985) **13**, 8955-8967.
7. **L.E.Xodo**, G.Manzini, F.Quadrifoglio, G.A.van der Marel, J.H. van Boom. Thermodynamic behaviour of the heptadecadeoxynucleotide d(CGCGCGTTTTTCGCGCG) forming B and Z hairpins in aqueous solution. *Nucleic Acids Research* (1986) **14**, 5389-5398.
8. G.Manzini, **L.E.Xodo**, F.Quadrifoglio, J.H.van Boom, G.H.van der Marel. dC-dG alternating oligonucleotides: thermodynamic and kinetic aspects of the B-Z transformation. *Journal of Biomolecular Structure & Dynamics* (1987) **4**, 651-662.
9. Base specificity in the interaction of ethidium with synthetic polyribonucleotides. Y.Babayan, G.Manzini, **L.E.Xodo**, F.Quadrifoglio. *Nucleic Acids Research* (1987) **15**, 5803-5812.
10. **L.E.Xodo**, G.Manzini, J.Ruggiero, F.Quadrifoglio. Base specificity in the interaction of daunomycin with synthetic polynucleotides. *Biochemical Pharmacology* (1988) **37**, 1867-1868.

11. **L.E.Xodo**, G.Manzini, G.H.van der Marel, J.H.van Boom, F. Quadrifoglio. Oligodeoxynucleotide folding in solution. Loop size and stability of B-hairpins. *Biochemistry* (1988) **27**, 6321-6326.
12. **L.E.Xodo**, G.Manzini, G.H.van der Marel, J.H.van Boom, F. Quadrifoglio. The B-Z conformational transition in folded oligodeoxynucleotides: loop size and stability of Z-hairpins. *Biochemistry* (1988) **27**, 6327-6331.
13. **L.E.Xodo**, G.Manzini, J.Ruggiero, F.Quadrifoglio. On the interaction of daunomycin with natural and synthetic DNAs: sequence specificity and polyelectrolyte effects on the intercalation process. *Biopolymers* (1988) **27**, 1839-1857.
14. **L.E. Xodo**, G.Manzini, G.H.van der Marel, J.H.van Boom, F. Quadrifoglio. The duplex-hairpin conformational transition of d(CGCGCGATCG-CGCG) and d(CGCGCGTACGCGCG): a kinetic and thermodynamic study. *Journal of Biomolecular Structure & Dynamics* (1988) **6**, 139-152.
15. Y.Babayan, **L.E.Xodo**, G.Manzini. Netropsin does not bind to the oligodeoxynucleotide d(CGGTACGC) *Biofizica* (1988) **4**, 716-717.
16. G.Manzini, **L.E.Xodo**, N.Yathindra, F.Quadrifoglio. Sequence effects on the energetics of the duplex-hairpin-coil conformational transitions in palindromic oligodeoxynucleotides. *The Italian Journal of Biochemistry* (1989) 145-148.
17. **L.E. Xodo**, G.Manzini, F.Quadrifoglio, N.Yathindra, G. A.van der Marel, J.H.van Boom. A facile duplex-hairpin interconversion through a cruciform intermediate in a DNA fragment. *Journal of Molecular Biology* (1989) **205**, 777-781.
18. **L.E.Xodo**, G.Manzini, F.Quadrifoglio, N.Yathindra, G. A.van der Marel, J.H. van Boom. The left-handed Z-DNA conformation in oligodeoxynucleotides containing different amounts of AT base pairs: a far UV circular dichroism study. *Journal of Biomolecular Structure & Dynamics* (1989) **6**, 1217-1231.
19. **L.E.Xodo**, G.Manzini, F.Quadrifoglio, G.A.van der Marel, J.H. van Boom. Hairpin structures in synthetic oligodeoxynucleotides: sequence effects on the duplex-hairpin interconversion. *Biochimie* (1989) **71**, 793-803.
20. **L.E.Xodo**, G.Manzini. Use of oligodeoxynucleotides as simple models for studying the polymorphism of DNA. *Italian Journal of Biochemistry* (1990) **6**, 395-400.
20. G.Manzini, **L.E. Xodo**, F.Fogolari, F.Quadrifoglio. Secondary structure effects on the interaction of different polynucleotides with Ca<sup>2+</sup>. *Biopolymers* (1990) **30**, 325-333.
22. G. Manzini, **L.E.Xodo**, D.Gasparotto, F. Quadrifoglio, G.H. van der Marel, J.H. van Boom. Triple helix formation by oligopurine-oligopyrimidine DNA fragments: electrohoretic and thermodynamic behavior. *Journal of Molecular Biology* (1990) **213**, 833-843.
23. **L. E. Xodo**, G.Manzini and F.Quadrifoglio. Spectroscopic and calorimetric investigation on the DNA triplex formed by d(CTCTTCTTTCTTTTCTTTCTTCTC) and d(GAGAAGAAAGA) at acidic pH. *Nucleic Acids Research* (1990) **18**, 3557-3564.

24. **L.E.Xodo**, G.Manzini, F.Quadrifoglio, G.H.van der Marel, J.H. van Boom. DNA hairpin loops in solution. Correlation between primary structure, thermostability and reactivity with single-strand-specific nuclease from mung bean. *Nucleic Acids Research* (1991) 19, 1505-1511.
25. **L.E.Xodo**, G.Manzini, F.Quadrifoglio, G.H.van der Marel, J.H. van Boom. Effect of 5-methylcytosine on the stability of triple-stranded DNA – a thermodynamic study. *Nucleic Acids Research* (1991) 19, 5625-5631.
26. Yu.S.Babayan, G.Manzini, **L.E.Xodo**. Binding of mitoxantrone and ametantrone with polyd(G-C):polyd(G-C) is not obstructed by NaCl induced B-Z transition. *Biofizica* (1991) **36**, 266-270.
27. J.Ruggiero, **L.E. Xodo**, A.Ciana, G.Manzini, F.Quadrifoglio. Charge effects in the interaction of antracyclines into double-stranded DNA. *Biochimica et Biophysica Acta* (1992) **1129**, 294-302.
28. **L.E.Xodo**, M.Alunni-Fabbroni, G.Manzini, F.Quadrifoglio. Sequence specific DNA triplex formation at imperfect homopurine-homopyrimidine sequences within a DNA plasmid. *European Journal of Biochemistry* (1993) **212**, 395-401.
29. **L.Xodo**, M.Alunni-Fabbroni, G.Manzini. Effect of 5-methylcytosine on DNA structure. Formation of triple-stranded concatemers by overlapping oligonucleotides. *J.Biomol. Struct. Dyn.* (1994) **11**, 703-720.
30. **L.Xodo**, M.Alunni-Fabbroni, G.Manzini, F.Quadrifoglio. Pyrimidine phosphorothioate oligonucleotides form triple-stranded helices and promote transcription inhibition *Nucleic Acids Res.* (1994) **22**, 3322-3330.
31. G.Manzini, N.Yathindra, **L.E.Xodo**. Evidence for intramolecularly folded i-DNA structures in biologically relevant CCC-repeat sequences. *Nucleic Acids Res.* (1994) **22**, 4634-4640
32. M.Alunni-Fabbroni, G.Manfioletti, G.Manzini, **L.E.Xodo**. Inhibition of T7 RNA polymerase transcription by phosphate and phosphorothioate triplex-forming oligonucleotides targeted to a R•Y site downstream from the promoter. *European Journal of Biochemistry*,(1994) 226, 831-839.
33. **Luigi E. Xodo**. Kinetic analysis of triple-helix formation by pyrimidine oligonucleotides and duplex DNA. *European Journal of Biochemistry*,(1995) **228**, 918-926
34. **Luigi E. Xodo**. Characterization of the DNA triplex formed by d(TGGGTGGGTGGTTGGGTGGG) and a critical R•Y sequence located in the promoter of the murine Ki-ras proto-oncogene. *FEBS Letters* (1995) **370**, 153-157
35. Marianna Alunni-Fabbroni, Giorgio Manzini, Franco Quadrifoglio, **Luigi E.Xodo**. Guanine-rich oligonucleotides targeted to a critical R•Y site located in the Ki-ras promoter. The effect of competing self-structures on triplex formation. *European Journal of Biochemistry* (1996) **238**, 141-151.

36. Eleonora Marsich, Antonella Piccini, **Luigi E. Xodo**, Giorgio Manzini. Evidence for a HeLa nuclear protein that binds specifically the single stranded d(CCCTAA)<sub>n</sub> telomeric motif. *Nucleic Acids Research* (1996) **24**, 4029-4033.
37. Marianna Alunni-Fabbroni, Doroti Pirulli, Giorgio Manzini, **Luigi E. Xodo**. (A,G)-Oligonucleotides form extraordinary stable triple helices with a critical R•Y sequence of the murine c-Ki-ras promoter and inhibit transcription in transfected NIH 3T3 cells. *Biochemistry* (1996) **35**, 16361-16369.
38. A kinetic study of triplex-helix formation at a critical RY sequence of the murine c-Ki-ras promoter by (A,G)- and (G,T)-oligonucleotides  
**Luigi E. Xodo**, Doroti Pirulli, F. Quadrifoglio  
*European Journal of Biochemistry* (1997) **248**, 424-432.
39. G-rich Tripelx-forming Oligonucleotides as Transcription Repressors. **Luigi E. Xodo**, Giorgio Manzini, Marianna Alunni-Fabbroni. *Nucleosides & Nucleotides* (1997) **16**, 1695-1698.
40. Widespread presence in mammals and high binding specificity of a nuclear protein that recognizes the single stranded (CCCTAA)<sub>n</sub> telomeric motif.  
Eleonora Marsich, **Luigi E. Xodo**, Giorgio Manzini  
*European Journal Biochemistry*, (1998) **259**, 1-7.
41. Formation of stable DNA triple helices within the human Bcr promoter at a critical oligopurine target interrupted in the middle by two adjacent pyrimidines  
**Luigi E. Xodo**, Giorgio Manzini, Franco Quadrifoglio  
*Antisense & Nucleic Acid Drug Development* (1998) **8**, 477-488.
42. Formation of triple helices at irregular poly (RY) sites located in critical positions in the human *bcr* promoter  
**Luigi E. Xodo**, Elisa Del Terra, Bruna Scaggiante, Giorgio Mnzini, Franco Quadrifoglio  
*Nucleosides & Nucleotides* (1999) **18**,1587-1592.
43. Effect of oligomer length and base substitutions on the cytotoxic activity and specific nuclear protein recognition of GT<sub>n</sub> oligonucleotides in the human leukemic CCRF-CEM cell line  
C. Morassuti, B. Dapas, B. Scaggiante, G. Paroni, **L. E. Xodo** F. Quadrifoglio  
*Nucleosides & Nucleotides* (1999) **18**, 1711-1716.
44. Effect of cation on purine:purine:pyrimidine triple-helix formation in mixed-valence salt solutions.  
Romina Floris, Bruna Scaggiante, Giorgio Manzini, Franco Quadrifoglio, **Luigi E. Xodo**  
*European Journal Biochemistry*, (1999) **260**, 801-809.
45. Reduction of *mdr1* gene amplification in human multidrug resistant LoVo DX cell line is promoted by triple helix forming oligonucleotides,  
C. Morassutti, B. Scaggiante, **L.E.Xodo**, B.Dapas, G.Paroni, G.Tolazzi, F.Quadrifoglio  
*Antisense & Nucleic Acid Drug Development* (1999) **9**, 261-270.
46. Effect of phosphorothioate modifications on the ability of GT<sub>n</sub> oligodeoxynucleotides to specifically recognize single-stranded DNA-binding proteins and to affect human cancer cellular growth.

Carla Morassutti, Bruna Scaggiante, Barbara Dapas, **Luigi E.Xodo**, Gianluca Tell and Franco Quadrifoglio  
*Biochimie* (1999) **81**, 1115-1122.

47. Down regulation of c-Ki-ras promoter activity by triplex-forming oligonucleotides endogenously generated in human 293 cells,  
S. Cogoi, C. Suraci, E. Del Terra, S. Diviacco, G. van der Marel, F. Quadrifoglio, **L.E.Xodo**,  
*Antisense & Nucleic Acid Drug Development* (2000) **10**, 283-295.
48. Antigene effect in live cells of AG motif triplex-forming oligonucleotides containing an increasing number of phosphorothioate linkages  
Susanna Cogoi, Valentina Rapozzi, Franco Quadrofoglio and **Luigi E.Xodo**  
*Biochemistry* (2001) **40**, 1135-1143.
49. Targeting neighbouring poly (purine-pyrimidine) sequences located in the human bcr promoter by triple-forming oligonucleotides  
**Luigi E. Xodo**, R. Thenmalarchelvi, F. Quadrifoglio, G. Manzini and N. Yathindra  
*E.J. Biochem*, (2001) 268, 656-664.
50. Site-directed inhibition of DNA replication by triple helix formation S.Diviacco, V. Rapozzi, **L. E.Xodo**, C. Helene, C., F. Quadrifoglio, C Giovannangeli  
*FASEB Journal*, (2001) **15**, 2660-2668.
51. Triple, MPEG-conjugated, helix-forming oligonucleotides (TRIPEGXs): liquid-phase synthesis of natural and chimeric "all-purine" sequences linked to high molecular weight poly(ethylene glycols)  
M. Ballico, S. Drioli, F. Morvan, **L.E.Xodo**, GM. Bonora  
*Bioconjugated Chemistry* (2001) **12**, 719-725
52. Antigene effect in K562 cells of a PEG-conjugated triple-forming oligonucleotide targeted to the bcr/abl oncogene  
V. Rapozzi, S. Cogoi, S. Spessotto, A. Risso, GM. Bonora, F. Quadrifoglio and **L.E.Xodo**  
*Biochemistry* (2002) **41**, 502-510.
53. Antiproliferative effect in chronic myeloid leukaemia cells by antisense peptide nucleic acids of antisense peptide nucleic acids  
V. Rapozzi, B.Burm, S. Cogoi, G. van der Marel, J. van Boom, F. Quadrifoglio, **L.E.Xodo**  
*Nucleic Acids Research* (2002) **30**, 3712-2721.
54. S Cogoi, V. Rapozzi, **LE Xodo**, Inhibition of gene expression by peptide nucleic acids in cultured cells. *Nucleosides Nucleotides Nucleic Acids*. 2003 May-Aug;22(5-8):1615-8.
55. Rapozzi V, **Xodo LE**. Efficient silencing of bcr/abl oncogene by single- and double-stranded siRNAs targeted against b2a2 transcripts. *Biochemistry*. 2004 Dec 28;43(51):16134-41
56. Cogoi S, Ballico M, Bonora GM, **Xodo LE** Antiproliferative activity of a triplex-forming oligonucleotide recognizing a Ki-ras polypurine/polypyrimidine motif correlates with protein binding. *Cancer Gene Ther*. 2004 Jul;11(7):465-76
57. **Xodo LE**, Cogoi S, Rapozzi V. Anti-gene strategies to down-regulate gene expression in mammalian cells. *Curr Pharm Des*. 2004;10(7):805-19.

58. Cogoi S, Quadrifoglio F, **Xodo LE**. G-rich oligonucleotide inhibits the binding of a nuclear protein to the Ki-ras promoter and strongly reduces cell growth in human carcinoma pancreatic cells. *Biochemistry*. 2004 Mar 9;43(9):2512-23;
59. Cogoi S, Codognotto A, Rapozzi V, Meeuwenoord N, van der Marel G, **Xodo LE**. Transcription inhibition of oncogenic KRAS by a mutation-selective peptide nucleic acid conjugated to the PKKKRKV nuclear localization signal peptide. *Biochemistry*. 2005 Aug 9;44(31):10510-9
60. Rapozzi V, Cogoi S, **Xodo LE**. Antisense locked nucleic acids efficiently suppress BCR/ABL and induce cell growth decline and apoptosis in leukemic cells. *Mol Cancer Ther*. 2006 Jul;5(7):1683-92.
61. Cogoi S, **Xodo LE**. G-quadruplex formation within the promoter of the KRAS proto-oncogene and its effect on transcription. *Nucleic Acids Res*. 2006 May 10;34(9):2536-49.
62. Comuzzi C, Cogoi S, Overhand M, Van der Marel GA, Overkleeft HS, **Xodo LE**. Synthesis and biological evaluation of new pentaphyrin macrocycles for photodynamic therapy. *J Med Chem*. 2006 Jan 12;49(1):196-204
63. Clara Comuzzi, Susanna Cogoi, **Luigi E. Xodo** (2006) Spectroscopic characterization of the oxidation control of the iso-pentaphyrin/pentaphyrin system *Tetrahedron* 62, 8147-8151.
64. **Xodo L**, Paramasivam M, Membrino A, Cogoi S. Protein hnRNPA1 binds to a critical G-rich element of KRAS and unwinds G-quadruplex structures: implications in transcription. *Nucleic Acids Symp Ser (Oxf)*. 2008;(52):159-60
65. Pedersen EB, Osman AM, Globisch D, Paramasivam M, Cogoi S, Bomholt N, Jørgensen PT, **Xodo LE**, Filichev VV. Triplex glue by synthesizing conjugated flexible intercalators. *Nucleic Acids Symp Ser (Oxf)*. 2008;(52):37-8
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67. Structural polymorphism within a regulatory element of the human KRAS promoter: formation of G4-DNA recognized by nuclear proteins. Cogoi S, Paramasivam M, Spolaore B, **Xodo LE**. *Nucleic Acids Res*. 2008 Jun;36(11):3765-80.
68. Rapozzi V, Lombardo C, Cogoi S, Comuzzi C, **Xodo L** Small interfering RNA-mediated silencing of glutathione-S-transferase A1 sensitizes hepatic carcinoma cells to photodynamic therapy with pentaphyrins. *ChemMedChem*. 2008 Apr;3(4):565-8.
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71. Paramasivam M, Membrino A, Cogoi S, Fukuda H, Nakagama H, **Xodo LE** Protein hnRNP A1 and its derivative Up1 unfold quadruplex DNA in the human KRAS promoter: implications for transcription. *Nucleic Acids Res*. 2009 May;37(9):2841-53.
72. Cogoi S, Paramasivam M, Filichev V, Géci I, Pedersen EB, **Xodo LE**. Identification of a new G-quadruplex motif in the KRAS promoter and design of pyrene-modified G4-decoys with antiproliferative activity in pancreatic cancer cells. *J Med Chem*. 2009 52(2):564-8,
73. Rapozzi V, Zacchigna M, Biffi S, Garrovo C, Cateni F, Stebel M, Zorzet S, Bonora GM, Drioli S, **Xodo LE**. Conjugated PDT drug: Photosensitizing activity and tissue distribution of PEGylated pheophorbide a. *Cancer Biol Ther*. 2010 Sep 31;10(5).
74. Cogoi S, Paramasivam M, Membrino A, Yokoyama KK, **Xodo LE** The KRAS promoter responds to Myc-associated zinc finger and poly(ADP-ribose) polymerase 1 proteins, which recognize a critical quadruplex-forming GA-element. *J Biol Chem*. 2010 Jul 16;285(29):22003-16.
75. Rapozzi V, Beverina L, Salice P, Pagani GA, Camerin M, **Xodo LE**. Photooxidation and Phototoxicity of pi-extended squaraines. *J Med Chem*. 2010 Mar 11;53(5):2188-96.PMID: 20131844
76. Membrino A, Paramasivam M, Cogoi S, Alzeer J, Luedtke NW, **Xodo LE** Cellular uptake and binding of guanidine-modified phthalocyanines to KRAS/HRAS G-quadruplexes. *Chem Commun (Camb)*. 2010 Jan 28;46(4):625-7.
77. Faudale M, Cogoi S, **Xodo LE**. Photoactivated cationic alkyl-substituted porphyrin binding to g4-RNA in the 5'-UTR of KRAS oncogene represses translation. *Chem Commun (Camb)*. 2012 Jan 21;48(6):874-6. Epub 2011 Nov 29.
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79. Rapozzi V, Umezawa K, **Xodo LE**. Role of NF- $\kappa$ B/Snail/RKIP loop in the response of tumor cells to photodynamic therapy. *Lasers Surg Med*. 2011 Sep;43(7):575-85.
80. Paramasivam M, Cogoi S, **Xodo LE**. Primer extension reactions as a tool to uncover folding motifs within complex G-rich sequences: analysis of the human KRAS NHE. *Chem Commun (Camb)*. 2011 May 7;47(17):4965-7
81. **Xodo LE**, Rapozzi V, Zacchigna M, Drioli S, Zorzet S. The chlorophyll catabolite pheophorbide a as a photosensitizer for the photodynamic therapy. *Curr Med Chem*. 2012;19(6):799-807
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83. **Xodo LE**. Applications of the photodynamic therapy to cancer, water- and vector-borne diseases. *Curr Med Chem*. 2012;19(6):780
84. Faudale M, Cogoi S, **Xodo LE**. Photoactivated cationic alkyl-substituted porphyrin binding to G4-RNA in the 5'-UTR of KRAS oncogene represses translation. *Chem Commun (Camb)*. 2012 Jan 21;48(6):874-6.
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86. **Xodo LE**, Rapozzi V, Zacchigna M, Drioli S, Zorzet S. The chlorophyll catabolite pheophorbide a as a photosensitizer for the photodynamic therapy. *Curr Med Chem*. 2012;19(6):799-807
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