

## Phenothiazine und andere Dopaminantagonisten

„1876 wurden die beiden Farbstoffe Methylenblau und Thionin (Lauths Violett) hergestellt, die beide die Phenothiazin-Struktur enthalten. In den nächsten Jahren wurde Methylenblau als Mittel gegen Malaria, Kopfschmerzen oder Depressionen versucht, konnte sich jedoch nicht durchsetzen. ... In der Tiermedizin wurden sie als Wurmmittel eingesetzt.... Erst in den 1940er Jahren begann sich die medizinische Forschung wieder vermehrt den Phenothiazinen zuzuwenden. Die französische Pharmafirma Rhône-Poulenc entdeckte Phenothiazine mit antihistaminischen Eigenschaften. Dies führte 1950 zur Synthese von Neuroleptika (Chlorpromazin, Thorazine®)“. Quelle: <http://de.wikipedia.org/wiki/Phenothiazine>

Zellkerntherapeutika: Methylenblau (Rember®)

“Phenothiazine is an organic compound that occurs in various antipsychotic and antihistaminic drugs. It has the formula  $S(C_6H_4)_2NH$ . ... The compound is related to the thiazine-class of heterocyclic compounds. Derivatives of the parent compound find wide use as drugs”. Source: <http://en.wikipedia.org/wiki/Phenothiazine>

Amaral L, Lorian V (1991) Effects of **chlorpromazine** on the cell envelope proteins of Escherichia coli. Antimicrob Agents Chemother 35, 9 1923-1924 Sep. [PMID](#)

Amaral L, Kristiansen J, Lorian V (1992) Synergic effect of **chlorpromazine** on the activity of some antibiotics. J Antimicrob Chemother 30, 4 556-558 Oct.

Amaral L, Kristiansen JE (2000) **Phenothiazines**: an alternative to conventional therapy for the initial management of suspected multidrug resistant tuberculosis. A call for studies. Int J Antimicrob Agents 14, 3 173-176 Apr.

Amaral L (2000) Management of intracellular infections with phenothiazines. Newsletter of the International Society of Chemotherapy. 3, 4

Amaral L, Kristiansen JE, Thomsen VF, Markovich B (2000) The effects of **chlorpromazine** on the outer cell wall of Salmonella typhimurium in ensuring resistance to the drug. Int J Antimicrob Agents 14, 3 225-229 Apr.

Amaral L, Kristiansen JE, Viveiros M, Atouguia J (2001) Activity of **phenothiazines against antibiotic-resistant Mycobacterium tuberculosis**: a review supporting further studies that may elucidate the potential use of thioridazine as anti-tuberculosis therapy. J Antimicrob Chemother 47, 5 505-511 May. [PMID](#)

L Amaral, J E Kristiansen (2001) **Phenothiazines: potential management of Creutzfeldt-Jacob disease and its variants**. Int J Antimicrob Agents 18, 5 411-417 Nov. [PMID](#)

Amaral L, Viveiros M, Kristiansen JE (2001) **Phenothiazines**: potential alternatives for the management of antibiotic resistant infections of tuberculosis and malaria in developing countries. Trop Med Int Health 6, 12 1016-1022 Dec. [PMID](#)

Ordway D, Viveiros M, Leandro C, Arroz MJ, Molnar J, Kristiansen JE, Amaral J (2002) **Chlorpromazine** has intracellular killing activity against phagocytosed Staphylococcus aureus at clinical concentrations. J Infect Chemother 8, 3 227-231 Sep. [DOI/PMID](#)

Ordway D, Viveiros M, Leandro C, Arroz MJ, Amaral L (2002) Intracellular activity of clinical concentrations of **phenothiazines including thioridazine** against phagocytosed Staphylococcus aureus. Int J Antimicrob Agents 20, 1 34-43 Jul. [PMID](#)

Grácio MA, dos Grácio AJ, Viveiros M, Amaral L (2003) Since **phenothiazines alter antibiotic susceptibility of microorganisms by inhibiting efflux pumps, are these agents useful for evaluating similar pumps in phenothiazine-sensitive parasites?** Int J Antimicrob Agents 22 3 347-351 Sep. [PMID](#)

Amaral L, Viveiros M, Molnar J (2004) Antimicrobial activity of **phenothiazines**. In Vivo 18, 6. 725-731 Nov/Dec. [PMID](#)

Hajos G, Riedl Z, Molnar J, Amaral L (2004) **NEW ACCESS TO PROMISING MDR INHIBITORY PHENOTHIAZINES** ANTICANCER RESEARCH 24, 3507-3508.

**Pelegrini P, Franco OL** (2005) **Plant Gamma-thionins: Novel insights on the mechanism of action of a multi-functional class of defense proteins.** The International Journal of Biochemistry & Cell Biology 37, 2239-2253

[http://www.bdttd.ucb.br/tede/tde\\_arquivos/13/TDE-2007-05-23T110410Z-457/Publico/Apendice%202.pdf](http://www.bdttd.ucb.br/tede/tde_arquivos/13/TDE-2007-05-23T110410Z-457/Publico/Apendice%202.pdf)

Amaral L, Martins M, Viveiros M (2007) **Phenothiazines** as anti-multi-drug resistant tubercular agents. Infect Disord Drug Targets 7, 3 257-265 Sep. [PMID](#)

Rodrigues L, Aínsa JA, Amaral L, Viveiros M (2011) **Inhibition of efflux pumps** of mycobacteria with **phenothiazines** and other putative efflux pump inhibitors (EPIs) Patents Reviews Antifungal Drug Discovery 6 118-27 [DOI/PMID](#)

Varga ZG, Szabó MA, Schelz Z, Szeged Ei, Amaral L, Molnár J (2011) **Quorum Sensing Inhibition by Phenothiazines and Related Compounds** Letters in Drug Design & Discovery 8, 133-137 [DOI](#)

Jeyaseeli L, Dasgupta A, Dastidar SG, Molnar J, Amaral L (2012) **Evidences of Significant Synergism between Antibiotics and the Antipsychotic Antimicrobial Drug Flupenthixol** European Journal of Clinical Microbiology & Infectious Diseases 31, 6 1243-1250 Oct 14. [PMID](#)

Sachlos E, Risueno RM, Laronde S, Shapovalova Z, Lee JH, Russell J, Malig M, McNicol JD, Fiebig-Comyn A, Graham M, Levadoux-Martin M, Lee JB, Giacomelli AO, Hassell JA, Fischer-Russell D, Trus MR, et al. (2012) **Identification of drugs including a dopamine receptor antagonist that selectively target cancer stem cells.** Cell. 149(6),1284-1297.

Li J, Zhu S, Kozono D et al. (2014) Genome-wide shRNA screen revealed integrated mitogenic signaling between **dopamine receptor D2 (DRD2)** and epidermal growth factor receptor (EGFR) in **glioblastoma**. Oncotarget, [http://www.impactjournals.com/oncotarget/index.php?journal=oncotarget&page=article&op=view&path\[\]=1801&path\[\]=2156](http://www.impactjournals.com/oncotarget/index.php?journal=oncotarget&page=article&op=view&path[]=1801&path[]=2156)

- ➔ **Die Thioester Welt, the thioester world**  
<http://www.xerlebnishaft.de/lebensstrukturenvergleich.pdf>
- ➔ **Komplement** <http://www.xerlebnishaft.de/complement.pdf>
- ➔ **Alzheimer** <http://www.erlebnishaft.de/alzheimerspirochaetosis.pdf>
- ➔ **Cavete Diagnosen nach v. Bergmann** <http://www.erlebnishaft.de/kommentalternativ.pdf>

Bernt - Dieter Huismans, Start 2014. Letzte Revision Februar 2017 [www.Huismans.click](http://www.Huismans.click)  
Back to top: <http://www.phenothiazine.pdf>



