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Supplementary Material

Bioactive Bismuth Compounds: Is Their Toxicity a Barrier to Therapeutic Use?

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Table S1. Main pharmacological properties of bismuth compound according preclinical studies.

Bismuth compound	Main pharmacological properties	Reference
Bismuth(III) hydroxamate complexes	Antibacterial activity (*Helicobacter pylori*)	[44]
Bismuth-fluoroquinolone complexes	Antibacterial activity (*Helicobacter pylori*)	[46]
Bismuth(III) 5-sulfosalicylate complexes	Antibacterial activity (*Helicobacter pylori*)	[47]
Phenylbismuth(III) sulfonate complexes	Antibacterial activity (*Helicobacter pylori*)	[48]
Bismuth(III) flavonolate complexes	Antibacterial activity (*Staphylococcus aureus*, methicillin-*resistant Staphylococcus aureus*, and vancomycin-resistant *Enterococcus*, *Escherichia coli*, *Pseudomonas aeruginosa*)	[50]
Di-aryl bismuth phosphinates	Antibacterial activity (methicillin-resistant *Staphylococcus aureus*, vancomycin-resistant *Enterococcus*)	[51]
Bismuth thiolates	Antibacterial activity (methicillin-resistant *Staphylococcus aureus*)	[52]
Bismuth nanoparticles	Antibacterial activity (*Helicobacter pylori* or *Streptococcus salivarius* and *Enterococcus faecalis*)	[45,53]
Cyclic organobismuth, bearing a nitrogen or sulphur atom as an additional ring member	Antibacterial activity (*Staphylococcus aureus*, *Bacillus subtilis*, and *Enterococcus faecalis*)	[54]
Bismuth(III) phenyl pyrazolinates	Antibacterial (*Bacillus lichaniformis* and *Vibrio* spp) and antifungal (*Aspergillus niger* and *Penicillium*	[55]

	notatum) activities	
Bis(dialkyldithiocarbamato)diorganodithiophosphatobismuth(III) complexes	Antibacterial activity (*Staphylococcus aureus*, *Escherichia coli*, *Pseudomonas aeruginosa*)	[56]
Bismuth(III) salicylate and pyrazoline complexes	Antibacterial (*Staphylococcus aureus, Bacillus lichaniformis, Klebsiella pneumoniae, Vibrio* ssp, *Escherichia coli, Pseudomonas aeruginosa*) and antifungal (*Aspergillus niger* and *Penicillium notatum*) activities	[57]
Bismuth-norfloxacin complexes	Antibacterial activity (*Escherichia coli, Klebsiella pneumoniae, Staphylococcus aureus, Bacillus pumilis and Staphylococcus epidermidis*)	[58]
Triorganobismuth(V) biscarboxylates	Antileishmanial activity (*Leishmania tropica*)	[60]
Triarylbismuth dihalides and halobismuthanes	Antifungal activity (*Saccharomyces cerevisiae*)	[61]
Heterocyclicorganobismuth(III) based on a diphenyl sulfone scaffold	Antifungal activity (*Saccharomyces cerevisiae*)	[62]
Peptide–bismuth bicycles	Antiviral activity (Zika and West Nile)	[63]
Ranitidine bismuth citrate	Antiviral activity (SARS-CoV-2)	[35]
Bi-chlorodibenzo[*c,f*][1,5]thiabismocine	Anticancer activity	[66]
Tris[2-(*N*,*N*-dimethylaminomethyl)phenyl]-bismuthane	Anticancer activity	[67]
Bismuth 8-quinolinethiolates	Anticancer activity	[68]
Bismuth(III) dithiocarbamate complexes	Anticancer activity	[70]
Bismuth citrate	Anticancer activity	[30]
Bismuth subgallate	Anticancer activity	[72]
Bismuth nanoparticles	Anticancer activity	[65, 69, 73-75]
Bismuth subsalicylate	Anti-Alzheimer's disease activity	[85]