Electronic Supplementary Material (ESI) for Natural Product Reports.

SUPPLEMENTARY INFORMATION

Chemistry of the fumiquinazolines and structurally related alkaloids

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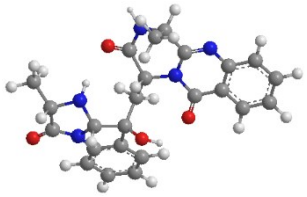
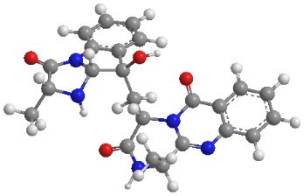
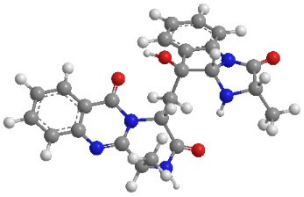
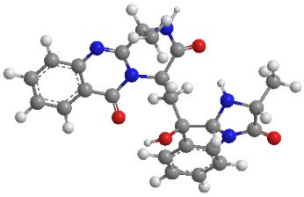
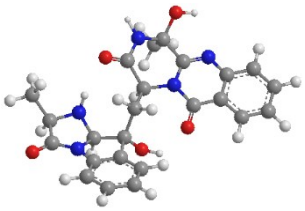
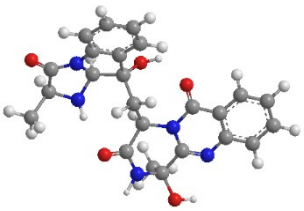
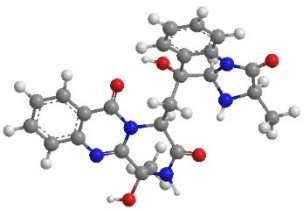
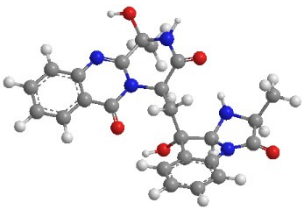
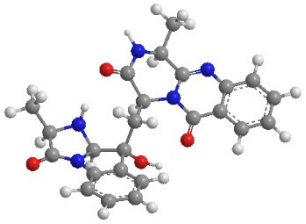
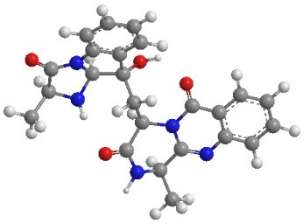
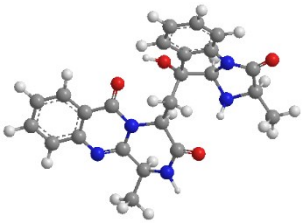
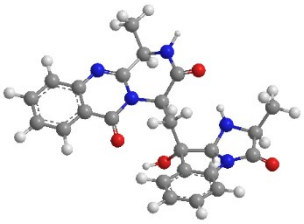
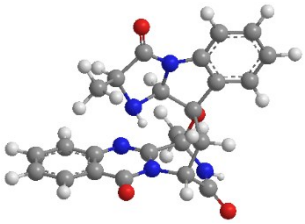
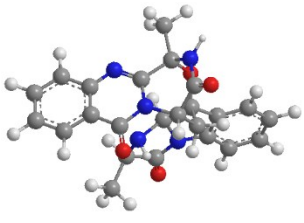
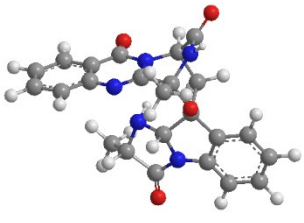
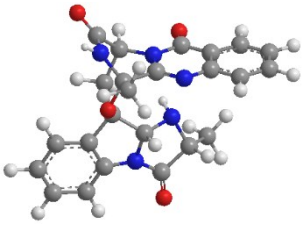
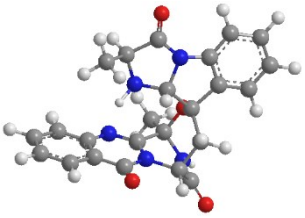
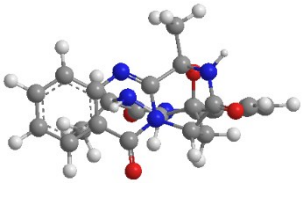
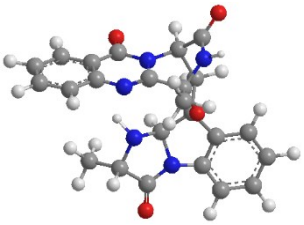
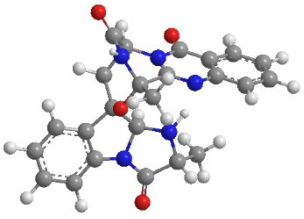
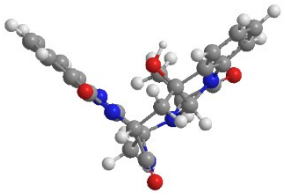
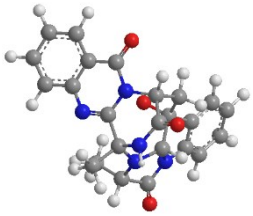
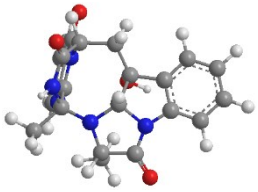
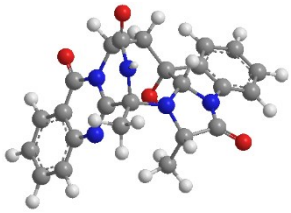
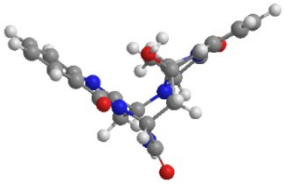
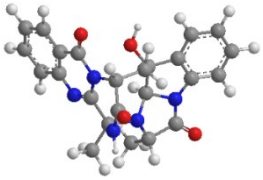
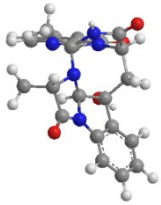
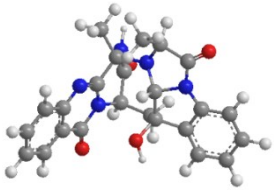
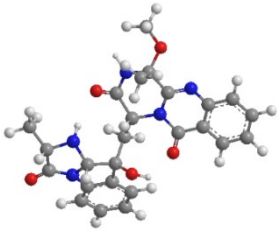
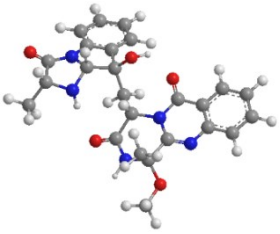
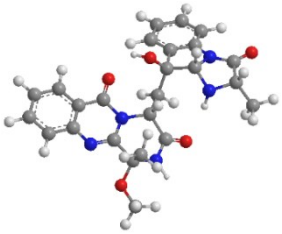
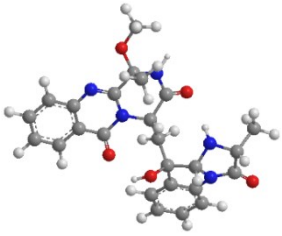
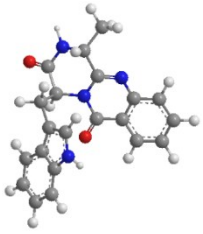
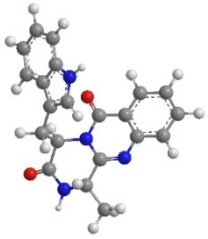
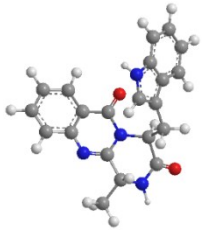
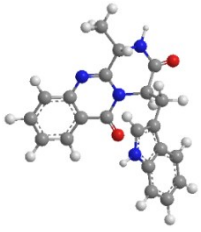
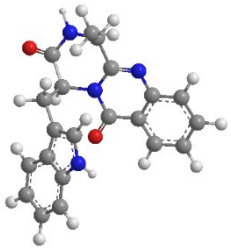
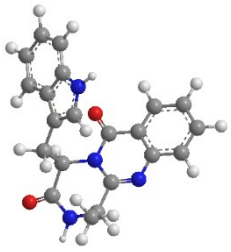
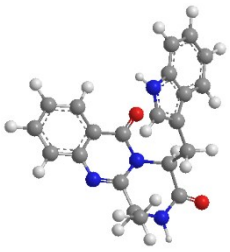
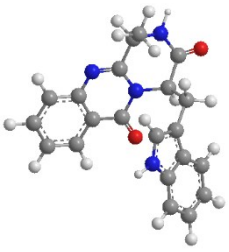
1. Supplementary Table 1

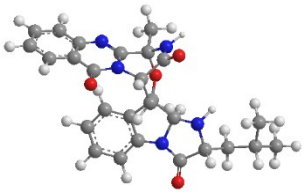
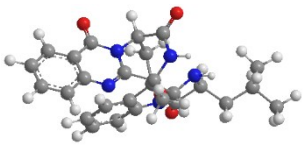
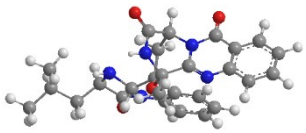
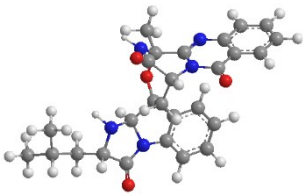
Supplementary Table 1. Summary of the sources and biological activity data of naturally-occurring fumiquinazolines **1**-**77** (including projections of three-dimensional structures[1]).

Comp.	Name	Sources	Biological Activity
	Fumiquinazolines		
1	fumiquinazoline A	*Aspergillus fumigatus*[2-4] *Aspergillus fumigatus* (H1-04)[5] *Aspergillus sydowii* (SCSIO 00305)[6] *Aspergillus fumigatus* (LN-4)[7]	Moderate cytotoxicity against P-388 cells (ED_{50} = 6.1 μg/mL)[3] Inhibitor of tsFT210 cell proliferation[5] Good activity against phytopathogenic fungi (MIC = 12.5-50 μg/mL); carbendazim and hymexazol as the positive control[7]
			 
2	3-hydroxyfumiquinazoline A	*Aspergillus fumigatus* (LN-4)[7]	Good activity against phytopathogenic fungi (MIC = 12.5-50 μg/mL); carbendazim and hymexazol as the positive control[7]
			 
3	fumiquinazoline B	*Aspergillus fumigatus*[2-4] *Aspergillus sydowii* (SCSIO 00305)[6]	Moderate cytotoxicity against P-388 cells (ED_{50} = 16.0 μg/mL)[3]
			 
4	fumiquinazoline C	*Aspergillus fumigatus*[2, 3, 8] *Aspergillus fumigatus* (H1-04)[5] *Aspergillus sydowii* (SCSIO 00305)[6]	Moderate cytotoxicity against P-388 cells (ED_{50} = 14.6 μg/mL)[3] Inhibitor of P388, HL60, A-549, and BEL-7402 and tsFT210 cell proliferation[5]
			 
5	2'-epi-fumiquinazoline C	*Penicillium lanosum* (MYC-1813)[9]	Not known
			 
6	fumiquinazoline D	*Aspergillus fumigatus*[3, 4, 10] *Aspergillus sydowii* (SCSIO 00305)[6]	Moderate cytotoxicity against P-388 cells (ED_{50} = 17.7 μg/mL)[3] Weak activity against phytopathogenic fungi (MIC = 25- >100 μg/mL);

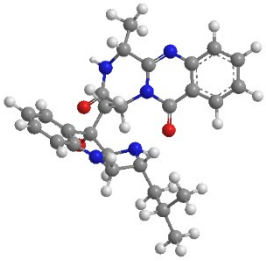
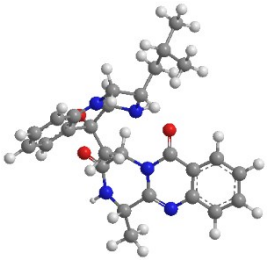
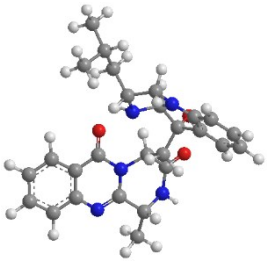
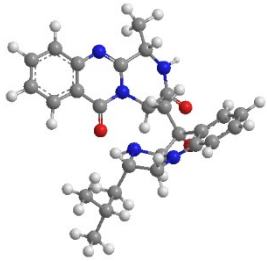
(cont. Supplementary Table 1)

		Aspergillus fumigatus (LN-4)[7]	carbendazim and hymexazol as the positive control[7]
			 
7	2'-epi-fumiquinazoline D	*Penicillium lanosum* (MYC-1813)[9]	Antiinsectan activity against the fall armyworm *Spodoptera frugiperda* (57% reduction in growth rate); Rotenone as a positive control showed 75% reduction at 0.01%[9]
			 
8	fumiquinazoline E	*Aspergillus fumigatus*[3]	Moderate cytotoxicity against P-388 cells (ED_{50} = 52.0 μg/mL)[3]
			 
9	fumiquinazoline F	*Penicillium corylophilum* Dierckx[11] *Aspergillus fumigatus*[3] *Aspergillus fumigatus* (H1-04)[5] *Aspergillus* sp. (F452)[12] *Neosartorya pseudofischeri*[13] *Penicillium thymicola*[14] *Aspergillus sydowii* (SCSIO 00305)[6] *Aspergillus fumigatus* (LN-4)[7]	Antimicrobial activity against *Micrococcus luteus* (MIC = 99 μg/mL) and *Staphylococcus aureus* (MIC = 137 μg/mL)[11] Moderate cytotoxicity against P-388 cells (ED_{50} = 13.5 μg/mL)[3] Inhibitor of tsFT210 cell proliferation[5] Weak inhibition against *Bacillus subtilis* (MIC = 50 μM); Weak inhibition against Na^+/K^+-ATPase (IC_{50} = 17 μM)[12] Good activity against phytopathogenic fungi (MIC = 12.5-50 μg/mL); carbendazim and hymexazol as the positive control[7]
			 
10	fumiquinazoline G	*Aspergillus fumigatus*[3] *Aspergillus fumigatus* (H1-04)[5] *Aspergillus sydowii* (SCSIO 00305)[6] *Aspergillus fumigatus* (LN-4)[7]	Moderate cytotoxicity against P-388 cells (ED_{50} = 13.8 μg/mL)[3] Inhibitor of tsFT210 cell proliferation[5] Good activity against phytopathogenic fungi (MIC = 12.5-50 μg/mL); carbendazim and hymexazol as the positive control[7]
			 
11	fumiquinazoline H	*Acremonium* sp.[15]	Weak activity toward *Candida albicans* at 0.5 mg/mL; amphotericin B as positive control, 1 μg/mL[15]

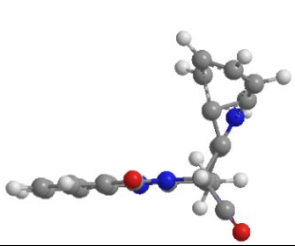
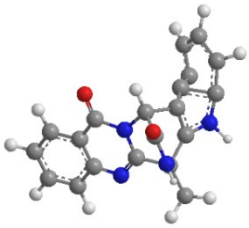
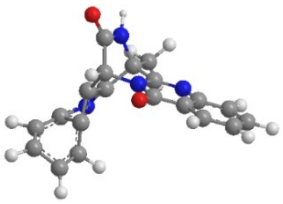
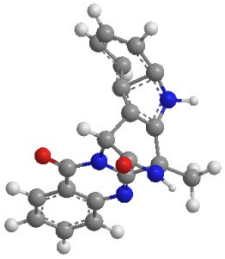
(cont. Supplementary Table 1)

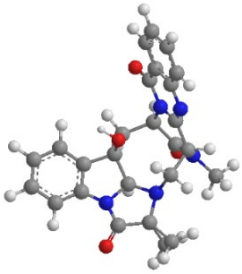
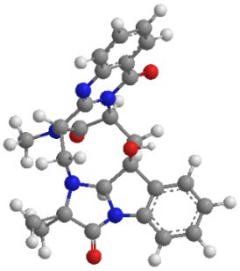
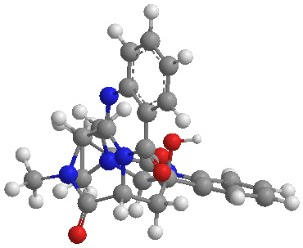
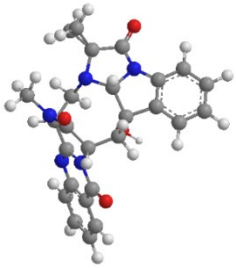
12	fumiquinazoline I	*Acremonium* sp.[15]	Weak activity toward *Candida albicans* at 0.5 mg/mL; amphotericin B as positive control, 1 μg/mL[15]

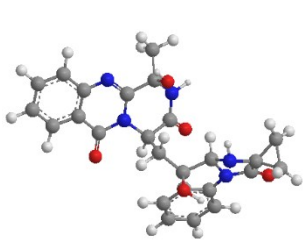
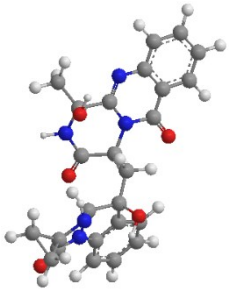
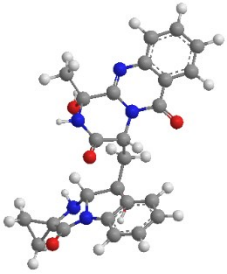
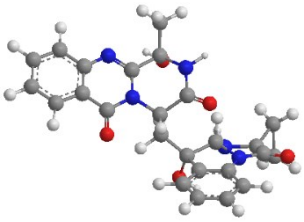
13	fumiquinazoline J	*Aspergillus fumigatus* (H1-04)[5] *Aspergillus* sp.[16]	Inhibitor of P388, HL60, A-549, and BEL-7402 and tsFT210 cell proliferation[5] Pronounced cytotoxic activity against L5178Y (IC_{50} = 3.6 μM); moderate to weak cytotoxicity against K562 (IC_{50} = 15 μM), A2780sens (IC_{50} = 18.5 μM) and A2780CisR (IC_{50} = 38.8 μM) human cancer cell lines[16]

14	fumiquinazoline K	*Aspergillus* sp.[16]	No cytotoxicity against L5178Y[16]

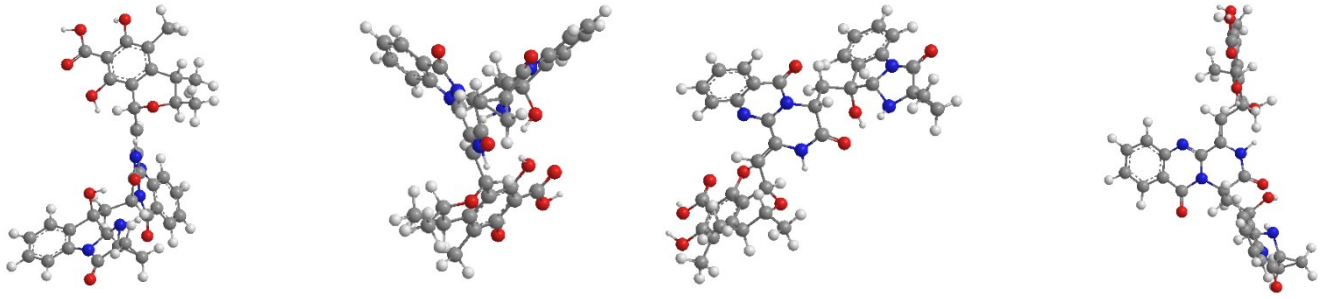





15	fumiquinazoline L	*Aspergillus* sp.[16] *Aspergillus sp.* (F452)[12]	No cytotoxicity against L5178Y[16] Weak inhibition against Na^+/K^+-ATPase (IC_{50} = 20 μM)[12]

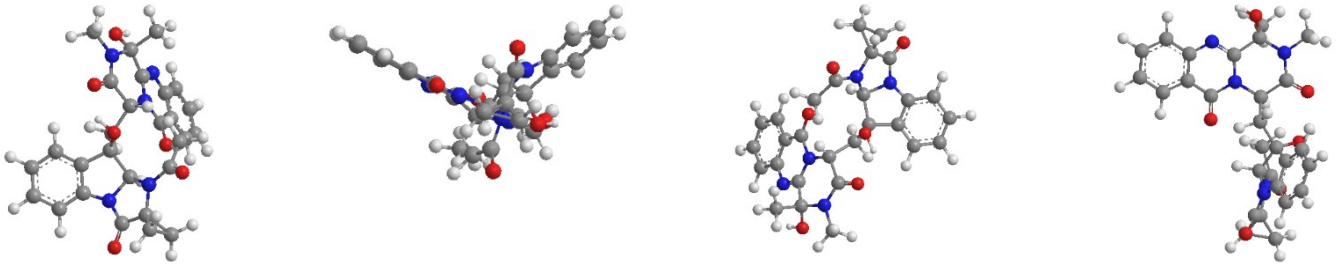





16	fumiquinazoline M	*Aspergillus* sp.[16]	No cytotoxicity against L5178Y[16]

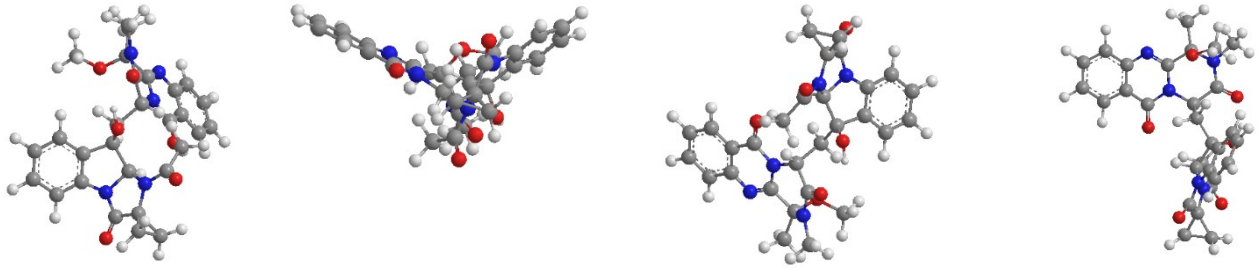
(cont. Supplementary Table 1)



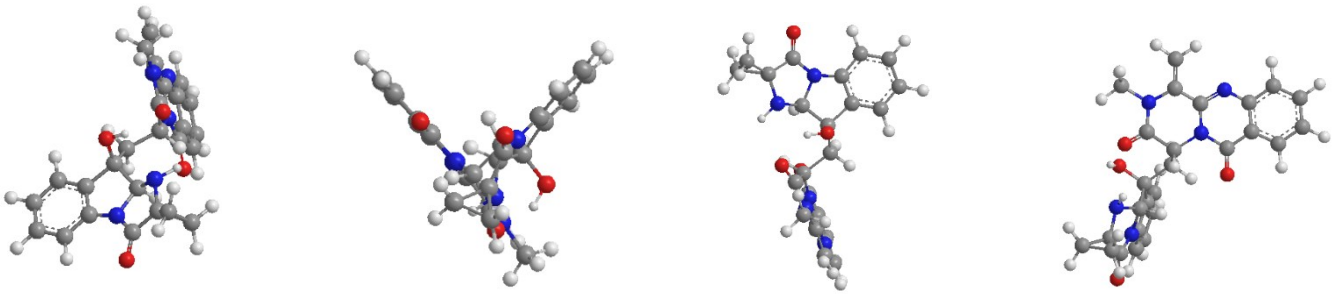
17	fumiquinazoline N	*Aspergillus* sp.[16]	No cytotoxicity against L5178Y[16]



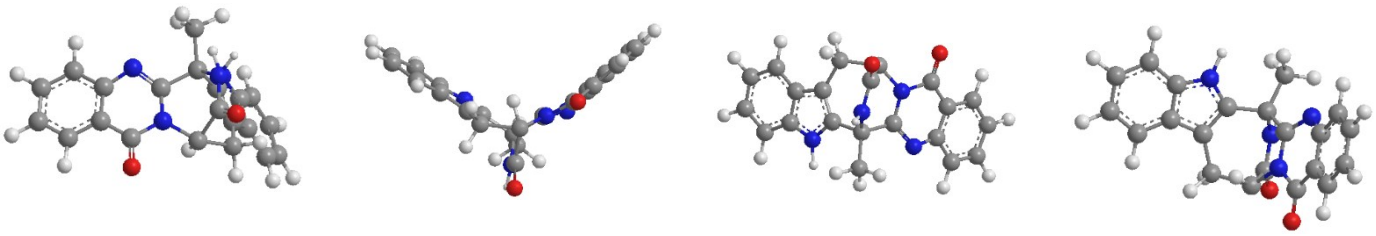
18	fumiquinazoline O	*Aspergillus* sp.[16]	No cytotoxicity against L5178Y[16]



19	fumiquinazoline P	*Aspergillus* sp.[16]	No cytotoxicity against L5178Y[16]

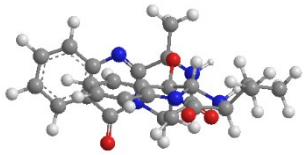
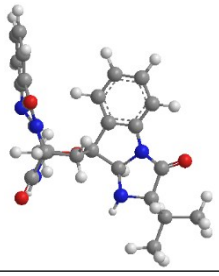
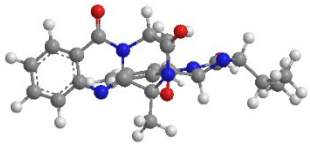
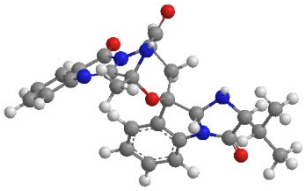


20	fumiquinazoline Q	*Aspergillus fumigatus* (KMM 4631)[17]	No activity against *Staphylococcus aureus*, *B. cereus*, *Escherichia coli*, *Pseudomonas aeruginosa* and *C. albicans*[17]

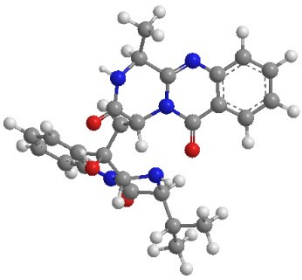
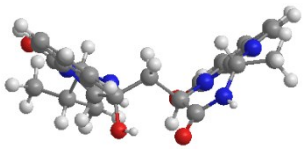
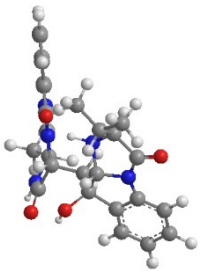
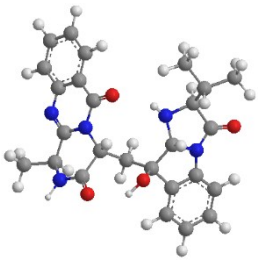


21	fumiquinazoline R	*Scopulariopsis* sp. (TA01-33)[18]	Weak antibacterial activity against *B. subtilis*, *S. albus*, and *Vibrio parahemolyticus* (MIC = 50 µM)[18]

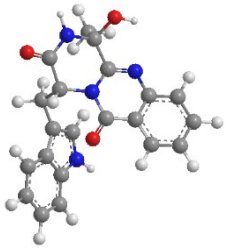
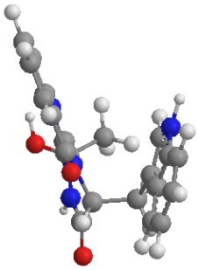
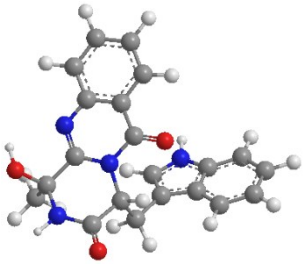
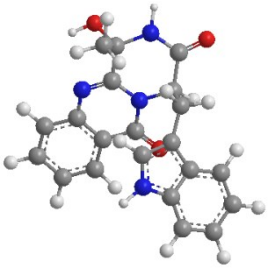
(cont. Supplementary Table 1)

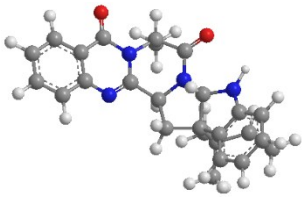
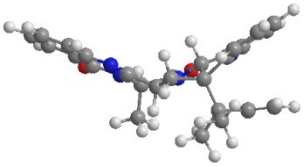
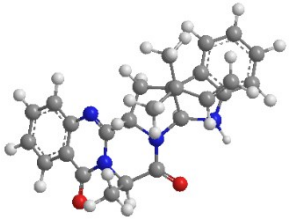
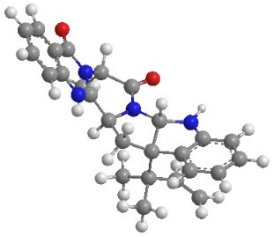
22	fumiquinazoline S	*Aspergillus sp.* (F452)[12]	Weak inhibition against Na^+/K^+-ATPase (IC_{50} = 34 µM)[12]

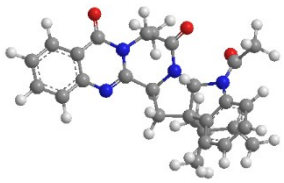
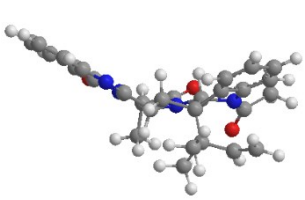
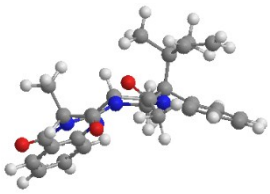
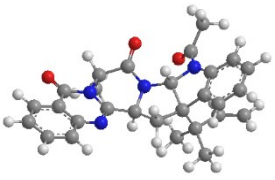
23	fumiquinazoline T	*Penicillium thymicola* (IBT 5891)[19]	Not known

	Ardeemins		
24	(-)-ardeemin	*Aspergillus fischeri* AB 1826M-35[20, 21]	No MDR reversal activity in KBV-1 tumour cells[20]

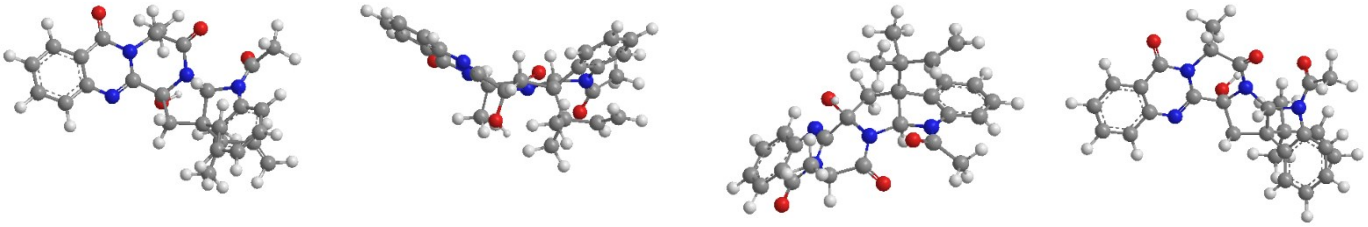





25	(-)-5-*N*-acetylardeemin	*Aspergillus fischeri* AB 1826M-35[20, 21] *Aspergillus terreus* IFB-E030 [22, 23] *Aspergillus fumigatus* SPS-02[24]	MDR reversal activity against tumour cell lines: 10-fold more effective in chemosensitizing KBV-1 cells than verapamil[20] Weak cytotoxicity against KB and HSC-T6 cell lines[23]

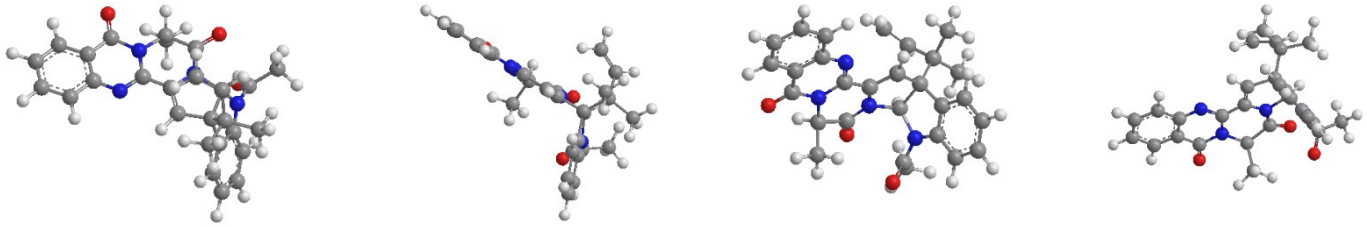





26	(-)-15b-*β*-hydroxy-5-*N*-acetylardeemin	*Aspergillus fischeri* AB 1826M-35[20, 21] *Aspergillus terreus* IFB-E030[22, 23] *Aspergillus fumigatus* SPS-02[24]	MDR reversal activity against tumour cell lines[20] Weak cytotoxicity against KB and HSC-T6 cell lines[23] MDR reversal activity against the tumour cell line SK-OV-S/DDP (10.8-fold)[24]

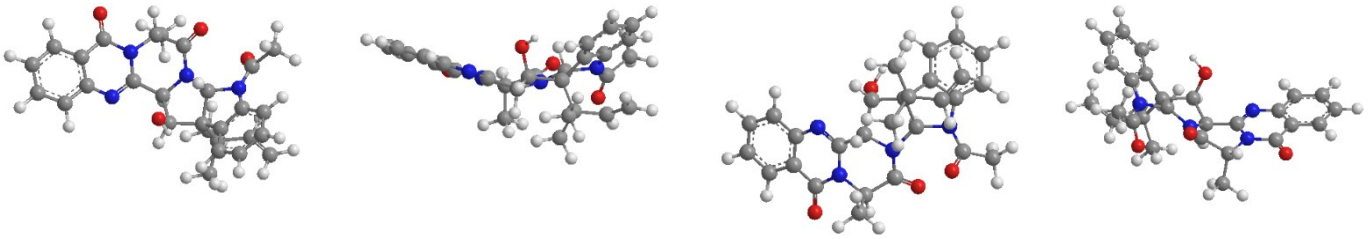
(cont. Supplementary Table 1)



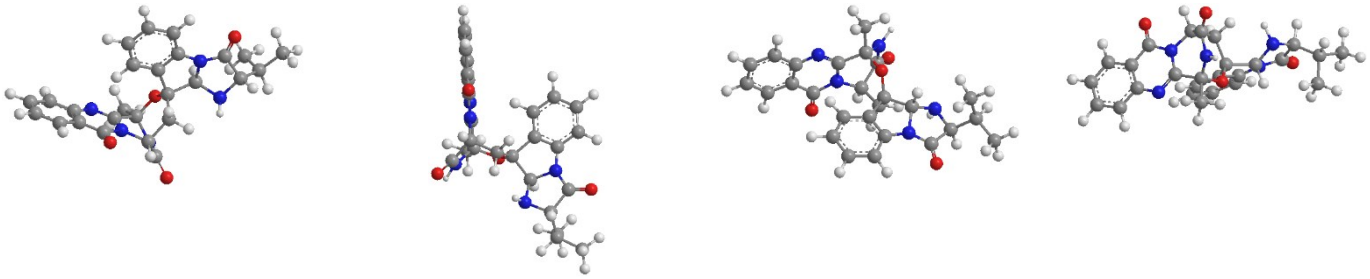
27	(-)-5-*N*-acetyl-15b-didehydroardeemin	*Aspergillus terreus* IFB-E030[22] *Aspergillus fumigatus* SPS-02[24]	MDR reversal activity against the tumour cell line SK-OV-S/DDP (8.7-fold)[24]



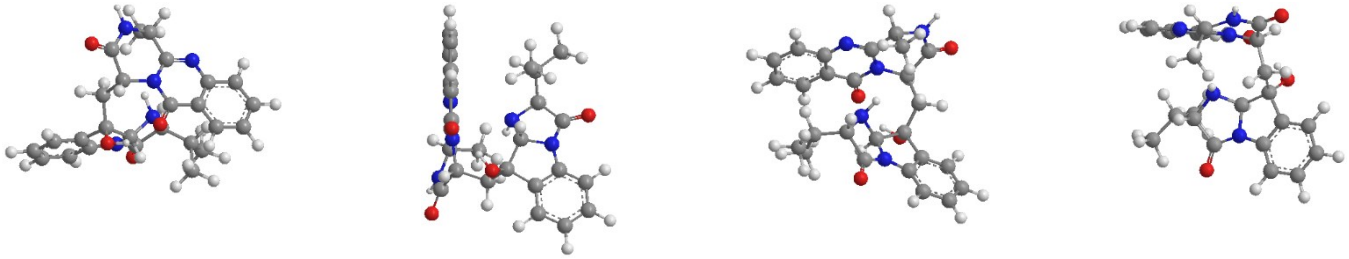
28	(-)-5-*N*-acetyl-16α-hydroxyardeemin	*Aspergillus terreus* IFB-E030[23] *Aspergillus fumigatus* SPS-02[24]	MDR reversal activity against the tumour cell line K562/DOX (5.2-fold) and A549/DDP (8.2-fold)[24] Inhibitory effect against acetylcholinesterase (IC_{50} = 58.3 μM); tacrine as positive control (IC_{50} = 37.9 μM); Weak cytotoxicity against KB and HSC-T6 cell lines [23]



	Aniquinazolines		
29	aniquinazoline A	*Aspergillus nidulans* MA-143[25]	Potent toxicity against brine shrimp (LD_{50} = 1.27 μM)[25]

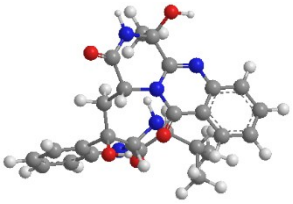
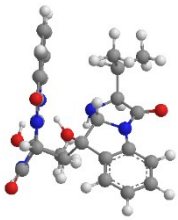
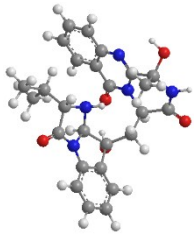
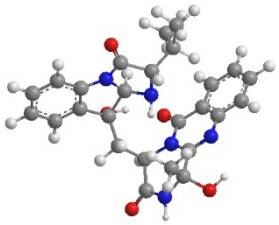


30	aniquinazoline B	*Aspergillus nidulans* MA-143[25]	Potent toxicity against brine shrimp (LD_{50} = 1.27 μM)[25]

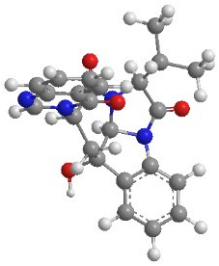
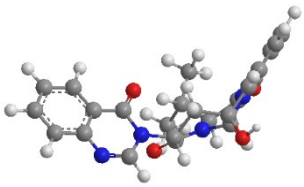
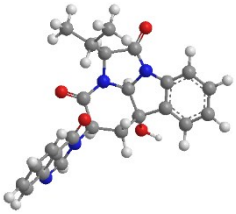
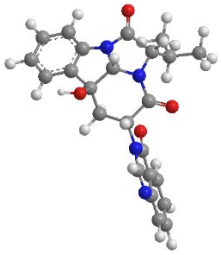


31	aniquinazoline C	*Aspergillus nidulans* MA-143[25]	Potent toxicity against brine shrimp (LD_{50} = 1.27 μM)[25]

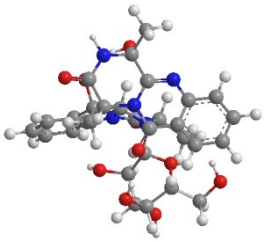
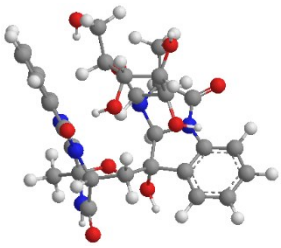
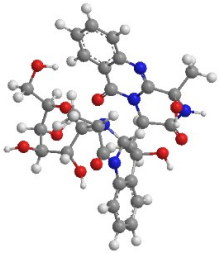
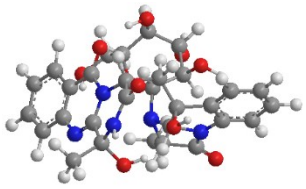
(cont. Supplementary Table 1)

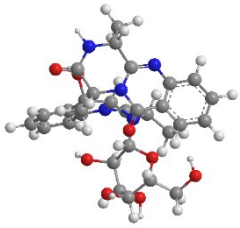
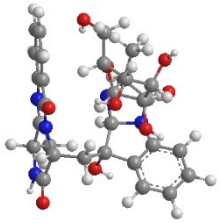
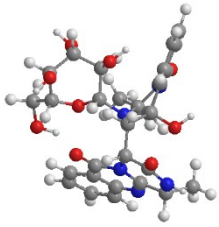
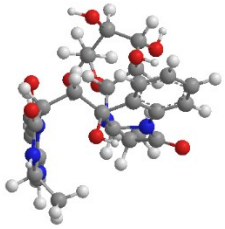
32	aniquinazoline D	*Aspergillus nidulans* MA-143[25]	Potent toxicity against brine shrimp (LD_{50} = 1.27 µM)[25]

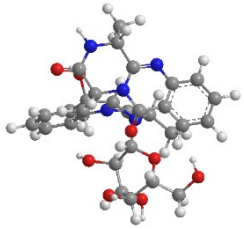
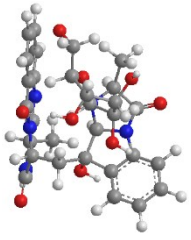
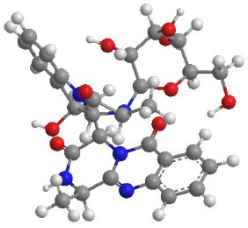
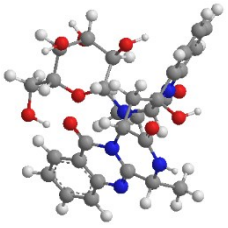
	Fumigatosides		
33	fumigatoside B	*Aspergillus fumigatus*[26]	Neither antibacterial nor cytotoxic effects when tested against a panel of six different bacterial strains and ten cell lines of solid human tumours[26]

34	fumigatoside C	*Aspergillus fumigatus*[26]	Neither antibacterial nor cytotoxic effects when tested against a panel of six different bacterial strains and ten cell lines of solid human tumours[26]

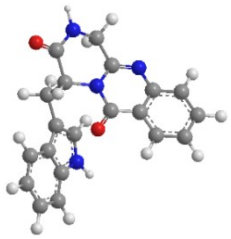
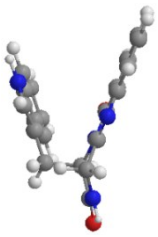
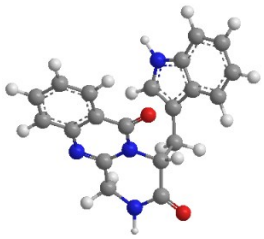
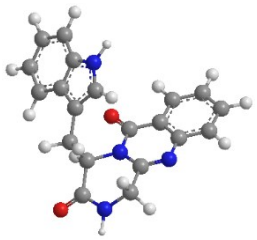
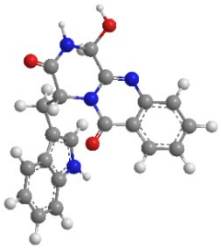
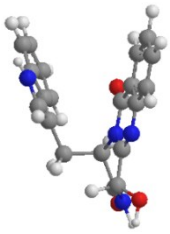
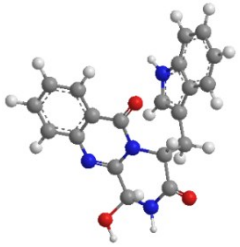
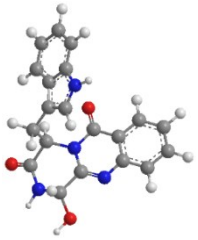
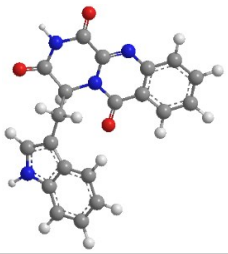
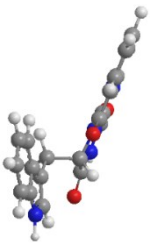
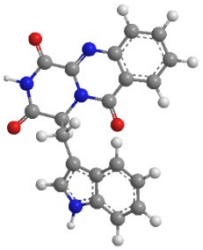
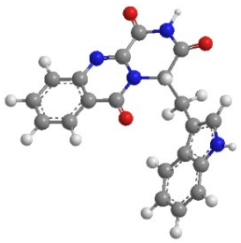
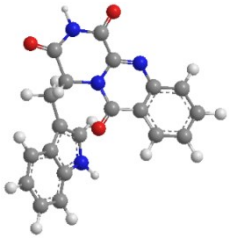
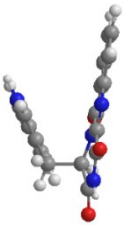
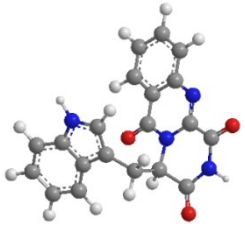
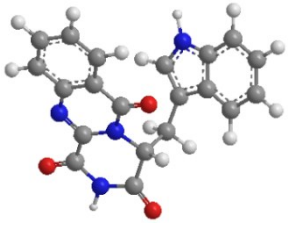
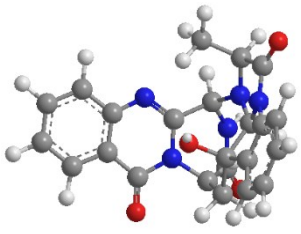
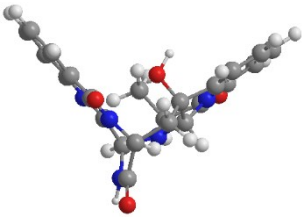
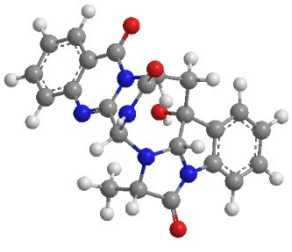
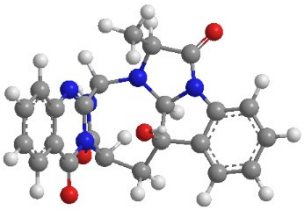





35	fumigatoside D	*Aspergillus fumigatus*[26]	Neither antibacterial nor cytotoxic effects when tested against a panel of six different bacterial strains and ten cell lines of solid human tumours[26]

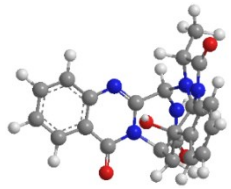
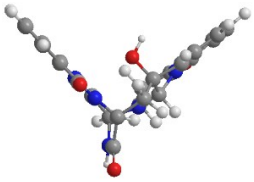
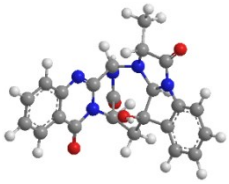
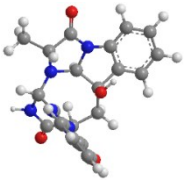





	Glyantrypine and glyantrypine derivatives

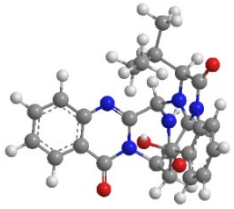
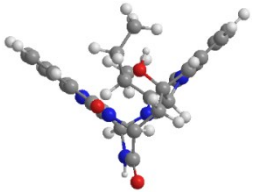
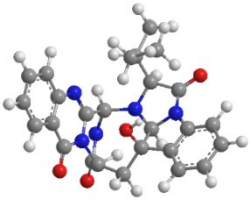
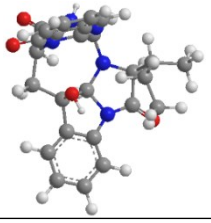
(cont. Supplementary Table 1)

36	glyantrypine	*Aspergillus clavatus*[27] *Penicillium adametzioides* (AS-53)[28] *Penicillium expansum* (Y32)[29] *Cladosporium* sp. (PJX-41)[30]	Moderate inhibitory activity against aqua-pathogenic bacterial *Vibrio harveyi* (MIC = 32 µg/mL; positive control, chloramphenicol, MIC = 8 µg/mL)[28] No vasculogenetic effect in a live zebrafish model[29] Weakly active against Influenza A virus (H1N1) (IC_{50} = 100-150 µM; ribavirin as positive control, IC_{50} = 87 µM)[30]
			 
37	3-hydroxyglyantrypine	*Cladosporium* sp. (PJX-41)[30]	Weakly active against Influenza A virus (H1N1) (IC_{50} = 100-150 µM; ribavirin as positive control, IC_{50} = 87 µM)[30]
			 
38	(-)-oxoglyantrypine	*Cladosporium* sp. (PJX-41)[30]	Notable anti-H1N1 activity (IC_{50} = 85 µM); ribavirin as positive control, IC_{50} = 87 µM)[30]
			 
39	(+)-oxoglyantrypine	*Cladosporium* sp. (PJX-41)[30]	Weakly active against Influenza A virus (H1N1) (IC_{50} = 100-150 µM); ribavirin as positive control, IC_{50} = 87 µM[30]
			 
	Cottoquinazolines		
40	cottoquinazoline A	*Aspergillus versicolor* (MST-MF495)[31] *Penicillium expansum* Y32[29]	Potent vasculogenetic activity at 20 µg/mL, 50 µg/mL and 100 µg/mL[29]
			 
41	cottoquinazoline B	*Aspergillus versicolor* LCJ-5-4[32] *Aspergillus versicolor* LZD-14-1[33]	No antimicrobial activity (at 100 µg/mL); no cytotoxicity against Hela and P388 cell lines (IC_{50} > 50 µM)[32]

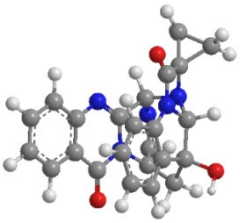
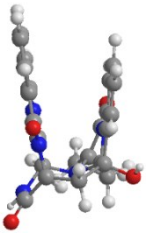
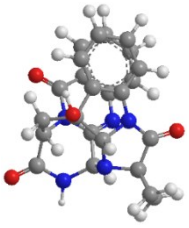
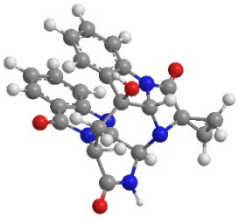
(cont. Supplementary Table 1)

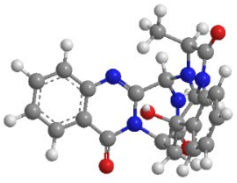
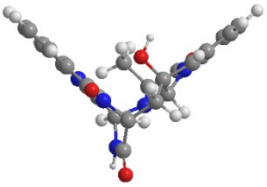
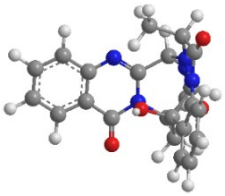
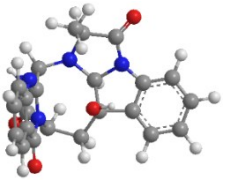
42	cottoquinazoline C	*Aspergillus versicolor* LCJ-5-4[32] *Aspergillus versicolor* LZD-14-1[33]	No antimicrobial activity (at 100 µg/mL); no cytotoxicity against Hela and P388 cell lines (IC_{50} > 50 µM)[32]

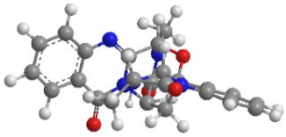
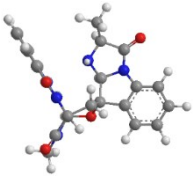
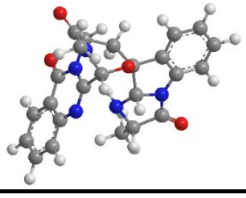
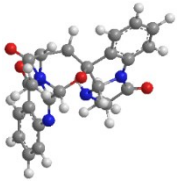
43	cottoquinazoline D	*Aspergillus versicolor* LCJ-5-4 [32] *Aspergillus versicolor* LZD-14-1[33]	Moderate antifungal activity against *Candida albicans* (MIC = 22.6 µM); no cytotoxicity against Hela and P388 cell lines (IC_{50} > 50 µM)[32]

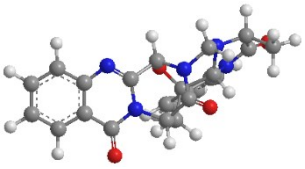
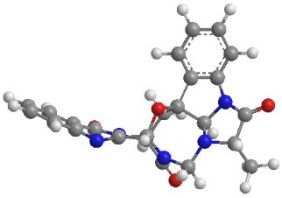
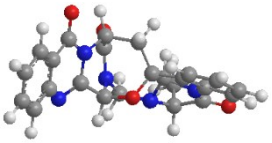
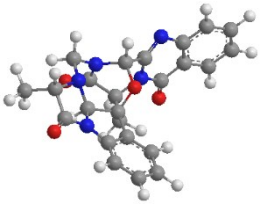
44	cottoquinazoline E	*Neosartorya fischeri* NRRL 181[34]	Not known

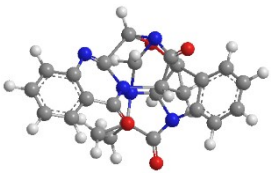
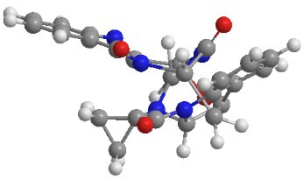
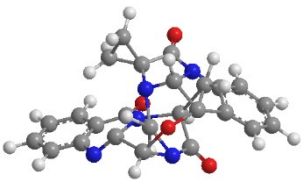
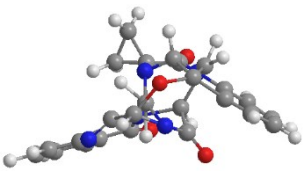
45	cottoquinazoline F	*Neosartorya fischeri* NRRL 181[34]	Not known

	Versiquinazolines		
46	versiquinazoline A	*Aspergillus versicolor* LZD-14-1[33]	Weak inhibition against lung adenocarcinoma and human ovarian cancer cell lines (IC_{50} > 50 µM) Thioredoxin reductase inhibitory activity (IC_{50} = 20 µM); curcumin as positive control[33]

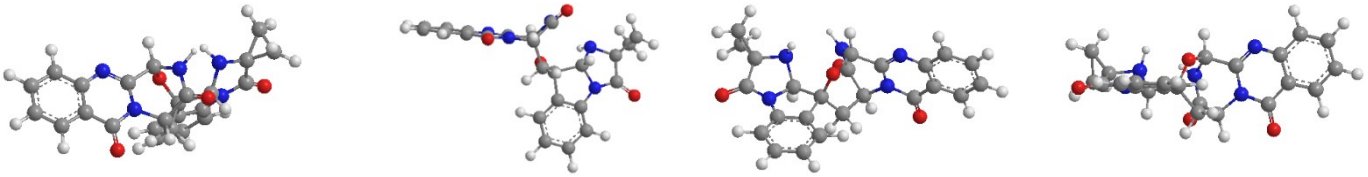





47	versiquinazoline B	*Aspergillus versicolor* LZD-14-1[33]	Weak inhibition against lung adenocarcinoma and human ovarian cancer cell lines (IC_{50} > 50 µM); Thioredoxin reductase inhibitory activity (IC_{50} = 12 µM); curcumin as positive control[33]

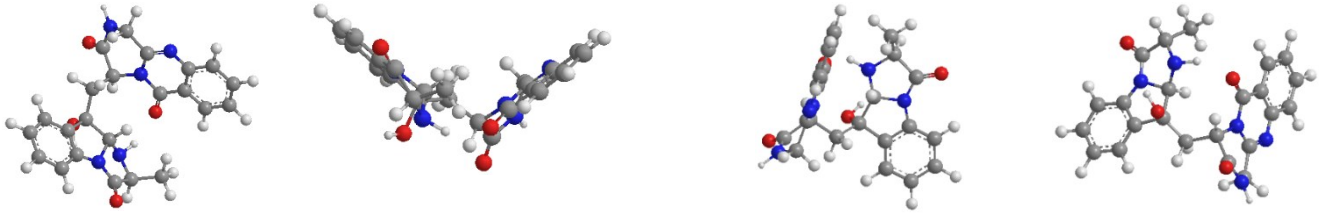





(cont. Supplementary Table 1)

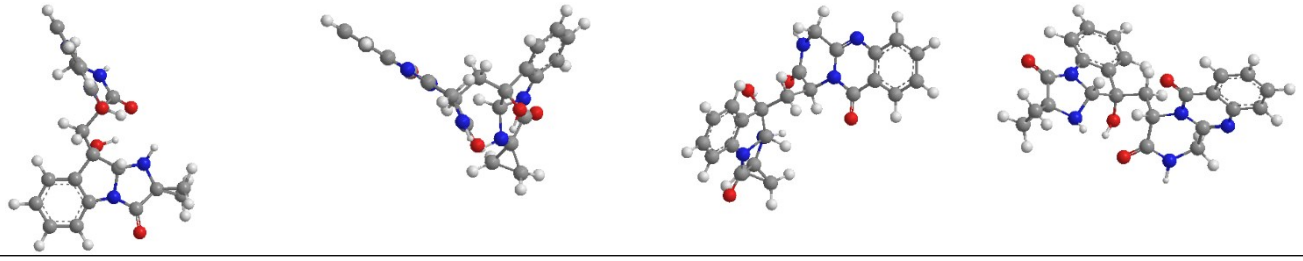
48	versiquinazoline C	*Aspergillus versicolor* LZD-14-1[33]	Weak inhibition against lung adenocarcinoma and human ovarian cancer cell lines (IC_{50} > 50 µM); curcumin as positive control[33]



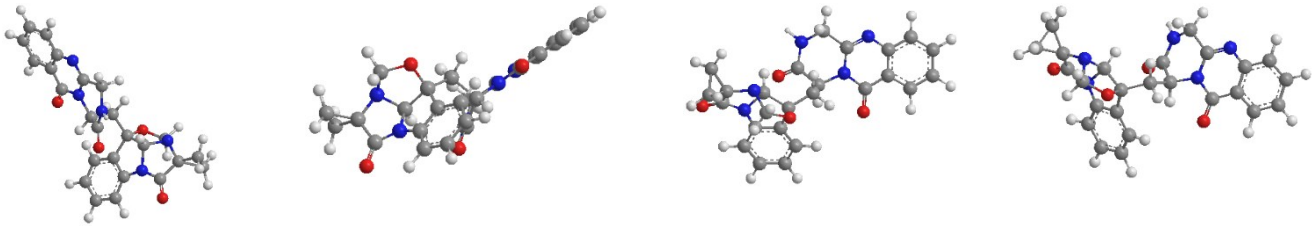
49	versiquinazoline D	*Aspergillus versicolor* LZD-14-1[33]	Weak inhibition against lung adenocarcinoma and human ovarian cancer cell lines (IC_{50} > 50 µM); curcumin as positive control[33]



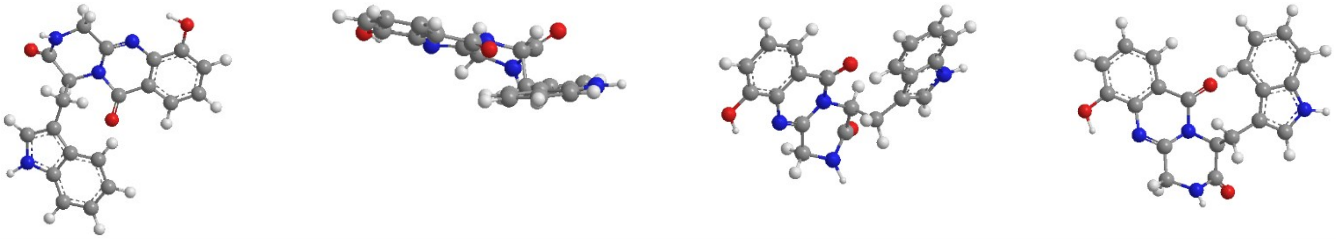
50	versiquinazoline E	*Aspergillus versicolor* LZD-14-1[33]	Weak inhibition against lung adenocarcinoma and human ovarian cancer cell lines (IC_{50} > 50 µM); curcumin as positive control[33]



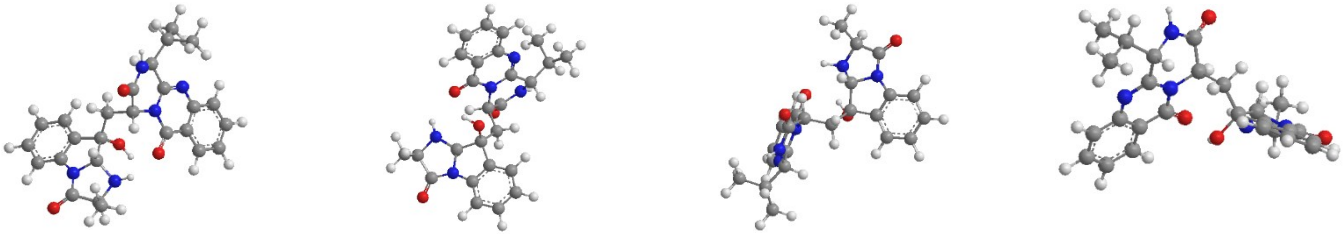
51	versiquinazoline F	*Aspergillus versicolor* LZD-14-1[33]	Weak inhibition against lung adenocarcinoma and human ovarian cancer cell lines (IC_{50} > 50 µM); curcumin as positive control[33]



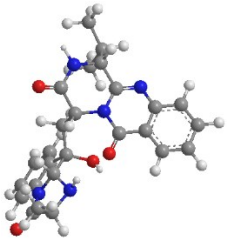
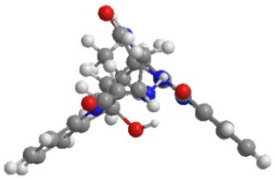
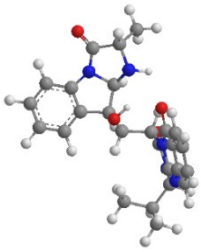
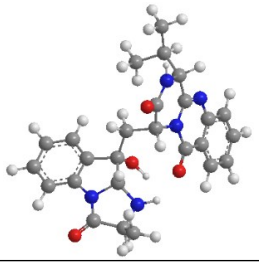
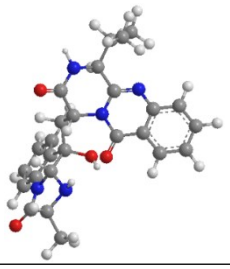
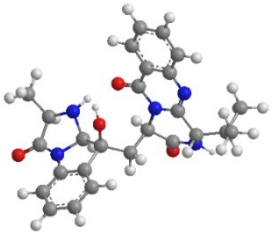
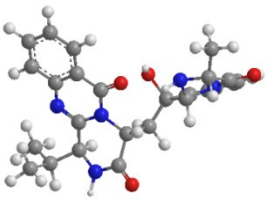
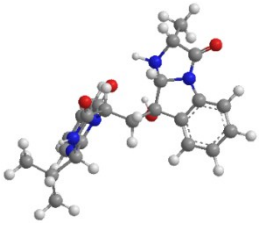
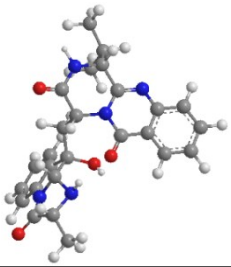
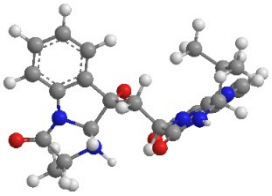
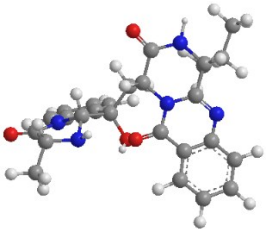
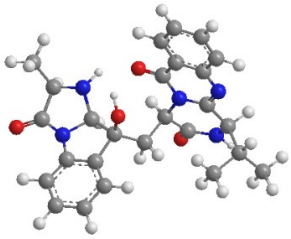
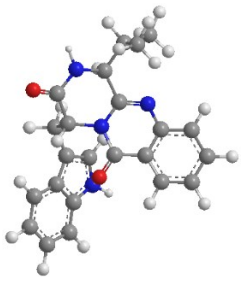
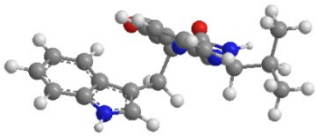
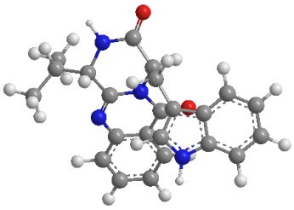
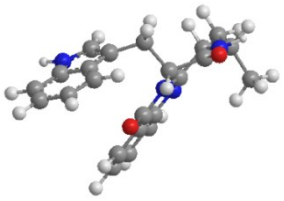
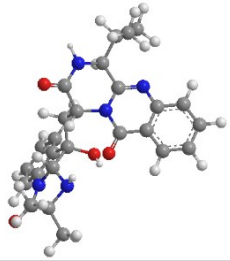
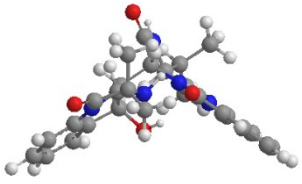
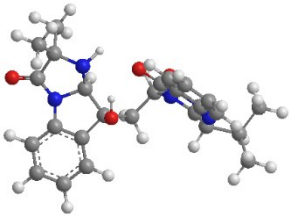
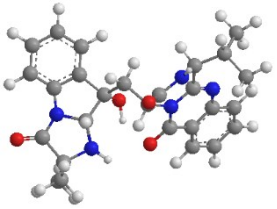
52	versiquinazoline I	*Aspergillus versicolor* LZD-14-1[33]	Weak inhibition against lung adenocarcinoma and human ovarian cancer cell lines (IC_{50} > 50 µM); curcumin as positive control[33]



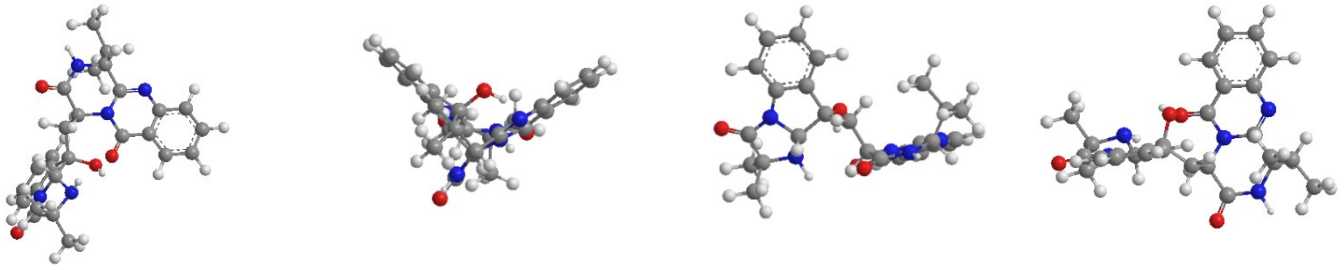
	Fiscalins		
53	fiscalin A	*Neosartorya fischeri*[35]; *Xylaria humosa*[36] *Neosartorya siamensis* (*KUFC 6349*)[37-39] *Neosartorya siamensis* (*KUFA 0017*)[37-40]	Substance P inhibitor to NK-1 receptor (K_i = 57 µM)[35]



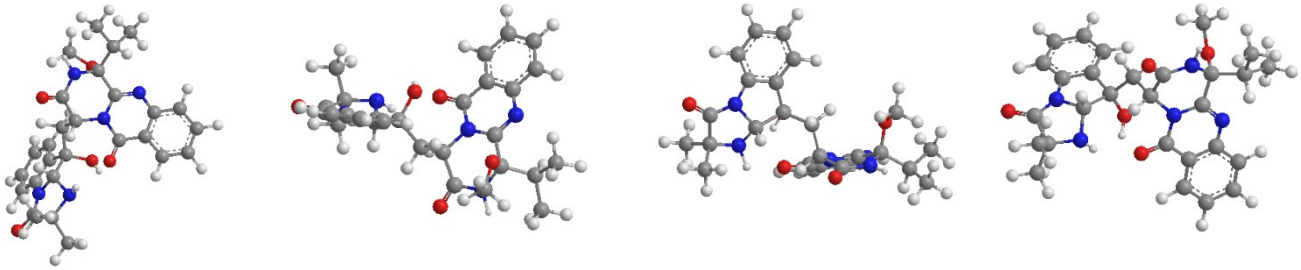
(cont. Supplementary Table 1)

54	*epi*-fiscalin A	*Neosartorya siamensis* (*KUFC 6349*) [73, 75, 76] *Neosartorya siamensis* (*KUFA 0017*)[37-40] *Xylaria humosa*[36]	Cytotoxicity against MCF-7 cells (IC_{50} = 24.4 µg/mL)[36]
			 
55	neofiscalin A	*Neosartorya siamensis* (*KUFC 6349*)[37-39] *Neosartorya siamensis* (*KUFA 0017*)[37-40]	Potent antibacterial activity against *Staphylococcus aureus* (MRSA) and *Enterococcus faecalis* (VRE) (MIC = 8 µg/mL) [38]
			 
56	*epi*-neofiscalin A	*Neosartorya siamensis* (*KUFC 6349*)[37-39] *Neosartorya siamensis* (*KUFA 0017*)[37-40]	Not known
			 
57	fiscalin B	*Neosartorya fischeri*;[35] *Corynasus setosus*[41] *Dichotomomyces cejpii* (BRF082)[42]	Substance P inhibitor to NK-1 receptor (K_i = 174 µM)[35]
			 
58	fiscalin C	*Neosartorya fischeri*[35] *Neosartorya udagawae* (HDN13-313)[43] *Xylaria cf. cubensis* (PK108)[44] *Neosartorya siamensis* (KUFC 6349)[39, 37, 38]	Substance P inhibitor to NK-1 receptor (K_i = 68 µM)[35] Cytotoxicity (IC_{50} = 21 µg/mL)[44] Potential adjuvant in antimicrobial combined therapeutics[38]
			 
59	*epi*-fiscalin C	*Xylaria cf. cubensis* (PK108)[44] ; *Xylaria humosa*[36] *Neosartorya siamensis* (KUFC 6349)[39, 37, 38] *Neosartorya siamensis* (*KUFA 0017*)[39, 37, 38]	Cytotoxicity against MCF-7 (IC_{50} = 21 µg/mL)[36]

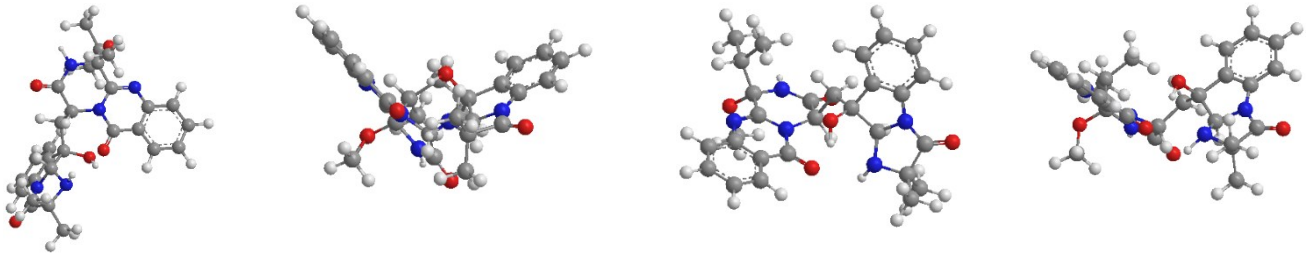
(cont. Supplementary Table 1)



60	fiscalin E	*Neosartorya udagawae* (HDN13-313)[43]	No cytotoxicity against HL-60 cancer cell line (IC_{50} > 50 µM)[43] No antiviral activity against H1N1[43]

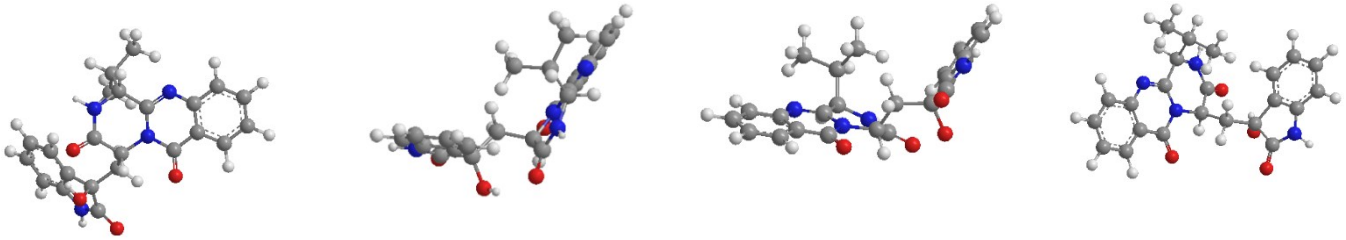


61	fiscalin F	*Neosartorya udagawae* (HDN13-313)[43]	No cytotoxicity against HL-60 cancer cell line (IC_{50} > 50 µM); no antiviral activity against H1N1[43]

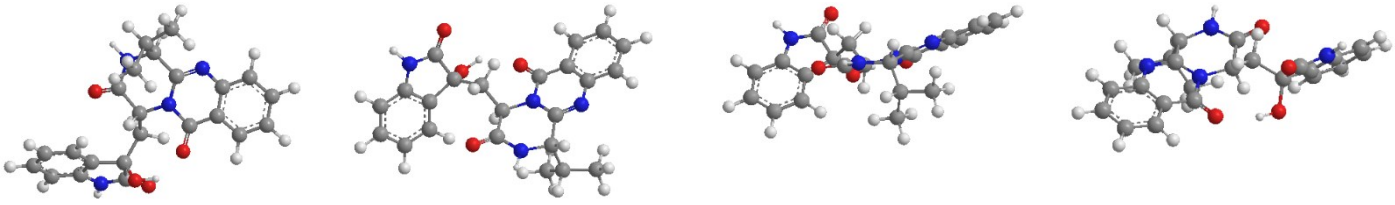


Cladoquinazolines and quinadolines

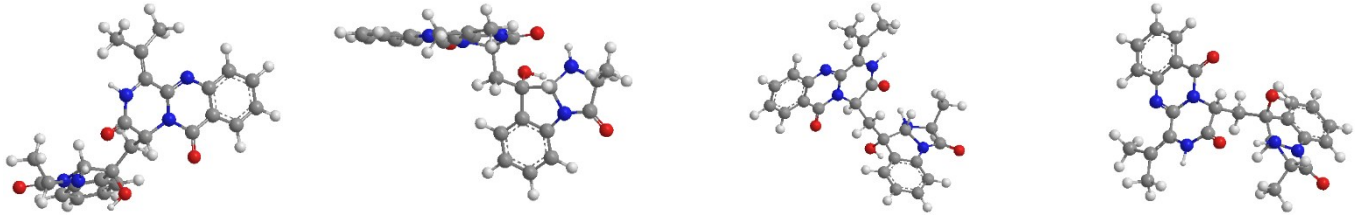
62	cladoquinazoline	*Cladosporium* sp. (PJX-41)[30]	Weakly active against Influenza A virus (H1N1) (IC_{50} = 100-150 µM)[30]



63	*epi*-cladoquinazoline	*Cladosporium* sp. (PJX-41)[30]	Weakly active against Influenza A virus (H1N1) (IC_{50} = 100-150 µM)[30]

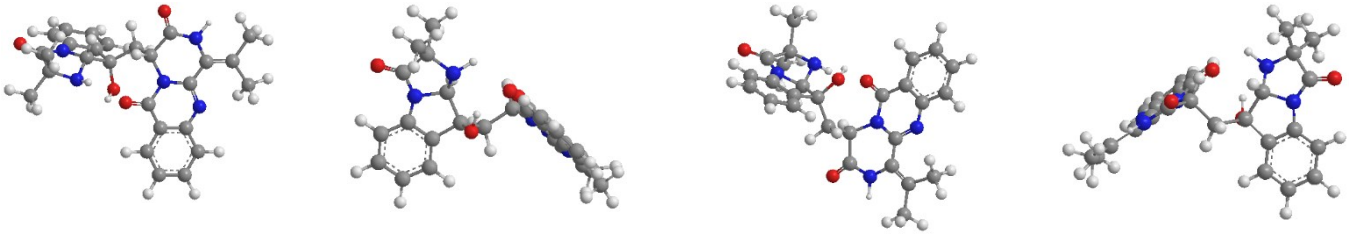


64	norquinadoline A	*Cladosporium* sp. (PJX-41)[30]	Notable anti-H1N1 activity (IC_{50} = 82 µM)[30]

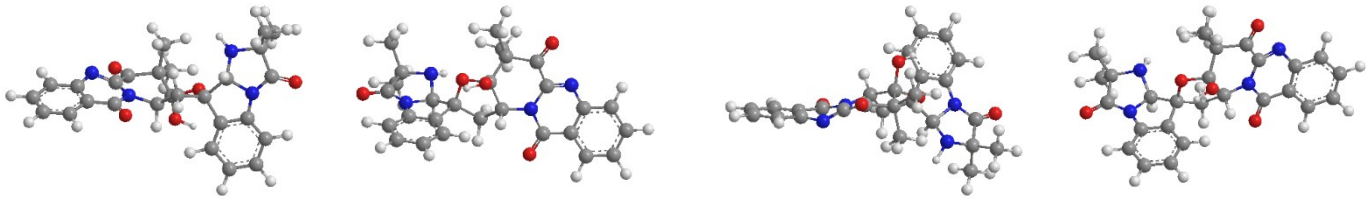


(cont. Supplementary Table 1)

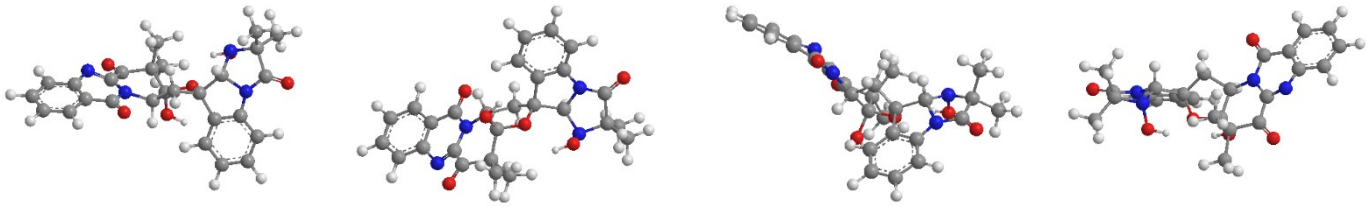
65	quinadoline A	*Cladosporium* sp. (PJX-41)[30]	Weakly active against Influenza A virus (H1N1) (IC_{50} = 100-150 μM)[30]



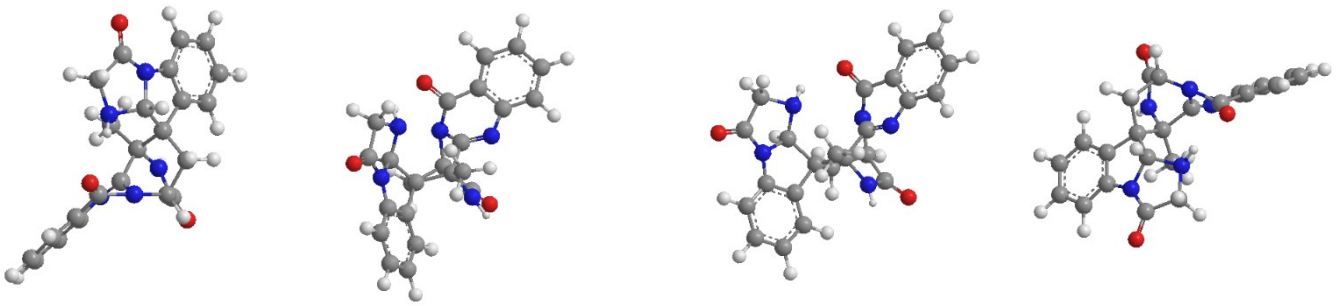
	Neosartoryadins		
66	neosartoryadin A	*Neosartorya udagawae* HDN13-313[43]	Anti-influenza activity against virus A (H1N1) (IC_{50} = 66 μM)[43]



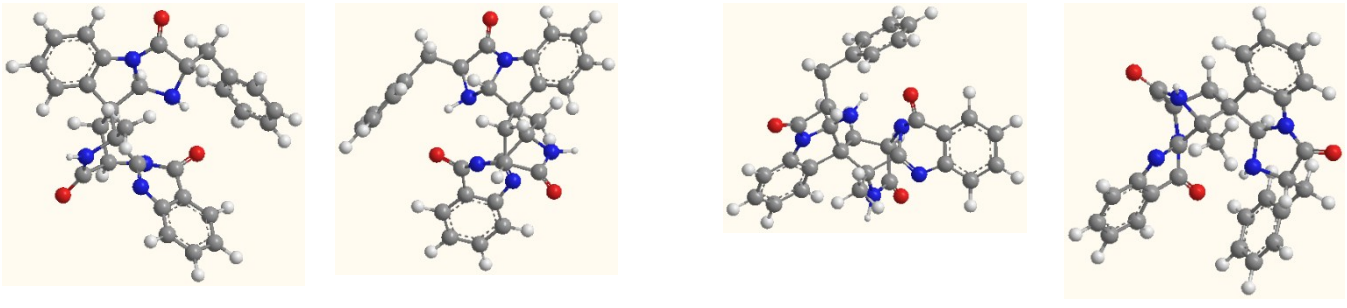
67	neosartoryadin B	*Neosartorya udagawae* HDN13-313[43]	Anti-influenza activity against virus A (H1N1) (IC_{50} = 66 μM)[43]



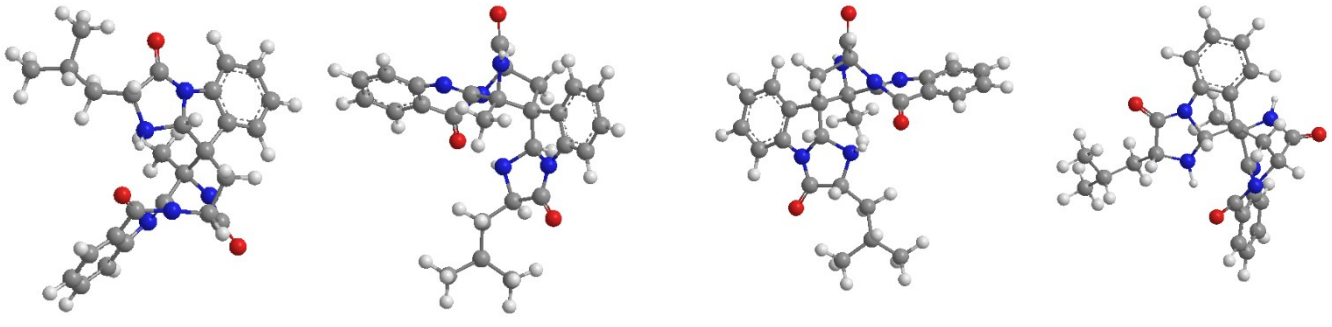
	Spiroquinazolines		
68	(-)-spiroquinazoline	*Aspergillus flavipes* (SC 230)[45]	Inhibits binding of substance-P to human astrocytoma cells (MIC = 95 μM)[45]



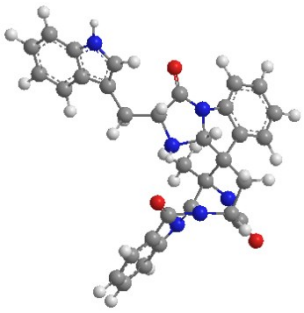
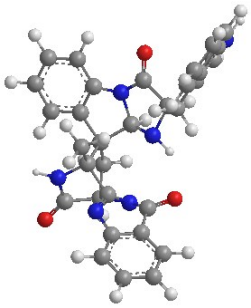
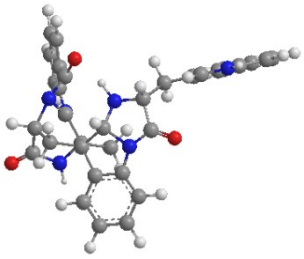
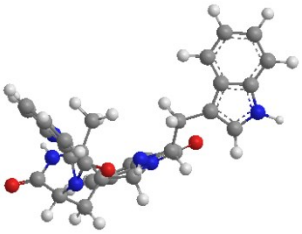
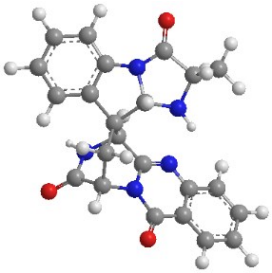
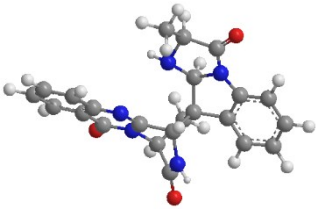
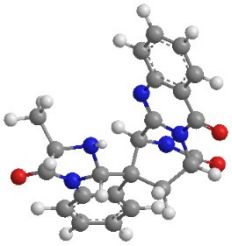
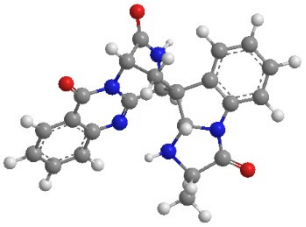
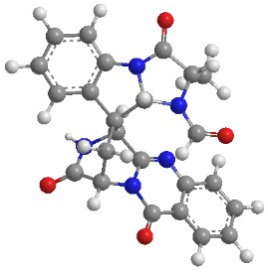
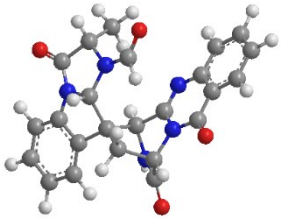
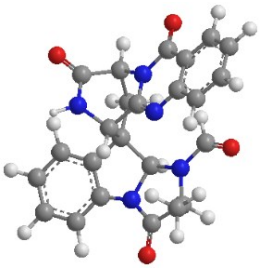
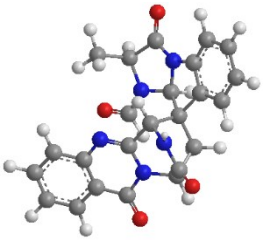
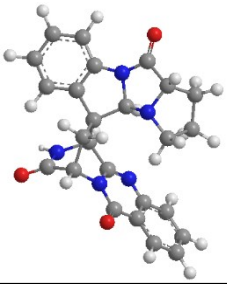
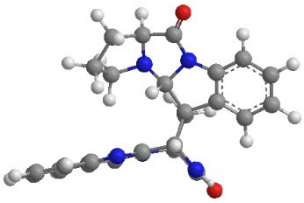
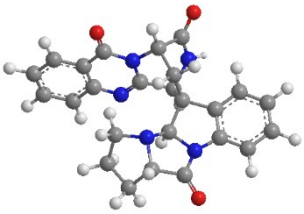
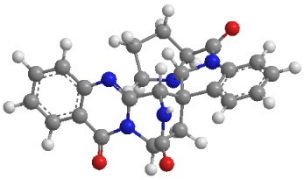
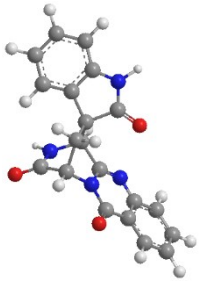
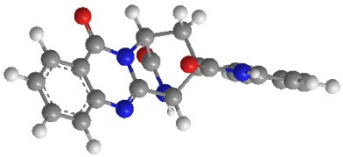
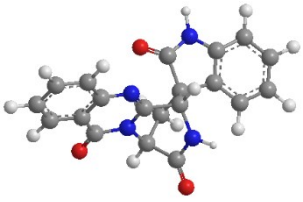
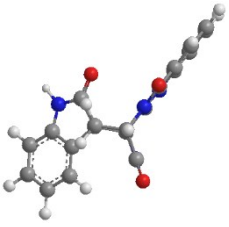
69	(-)-alantryphenone	*Eupenicillium* spp.[46]	Not known



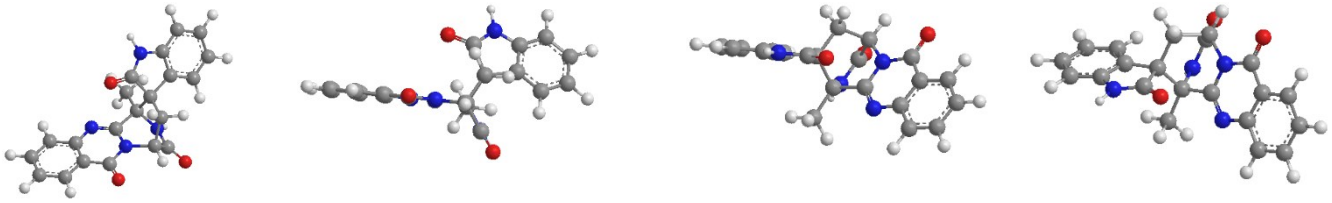
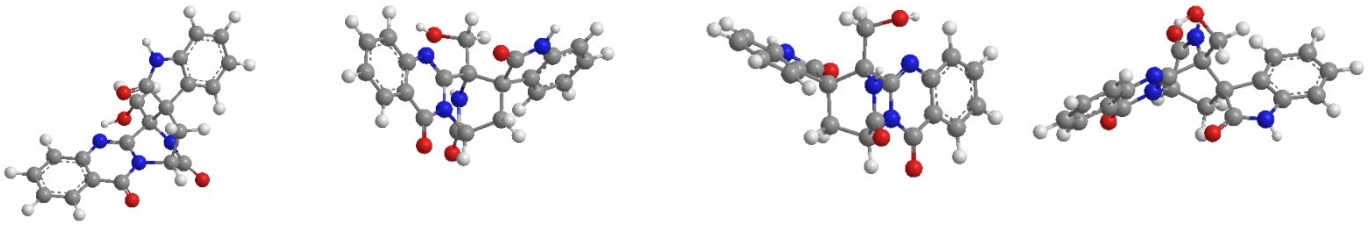
70	(-)-alantryleunone	*Eupenicillium* spp.[46]	Not known



(cont. Supplementary Table 1)

71	(-)-alanditrypinone	*Eupenicillium* spp.[46]	Not known
			 
72	(+)-lapatin A	*Penicillium lapatayae* (IBT 10870)[47] *Penicillium adametzioides* (AS-53)[28]	No activity against *Aeromonas hydrophilia*, *Vibrio alginolyticus*, *V. anguillarum*, *V. harveyi,* and *Edwardsiella tarda*[28]
	 	 	
73	(+)-N-formyllapatin A	*Penicillium adametzioides* (AS-53)[28]	No activity against *A. hydrophilia*, *V. alginolyticus*, *V. anguillarum*, *V. harveyi*, and *E. Tarda*[28]
	 	 	
74	(-)-quinadoline B	*Aspergillus* sp. (FKI-1746)[48]	Moderate inhibition of lipid droplet synthesis in mouse macrophages (50-200 µM); no cytotoxic effects on macrophages; inhibition of cholesteryl ester (IC_{50} = 125 µM) and triacylglycerol synthesis (IC_{50} = 243 µM)[48]
	 	 	
75	(-)-lapatin B	*Penicillium lapatayae* (IBT 10870)[47] *Penicillium adametzioides* (AS-53)[28]	Moderate inhibitory activity against aqua-pathogenic bacterial *V. harveyi* (MIC = 16 µg/mL); chloramphenicol as positive control, MIC = 8 mg/mL[28]
	 	 	

(cont. Supplementary Table 1)

76	(+)-alantrypinone	*Penicillium thymicola* (IBT 5891)[14] *Aspergillus terreus*[49]	Not known
			
77	(-)-serantrypinone	*Penicillium thymicola* (IBT 5891)[50] *Aspergillus terreus*[49]	Not known
			

IC_{50} - half maximal inhibitory concentration, MIC - minimum inhibitory concentration, MDR – multidrug resistance, LD_{50} - half maximal lethal dose, K_i – inhibitory constant.

2. References

1. A two-dimensional structure was depicted by ChemDraw (Cambridge Software, MA, USA) and was converted to a three-dimensional structure by Chem 3D (Cambridge Software) followed by a structural optimization (lowest energy) using MM2 (molecular mechanics 2). The following color scheme is used to interpret the images generated from the model: red (oxygen), blue (nitrogen), dark grey (carbon) light grey (hydrogen), and dashed lines (H-bonds).
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