

Metal Complexes as a Promising Source for New Antibiotics

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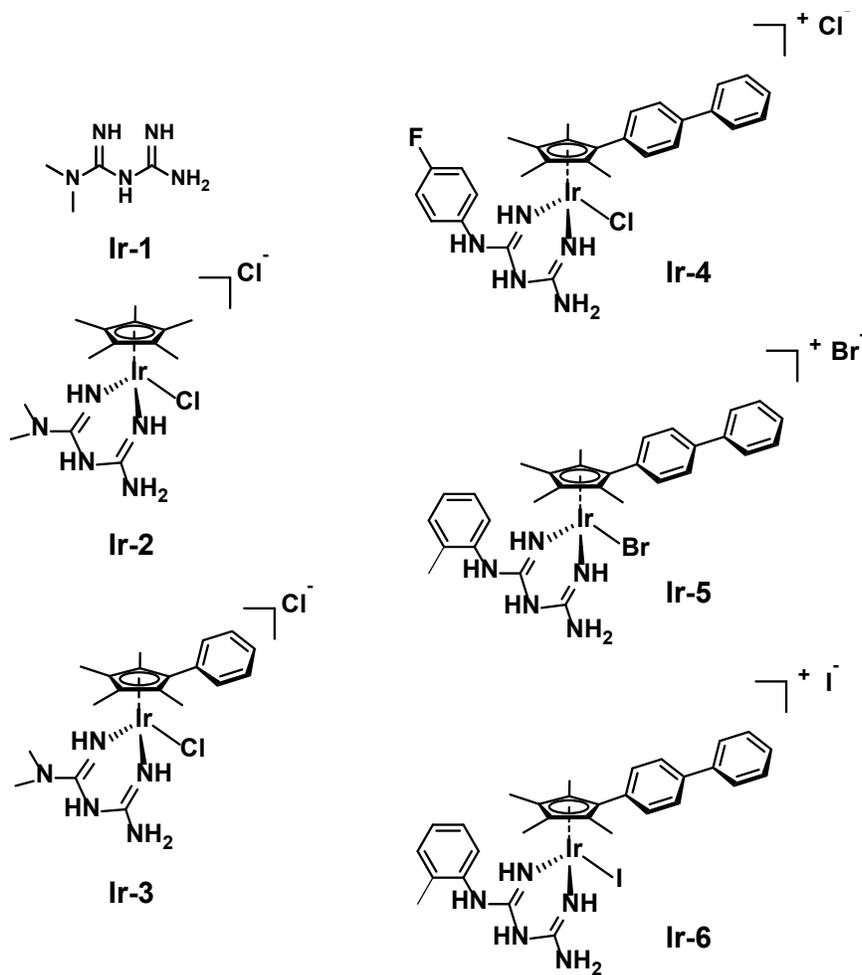
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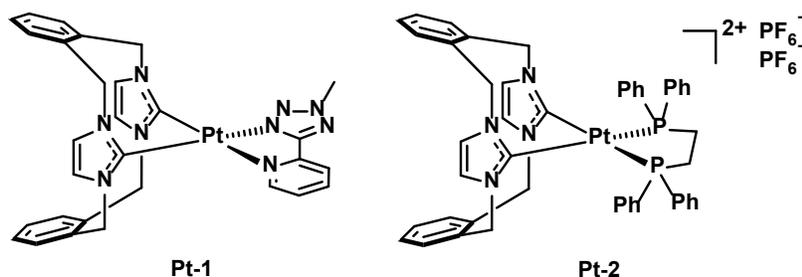
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| | G-ve | | | | G+ve | Fungi | | CC ₅₀ ^h | |
|-------------|-----------------|-----------------|-----------------|-----------------|------|-----------------|-----------------|-------------------------------|-------|
| | Ab ^a | Ec ^b | Kp ^c | Pa ^d | | Sa ^e | Ca ^f | | |
| Ir-1 | >32 | >32 | >32 | >32 | >32 | >32 | >32 | >32 | µg/ml |
| Ir-2 | >32 | >32 | >32 | >32 | 32 | >32 | >32 | >32 | µg/ml |
| Ir-3 | >32 | >32 | >32 | >32 | 16 | >32 | >32 | 28.1 | µg/ml |
| Ir-4 | 4 | 8 | >32 | >32 | 1 | 1 | 0.5 | 19.3 | µg/ml |
| Ir-5 | 4 | 8 | 8 | >32 | 1 | 1 | 0.5 | 23.7 | µg/ml |
| Ir-6 | 16 | 8 | 16 | >32 | 1 | 1 | 0.5 | 17.0 | µg/ml |

^aAb - *Acinetobacter baumannii* ATCC 19606, ^bEc - *Escherichia coli* ATCC 25922; ^cKp - *Klebsiella pneumoniae* ATCC 700603, ^dPa - *Pseudomonas aeruginosa* ATCC 27853, ^eSa - *Staphylococcus aureus* ATCC 43300, ^fCa - *Candida albicans* ATCC 90028, ^gCn - *Cryptococcus neoformans* ATCC 208821, ^hCC₅₀ - HEK293 cells

Figure S1. Structures and antimicrobial activity for related active and inactive iridium-based complexes similar to **10-15**.



| | G-ve | | | | G+ve | Fungi | | CC ₅₀ ^h | |
|-------------|-----------------|-----------------|-----------------|-----------------|------|-----------------|-----------------|-------------------------------|-------|
| | Ab ^a | Ec ^b | Kp ^c | Pa ^d | | Sa ^e | Ca ^f | | |
| Pt-1 | >32 | >32 | >32 | >32 | >32 | 32 | 32 | >32 | μg/ml |
| Pt-2 | >32 | >32 | >32 | >32 | 32 | >32 | 32 | >32 | μg/ml |

^aAb - *Acinetobacter baumannii* ATCC 19606, ^bEc - *Escherichia coli* ATCC 25922; ^cKp - *Klebsiella pneumoniae* ATCC 700603, ^dPa - *Pseudomonas aeruginosa* ATCC 27853, ^eSa - *Staphylococcus aureus* ATCC 43300, ^fCa - *Candida albicans* ATCC 90028, ^gCn - *Cryptococcus neoformans* ATCC 208821, ^hCC₅₀ - HEK293 cells

Figure S2. Structures and antimicrobial activity for cluster of related inactive platinum-based complexes similar to **19-20**.

Characterization Data for tested compounds

| Compound | X-ray Crystal Structure | Synthesis and Characterization Published |
|---------------|---|--|
| 1 | Structure for analogous compounds available ^[1] | Yes ^[1] |
| 2-9 | No | No |
| 10-15 | Structures for analogous compounds available ^[2] | Yes ^[2] |
| 16 -18 | Structure for analogous compounds available ^[3] | Yes ^[3] |
| 19-20 | No | Yes ^[4] |
| 21-22 | Yes ^[5] | Yes ^[5] |
| 23 | Yes ^[6] | Yes ^[6] |
| 24 | No | <i>Submitted</i> |
| 25 | No | Yes ^[7] |
| 26 | No | Yes ^[8] |
| 27-30 | No | Compound 27 ^[9] |

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