

## Supporting Information

### Investigating the reactivity and cellular interactions of indazole-based ruthenium(II) complexes in cancer and leishmania cells

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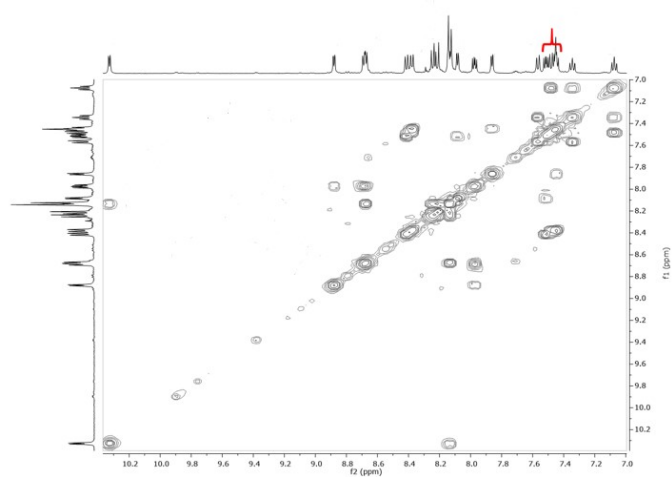
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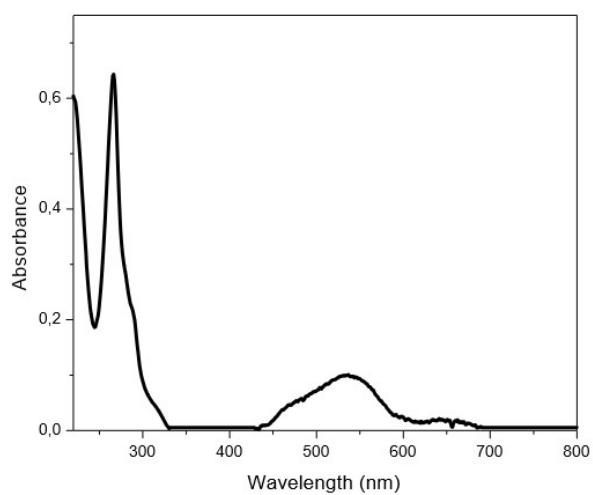
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<sup>e</sup> Institute of Innovation in Advanced Health Systems (ISI SAS), University Center SENAI/CIMATEC, Salvador, Bahia, Brazil.

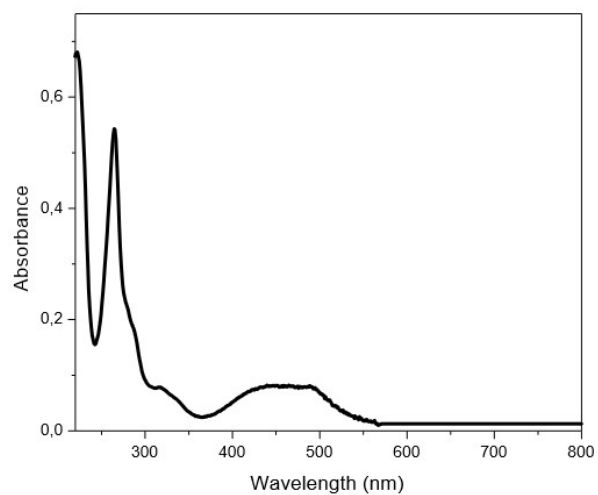
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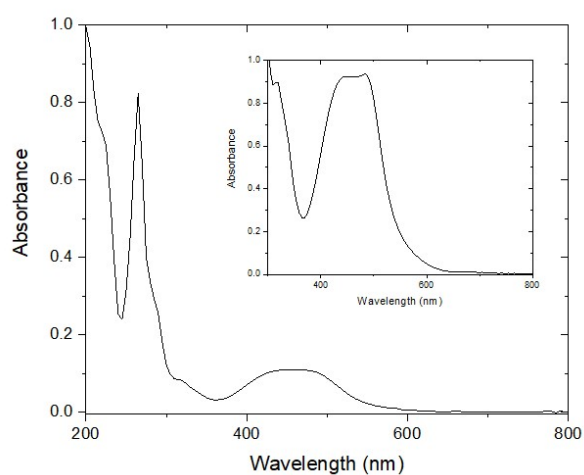
**Fig. S1**  $^1\text{H}$  NMR bidimensional spectrum (COSY) of FOR022 and 25 °C, deuterated methanol.



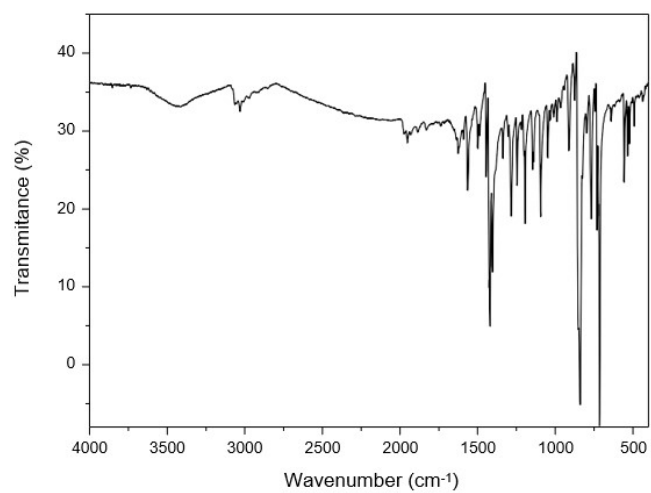
**Fig. S2** Electronic absorption spectra of metal complex *cis*-[RuCl<sub>2</sub>(phen)<sub>2</sub>] (FOR020 - precursor) in acetonitrile.



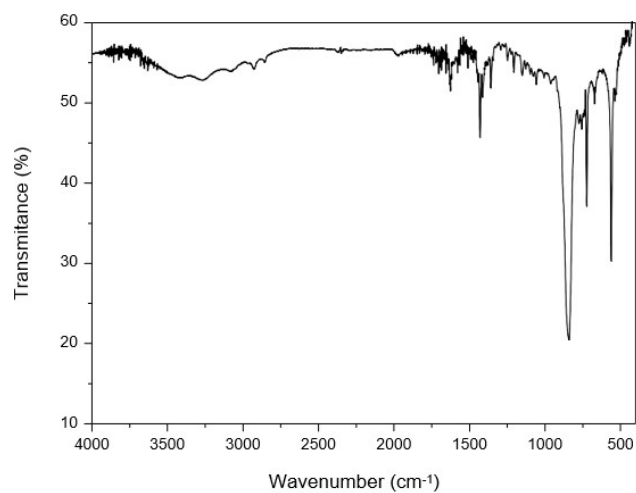
**Fig. S3** Electronic absorption spectra of metal complex *cis*-[RuCl(Hind)(phen)<sub>2</sub>]PF<sub>6</sub> (FOR022) in acetonitrile.



**Fig. S4** Electronic absorption spectra of metal complex *cis*-[Ru(Hind)<sub>2</sub>(phen)<sub>2</sub>](PF<sub>6</sub>)<sub>2</sub> (FOR0E2), in acetonitrile.



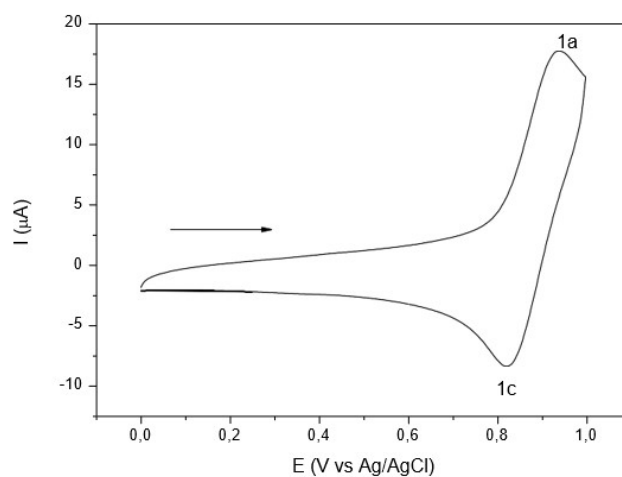
**Fig. S5** infrared spectra of metal complex *cis*-[RuCl<sub>2</sub>(phen)<sub>2</sub>] (FOR020 - precursor) in KBr pellet.



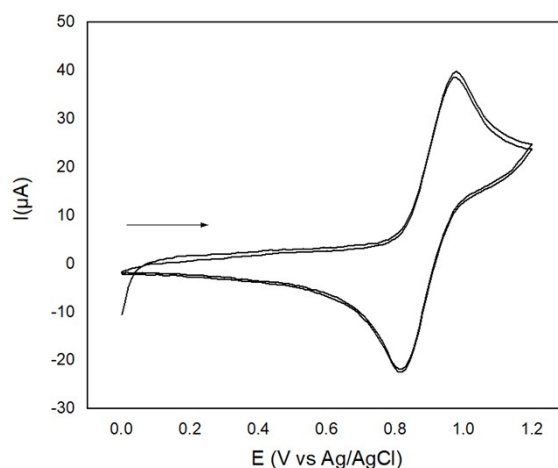
**Fig. S6** infrared spectra of metal complex *cis*-[RuCl(Hind)(phen)<sub>2</sub>]PF<sub>6</sub> (FOR022) in KBr pellet.



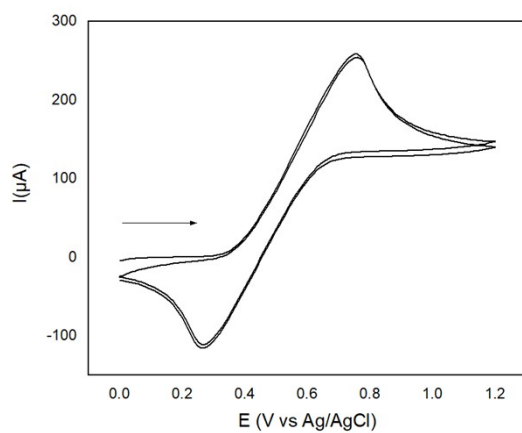
**Fig. S7** infrared spectra of metal complex *cis*-[Ru(Hind)<sub>2</sub>(phen)<sub>2</sub>](PF<sub>6</sub>)<sub>2</sub> (FOR0E2) in KBr pellet.



**Fig. S8** Cyclic voltammogram of metal complex *cis*-[RuCl(Hind)(phen)<sub>2</sub>]PF<sub>6</sub> (FOR022) (940 μmol L<sup>-1</sup>) at 25 mV s<sup>-1</sup> in acetonitrile containing 0.1 mol L<sup>-1</sup> tetrabutylammonium perchlorate (PTBA). Ferrocene as internal standard, Fc/Fc<sup>+</sup> at E<sub>1/2</sub> = 0.52 V vs. Ag/AgCl - Supplementary data Fig. S10.



**Fig. S9** Cyclic voltammogram metal complex *cis*-[Ru(Hind)<sub>2</sub>(phen)<sub>2</sub>](PF<sub>6</sub>)<sub>2</sub> (FOR0E2) (940 μmol L<sup>-1</sup>) at 25 mV s<sup>-1</sup> in acetonitrile containing 0.1 mol L<sup>-1</sup> tetrabutylammonium perchlorate (PTBA). Ferrocene as internal standard, Fc/Fc<sup>+</sup> at E<sub>1/2</sub> = 0.52 V vs. Ag/AgCl - Supplementary data Fig. S10.



**Fig. S10** Cyclic voltammogram of internal standard ferrocene (Fc) in acetonitrile/tetrabutylammonium perchlorate (PTBA). Rate scan: 25 mV s<sup>-1</sup>.

**Table S1** Electrochemical potentials of metal complexes *cis*-[RuCl<sub>2</sub>(phen)<sub>2</sub>] (FOR020 - precursor), *cis*-[RuCl(Hind)(phen)<sub>2</sub>]PF<sub>6</sub> (FOR022) and *cis*-[Ru(Hind)<sub>2</sub>(phen)<sub>2</sub>](PF<sub>6</sub>)<sub>2</sub> (FOR0E2) in MeCN/PTBA (vs Ag/AgCl).

Compounds	Electrochemical potential (E <sub>1/2</sub> ) (V)	Experimental λ <sub>max</sub> (nm) in visible range
	1a/1c	

FOR020	0.47	542
FOR022	0.89	462
FOR0E2	0.87	450