## Synthesis and Biological Studies on Dinuclear Gold(I) Complexes with Di-(*N*-Heterocyclic Carbene) Ligands Functionalized with Carbohydrates

Federica Tresin <sup>1</sup>, Valentina Stoppa <sup>1</sup>, Marco Baron <sup>1</sup>, Andrea Biffis <sup>1</sup>, Alfonso Annunziata,<sup>2</sup> Luigi D'Elia <sup>2</sup>, Daria Maria Monti <sup>2</sup>, Francesco Ruffo <sup>2</sup>, Marco Roverso <sup>1</sup>, Paolo Sgarbossa <sup>3</sup>, Sara Bogialli <sup>1</sup>, Cristina Tubaro <sup>1,\*</sup>

- <sup>1</sup> Department of Chemical Sciences, University of Padova, via Marzolo 1, 35131 Padova (Italy).
- <sup>2</sup> Department of Chemical Sciences, University of Napoli Federico II, Complesso Universitario di Monte S. Angelo, via Cintia 21, 80126 Napoli (Italy).
- <sup>3</sup> Department of Industrial Engineering, University of Padova, via Marzolo 9, 35131 Padova (Italy).
- \* Correspondence: cristina.tubaro@unipd.it; Tel.: +39-049-8275655 (C.T.).

NMR Spectra and ESI-MS spectra for the new compounds



Figure S1: <sup>1</sup>H NMR spectra of L<sup>1</sup>·2HPF<sub>6</sub> in CD<sub>3</sub>CN



Figure S2: <sup>13</sup>C NMR spectra of  $L^1$ ·2HPF<sub>6</sub> in CD<sub>3</sub>CN



Figure S3: ESI-MS spectra of L<sup>1</sup>·2HPF<sub>6</sub>



Figure S4: <sup>1</sup>H NMR spectra of L<sup>2</sup>·2HPF<sub>6</sub> in CD<sub>3</sub>CN



Figure S5: <sup>13</sup>C NMR spectra of L<sup>2</sup>·2HPF<sub>6</sub> in CD<sub>3</sub>CN



Figure S6: ESI-MS spectra of L<sup>2</sup>·2HPF<sub>6</sub>





Figure S7: <sup>1</sup>H NMR spectra of complex **1** in CD<sub>3</sub>CN



Figure S8: <sup>13</sup>C NMR spectra of complex **1** in CD<sub>3</sub>CN



Figure S9: ESI-MS spectra of complex 1





Figure S10: <sup>1</sup>H NMR spectra of complex **2** in CD<sub>3</sub>CN



Figure S11:  $^{13}$ C NMR spectra of complex **2** in CD<sub>3</sub>CN



Figure S12: ESI-MS spectra of complex 2



Figure S13: <sup>1</sup>H NMR spectra of complex **3** in CD<sub>3</sub>CN



Figure S14: <sup>13</sup>C NMR spectra of complex **3** in CD<sub>3</sub>CN



Figure S15: HRMS of complex  ${\bf 3}$  in CH\_3CN





Figure S17: <sup>13</sup>C NMR spectra of complex **4** in CD<sub>3</sub>CN



Figure S18: HRMS of complex  $\mathbf{4}$  in CH<sub>3</sub>CN

![](_page_13_Figure_0.jpeg)

Figure S19: <sup>1</sup>H NMR spectra of complex **5** in CD<sub>3</sub>CN

![](_page_13_Figure_2.jpeg)

Figure S20: <sup>13</sup>C NMR spectra of complex **5** in CD<sub>3</sub>CN

![](_page_14_Figure_0.jpeg)

Figure S21: HRMS of complex  ${\bf 5}$  in CH\_3CN