## Supporting information:

## Article

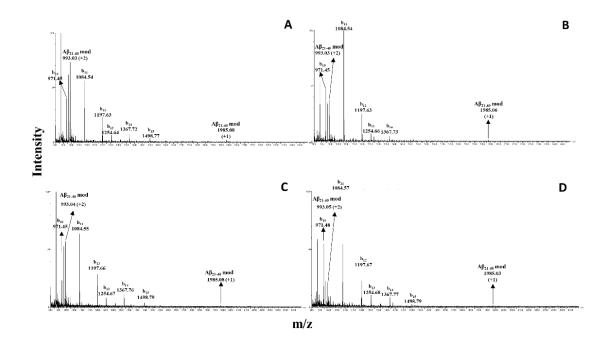
## A Comparative Study of the Effects of Platinum (II) Complexes on β-Amyloid Aggregation: Potential Neurodrug Applications

## Sara La Manna <sup>1</sup>, Daniele Florio <sup>2</sup>, Ilaria Iacobucci <sup>3</sup>, Fabiana Napolitano <sup>4</sup>, Ilaria De Benedictis <sup>5</sup>, Anna Maria Malfitano <sup>6</sup>, Maria Monti <sup>7</sup>, Mauro Ravera <sup>8</sup>, Elisabetta Gabano <sup>9</sup> and Daniela Marasco <sup>10,\*</sup>

<sup>1</sup> Department of Pharmacy, University of Naples "Federico II", 80131, Naples, Italy; sara.lamanna@unina.it

<sup>2</sup> Department of Pharmacy, University of Naples "Federico II", 80131, Naples, Italy; floriodaniele1@gmail.com

- <sup>3</sup> Department of Chemical Sciences, CEINGE Biotecnologie Avanzate S.c.a r.l., "University of Naples Federico II", 80131, Naples, Italy; ilaria.iacobucci@unina.it
- <sup>4</sup> Department of Translational Medical Science, University of Naples "Federico II", 80131, Naples, Italy; fabiananapolitano94@gmail.com
- <sup>5</sup> Department of Pharmacy, University of Naples "Federico II", 80131, Naples, Italy; ilariadebenedictis2308@gmail.com
- <sup>6</sup> Department of Translational Medical Science, University of Naples "Federico II", 80131, Naples, Italy; annamaria.malfitano@unina.it
- <sup>7</sup> Department of Chemical Sciences, CEINGE Biotecnologie Avanzate S.c.a r.l., "University of Naples Federico II", 80131, Naples, Italy; montimar@unina.it
- <sup>8</sup> Department of Sciences and Technological Innovation (DiSIT), University of Piemonte Orientale "A. Avogadro", 15121, Alessandria, Italy; mauro.ravera@uniupo.it
- <sup>9</sup> Department of Sciences and Technological Innovation (DiSIT), University of Piemonte Orientale "A. Avogadro", 15121, Alessandria, Italy; elisabetta.gabano@uniupo.it
- <sup>10</sup> Department of Pharmacy, University of Naples "Federico II", 80131, Naples, Italy;
- \* Correspondence: daniela.marasco@unina.it; Tel.: (+39)081-2534512. Fax: (+39)081-2534574



**Figure S1.** ESI-MS spectra of mutA $\beta_{21-40}$  at 0 and 24h of incubation in the absence (panel **A** and **B**, respectively) and in the presence of Pt-terpy (panel **C** and **D**, respectively). Fragmentation ions are also indicated.

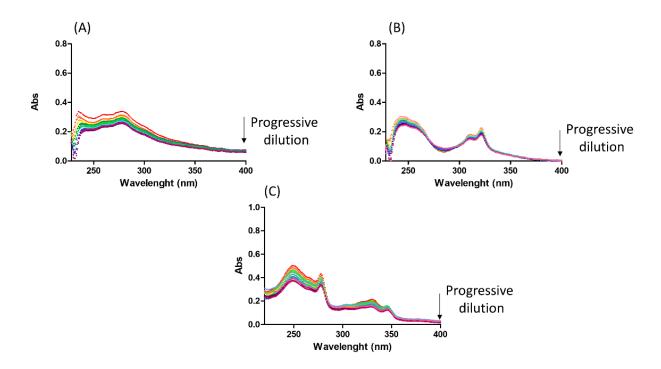
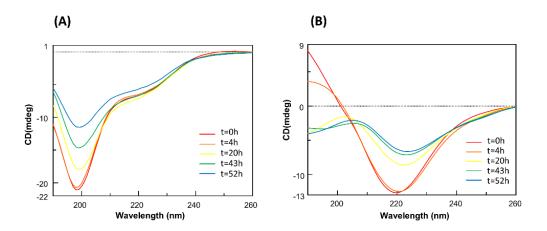


Figure S2. Absorption spectra of (A) Pt-phen, (B) Pt-bpy, (C) Pt-terpy upon the addition of increasing volume of solvents Arrow indicates increasing dilution.



**Figure S3.** Overlay of CD spectra of  $mutA\beta_{21-40}$  (**A**) alone, (**B**) with Pt-terpy complex at 1:5 peptide: Pt(II) compound molar ratio.

**Table S1.** Deconvolution of CD spectra reported in Figure 5 at indicated times and ratios  $\beta_{21-40}$ : Pt-terpy.

|                       | Time (h) | Helix% | Beta % | Turn% | Random coil% |
|-----------------------|----------|--------|--------|-------|--------------|
| Αβ21-40               | 0        | 2.8    | 23.4   | 18.7  | 55.0         |
| Aβ21-40: Pt-terpy 1:1 | 0        | 15.1   | 34.1   | 5.9   | 44.9         |
| Aβ21-40: Pt-terpy 1:5 | 0        | 19.7   | 37.3   | 3.5   | 39.6         |