



## Two Novel Zn(II) Metal Complexes: Inhibiting Growth of Human Buccal Tumor Cells

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**SUMMARY.** In this study, two new coordination polymers,  $\{[Zn_2(TPA)_2(BPY)(NO_3)_2](H_2O)_2\}_n$  [**1**, HTPA=2-(4-(4H-1,2,4-triazol-4-yl)phenyl)acetic acid, BPY=4,4'-bipyridine] and  $\{[Zn_3(TCA)_2(BPY)(H_2O)](DMA)_5(MeOH)_2\}_n$  [**2**, H<sub>3</sub>TCA= tris((4-carboxyl)phenylduryl)amine]} has been successfully constructed under solvothermal conditions and then characterized by single crystal X-ray diffraction analysis. The *in vitro* proliferation inhibitory activity against four human buccal tumor cell lines (HSC-4, HN13, Tca8113 and SCC-25) were then evaluated. The experimental results showed that the title compounds **1** and **2** exhibited potent anti-cancer activity.

**RESUMEN.** En este estudio dos nuevos polímeros de coordinación,  $\{[Zn_2(TPA)_2(BPY)(NO_3)_2](H_2O)_2\}_n$  [**1**, HTPA = 2-(4-(4H-1,2,4-triazol-4-il)fenil ácido acético), BPY = 4,4'-bipiridina] y  $\{[Zn_3(TCA)_2(BPY)(H_2O)](DMA)_5(MeOH)_2\}_n$  [**2**, H<sub>3</sub>TCA = tris((4-carboxil) fenilduril) amina]} se han obtenido con éxito en condiciones solvotermales y luego se ha caracterizado por análisis de difracción de rayos X de cristal único. La actividad inhibidora de la proliferación *in vitro* contra cuatro líneas de células tumorales bucales humanas (HSC-4, HN13, Tca8113 y SCC-25) se evaluaron a continuación. Los resultados experimentales mostraron que los compuestos **1** y **2** mostraron una potente actividad anticancerígena.

**KEY WORDS:** buccal tumor, coordination polymer, single-crystal.

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