* **Supplementary method 1. DNA platinum-adducts measurement**
* DNA was isolated using the SNET (1% SDS; 400 mM NaCl; 5 mM EDTA pH 8.0; 20 mM Tris-Cl pH 8.0) isolation procedure and concentrations were measured using Nanodrop (Thmero Scientific, Waltham, MA). Samples were digested with 5 µl of concentrated trace metal nitric acid for 10 minutes in an 80ºC water bath then cooled to room temperature and 5 µl of 30% trace metal hydrogen peroxide (Fisher Scientific Optima grade, Pittsburg, PA) was added for a further 10 min incubation at 80ºC. Samples were diluted to a final volume of 540 µl with ultrapure 18 mΩ water. Samples were analyzed by an inductively coupled plasma-mass spectrometry (ICP-MS) using the NexION 350D (Perkin Elmer, Shelton, CT) equipped with the microFAST system (Elemental Scientific Inc., Omaha, NE). Nebulizer gas flow, torch alignment, and quadrupole ion deflector (QID) were optimized daily to pass the standard performance check. Holmium was used as the internal standard to control for instrument drift and was added inline (stock concentration 10 ppb) to each sample and standard. Platinum concentrations were determined by quantitative analysis using a 100 ppt platinum standard curve (5, 10, 50, 100 ppt, Perkin Elmer). Platinum 195 and holmium 165 isotopes were measured in standard mode using peak hopping scan with 50 sweeps per reading and three replicates for each sample. Dwell times were 150 ms for platinum and 25 ms for Holmium. DNA-platinum adducts were calculated by normalizing the platinum concentration to the DNA concentration for each sample.