

**Supplementary Material:** The liquid chromatography with tandem mass spectrometry (LC-MS/MS) test parameters

**Supplementary Table 1 Chromatographic parameters and conditions**

Time point (min)	Mobile phase A (%)	Mobile phase B (%)
0	10	90
3	30	70
3.01	30	70
4	2	98
5	10	90
5.01	10	90
7	10	90

Note: A: 5mM ammonium acetate (0.1% methanoic acid); B: methanol (0.1% methanoic acid); flow rate: 0.4mL/min; stop time: 7min; post time: 1min.

**Supplementary Table 2 Acquisition parameters for mass spectrometry**

<b>Compounds</b>	<b>Mass transitions</b>	<b>ISTD transitions</b>	<b>Collision energy</b>	<b>Fragmentor voltage</b>	<b>Cell accelerator voltage</b>
8-oxo-dGsn	m/z 284-168	m/z 289-173	10 eV	380 V	3
8-oxo-Gsn	m/z 300-168	m/z 303-171	14 eV	380 V	3

**Supplementary Table 3 Source parameters for mass spectrometry**

Source parameters	Numerical value
Gas Temp	200 °C
Gas Flow	16 l/min
Nebulizer	30 psi
Sheath Gas Temp	400 °C
Sheath Gas Flow	12 l/min
Capillary	2000V(Positive), 3000V(Negative)
Nozzle Voltage	0V(Positive), 1500V(Negative)
High Pressure RF	120V(Positive), 90V(Negative)
Low Pressure RF	50V(Positive), 60V(Negative)