Supplementary material for Wang W.-X. et al. Analysis of the oxidative damage of DNA, RNA, and their metabolites induced by hyperglycemia and related nephropathy in Sprague Dawley rats. Free Radical Research 2015;49(10): 1199–1209.

Supplementary Table I. Monitoring ion pairs of the 8-oxo-dGsn, dGsn, 8-oxo-Gsn, Gsn and the corresponding isotope internal standards.

Compound	Monitoring ion pairs
[¹⁵ N ₅]8-oxo-dGsn	289.3/173.1
8-oxo-dGsn	284.2/168.1
[¹⁵ N ₅]dGsn	273.2/157.1
dGsn	268.4/152.1
[¹⁵ N ₂ ¹³ C ₁]8-oxo-Gsn	303.2/171.0
8-oxo-Gsn	300.1/168.0
[¹⁵ N ₅]Gsn	289.2/157.1
Gsn	284.2/152.1

Supplementary Table II. Optimized measurement conditions of DNA.

Compound	ISTD	Time (msec)	DP	EP	CE	CXP
[¹⁵ N ₅]8-oxo-dGsn	✓	100	52	8	20	11
8-oxo-dGsn		100	52	8	21	11
[¹⁵ N ₅]dGsn	✓	100	52	8	20	11
dGsn		100	30	8	27	6
Parameters		Time (min)	Module	Event	Parameter	Flow (ml/min)
Collision Gas	6	0.01	pumps	pumpB conc.	5	0.2
Curtain Gas	25	8.50	pumps	pumpB conc.	5	0.2
Gas1	60 L	9.50	pumps	pumpB conc.	38	0.2
Gas2	60 L	10.00	pumps	pumpB conc.	40	0.2
Ion spray voltage	5200 V	14.00	controller	stop	5	0.2
Temperature	450°C					

Supplementary Table III. Optimized measurement conditions of RNA.

Compound	ISTD	Time (msec)	DP	EP	CE	CXP
[¹⁵ N ₂ ¹³ C ₁]8-oxo-Gsn	✓	200	50	7.2	21	11
8-oxo-Gsn		200	50	7.2	21	11
[¹⁵ N ₅]Gsn	✓	200	140	10	45	11
Gsn		200	140	10	45	11
Parameters		Time/min	Module	Event	Parameter	Flow (ml/min)
Collision Gas	10	0.01	pumps	pumpB conc.	5	0.22
Curtain Gas	10	8.00	pumps	pumpB conc.	5	0.22
Gas1	80 L	9.00	pumps	total flow	0.22	0.22
Gas2	70 L	9.01	pumps	total flow	0.3	0.3
Ion spray voltage	5200 V	10.00	pumps	pumpB conc.	35	0.22
Temperature	550°C	10.50	pumps	pumpB conc.	35	0.22
		10.51	pumps	pumpB conc.	5	0.22
		11.00	pumps	total flow	0.3	0.3
		11.50	pumps	total flow	0.22	0.22
		14.00	controller	stop		

Supplementary Table IV. Optimized measurement conditions of plasma.

Compound	ISTD	Time (msec)	DP	EP	CE	CXP
[¹⁵ N ₅]8-oxo-dGsn	✓	200	52	8	20	11
8-oxo-dGsn		200	52	8	20	11
[¹⁵ N ₂ ¹³ C ₁]8-oxo-Gsn	✓	200	50	7.2	21	11
8-oxo-Gsn		200	50	7.2	21	11
Parameters		Time/min	Module	Event	Parameter	Flow (ml/min)
Collision Gas	6	0.01	pumps	pumpB conc.	5	0.25
Curtain Gas	25	4.50	pumps	pumpB conc.	5	0.25
Gas1	60 L	9.00	pumps	pumpB conc.	45	0.25
Gas2	60 L	10.50	pumps	pumpB conc.	45	0.25
Ion spray voltage	5500 V	11.00	pumps	pumpB conc.	5	0.25
Temperature	450°C	15.00	controller	stop		

Supplementary Table V. Optimized measurement conditions of urine.

Compound	ISTD	Time (msec)	DP	EP	CE	CXP
[¹⁵ N ₅]8-oxo-dGsn	✓	200	52	8	20	11
8-oxo-dGsn		200	52	8	20	11
[¹⁵ N ₂ ¹³ C ₁]8-oxo-Gsn	✓	200	50	7.2	21	11
8-oxo-Gsn		200	50	7.2	21	11
Parameters		Time/min	Module	Event	Parameter	Flow (ml/min)
Collision Gas	6	0.01	pumps	pumpB conc.	6	0.25
Curtain Gas	25	8.00	pumps	pumpB conc.	50	0.25
Gas1	60 L	9.00	pumps	pumpB conc.	50	0.25
Gas2	60 L	10.00	pumps	pumpB conc.	6	0.25
Ion spray voltage	5500 V	14.00	controller	stop		
Temperature	450°C					