Table showing 2019 Instrumental parameters used for MRM analysis. The ion selected for quantification is listed first for each compound. DP: de-clustering potential; EP: entrance

potential; CE: collision energy; CXP: collision cell exit potential.

Compound	Instrument setup	Polarity	Q1	Q3	DP	EP	CE	СХР
				101			-15	-9
Organic_A	2	-	145	83	-30	-6	-17	-10
				79			23	5
Organic_B	1	+	114	69	81	8	25	8
Organic_B				96			21	8
				198			21	18
Organic_C	2	+	350	322	51	10	13	29
				153			18	20
Organic_D	1	-	205	131	-45	-11	-13	-10
				205			-5	-10
d4-cholic acid	1, 2, 3	_	411	411	-210	-7	-24	-10
(Internal standard)	1, 2, 3		711	347	-210		-49	-15

Table showing 2020 & 2021 Instrumental parameters used for MRM analysis. The ion selected for quantification is listed first for each compound. DP: de-clustering potential; EP: entrance potential; CE: collision energy; CXP: collision cell exit potential.

Compound	Polarity	Parent ion	D	P EP	Daughter ion	CE	CXP
Organic_A	neg	145.05	-30	-6	101	-15	-9
					83	-17	-10
Organic_B	pos	114.0919	81	8	79	23	5
					69	25	8
					96	21	8
Organic_C	pos	349.93	51	10	198	21	18
					153	18	20
Organic_D	neg	205.1228	-45	-11	161	-13	-10
					205	-5	-10
d4-Cholic acid	neg	411.3048	-210	-7	411	-24	-10
					347	-49	-15

LC-MS instrumental setups:

2019:

Setup 1

A binary gradient with mobile phase A of 5 mM NH₄OAc and with mobile phase B of ACN and 5 mM NH₄OAc was used. The flow rate was set to 0.2 mL/min. The gradient started with 50% B for 2 min and increased to 99% of phase B during 2-2.5 min. The gradient was then kept at 99% B for 3.5 min, followed by equilibrium at 50% B for 5 min.

Setup 2 & 3

A binary gradient with mobile phase A of 5 mM NH₄OAc and with mobile phase B of ACN and 5 mM NH₄OAc was used. The flow rate was set to 0.3 mL/min. The gradient started with 1% B for 2 min and increased to 95% of phase B during 2-6 min. The gradient was then kept at 95% B for 7 min, followed by equilibrium at 1% B for 7 min.

2020 & 2021:

Setup 4

A binary gradient with mobile phase A of 5 mM NH₄OAc and with mobile phase B of ACN and 5 mM NH₄OAc was used. The flow rate was set to 0.3 mL/min. The gradient started with 30% B for 2 min and increased to 95% of phase B during 2-6 min. The gradient was then kept at 95% B for 7 min, followed by equilibrium at 30% B for 7 min.

Table showing The electrospray ionization (ESI) parameters for the three instrument setups.

Setups	Curtain gas	Needle current/ion spray voltage	Source temperature	GS1	GS2
1 st	35	5.5 kV (+) / -4.5 kV (-)	550 °C	50	60
2 nd	35	5.5 kV (+) / -4.5 kV (-)	500 °C	60	65
3 rd	35	5.5mA (+) /-4.5 mA (-)	500 °C	60	65