

Table S4

Quantification by linear regression analysis of the mass (ng) present on the PDMS sampling bands as worn by participants. Accuracy and precision of simulated cutaneous sampling onto PDMS bands (section 2.4).

Target Compound	Molecular Formula	Molecular weight (Da)	Malaria-positive					Malaria- negative					Linear regression $y=mx+c$	Range (ng)	R ²	LOD (ng)	LOQ (ng)	%Recovery 10 ng	%RSD
			#4	#17	#18	#3	#5	#6	#13	#24	#25								
Heptanal	C7H14O	114	14.9-36.4	0.5-1.2	0.6-1.5	<LOD	23.1	18.2	17.9-46.9	0.2-1.8	0.7	$y=3E+06x + 7E+07$	2.5-60	0.96	0.004	0.01	$\bar{x} \pm \sigma (n=2)$ 89.3±4.7	5.3	
(E)-2-Octenal	C8H14O	126	0.3-0.4	<LOD	0.3	1.1	1.4-2.5	0.5	<LOD	<LOD	<LOD	$y=5E+06x + 2E+07$	2.5-60	0.99	0.006	0.02	89.5±24.2	27.1	
2-Octanone	C8H16O	128	0.04-1.1	0.007-0.1	0.3-0.6	0.4	<LOD	0.03	<LOD	<LOD	<LOD	$y=8E+06x + 2E+08$	5.0-60	0.93	0.0004	0.001	118.9±1.2	0.98	
Octanal	C8H16O	128	3.2-3.9	2.3-8.9	0.7-1.3	4.7	1.7-1.8	1.7-4.1	1.7-2.3	1.1-1.9	2.3-9.7	$y=1E+07x + 5E+07$	2.5-60	0.95	0.003	0.008	108.9±0.3	0.28	
Nonanal	C9H18O	142	1.1-5.7	8.8-24.4	0.6-1.9	12.5	1.0-1.1	1.0-1.3	0.4-0.8	1.2	0.5	$y=5E+06x + 1E+08$	2.5-60	0.97	0.001	0.004	96.0±0.03	0.03	
(E)-2-Decenal	C10H18O	154	1.3-2.1	0.4-0.5	0.6-2.3	5.5	0.7-1.3	4.5-5.5	0.7-1.6	0.016	<LOD	$y=4E+06x + 7E+06$	2.5-60	0.98	0.003	0.008	77.8±10.3	13.3	

For concentrations below the lowest calibration standard, a single point quantification was performed using the lowest standard. The limit of detection (LOD) and quantification (LOQ) for each compound was calculated using a signal-to-noise (S/N) of 3 for the LOD and a S/N of 10 for the LOQ.