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SUPPLEMENTARY MATERIAL TO

Differential pulse voltammetric assay of atorvastatin in tablets using an unmodified glassy carbon electrode

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TABLE S1. Comparison of the proposed method with previous electroanalytical methods reported for ATOR determination

Electrode/sensor	Supporting electrolyte	E_p[a] (V)		LCR (μM)	LOD (μM)	Analyzed sample	Ref.
BDDE	0.1 M H_2SO_4	+0.86	DPV	0.965–38.6	0.227	Tablets, serum, urine	12
CPE with CTAB	PB, pH 3	+1.07	DPV	0.05–10	0.00408	Tablets, urine	14
PPy/CNTs/GCE	BR, pH 2	+0.98	LSV	0.005–0.1	0.0015	Tablets, plasma	15
VACNT-GO electrode	PB, pH 2	+1.08	DPAdSV	0.09–3.81	0.0094	Tablets, urine, serum	16
EPPGE	PB, pH 3	+1.05	DPV	0.096–5.60	0.021	Tablets	23
ZnO/NS/CPE	PB, pH 4	+0.90	DPV	1.00–12.0	0.0007	Tablets, urine	24
PPy-GNs/GCE	PB, pH 4	~+0.17	DPV	20–200	1.191	Tablets	25
PbTe NPs/SPE	PB, pH 7	~+0.70	DPV	1–70	0.05	Tablets, urine	26
AgNWs/Au/GCE	BR, pH 2	+0.87	DPV	0.010–0.100	0.001	Tablets, plasma	27
Fe_3O_4@PPy/MWCNTs/GE	BR, pH 4	~+1.05	SWASV	0.0314–21.3	0.023	Tablets, serum	28
AuNP-CNT/SPCE	0.1 M KCl	+1.00	CV	1.2–53.33	0.192	Tablets	17
MIP/SPCE	PB, pH 7	~+0.73	DPV	0.05–2.0	0.049	Water	29
3D-printed Gpt/PLA electrode	BR, pH 5	~+0.98	BIA-AD	1–200	0.13	Tablets, water	30
Unmodified GCE	0.1 M H_2SO_4	+1.02	DPV	0.965–38.6	0.211	Tablets, serum, urine	12
Unmodified GCE	BR, pH 3	+1.07	DPV	1.79–89.50	0.36	Tablets	18
Unmodified GCE	BR, pH 4	+1.05	DPV	0.05–0.84	0.013	Tablets	This work

[a]Peak potentials are reported versus the reference electrodes used in the original publications. Values marked with "~" were estimated from published voltammograms or from reported E_p–pH relationships and are given without conversion to a common reference electrode.

Abbreviations: ATOR: atorvastatin; AgNWs: silver nanowires; AuNP: gold nanoparticle; BDDE: boron-doped diamond electrode; BIA-AD: batch injection analysis with amperometric detection; BR: Britton–Robinson; CNTs: carbon nanotubes; CPE: carbon paste electrode; CTAB: cetyltrimethylammonium bromide; CV: cyclic voltammetry; DPAdSV: differential pulse adsorptive stripping voltammetry; DPV: differential pulse voltammetry; E_p: peak potential; EPPGE: edge-plane pyrolytic graphite electrode; Fe_3O_4@PPy: polypyrrole-coated magnetite nanoparticles; GCE: glassy carbon electrode; GE: graphite electrode; GNs: graphene nanosheets; Gpt/PLA: graphite/polylactic acid composite; LCR: linear concentration range; LOD: limit of detection; LSV: linear sweep voltammetry; MIP: molecularly imprinted polymer; MWCNTs: multi-walled carbon nanotubes; NPs: nanoparticles; NS: nano-silica; PB: phosphate buffer; PPy: polypyrrole; SPE: screen-printed electrode; SPCE: screen-printed carbon electrode; SWASV: square-wave anodic stripping voltammetry; SWV: square-wave voltammetry; VACNT-GO: vertically aligned carbon nanotube/graphene oxide