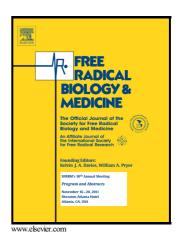
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ACCEPTED MANUSCRIPT

Structural, biological and biophysical properties of glycated and glycoxidized phosphatidylethanolamines

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Highlights:

- PE glycoxidation produces highly complex mixtures of glycated and oxidized products
- NMR spectroscopy identified Amadori compounds as major glycation products of PE
- Pro-oxidative effects of glycated PE were associated with increased lipid peroxide levels
- AGEs are formed prevalently via the Amadori cleavage pathway
- Glycated and glycoxidized PEs trigger reconfiguration of cellular proteome
- Glycated and glycoxidized PEs alter electrical properties of biological membranes

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