Accepted Manuscript

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PII: S0142-9612(18)30429-0

DOI: 10.1016/j.biomaterials.2018.06.008

Reference: JBMT 18709

To appear in: *Biomaterials*

Received Date: 14 January 2018

Revised Date: 31 May 2018

Accepted Date: 6 June 2018

Please cite this article as: Yang Z, Yang Y, Zhang L, Xiong K, Li X, Zhang F, Wang J, Zhao X, Huang N, Mussel-inspired catalytic selenocystamine-dopamine coatings for long-term generation of therapeutic gas on cardiovascular stents, *Biomaterials* (2018), doi: 10.1016/j.biomaterials.2018.06.008.

Mussel-Inspired Catalytic Selenocystamine - Dopamine Surface Chemistry for Generating Therapeutic Gas on Cardiovascular Stents

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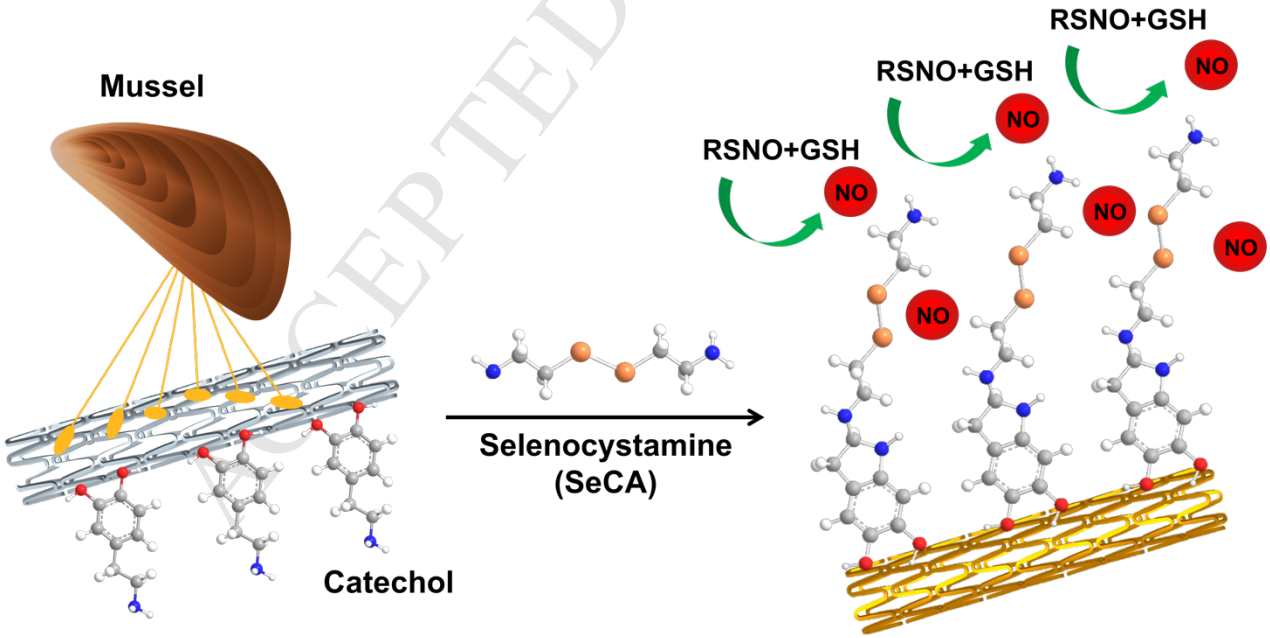
A mussel-inspired selenocystamine-dopamine nitric oxide (NO)-generating coating for surface engineering of cardiovascular stent is developed. Such a NO-generating coating exhibits long-term, steady and an adjustable range of NO release rates. Surface functionalization by this coating endows the cardiovascular stent with the abilities to significantly improve antithrombogenicity, promote regeneration of endothelium and inhibit restenosis.



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