**Stabilization of resveratrol in blood circulation by conjugation to mPEG and mPEG-PLA polymers: investigation of conjugate linker and polymer composition on stability, metabolism, antioxidant activity and pharmacokinetic profile.**

*Basavaraj Siddalingappa1,3\*, Heather A. E. Benson\*, David H. Brown2, Kevin T. Batty1, Yan Chen1*

**1**School of Pharmacy, CHIRI-Bioscience, Curtin University, GPO Box U1987 Perth, Western Australia

2Department of Chemistry, Curtin University, GPO Box U1987 Perth, Western Australia.

3Present Address, Graduate College of Biomedical Sciences, Western University of Health Sciences, Pomona, CA, USA.

Corresponding author: Dr.Basavaraj Siddalingappa,Graduate College of Biomedical Sciences, Western University of Health Sciences, Pomona, CA 91766, USA. Email: bsiddalingappa@westernu.edu; Tel: +1 909 469 6476

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**Figure A**. 1H NMR spectra (400 MHz) for: (a) MeO-PEGN-SuccOH; (b) the resveratrol-PEG conjugate mixture from the synthesis of MeO-PEGN-Succ-RSV; (c) resveratrol; and (d) the solution from (b) after treatment with water and heat (90 °C) for *ca.* 1 week). All solutions are in *d*6-DMSO. Key: † = *d*5-DMSO, ‡ = H2O. To identify the low intensity down-field signals the spectra in (a), (b) and (d) have been expanded vertically.



**Figure B**. The down field region of the 1H NMR spectra (400 MHz) for: (a) a solution of the resveratrol-PEG conjugate mixture in *d*6-DMSO showing the assigned signals for the two major products **4'-MeO-PEGN-Succ-RSV** and **3-MeO-PEGN-Succ--RSV**; and (b) a solution of resveratrol in *d*6-DMSO.



**Figure C**. 1H NMR spectra for the MeO-PEGN-Succ-RSV conjugate mixture in *d*6-DMSO, recorded at 400 MHz. Key: † = *d*5-DMSO, ‡ = H2O.



**Figure D**. 1H NMR spectra for MeO-PEGN-Succ-OH in *d*6-DMSO, recorded at 400 MHz. Key: † = *d*5-DMSO, ‡ = H2O.



**Figure E**. 1H NMR spectra of the MeO-PEGN-Succ-RSV conjugate mixture after treatment with water and heat (90 °C) for *ca.* 1 week, in *d*6-DMSO, recorded at 400 MHz. Key: † = *d*5-DMSO, ‡ = H2O.