**Supporting Information**

# Synthesis and Biological Evaluation of Fatty acyl Di-cytarabine Prodrug

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## The analysis of $^1$H NMR spectrum for Ara-R-Ara sample

The peak assignments of the cytarabine part are as follows. The peaks at $\delta_H$ 8.05 (d, 1H, J= 7.60 Hz, 6-H) and $\delta_H$ 6.06 (d, 1H, J= 7.60 Hz, 5-H) were assigned to the olefinic protons, namely, the protons of H-6, H-5. The peak appears at $\delta_H$ 7.21 (d, 1H, 1'-H) was attributed to the proton attached to the oxygenated N-substituted methines of the sugar ring (H-1'). Each of the cytosine ring protons (H-5 and H-6) and the H-1' proton of the arabinose moiety provided a doublet arising from the indirect spin-spin couplings with the vicinal protons. The resonances were due to the proton attached to H-5 and the H-6 overlap. For suberoyl chloride part, the peaks at $\delta_H$ 2.39 (t, 4H, -CO-$CH_2$-) can be assigned to the protons of the -CO-$CH_2$- groups. And the spectrum showed signals for a methylene at $\delta_H$ 1.54 (m, 4H, –$CH_2$–), and $\delta_H$ 1.27 (m, 8H, –$CH_2$–). By calculating the ratio of the integral area of peaks corresponding to cytarabine and suberoyl chloride part in $^1$H-NMR spectrum, the molar ratio of cytarabine to suberoyl chloride in the Ara-R-Ara molecules was determined to be 2:1.