**Influence of novel carrier Soluplus® on aqueous stability, oral bioavailability and anticancer activity of Morin hydrate**

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**Supplementary File**

**K:\2. SOLUPLUS SOLID DISPERSION\2 Manuscript\Figures\Fig 1a Structure of MOR with numbering.tif**

K:\2. SOLUPLUS SOLID DISPERSION\2 Manuscript\Figures\Fig 1b Structure of Soluplus.tif

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**Fig. 1S.** Chemical structure of Morin hydrate (a) Soluplus® (b) and phase solubility diagram of MOR in aqueous solutions of varied carriers (c).

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**Fig. 2S.** Intensity particle size distribution (A) number particle size distribution (B) and zeta potential (**ζ**) distribution (C) of optimized formulation SSD F(7) by Malvern Zetasizer.

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**Fig. 3S.** TGA-DTA analysis curves of MOR (A), Soluplus® (B), PM (C) and SSD F(7) (D).

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**Fig. 3S.***Continued*

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**Fig. 4S.**Fourier transform infrared spectrum of MOR (A), Soluplus® (B), PM (C) and SSD F(7) (D).

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**Fig. 5S.** *In vitro* dissolution profiles of MOR, PM and optimized formulation SSD F(7). Data represents mean ± standard deviation (*n*=3).