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Cross-linkable star-hyperbranched unimolecular micelles for the enhancement of the anticancer activity of clotrimazole

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S Figure 2. ¹H NMR spectrum of poly(1,2-epoxybutane (3x10)-b-ethoxyethyl glycidyl ether (3x4)) recorded in $CDCI_3$.



S Figure 3. ¹H NMR spectrum of poly(1,2-epoxybutane (3x10)-b-glycidol (3x4)) recorded in DMSO-d₆.



S Figure 4. ¹H NMR spectrum of poly(1,2-epoxybutane (3x10))-b-hyperbranched polyglycidol (A86) recorded in DMSO-d₆.



S Figure 5. ¹³C INVGATE NMR spectrum of poly(1,2-epoxybutane (3x10))-b-hyperbranched polyglycidol (A86) recorded in MeOD.



S Figure 6. ¹H DOSY NMR spectrum of poly(1,2-epoxybutane (3x10))-b-hyperbranched polyglycidol (A86) recorded in MeOD.



S Figure 7. ¹H NMR spectrum of poly(1,2-epoxybutane (3x15)) recorded in CDCl₃.



S Figure 8. ¹H NMR spectrum of poly(1,2-epoxybutane (3x15)-b-ethoxyethyl glycidyl ether (3x14)) recorded in $CDCl_3$.





S Figure 9. ¹H NMR spectrum of poly(1,2-epoxybutane (3x15)-b-glycidol (3x14)) recorded in DMSO-d₆.





S Figure 10. ¹H NMR spectrum of poly(1,2-epoxybutane (3x15))-b-hyperbranched polyglycidol (A92) recorded in DMSO-d₆.

S Figure 11. ¹³C INVGATE NMR spectrum of poly(1,2-epoxybutane (3x15))-b-hyperbranched polyglycidol (A92) recorded in MeOD.



S Figure 12. ¹H DOSY NMR spectrum of poly(1,2-epoxybutane (3x15))-b-hyperbranched polyglycidol (A92) recorded in MeOD.



S Figure 13. ¹H NMR spectrum of poly(1,2-epoxybutane (3x15)-b-ethylene oxide (3x8)) recorded in $CDCl_3$.



S Figure 14. ¹H NMR spectrum of poly(1,2-epoxybutane (3x15)-b-ethylene oxide (3x8))-bhyperbranched polyglycidol (A165) recorded in DMSO- d_6 .



S Figure 15. ¹³C INVGATE NMR spectrum poly(1,2-epoxybutane (3x15)-b-ethylene oxide (3x8))-bhyperbranched polyglycidol (A165) recorded in MeOD.



S Figure 16. ¹H DOSY NMR spectrum of poly(1,2-epoxybutane (3x15)-b-ethylene oxide (3x8))-bhyperbranched polyglycidol (A165) recorded in MeOD.



S Figure 17. ¹H NMR spectrum of poly(1,2-epoxyhexane (3x10)) recorded in CDCl₃.



S Figure 18. ¹H NMR spectrum of poly(1,2-epoxyhexane (3x10)-b-ethoxyethyl glycidyl ether (3x10)) recorded in $CDCl_3$.



S Figure 19. ¹H NMR spectrum of poly(1,2-epoxyhexane (3x10)-b-glycidol (3x10)) recorded in DMSO-d₆.



S Figure 20. ¹H NMR spectrum of poly(1,2-epoxyhexane (3x10))-b-hyperbranched polyglycidol (A71) recorded in DMSO-d₆.



S Figure 21. ¹³C INVGATE NMR spectrum of poly(1,2-epoxyhexane (3x10))-b-hyperbranched polyglycidol (A71) recorded in MeOD.



S Figure 22. ¹H DOSY NMR spectrum of poly(1,2-epoxyhexane (3x10))-b-hyperbranched polyglycidol (A71) recorded in MeOD.



S Figure 23. TEM image demonstrating the sape and diameter of unimolecular micelles based on A71.

Transmission Electron Microscopy, TEM TEM image was taken with Talos FX, FEI (Thermo Fisher Scientific, Waltham, MA USA). For TEM analysis, the aqueous solution of copolymer saturated with nifuratel was deposited on carbon-coated copper grid and evaporated. Image analysis was performed with Sigma Scan 5.0.



S Figure 24. ¹H NMR spectrum of poly(acrylamide-*ran*-2-acrylamidephenylboronic acid), 80:20 recorded in D_2O .



S Figure 25. Strain sweep tests performed for hydrogel systems constructed of polyether-based starhyperbranched unimolecular micelles.