

Supplementary Materials: Antibiotic-Loaded Psyllium Husk Hemicellulose and Gela-tin-Based Polymeric Films for Wound Dressing Application

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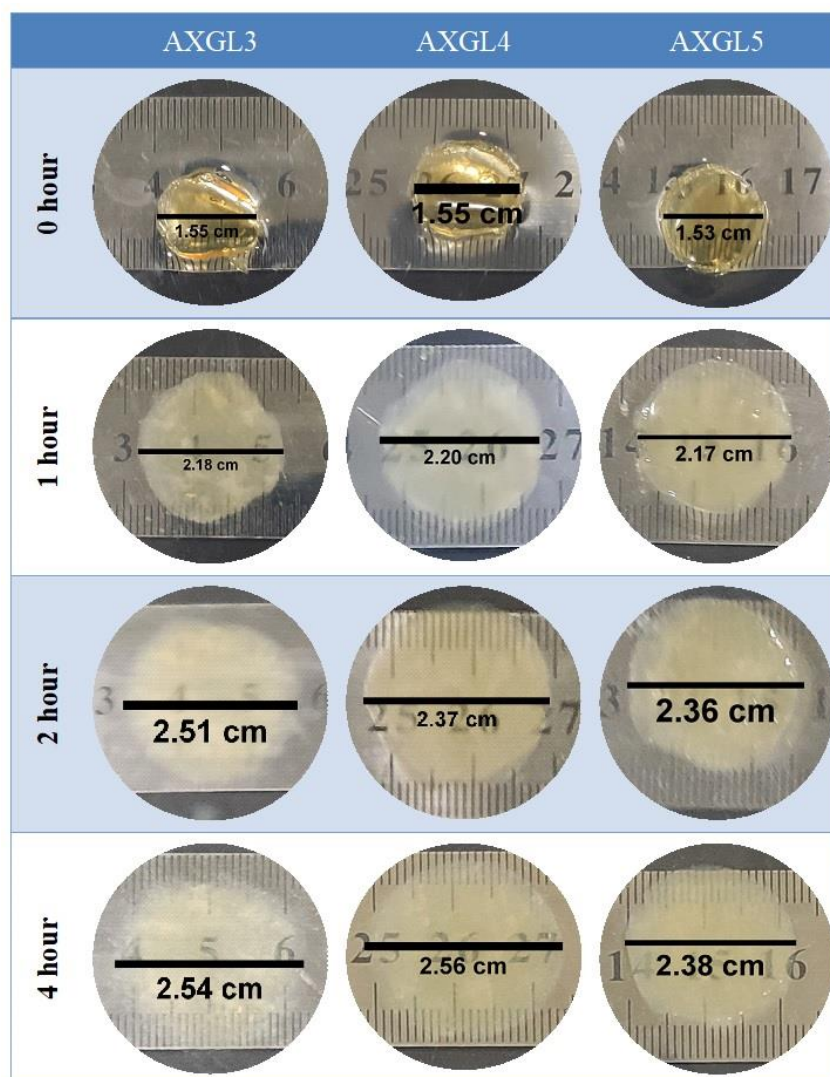


Figure S1. Photographs of the AX-GL films captured at different time intervals during expectation study.

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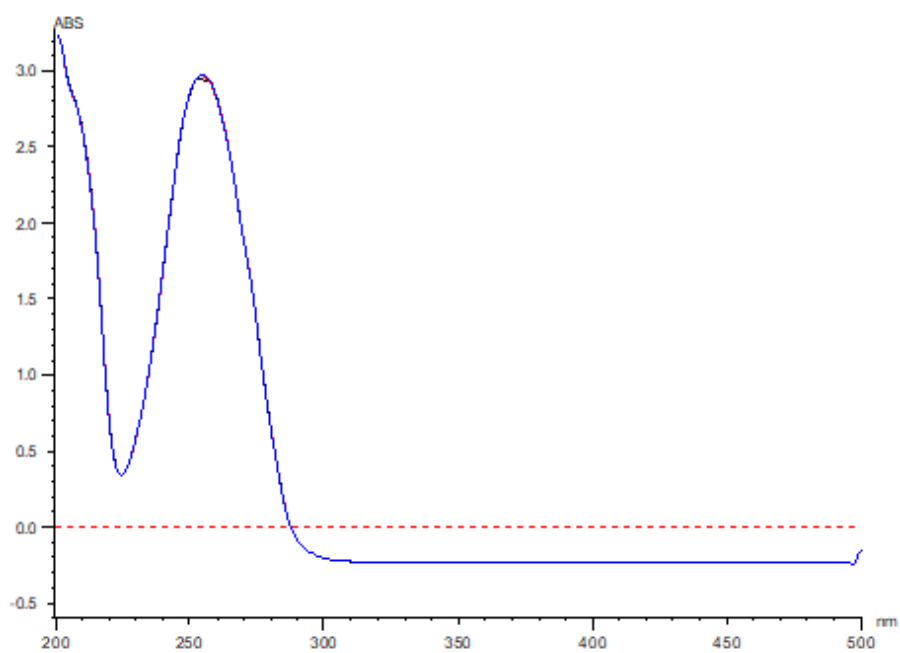


Figure S2. UV-visible spectrum of gentamicin sulfate (GM) solution.

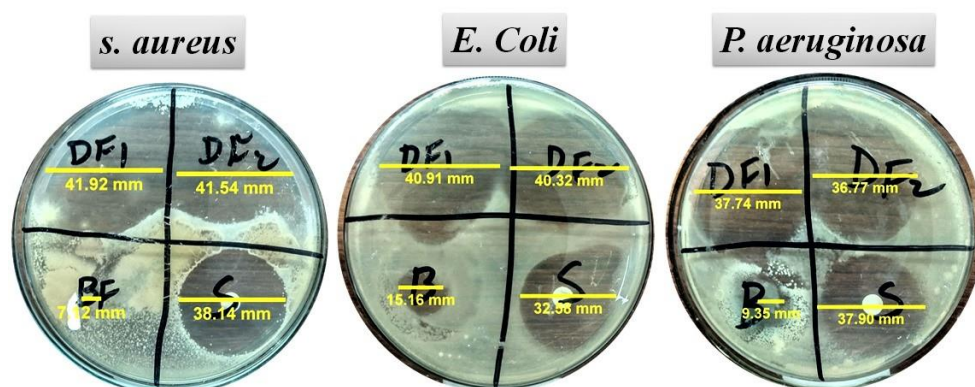


Figure S3. Antibacterial activity of AX-GL films against *S. aureus*, *E. coli*, and *P. aeruginosa*.

Table S1. Physical assessment of the AX-GL films and criteria for selection.

Code	Peelability	Transparency	Surface	Foldability	Remarks
AXGL1	×	√	√	-	Rejected: Films ruptured during peeling from plate
AXGL2	×	√	×	-	Rejected: Films showed rough surface and ruptured during peeling from plate
AXGL3	√	√	√	√	Selected: Transparent, easily peelable, and foldable films
AXGL4	√	√	√	√	Selected: Transparent, easily peelable, and foldable films
AXGL5	√	√	√	√	Selected: Transparent, easily peelable, and foldable films
AXGL6	-	-	-	-	Rejected: The film casting gel was highly viscous that was difficult to stir and pour for casting film

Table S2. Major peaks observed in the FTIR spectra and assigned functional groups.

Samples	νOH	νCH ₂ , νCH	-COOH	Pyran ring	Glycosidi c bond	N-H	Amide I	Amide II	C-O
AX	3340	2950, 2899	1625, 1440	1044	930	-	-	-	-
Glycerol	3319	2952, 2906		-		-	-	-	1045
GM	3299	-		1048	912	-	1635	1544	-
GL	3315	2941	1440	-	-	3315	1640	1557	1090
AXGL5	3312	2958, 2906	1437	1043	930	3312	1650	1560	1043
AXGL5 D	3314	2952, 2898	1422	1039	928	1314	1650	1560	1039

Values represents wavenumber (cm⁻¹) at which peaks were observed.