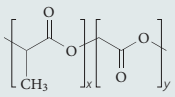
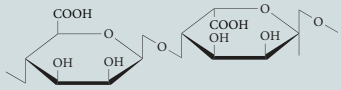
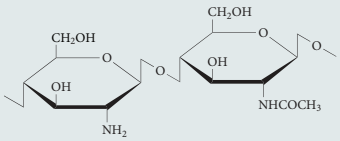
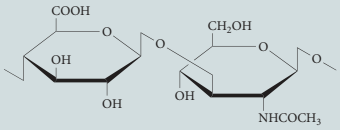
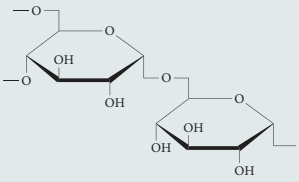
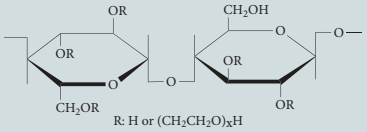
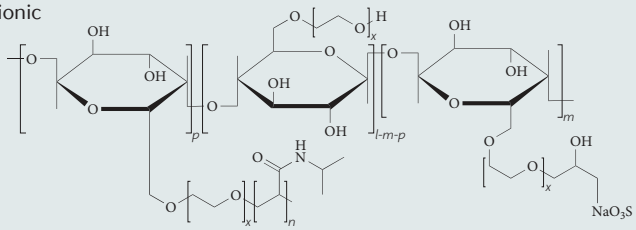
S1 | **Some characteristic properties of polymers that can be used to produce biocompatible micro- and nanobeads.**

Polymer	Type	Chemical Structure	Solubility	Cross-linker agent & method	References (TB applications italicized)
PLGA	Linear		DCM Acetone Ethyl -acetate	Beads preparation by emulsion	*1–4*
Alginate	Linear Anionic		Water	GDL,Ca+2 (physical) EDC (chemical)	*5–8*
Chitosan	Linear Cationic		Acidic pH ~ 3	TPP (physical) GP, GA (chemical)	*9–11*
Hyaluronan	Linear Anionic		Water	EDC (chemical)	10,12
Dextran	Branched		Water	DVS, EGDE (chemical)	10,12,13
HEC	Linear		Water	DVS, EGDE (chemical)	14,15
HEC-g-PNIPAAM	Grafted Anionic		Water	DVS, EGDE (chemical)	14,15

PLGA: Poly(lactic-co-glycolic acid); HEC: Hydroxyethylcellulose; GDL: Glucono-δ-lactone; EDC: 1-(3-Dimethylaminopropyl)-3-ethylcarbodiimide; TPP: Tripolyphosphate; GP: Genipin; GA: Glutaraldehyde; DVS: Divinylsulfone; EGDE: Ethylene glycol diglycidyl ether

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