

Table 2: Biologically Active Materials for Root Coverage				
Material	Components	Biologic Activity	Clinical Results	Histological Regeneration
Enamel matrix derivative	Porcine amelogenin (90%)	Increased cementoblast & osteoblast proliferation, differentiation; increased acellular cementum	Similar to CAF, CTG or GTR alone; no added benefit as adjunct; may be easier to handle	Inconsistent
Platelet-derived growth factor	Purified recombinant (synthetic) human platelet-derived growth factor (rhPDGF-BB)	Increased PDL and osteoblast proliferation; increased PDL, bone, cementum regeneration	As adjunct to collagen membrane, similar results as CTG alone	None
Platelet-rich plasma	Human (host) growth factors (vascular endothelial growth factor [VEGF]), insulin-like growth factor (IGF)-I, transforming growth factor- β (TGF- β), epithelial growth factor (EGF)	Increased angiogenesis, new bone formation, soft tissue maturation	No added benefit to CAF; may hasten soft tissue healing	None
Fibroblast-derived dermal substitute	Cultivated fibroblasts from human newborn foreskin that secrete VEGF, TGF- β	Increased angiogenesis and epithelialization	Similar to CTG; less keratinized tissue and more shrinkage versus FGG	None