

collagen V, fibronectin, tenascin, vitronectin, a glycosaminoglycans, any derivative thereof, and any combination thereof

18. A method comprising:

preparing a dermal equivalent for an allograft operation for a patient, wherein the dermal equivalent comprises a hydrogel matrix comprising at least a first hydrogel layer and a second hydrogel layer, and a plurality of mesenchymal stem cells.

19. The method of claim **18** wherein the mesenchymal stem cells are sourced from the patient for whom the dermal equivalent is prepared.

20. The method of claim **18** wherein at least a plurality of the mesenchymal stem cells comprise adipose derived stem cells.

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