CLAIMS

What is claimed is:

1. A composition comprising:

a plurality of dermal plugs harvested from tissue of a subject at a donor site while preserving live fibroblasts of the dermal plugs by using a rotating scalpet with a cylindrical shaft configured to contain the plurality of dermal plugs, and a distal end configured as a circular scalpel including a cutting surface to incise the plurality of dermal plugs, wherein the plurality of dermal plugs is minced following harvest; and

a carrier including a fluid, wherein the carrier is mixed with the minced dermal plugs to form an injectable filler with live fibroblasts of the subject, wherein the injectable filler is configured for injection into a subject.

2. The composition of claim 1, wherein the injectable filler comprises a live autologous dermal matrix (LADMIX) including a live biological collagen filler comprising the live fibroblasts of the subject.

3. The composition of claim 2, wherein the injectable filler comprises live fibroblasts.

4. The composition of claim 1, wherein the plurality of dermal plugs is harvested directly from the subject.

5. The composition of claim 1, wherein the plurality of dermal plugs is harvested from the tissue subsequent to the tissue being removed from the subject.

6. The composition of claim 1, wherein the plurality of dermal plugs excludes the epidermis, wherein the epidermis is removed in at least one region of the donor site.

7. The composition of claim 6, wherein the epidermis is removed by delaminating the epidermis from dermis in the at least one region.

8. The composition of claim 7, wherein the delaminating comprises blistering skin.

9. The composition of claim 7, wherein the delaminating comprises vibratory shearing, wherein the vibratory shearing comprises at least one of vacuum and heat.

10. The composition of claim 7, wherein the delaminating comprises superficial injection, wherein the superficial injection comprises at least one of saline and anesthetic.

11. The composition of claim 6, wherein the epidermis is removed by dermabrasion.

12. The composition of claim 1, wherein the plurality of dermal plugs is harvested by fractionally resecting at least one dermal plug from at least one region of a donor site.

13. The composition of claim 1, wherein the plurality of dermal plugs is harvested via at least one fractional resection application at the donor site.

14. The composition of claim 13, wherein the at least one fractional resection application comprises a first fractional resection application and a second fractional resection application.

15. The composition of claim 14, wherein the first fractional resection application comprises epidermis removal, wherein the second fractional resection application comprises fractional resection through dermis.

16. The composition of claim 15, wherein the second fractional resection comprises at least one of a partial-thickness fractional resection through the dermis and a full-thickness fractional resection through the dermis.

17. The composition of claim 15, wherein a fractional defect skin edge of the second fractional resection application comprises additional clearance relative to the fractional defect skin edge of the first fractional resection application.

18. The composition of claim 15, wherein the rotating scalpet is inserted into the at least one donor region during the at least one fractional resection.

19. The composition of claim 13, wherein a housing comprising a scalpet assembly is positioned at a donor site, wherein the scalpet assembly includes a scalpet array and at least one guide plate, wherein the scalpet array includes a plurality of rotating scalpets, wherein the at least one guide plate maintains a configuration of the plurality of rotating scalpets.

20. The composition of claim 19, wherein each rotating scalpet of the scalpet array comprises a cylindrical scalpet including a cutting surface on a distal end of the scalpet.

21. The composition of claim 19, wherein the scalpet array is deployed from the housing into tissue at the donor site and the plurality of dermal plugs is generated at the donor site.

22. The composition of claim 21, wherein the plurality of dermal plugs is passively extruded through a plurality of lumens of the plurality of rotating scalpets.

23. The composition of claim 21, wherein the plurality of dermal plugs is captured by a vacuum at the donor site, wherein the vacuum comprises pressure relatively lower than ambient air pressure.

24. The composition of claim 21, wherein the scalpet array is retracted into the housing from the donor site.

25. The composition of claim 19, wherein the plurality of dermal plugs is collected in a collection chamber coupled to the scalpet array.

26. The composition of claim 25, wherein the collection chamber is configured for at least one of receiving the plurality of dermal plugs, collecting the plurality of dermal plugs, mincing the plurality of dermal plugs, mixing the plurality of dermal plugs with a carrier, and a loading chamber for loading a composition comprising the plurality of dermal plugs into at least one of a needle and an injection cannula.

27. The composition of claim 25, wherein the collection chamber includes at least one of a pressurized chamber and an unpressurized chamber.

28. The composition of claim 25, wherein the plurality of dermal plugs is minced in the collection chamber.

29. The composition of claim 28, wherein the plurality of dermal plugs is minced with a rotating blade.

30. The composition of claim 25, wherein the carrier is mixed with the minced dermal plugs in the collection chamber.

31. The composition of claim 25, wherein at least one of a needle and an injection cannula is used for the injection, wherein the collection chamber is configured as a loading chamber for the at least one of the needle and the injection cannula.

32. The composition of claim 1, wherein the plurality of dermal plugs is minced with at least one blade.

33. The composition of claim 32, wherein the mincing comprises at least one of manual mincing, powered mincing, rotary mincing, reciprocating mincing, oscillating mincing, compressive mincing, and compressive morselization.

34. The composition of claim 1, wherein the carrier includes at least one of a fluid, a gel, hyaluronic acid, hydrogel, and saline.

35. The composition of claim 1, wherein the carrier includes a bioactive agent, wherein the bioactive agent comprises a dermal growth factor.

36. The composition of claim 1, wherein the injectable filler is centrifuged.

37. The composition of claim 1, wherein the injectable filler is injected from a syringe.

38. The composition of claim 1, wherein the injectable filler is injected during a same procedure as harvesting of the plurality of dermal plugs.

39. The composition of claim 1, wherein the injectable filler is configured to be injected into a recipient site on the subject, wherein the recipient site is different from the donor site.

40. The composition of claim 39, wherein a pocket is generated at the recipient site for receiving the injectable filler, wherein the pocket is generated when at least one of a needle and an injection cannula is advanced into a region adjacent the recipient site, wherein the injectable filler is injected into the pocket using the at least one of the needle and the injection cannula.