What is claimed is:

1. A method of removing agglomerations of individual particles from a viscous material or a viscous dermal filler material for administration to a patient comprising:

filling the material in an extrusion system comprising at least one filter/sieve;

passing the material through the at least one filter/sieve causing removal of the agglomerations of individual particles from the material; wherein the filtered material is suitable for administration to the patient.

2. The method of claim 1, wherein the method does not change the characteristic features or morphology of at least 98%, at least 95%, at least 92%, at least 89%, at least 86%, at least 83%, or at least 80% of the individual particles of the material.

3. The method of claim 1, wherein the passing step additionally comprises forcing the material through the at least one filter/sieve under pressure/by application of pressure, and/or wherein the material is forced through the at least one filter/sieve by application of pressure using a plunger, an extruder, a manual compression, a syringe pump, a platen compression, a roller for flexible tubes, a compressor, or a device capable of employing similar mechanism.

4. The method of claim 1, wherein the agglomerations are removed from the material by breaking-up/disintegrating the agglomerations, or by filtering out/sieving out the agglomerations that are unable to pass through the at least one filter/sieve.

5. The method of claim 1, wherein the material is pre-filtered through a plurality of pre-filtering devices, wherein the pre-filtration step occurs prior to the passing step, and/or wherein the plurality of pre-filtering devices are a series of injection devices, injection syringes, discharge systems, injection devices with luer-lock connectors, compressible tubes, non-compressible tubes, cylinders, or large-scale syringes.

6. The method of claim 5, wherein the material is pre-filtered through a first pre-filtering device followed by a second pre-filtering device, and/or wherein the first and second pre-filtering devices are a series of injection devices, injection syringes, or large-scale syringes, wherein the first pre-filtering device has an aperture size greater than the second pre-filtering device, and/or wherein

the aperture size of the first pre-filtering device is in the range of 18G-34G and/or wherein the aperture size of the second pre-filtering device is in the range of 18G-34G.

7. The method of claim 1, wherein the material is passed through the at least one filter/sieve having a pore size/an aperture size smaller than the individual particle size of the material, wherein the pore size of the at least one filter/sieve is in the range of 1-1000 μm and the individual particle size is in the range of 20-1000 μm or wherein the pore size of the at least one filter/sieve is in the range of 25-500 μm and the individual particle size is in the range of 40-500 μm, or wherein the pore size of the at least one filter/sieve is in the range of 50-200 μm and the individual particle size is in the range of 75-200 μm.

8. The method of claim 1, wherein the filtered material is collected in a loading vessel / transfer syringe, and/or wherein the filtered material does not occlude the loading vessel / transfer syringe when injected out of the loading vessel / transfer syringe, and/or wherein the filtered material has a substantially uniform or controlled extrusion profile when injected out of the loading vessel / transfer syringe, and and/or wherein the filtered material injects out of the loading vessel / transfer syringe without any pressure build-ups after the initial characteristic burst / break force.

burst / break force.

9. The method of claim 1, wherein the individual particles of the material have an undamaged morphology and/or wherein the filtered material triggers an expected immune response in the patient upon administration.

10. The method of claim 1, wherein the extrusion system is selected from the group consisting of an injection syringe, a discharge system, a luer-lock connector device, or a compressible tube, and/or wherein the extrusion system is a syringe, wherein the syringe has a needle size in the range of 18G-34G.

11. The method of claim 1, wherein the loading vessel / transfer syringe is selected from the group consisting of an injection syringe, a discharge system, a luer-lock connector device, or a compressible tube, and/or wherein the loading vessel / transfer syringe is a syringe, wherein the syringe has a needle size of 18G-34G.

12. The method of any one of claims 1-11, wherein the volume of the extrusion system is greater than the volume of the loading vessel / transfer syringe, or wherein the extrusion system has a lower cross section compared to the loading vessel/transfer syringe.

13. The method of any one of claims 1-12, wherein the at least one filter/sieve is selected from the group consisting of nylon mesh, stainless steel mesh, polytetrafluoroethylene mesh or nitrocellulose mesh, and/or wherein the at least one filter/sieve is placed inside, outside, adjacent to, or screwed on to the extrusion system, and/or wherein the at least one filter/sieve is replaced with an inline filter, a gated impeller, a static mixer, a high shear mixer, a viscous mixer or a sieving channel.

14. The method of any one of claims 1-13, wherein the passing step sizes the individual particles of the material to create a substantially uniform or controlled particulate matrix for administration, and/or wherein the method reduces the extrusion force required for injecting out the material from the extrusion system.

15. The method of claim 1, wherein the extrusion system is a luer-lock connector device, wherein the at least one filter/sieve is fitted/disposed within the luer-lock connector portion of the device, and/or wherein the material is forced through the at least one filter/sieve fitted/disposed within the luer-lock connector portion under pressure / by application of pressure, and/or wherein the pressure is applied using a plunger, an extruder, a manual compression, a syringe pump, a platen compression, a roller for flexible tubes, a compressor or a device capable of employing similar mechanism.

16. The method of claim 1, wherein the passing step is repeated with a plurality of filters/sieves, and/or wherein the plurality of filters/sieves are of the same size or have varying sizes, and/or wherein the pore size of the at least one filter/sieve is in the range of 1-1000 μm, and/or wherein passing the material through a plurality of filter/sieves reduces the viscosity or adjusts the particle size distribution of the material to a desired level, and/or in the range of 50-750 μm.

17.The method of claim 1, wherein the material is selected from the group consisting of dermal fillers; sealants; adhesives; composite mixtures of mammalian cells; scaffolding materials; bone pastes; bone cements; cartilage biomaterials; injectables including venous stasis applications; protein hydrogel; carbohydrate hydrogels including cellulose, pectin, and lignin; cell material mixtures; thickeners; gelling agents; and stabilizers.

18. A method of removing agglomerations of individual particles from a material for administration to a patient comprising:

filling the material in a first collection vessel comprising at least one filter/sieve;

passing the material through the at least one filter/sieve causing removal of the agglomerations of individual particles from the material

collecting the material in a second collection vessel, wherein the filtered material collected in the second collection vessel is suitable for administration to the patient.

19. The method of claim 18, wherein the first collection vessel comprises an extrusion system, wherein the extrusion system comprises the at least one filter/sieve, and/or wherein the method does not change the characteristic features or morphology of at least 98%, at least 95%, at least 92%, at least 89%, at least 86%, at least 83%, or at least 80% of the individual particles of the material.

20. The method of claim 18, wherein the passing step additionally comprises forcing the material through the at least one filter/sieve under pressure/by application of pressure, and/or wherein the material is forced through the at least one filter/sieve by application of pressure using a plunger, an extruder, a manual compression, a syringe pump, a platen compression, a roller for flexible tubes, a compressor or a device capable of employing similar mechanism.

21. The method of claim 18, wherein the agglomerations are removed from the material by breaking-up/disintegrating the agglomerations or wherein the agglomerations are removed from the material by filtering out/sieving out the agglomerations that are unable to pass through the at least one filter/sieve.

22. The method of claim 18, wherein the material is pre-filtered through a plurality of pre-filtering devices, wherein the pre-filtration step occurs prior to the passing step, and/or wherein the plurality of pre-filtering devices are selected from the group of a series of injection devices, injection syringes, discharge systems, injection devices with luer-lock connectors, compressible tubes, non-compressible tubes, cylinder, or large-scale syringes.

23. The method of claim 22, wherein the material is pre-filtered through a first pre-filtering device followed by a second pre-filtering device, and/or wherein the first pre-filtering device has an

aperture size greater than the second pre-filtering device, and/or wherein the aperture size of the first pre-filtering device is selected from 18G-34G and/or wherein the aperture size of the second pre-filtering device is selected from 18G-34G.

24. The method of claim 18, wherein the material is passed through the at least one filter/sieve having a pore size/an aperture size smaller than the individual particle size of the material, and/or wherein the pore size of the at least one filter/sieve is in the range of 1-1000 μm and the individual particle size is in the range of 20-1000 μm or wherein the pore size of the at least one filter/sieve is in the range of 25-500 μm and the individual particle size is in the range of 40-500 μm, or wherein the pore size of the at least one filter/sieve is in the range of 50-200 μm and the individual particle size is in the range of 75-200 μm.

25. The method of claim 18, wherein the filtered material collected in the second collection vessel is dispensed/injected out using a dispensing device, and/or wherein the filtered material does not occlude the dispensing device when dispensed/injected out of the dispensing device, or wherein the filtered material has a substantially uniform or controlled extrusion profile when dispensed/injected out of the dispensing device, and/or wherein the filtered material dispenses/injects out of the dispensing device without any pressure build-ups after the initial characteristic burst / break force, and/or wherein the individual particles of the material have an undamaged morphology.

26. The method of claim 18, wherein the filtered material triggers an expected immune response in the patient upon administration, and/or wherein the dispensing device is selected from the group consisting of a series of injection devices, injection syringes, discharge systems, injection devices with luer-lock connectors, compressible tubes, non-compressible tubes, cylinders, or large-scale syringes, and/or wherein the dispensing device is a syringe, wherein the syringe has a needle size of 18G-34G.

27. The method of claim 18, wherein the at least one filter/sieve is selected from the group consisting of nylon mesh, stainless steel mesh, polytetrafluoroethylene mesh or nitrocellulose mesh, and/or wherein the at least one filter/sieve is placed inside, outside, adjacent to, or screwed on to the first collection vessel, or wherein the at least one filter/sieve is replaced with an inline filter, a gated impeller, a static mixer, a high shear mixer, a viscous mixer or a sieving channel.

28. The method of claim 18, wherein the passing step sizes the individual particles of the material to create a substantially uniform or controlled particulate matrix for administration.

29. The method of claim 18, wherein the at least one filter/sieve is disposed within a luer-lock connector fitted within the first collection vessel / a luer-lock connector portion of the first collection vessel, and/or wherein the material is forced through the at least one filter/sieve disposed within the luer-lock connector portion under pressure / by application of pressure, and/or wherein the pressure is applied using a plunger, an extruder, a manual compression, a syringe pump, a platen compression, a roller for flexible tubes, a compressor or a device capable of employing similar mechanism.

30. The method of claim 18, wherein the passing step is repeated with a plurality of filters/sieves, and/or wherein the plurality of filters/sieves are of the same size or have varying sizes, and/or wherein the size of the at least one filter/sieve is in the range of 1-1000 μm, more and/or wherein passing the material through a plurality of filter/sieves reduces the viscosity or adjusts the particle size distribution of the material to a desired level, and/or in the range of 50-750 μm, and/or wherein passing the material through a plurality of filter/sieves reduces the viscosity or adjusts the particle size distribution of the material to a desired level, and/or in the range of 50-750 μm, wherein the method reduces the extrusion force required for injecting out the material from the extrusion system.

31. The method of claim 18, wherein the material is selected from the group consisting of dermal fillers; sealants; adhesives; composite mixtures of mammalian cells; scaffolding materials; bone pastes; bone cements; cartilage biomaterials; injectables including venous stasis applications; protein hydrogel; carbohydrate hydrogels including cellulose, pectin, and lignin; cell material mixtures; thickeners; gelling agents; and stabilizers, and/or wherein the first collection vessel is a series of vessels of varying dimensions, a storage unit or chamber, an industrial mixer, an industrial dispenser, an intermediate transfer container, a injection syringe, a large-injection syringe, a luer-lock connector device, a discharge system, or a compressible tube, and/or wherein the second collection vessel is selected from at least one of a transfer container, a storage bottle, a injection syringe, a filler cartridge, a series of vessels of varying dimensions, a storage unit or chamber, an industrial mixer, an industrial dispenser, an intermediate transfer container, a large-injection syringe, a luer-lock connector device, a discharge system, or a compressible tube, wherein the second collection vessel is used for dispensing/injecting out the filtered material for

administration to the patient, and/or wherein the first collection vessel has a volume greater than the second collection vessel.