[0014] In an embodiment, the device may further comprise an extraction button configured to activate the extraction source such that the extraction portion is in fluid communication with the needle to extract the sample from the needle to the extraction source.

[0015] In an embodiment, the extraction source may be fluidically separated from the injection source such that, in use, the agent does not contact the sample.

[0016]

[0017]

[0018]

[0019]

[0020]

[0021]

CLAIMS

1. An extraction and injection ophthalmic device comprising:

a housing comprising:

an injection portion configured to receive an injection source;

an extraction portion configured to receive an extraction source;

a priming mechanism configured to simultaneously prime both the injection source and the extraction source;

a needle selectively in fluid communication with the injection source or the extraction source;

wherein on activation of the extraction source, the device is configured to extract a sample through the needle, and on activation of the injection source the device is configured to inject an agent through the needle.

2. The device according to claim 1, wherein the priming mechanism further comprises a lever communicatively coupled to a spring, such that a translation movement of the lever is configured to compress the spring to simultaneously prime both the injection source and the extraction source.

3. The device according to claim 1, further comprising a manifold configured to selectively connect the needle with the injection source or the extraction source, wherein the manifold comprises a double spool manifold.

4. The device according to claim 1, further comprising shearing means configured to shear excess vitreous humor from the sample to be extracted.

5. The device according to claim 1, wherein the injection source and the extraction source are removably attached to the housing.

6. The device according to claim 1, wherein the injection source includes a syringe.

7. The device according to claim 1, wherein the extraction source includes any one of: a syringe, a vacutainer or a pump.

8. The device according to claim 1, further comprising an injection button configured to activate the injection source such that the injection portion is in fluid

communication with the needle to inject the agent from the injection source to the needle.

9. The device according to claim 1, further comprising an extraction button configured to activate the extraction source such that the extraction portion is in fluid communication with the needle to extract the sample from the needle to the extraction source.

10. The device according to claim 1, wherein the extraction source is fluidically separated from the injection source such that, in use, the agent does not contact the sample.