

Claims

1. Cannula system (1) comprising a rigid cannula (2), a cannula unit (3) and an insertion unit (4), wherein the rigid cannula (2) is connected to the cannula unit (3), the cannula unit (2) comprising, a septum (31) being mounted to a mounting structure (32) of the cannula unit
5 (3), a connecting structure (33) for reversibly or irreversibly connecting the cannula unit (3) to a cannula unit holder (5), a cavity (34) being at least partially formed by the septum (31), wherein the rigid cannula (2) is in fluidic communication with the cavity (34), and wherein the insertion unit (4) comprises a rigid needle (41) at least partially penetrating the septum (31) and an attachment structure (42) for reversibly attaching the insertion unit
10 (4) to the cannula unit (3).
2. The cannula system (1) according to claim 1, wherein the rigid needle (41) penetrates the septum (31) in an essentially central position of the septum, when the insertion unit (4) is attached to the cannula unit (3).
3. The cannula system (1) according to any of the preceding claims, wherein the cavity (34)
15 is formed by inner walls (35) of the cannula unit (3) and the septum (31).
4. The cannula system (1) according to any of the preceding claims, wherein the rigid cannula (2) comprises a locking structure (21) for fixedly connecting the cannula (2) to the cannula unit (3).
5. The cannula system (1) according to claim 4, wherein the locking structure (21) provides
20 a positive lock and/or an adhesive bond between the rigid cannula (2) and the cannula unit (3)
6. The cannula system (1) according to claim 5, wherein the locking structure (21) includes at least one protrusion, preferably a collar arranged at the most distal part of the rigid

cannula, protruding from the rigid cannula and/or at least one hole, preferably a through bore or a blind hole.

- 5 **7.** The cannula system (1) according to any of the preceding claims, wherein the insertion unit (4) comprises connecting means (43a, 43b) for connecting the insertion unit (4) to an inserter.
- 8.** The cannula system (1) according to any of the preceding claims, wherein the insertion unit (4) comprises a slit (44) extending towards the rigid needle, wherein the slit (44) comprises an adhesive.
- 10 **9.** The cannula system (1) according to any of the previous claims, wherein the rigid needle (41) is unmovably connected to the rest of the insertion unit (4).
- 10.** The cannula system (1) according to any of the previous claims, wherein the attachment structure (42) comprises a releasable adhesive or a releasable form-locking structure.
- 15 **11.** The cannula system (1) according to any of the previous claims, wherein a force required for release the cannula unit (3) from the insertion unit (4) is smaller than a force exerted by the connecting structure (33) for reversibly or irreversibly connecting the cannula unit (3) to the cannula unit holder (5) and/or smaller than a force required to separate the rigid cannula (2) from the cannula unit (3).
- 20 **12.** The cannula system (1) according to any of the previous claims, wherein the rigid needle (41) preferably does not extend into rigid cannula (2), preferably, a tip of the rigid needle (41) does not extend into the lumen of the rigid cannula (2).
- 13.** Infusion system for the infusion of liquid drugs with a cannula system (1) according to any of the previous claims.

- 14.** Use of a cannula system (1) according to any of the previous claims in an infusion system.