

CLAIMS

1. An inserter (1100, 1300, 1400, 1500) for an intrauterine system (1102, 1336, 1402, 1502), comprising
- a handle body (1104, 1306, 1416, 1504) having a distal end (1108, 1330, 1454, 1508), a proximal end (1106, 1440, 1506) and a length L_H defined as the distance between the distal end and the proximal end;
 - a measurement tube (1110, 1328, 1406, 1510) having a distal end (1114, 1514) and a proximal end (1112, 1512), its proximal end being movably attached to the distal end of the handle body, provided the measurement tube is arranged to remain outside a cervix channel during insertion;
 - a plunger (1132, 1202, 1362, 1450, 1532) having a distal end (1134, 1360, 1534), a proximal end (1136, 1536), a length L_P defined as the distance between the distal end and the proximal end, the plunger being movably arranged inside the handle body and the measurement tube, wherein the length L_P is greater than the length L_H ;
 - a flange (1122, 1404, 1522) movably arranged to surround the measurement tube;
 - a finger holder (1124, 1314, 1446, 1524) movably arranged to surround the handle body; and
 - means (1126, 1526) for reversibly locking a removal thread (1128, 1358, 1414) of the intrauterine system, arranged on the handle body.
2. An inserter (1100, 1300, 1400, 1500) according to claim 1, wherein the plunger (1132, 1202, 1362, 1450, 1532) is hollow so as to allow the removal thread (1128, 1358, 1414) of the intrauterine system (1102, 1336, 1402, 1502) to pass through the plunger.
3. An inserter (1100, 1300, 1400, 1500) according to any of the preceding claims, wherein the plunger (1132, 1202, 1362, 1450, 1532)

comprises means (1206) for preventing its removal from inside the handle body (1104, 1306, 1416, 1504).

4. An inserter (1100, 1300, 1400, 1500) according to any of the preceding claims, further comprising a piston (1130, 1204, 1304, 1438, 5 1530) attached to the plunger (1132, 1202, 1362, 1450, 1532) and arranged to move the plunger, the piston being movably arranged inside the handle body (1104, 1306, 1416, 1504).

5. An inserter (1100, 1300, 1400, 1500) according to claim 4, wherein the piston (1130, 1204, 1304, 1438, 1530) is hollow so as to allow the 10 removal thread (1128, 1358, 1414) of the intrauterine system (1102, 1336, 1402, 1502) to pass through the piston.

6. An inserter (1100, 1300, 1400, 1500) according to claim 4 or 5, wherein the piston (1130, 1204, 1304, 1438, 1530) comprises means (1308) for preventing its removal from inside the handle body (1104, 15 1306, 1416, 1504).

7. An inserter (1100, 1300, 1400, 1500) according to any of the preceding claims, wherein the means (1126, 1526) for reversibly locking the removal thread (1128, 1358, 1414) comprises a rotatable knob (1418) arranged, in a first position (1420), to lock the removal thread 20 between the handle body (1104, 1306, 1416, 1504) and the knob, and in a second position (1454), to allow the removal threads to be moved with respect to the handle body.

8. An inserter (1100, 1300, 1400, 1500) according to claim 7, wherein the knob (1418) and the handle body (1104, 1306, 1416, 1504) comprise 25 corresponding forms allowing the removal threads (1128, 1358, 1414) to be locked when the knob is in the first position (1420).

9. An inserter (1100, 1300, 1400, 1500) according to any of the preceding claims, further comprising a tip cover (1116, 1334, 1422,

1516) having a distal end (1118, 1434, 1518) and a proximal end (1120, 1520), the tip cover being arranged to withdraw inside the distal end of the measurement tube, provided the tip cover is arranged to remain outside the cervix channel during insertion.

5 10. An inserter (1100, 1300, 1400, 1500) according to any of the preceding claims, wherein the length L_h is 70-110 mm.

11. An inserter (1100, 1300, 1400, 1500) according to any of the preceding claims, wherein the length L_p is 50-90 mm.

12. An inserter (1100, 1300, 1400, 1500) according to any of the
10 preceding claims, wherein the proximal part of the measurement tube (1110, 1328, 1406, 1510) comprises insertion depth indicators (1408).

13. A kit comprising an inserter (1100, 1300, 1400, 1500) according to any of the claims 1-12 and an intrauterine system (1102, 1336, 1402, 1502), wherein the intrauterine system comprises

15 - a frame (1146, 1338, 1412, 1544) having a first end (1148, 1340, 1546), a second end (1150, 1342, 1548) and a length L defined as a distance from the first end to the second end;

- a removal thread (1128, 1358, 1414) attached to the first end of the frame; and

20 - at least one pharmaceutically active agent;

wherein the first end of the frame comprises a first locking part (1152, 1344, 1550) and the second end of the frame comprises a second locking part (1154, 1346, 1552), the first locking part and the second locking part being arranged to form a lock, the removal thread being configured

25 to guide the first locking part to the second locking part.

14. A kit according to claim 13, wherein the distal end (1134, 1360, 1534) of the plunger (1132, 1202, 1362, 1450, 1532) is configured to cooperate with the second locking part (1154, 1346, 1552).