

CLAIMS

1. A valve clamping system, comprising:

a catheter sheath, having a first through hole;

5 an expanding device, having a second through hole, wherein the second through hole and an outer wall thereof are capable of entering into the first through hole; the second through hole has an inner diameter adapted to be penetrated by the guide wire; and the axial length of the second through hole is greater than the axial length of the first through hole;

a trans-valve device, wherein the trans-valve device comprises a rod body having an
10 outer diameter smaller than an inner diameter of the first through hole and an elastic trans-valve head disposed at one end of the rod body, and the length of the rod body is greater than the axial length of the first through hole;

a conveying device, wherein one end of the conveying device is provided with a conveying tube, the conveying tube comprises a third through hole, one end of the
15 conveying tube is connected with a closed ring in a detachable manner, and the axial length of the conveying tube is greater than the axial length of the catheter sheath;

a pushing rod, wherein at least a portion of the pushing rod is capable of entering the third through hole, and a length of the rod section of the pushing rod capable of entering the third through hole is greater than an axial length of the third through hole;

20 a loading device, wherein the loading device comprises a fourth through hole adapted to accommodate at least a portion of the conveying tube, and at least a portion of the outer wall of the fourth through hole is capable of entering into the first through hole; ~~and~~

a first clamping component and a second clamping component, wherein the first clamping component comprises at least two first clamping arms, and the second clamping
25 component comprises a corresponding number of second clamping arms; each of the first clamping arms and the corresponding second clamping arm are combined into a pair of clamps; the first clamping component is adapted to be connected to the distal end of the pushing rod in a detachable manner, the second clamping component is adapted to be connected to the pushing rod in a sliding manner, and the distal end of the closed ring is
30 adapted to be connected to the proximal end of the second clamping component in a

detachable manner; and

5 wherein, a distal end of the closed ring and a proximal end of the second clamping component are respectively provided with an internal thread and an external thread matched with each other, and the second clamping component comprises fixed teeth that cooperate with the internal thread, wherein a portion of the external thread of the second clamping component disposable and positionable a distance away from the distal end of the internal thread of the closed ring.

10 2. The valve clamping system of claim 1, wherein the valve clamping system further comprises a piercing sheath, and the piercing sheath comprises a tube section having an inner diameter dimension adapted to accommodate the rod body and the trans-valve head, and an outer diameter dimension adapted to enter the first through-hole.

15 3. The valve clamping system of claim 1, wherein the conveying device further comprises a hemostasis valve disposed at an end of the conveying device away from the conveying tube.

20 4. The valve clamping system of claim 1, wherein a transition between a tube body of the expanding device and a tube wall of the catheter sheath is smooth.

5. The valve clamping system of claim 1 or 3, wherein, the conveying device further comprises an operating handle, and the conveying tube and the closed ring are fixed to the operating handle in a silk thread binding manner.

25 ~~6. The valve clamping system of claim 1, wherein, a distal end of the closed ring and a proximal end of the second clamping component are respectively provided with an internal thread and an external thread matched with each other, and the second clamping component comprises fixed teeth that cooperate with the internal thread.~~

30 67. The valve clamping system of any of the preceding claims, wherein, the valve

clamping system further comprises a storage box configured for a setting of the catheter sheath, the expanding device, the trans-valve device, the conveying device, the loading device, and the pushing rod.