

1. A puncture instrument comprising:
  - a puncture tip section;
  - a first tubular body connected to the puncture tip section at a distal end; and
  - an outer tubular body at least partially covering the first tubular body;wherein
  - the first tubular body is formed to be rotatable around an axis along the longitudinal direction,
  - the first tubular body has an outer diameter smaller than an inner diameter of the outer tubular body,
  - a drug solution supply path is provided on the outside of the first tubular body,the puncture tip section comprises:
  - a tube comprising a distal end and an opening in a surface at the distal end,
  - a tip rotation section configured to perforate a tissue in a medullary cavity while rotating together with the tube, the tip rotation section being disposed on a distal side of the surface at the distal end in the tube, and
  - a connection member configured to connect the tube and the tip rotation section,wherein
  - the tube is integrally formed with the tip rotation section and the connection member, and
  - the first tubular body is flexible and disposed on a proximal side of the tube.
2. The puncture instrument according to claim 1, wherein
  - the first tubular body is formed into a coil shape.
3. The puncture instrument according to claim 2, wherein
  - a direction for winding the coiled first tubular body agrees with a direction for rotating the first tubular body.
4. The puncture instrument according to any one of claims 1 to 3 wherein
  - the tip rotation section comprises a disc-shaped member having a radial central axis on a central axis extending in the longitudinal direction of the tube.

5. The puncture instrument according to any one of claims 1 to 4, wherein a groove continuing from the opening of the tube is formed in the connection member.
6. The puncture instrument according to any one of claims 1 to 5, wherein the surface at the distal end is not orthogonal to the longitudinal direction of the tube.
7. The puncture instrument according to any one of claims 1 to 6, wherein the width of the tip rotation section in a direction orthogonal to the longitudinal direction of the tube is larger than that of the tube in the same.
8. The puncture instrument according to any one of claims 1 to 7, wherein an angle  $\theta$  between a surface at the distal end of the tube and a central axis extending in the longitudinal direction of the tube is an acute angle.
9. The puncture instrument according to claim 8, wherein the angle  $\theta$  is  $50^\circ$  to  $60^\circ$ .
10. The puncture instrument according to any one of claims 1 to 9, wherein an outer edge of the tip rotation section at the distal end is an arc shape.
11. The puncture instrument according to any one of claims 1 to 10, wherein a side surface at an outer edge of the tip rotation section is a curved surface.
12. The puncture instrument according to any one of claims 1 to 11, wherein the puncture instrument is a bone marrow puncture instrument.