~~WHAT IS~~ CLAIM~~ED I~~S:

1. A medical tube (200) to transport gases, the medical tube (200) comprising:

an elongate film (210) spirally wrapped with an elongate reinforcing member (220) to form a lumen, the elongate film (210) bonding with the elongate reinforcing member (220),

wherein the elongate film (210) comprises a profile (230) that keeps the elongate film (210) from protruding into the lumen of the medical tube (200) when the medical tube (200) is bent;

wherein the profile (230) comprises an inwardly biased profile between adjacent windings of the reinforcing member; and

wherein the longitudinal distance between corresponding points on adjacent windings of the elongate reinforcing member (220), measured when the medical tube (200) is not subject to deformational strain, is selected such that the elongate film (210) drapes a maximal amount between successive windings of the elongate reinforcing member (220) while not extending inwardly beyond the base of the elongate reinforcing member (220) into the lumen when the medical tube (200) is bent.

2. A medical tube (200) as claimed in claim 1, wherein the elongate film (210) is made of a breathable material.

3. A medical tube (200) as claimed in claims 1 or 2, wherein the elongate film (210) is wrapped around a radially-outward surface of the elongate reinforcing member (220), facing away from the lumen, such that the elongate reinforcing member (220) interacts with the lumen of the medical tube (200) and the elongate film (210) forms the outer surface of the medical tube (200).

~~4. A medical tube as claimed in any one of claims 1 to 3, wherein the longitudinal distance between corresponding points on adjacent windings of the elongate reinforcing member, measured when the medical tube is not subject to deformational strain, is selected such that the elongate film drapes a maximal amount between successive windings of the elongate reinforcing member while not extending inwardly beyond the elongate reinforcing member base into the lumen when the medical tube is bent.~~

~~5.~~4. A medical tube (200) as claimed in any one of claims 1 to ~~4~~3, wherein the average radial distance from the lowest point of the elongate film (210) in the lumen to the bottom of

the elongate reinforcing member (220), measured when the medical tube (200) is not subject to deformational strain, is less than 0.2 mm.

~~6. A medical tube as claimed in any one of claims 1 to 5, wherein the profile is an inwardly biased profile.~~

~~7. A medical tube as claimed in any one of claims 1 to 6, wherein the elongate reinforcing member comprises a D-shaped cross section.~~

~~8. A medical tube as claimed in any one of claims 1 to 7, wherein the flat part of the D-shaped cross section is longitudinally aligned with the lumen and the semi-circular part of the D-shaped cross section is facing away from the lumen.~~

~~9. A medical tube as claimed in claim 8, wherein the elongate film bonds to the semi-circular part of the D-shaped cross section.~~

~~10.~~5. A medical tube (200) as claimed in any one of claims 1 to ~~6~~4, wherein the elongate reinforcing member (220) comprises a circular cross section.

~~11.~~6. A medical tube (200) as claimed in any one of claims 1 to ~~10~~5, wherein windings of the elongate reinforcing member (220) roll or lean sideways in response to an applied force.

~~12.~~7. A medical tube (200) as claimed in claim ~~11~~6, wherein the medical tube (200) maintains a gases flow while the force is applied.

~~13.~~8. A medical tube (200) as claimed in any one of claims 1 to ~~12~~7, wherein a maximal amount of the elongate film (210) extends between adjacent windings of the elongate reinforcing member (220) without protruding into the lumen.

~~14.~~9. A medical tube (200) as claimed in any one of claims 1 to ~~13~~8, wherein the elongate reinforcing member (220) is hollow.

~~15.~~10. A medical tube (200) as claimed in claim ~~13~~8, wherein the elongate reinforcing member (220) comprises a cavity configured to hold or transport a fluid.

11. A medical tube (200) as claimed any one of claims 1 to 10, wherein the longitudinal distance between corresponding points on adjacent windings, measured when the medical tube (200) is not subject to deformational strain, is selected to maintain a bend radius of the medical tube (200) greater than or equal to about 10 mm.

12. A medical tube (200) as claimed in any one of claims 1 to 11, wherein the film is made from a breathable thermoplastic polyurethane material, and the reinforcing member is made from a thermoplastic polyurethane material.

13. A medical tube (200) as claimed in any one of claims 1 to 12, wherein the film comprises a breathable film made of a breathable material having a vapour transmission rate greater than or equal to 650 g/m2/day when measured according to Procedure B of ASTM E96, using the upright cup method at a temperature of 230C and a relative humidity of 50%.

14. A medical tube (200) as claimed in any one of claims 1 to 13, wherein the diameter of the tube (200) is between 1 mm and 16 mm, preferably between 7 and 9 mm or between 14 and 16 mm.

~~16. A medical tube to transport gases, the medical tube comprising:~~

~~an elongate film spirally wrapped with a elongate reinforcing member to form a lumen, the elongate reinforcing member comprising a D-shaped cross section, the elongate film bonding to a semi-circular part of the D-shaped cross section of the elongate reinforcing member,~~

~~wherein a maximal amount of the elongate film extends between adjacent windings of the elongate reinforcing member without protruding into the lumen.~~

~~17. A medical tube as claimed in claim 16, wherein the elongate film is made of a breathable material.~~

~~18. A medical tube as claimed in claims 16 or 17, wherein the elongate film is wrapped around a radially-outward surface of the elongate reinforcing member, facing away from the lumen, such that the elongate reinforcing member interacts with the lumen of the medical tube and the elongate film forms the outer surface of the medical tube.~~

~~19. A medical tube as claimed in any one of claims 16 to 18, wherein the average radial distance from the lowest point of the elongate film in the lumen to the bottom of the elongate reinforcing member, measured when the medical tube is not subject to deformational strain, is less than 0.2 mm.~~

~~20. A medical tube as claimed in any one of claims 16 to 19, wherein the profile is an inwardly biased profile.~~

21. A medical tube as claimed in any one of claims 16 to 20, wherein the flat part of the D-shaped cross section is longitudinally aligned with the lumen and the semi-circular part of the D-shaped cross section is facing away from the lumen.

22. A medical tube as claimed in any one of claims 16 to 21, wherein windings of the elongate reinforcing member roll or lean sideways in response to an applied force.

23. A medical tube as claimed in claim 22, wherein the medical tube maintains a gases flow while the force is applied.

24. A medical tube as claimed in any one of claims 16 to 23, wherein the elongate reinforcing member is hollow.

25. A medical tube as claimed in claim 24, wherein the elongate reinforcing member comprises a cavity configured to hold or transport a fluid.