

15

48. The guide extension catheter of claim 25, wherein the partially cylindrical opening and the tubular structure comprise a reinforced portion of the guide extension catheter.

49. The guide extension catheter of claim 25, wherein a distal portion of the tubular structure is configured to anchor within an ostium of a coronary vessel and resist axial and shear forces exerted by the received one or more interventional cardiology devices that would otherwise tend to dislodge the distal portion.

50. The guide extension catheter of claim 49, wherein at least one cut includes two circumferential cuts along a single line and separated by a section of uncut structure.

51. The system of claim 49, wherein a first cut is spaced approximately 0.010 inches apart from a second cut.

52. A guide extension catheter for use with a guide catheter, comprising:

- a substantially rigid segment;
- a tubular structure defining a lumen and positioned distal to the substantially rigid segment; and
- a segment defining a partially cylindrical opening positioned between a distal end of the substantially rigid segment and a proximal end of the tubular structure, the segment defining the partially cylindrical opening having an angled proximal end, formed from a material having a greater flexural modulus than a flexural modulus of the tubular structure, and configured to receive one or more interventional cardiology devices there-through when positioned within the guide catheter, wherein a cross-section of the guide extension catheter at the proximal end of the tubular structure defines a single lumen;
- wherein the segment defining the angled proximal end of the partially cylindrical opening includes at least two inclined regions.

53. A guide extension catheter for use with a guide catheter having a lumen with a cross-sectional inner diameter, comprising:

- a substantially rigid segment;

16

a tubular structure defining a lumen and positioned distal to the substantially rigid segment, the lumen having a uniform cross-sectional inner diameter that is not more than one French size smaller than the cross-sectional inner diameter of the lumen of the guide catheter; and a segment defining a partially cylindrical opening positioned between a distal end of the substantially rigid segment and a proximal end of the tubular structure, the segment defining the partially cylindrical opening having an angled proximal end and configured to receive one or more interventional cardiology devices when positioned within the lumen of the guide catheter; a cross-section of the guide extension catheter at the proximal end of the tubular structure defining a single lumen;

wherein the segment defining the angled proximal end of the partially cylindrical opening includes at least two inclined regions.

54. The guide extension catheter of claim 53, wherein the segment defining the partially cylindrical opening is formed from a structure having a greater flexural modulus than a flexural modulus of the tubular structure.

55. The guide extension catheter of claim 53, wherein the segment defining the partially cylindrical opening includes a portion having an arcuate cross-sectional shape, a portion having a hemicylindrical cross-sectional shape, and a portion having a full circumference cross-sectional shape.

56. The guide extension catheter of claim 53, wherein a cross-section of the substantially rigid segment is sufficiently sized and configured to permit the tubular structure of the guide extension catheter to be advanced partially through the guide catheter and into a coronary artery while preserving space of the cross-sectional inner diameter of the lumen of the guide catheter.

57. The guide extension catheter of any one of claim 25, 28, 30-32, 34, 36, 38, 47, 49 53-54, wherein the segment defining the partially cylindrical opening includes one or more cuts.

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