

CLAIMS

What is claimed is:

1. An allograft implant (5) for fusing a sacroiliac joint (3), the allograft implant (5) comprising:

a body (83) having a proximal end (86), a distal end (87), and a length disposed therebetween, the distal end having a rounded nose (6);

two sides (7), each side comprising a groove (8) beginning at the proximal end (86) of the body (83) and continuing along each of the two sides (7) for at least part of the length, the distance between the two sides (7) defining a width (W) of the body (83);

two opposing faces (81), each face (81) having one or more anti-migration features (82), and each face (81) configured for abutting contact with a sacrum (1) or an ilium (2) of the sacroiliac joint (3);

a graft window (85) disposed between each face (81), the graft window (85) providing passage through the body (83) between the two opposing faces (81), wherein a portion of the body (83) located between the graft window (85) and each of the sides (7) defines a wall (84), and wherein the graft window (85) has a cross-sectional area that is:

about 35% to about 40% of a first cross-sectional area of the body;

and

about 60% of an area of each opposing face (81) that makes contact with the sacrum (1) or the ilium (2) of the sacroiliac joint (3).

2. The allograft implant (5) of claim 1, wherein the graft window (85) is unobstructed by internal or intermediate supports.

3. The allograft implant (5) of claim 1, wherein the graft window (85) has a proximal portion (88) located in proximity to the grooves (8), and a distal portion (89), the proximal portion (88) having a width (W1) that is less than a width (W2) of the distal portion (89) such that the wall (84) maintains a minimum thickness in a range of about 17% to about 20% of the width (W) of the body (83).

4. The allograft implant (5) of claim 2, wherein the graft window (85) has a proximal portion (88) located in proximity to the grooves (8), and a distal portion (89), the proximal portion (88) having a width (W1) that is less than a width (W2) of the distal portion (89) such that the wall (84) maintains a minimum thickness in the range of about 17% to about 20% of the width (W) of the body (83).

5. The allograft implant (5) of claim 1, wherein the proximal end (86) of the body (83) comprises a taper (90) that reduces a second cross-sectional area of the body (83).

6. The allograft implant (5) of claim 5, wherein the graft window (85) is unobstructed by internal or intermediate supports.

7. The allograft implant (5) of claim 5, wherein the graft window (85) has a proximal portion (88) located in proximity to the grooves (8), and a distal portion (89), the proximal portion (88) having a width (W1) that is less than a width (W2) of the distal portion (89) such that the wall (84) maintains a minimum thickness in a range of about 17% to about 20% of the width (W) of the body (83).

8. The allograft implant (5) of claim 7, wherein the graft window (85) has a proximal portion (88) located in proximity to the grooves (8), and a distal portion (89), the proximal portion (88) having a width (W1) that is less than a width (W2) of the distal portion (89) such that the wall (84) maintains a minimum thickness in the range of about 17% to about 20% of the width (W) of the body (83).