{CLAIMS}

{Claim 1}

A bone plate comprising:

a band-shaped body section arranged for fixing, along a longitudinal direction of a tibia, to an obliquely anterior inner side surface of the tibia at a position lower than a notch formed in an inner side surface of the tibia;

a transverse section arranged for fixing, along a direction intersecting the longitudinal direction of the tibia, to the inner side surface of the tibia at a position higher than the notch;

a joining section for joining the body section and the transverse section; and

a plurality of screw holes that are arranged in the transverse section, the body section, and the joining section in a manner spaced apart from one another and that pass therethrough in a plate thickness direction,

wherein the plurality of screw holes include a first screw hole provided in the joining section and a second screw hole provided in the body section,

the body section, the joining section, and the transverse section continuously form a curved surface in such a manner as to twist about an axial line along the longitudinal direction,

a first plane on which an axial line of the first screw

hole is disposed and a second plane on which an axial line of the second screw hole is disposed are substantially parallel to each other,

the angles between a straight line connecting a longitudinal-direction upper-end portion and lower-end portion in the bone plate and the first plane and the second plane are 80° to 95° inclusive, and the angle relative to the fourth plane is 74° to 80° inclusive, and

the axial line of the first screw hole and the axial line of the second screw hole are disposed at twisted positions.

{Claim 2}

The bone plate according to claim 1, further comprising:

a third screw hole that is disposed in a manner spaced apart from the second screw hole in a longitudinal axis direction of the body section,

wherein a third plane on which an axial line of the third screw hole is disposed is substantially parallel to each of the first plane and the second plane.

{Claim 3}

The bone plate according to claim 1 or 2, further comprising:

a plurality of fourth screw holes that are provided in the transverse section and that are disposed in a manner

spaced apart from one another in a direction intersecting a longitudinal direction of the body section,

wherein the axial line of the first screw hole is disposed along the first plane, which is tilted relative to a fourth plane including a straight line for specifying an arrangement direction of the plurality of fourth screw holes and the axial directions of the fourth screw holes.

{Claim 4}

The bone plate according to claim 3, wherein the axial line of the first screw hole, the axial line of the second screw hole, the axial line of the third screw hole, and axial lines of the fourth screw holes are arranged so as to be substantially orthogonal to the plate thickness direction of the bone plate.

{Claim 5}

The bone plate according to one of claims 1 to 4, wherein the curved surfaceis twisted by 18.7° ± 10° about an axial line parallel to a longitudinal axis of the body section.

{Claim 6}

The bone plate according to one of claims 1 to 5,

wherein the joining section is formed to bend relative to the transverse section, and

the bending angle of the joining section relative to the transverse section is 175° ± 10°.

{Claim 7}

The bone plate according to one of claims 1 to 6, wherein the total length in the longitudinal direction is 90 mm to 110 mm inclusive and is desirably 95 mm to 105 mm inclusive, and the distance between the first screw hole and the second screw hole is 24 mm to 34 mm inclusive and is desirably 24 mm to 30 mm inclusive.

{Claim 8}

A bone plate system comprising:

the bone plate according to one of claims 1 to 7; and

arranged for a plurality of screws to be tightened into the plurality of screw holes in the bone plate to fix the bone plate to the tibia.

{Claim 9}

The bone plate system according to claim 8,

wherein the plate thickness of the bone plate is 3 ± 1 mm, and

arranged for the amount of flexure of the bone plate and the plurality of screws when a vertical load in the longitudinal axis is applied to the plurality of screws at a

position 30 to 50 mm away from the transverse section of the bone plate in the longitudinal axis direction in a state where the bone plate is tightened with the plurality of screws is 0.15 mm ± 0.1 mm/kgf.

{Claim 10}

The bone plate system according to claim 8 or 9, wherein the bone plate and the screws are formed of at least one highly biocompatible material selected from a group comprising a titanium-based alloy, a cobalt-chromium alloy, or a stainless steel.

{Claim 11}

The bone plate system according to one of claims 8 to 10,

wherein the screws are hollow screws each having a through-hole that is arranged to allow a guide pin to pass therethrough,

each of the screws has a crest diameter of 5.0 mm to 5.8 mm inclusive and a root diameter of 4.5 mm to 5.3 mm inclusive, and

the hollow axis diameter of the above-described hollow screw is 1.8 mm to 2.8 mm inclusive.

{Claim 12}

The bone plate system according to claim 8 comprising:

a first block for containing the transverse section, the joining section, and for a first screw group composed of a plurality of screws to be tightened into the first screw hole and the fourth screw holes; and

a second block for containing the body section and for a a second screw group composed of a plurality of screws to be tightened into the second screw hole and the third screw hole,

wherein the bone plate system has elasticity that, when a vertical load is relatively applied from the first block to the second block at a position 30 to 50 mm away from the transverse section of the bone plate in the longitudinal axis direction, allows flexure with which the first block is displaced by 0.15 mm ± 0.1 mm/kgf relative to the second block in a direction of the vertical load.