

A GASTRIC RESIDENCE ARTICLE FOR ORAL ADMINISTRATION

Abstract

The present disclosure relates to a gastric residence article for oral administration. The gastric residence article includes a foldable central superelastic alloy component comprising a plurality of ribs. The foldable central superelastic alloy component undergoes elastic deformation when the gastric residence article is in a folded configuration and recoils when the gastric residence article assumes an expanded configuration. The gastric residence article further includes a plurality of linker components radially connected to the foldable central superelastic alloy component. Each linker component includes a first side and a second side opposite the first side, and the first side of each linker component is individually connected to a corresponding rib. Additionally, the gastric residence article includes a plurality of elongated limb components comprising a core shaft and an outer layer encapsulating the core shaft. Each elongated limb component is individually connected to the second side of a corresponding linker component. The plurality of linker components is configured to be structurally compromised in the expanded configuration in-vivo, thereby resulting in a loss of a shape of the gastric residence article. The core shaft has an active substance, and the outer layer has a lower concentration of the active substance than the core shaft. Each elongated limb component includes at least one slit formed on an exterior surface of the outer layer. The at least one slit extending across at least 50% of a length of the elongated limb component.

Figure 1