A GASTRIC RESIDENCE ARTICLE FOR ORAL ADMINISTRATION

Abstract

The present disclosure relates to a gastric residence article for oral administration. The gastric residence article has an outer portion comprising a central region and a plurality of distal regions radially connected to the central region. The plurality of distal regions has a higher level of hardness than the central region. The gastric residence article further includes a foldable central superelastic alloy component securely received within the outer portion. 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 also includes a plurality of linker components. 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 distal region. Additionally, the gastric residence article includes a plurality of elongated limb components comprising an active substance, which is a therapeutic agent or a diagnostic agent. 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 foldable central superelastic alloy component includes a plurality of ribs with an individual end and each end is individually embedded in a corresponding distal region.

Figure 1B