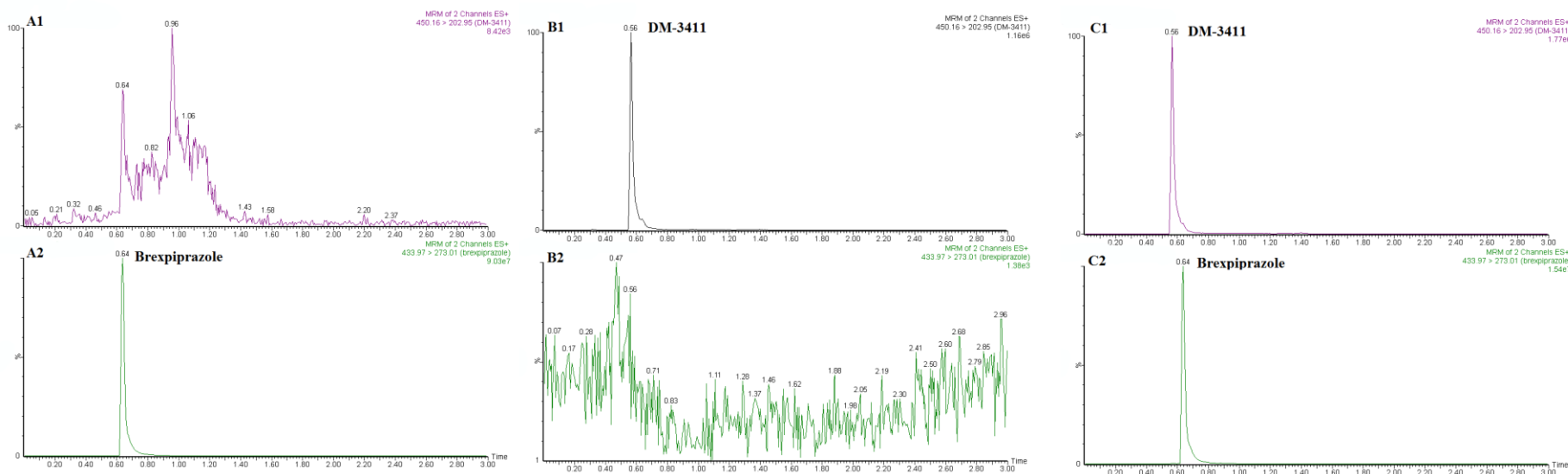


A Supporting Information

Brexpiprazole and DM-3411 Analysis in Chromatography and Mass Conditions

Corresponding chromatography and mass detection conditions were used to detect brexpiprazole and DM-3411 in different channel. The results were shown as following. When brexpiprazole was injected alone, the brexpiprazole channel showed high response value at the retention time (0.64min) (SI FigA2), but there are no signal shows up in the metabolite DM-3411 channel at its retention time (0.56min) of the metabolite (SI FigA1). Then DM-3411 was injected alone, DM-3411 channel showed high response value at its retention time (0.56min) (SI FigB1), while there were no signal shows up in the brexpiprazole channel at the retention time (0.64min) (SI FigB2). The mixture of brexpiprazole and DM-3411 were injected together, their retention times were 0.64 and 0.56min, respectively; and there are no interference signals in the corresponding channels, as shown in SI FigC. These demonstrated that brexpiprazole and DM-3411 were well seperated under the corresponding conditions of MS/MS.



SI Fig 1. Representative chromatograms for brexpiprazole and DM-3411. (A) When brexpiprazole was injected alone, there are no signal shows up in the metabolite DM-3411 channel at its retention time (0.56min) (A1), but brexpiprazole channel showed high response value at the retention time (0.64min) (A2). (B) When DM-3411 was injected alone, DM-3411 channel showed high response value at its retention time (0.56min) (B1), while there were no signal shows up in the brexpiprazole channel at the retention time (0.64min) (B2). (C) The mixture of brexpiprazole and DM-3411 were injected together, their retention times were 0.64 and 0.56min, respectively; and there are no interference signals in the corresponding channels.